



## **Mini Series Illustrated Parts List**

**Covering: Beta 10, BZ482, Beta 16 (BZ602), BD722 & Beta25 (BD902)**

### *Contents / Index*

2	Quick reference parts listing
4	Header tank manifold fixings
10	Keel cooled header tank
12	Heat exchange tank
17	Heat exchange tubestack
18	Heat exchange sea water pump
19	Sea water cooling pipe
21	Water injection bends –non standard
22	Thermostat housing
23	Air inlet manifold & fuel system
27	Sea spec fuel system
29	Air filter
30	Flywheel housing
31	Speed control bracket
34	Front feet
35	Rear feet
36	Gearbox driveplate
37	Driveplate spacer ring
38	Gearbox & gear control bracket
42	Shallow sump
43	Sump drain pump & drain hose assembly
45	Alternator –12 Volt 40 Amp
46	Alternator –12 Volt 65 Amp
48	Alternator accessories –12 Volt 65 Amp
49	Wiring harness & switches
50	Simple 2A panel
52	2AB panel
54	2AB'V' panel
56	2AB'V'W panel
57	SFIA 2B panel
59	2C panel & senders
62	Panel gauges, senders, relays & various electrical components
64	Expansion tank
65	Calorifier connections
66	Electrical, Oil system & Miscellaneous

*Issue 007 May 2007*

Prices and specifications are subject to amendment without notice. Information given is subject to our current conditions of tender and sale.

## Quick Reference Parts Listing

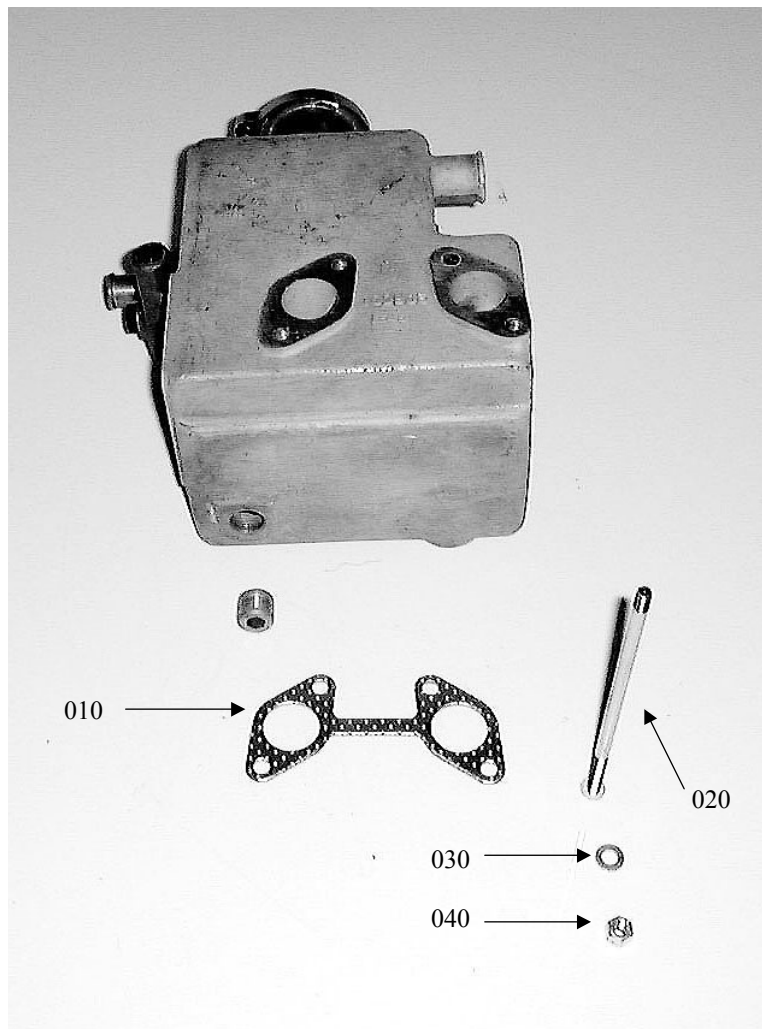
Heat Exchanger & Keel Cooled Beta 10, BZ482, Beta 16, BD722, & Beta 25

In all cases please quote **Beta Marine WOC "K" number** and Engine Type

Description	Part Number	Qty per Engine	
Wasting <b>Zinc Anode</b>	209-61840	1	
Heat Exchanger " <b>O</b> " <b>Ring</b>	209-80110	2	
<b>Pressure Cap</b> 95kPa	209-80130	1	
<b>Thermostat</b>	600-59290	1	
<b>Thermostat</b> (Beta 16 & 25 only)	600-72450		
Thermostat <b>Gasket</b>	600-62590	1	
Thermostat <b>Gasket</b> (Beta 16 & 25 only)	600-80490		
<b>Fuel Filter</b>	211-60210	1	
Air Filter <b>Element</b>	211-62950	1	
Lubricating <b>Oil Filter</b>	211-63760	1	
<b>Sump Pump</b>	210-80061	1	
Sump Pump <b>Clamp</b>	212-00793	2	
<b>Dip Stick</b> (only) - Extended	600-96280	1	
<b>Sea Water Pump</b> Johnson (6 Screw)	207-61500/01	1	
Sea Water Pump <b>Impeller Kit Johnson 6 Screw</b> (includes gasket etc.)	207-05355	1	
Sea Water Pump <b>Cover plate Johnson 6 Screw</b>	207-05478	1	
Sea Water Pump cover plate <b>Bolt Johnson 6 Screw</b>	207-05479	6	
<b>Fuel Lift Pump</b>	600-65470	1	
<b>Fuel Lift Pump</b> – Beta 16 & 25	AK/MINI/9&6/F01		
Fuel Lift Pump <b>Gasket</b>	600-00065	1	
<b>Belt</b> – Standard "Vee" – 40 Amp	600-63080	Correctly Select a Belt	
<b>Belt</b> – PolyVee 40 Amp 4PK900 (NOT Beta 25)	214-04360		
<b>Belt</b> – PolyVee 40 Amp 4PK913 Beta 25	214-05074		
<b>Belt</b> – 65 Amp Alternator BZ482/BD722 - 4PK950 – External fan	214-03235		
<b>Belt</b> – 65 Amp Alternator Beta 16 - 4PK900 – Internal fan	212-04360		
<b>Belt</b> – 65 Amp Alternator Beta 25 4PK913 Internal fan	214-05074		
<b>Alternator 40 Amp</b>	600-80010		1
<b>Alternator 55 Amp</b> - (A127)	200-69190		
<b>Alternator 65 Amp</b> – External Fan	200-01155		
<b>Alternator 65 Amp</b> – Internal Fan	200-04989		
<b>Panel A - standard</b>	AK/2AS/KS01	1	
<b>Panel ABV</b> with tachometer	AK/2ABV/KS01		
<b>Panel ABVW</b> with tachometer	AK/2ABVW/KS01		
<b>Panel B</b> – with tachometer and gauge	AK/2BT/KS01		
<b>Panel C</b> – with tachometer and three gauges	AK/2CD/KS01		
Control Panel standard <b>Key</b>	600-00058	Pair (2)	
Control Panel <b>Key Switch</b>	600-00057	1	
Control Panel <b>Stop Button</b> (and heat & start on ABVW)	200-00072	1	
<b>Tachometer</b> 0-4000rpm with digital hour counter	200-02373	1	
<b>Water temperature</b> switch <b>Gauge</b> (B & C panels)	200-96200	1	
<b>Oil pressure</b> switch <b>Gauge</b> (C panels only)	200-96190	1	
<b>Voltmeter</b> (C panels only)	200-96210	1	
<b>Green</b> power on <b>indicator lamp</b> & retaining clip	200-04656	1	

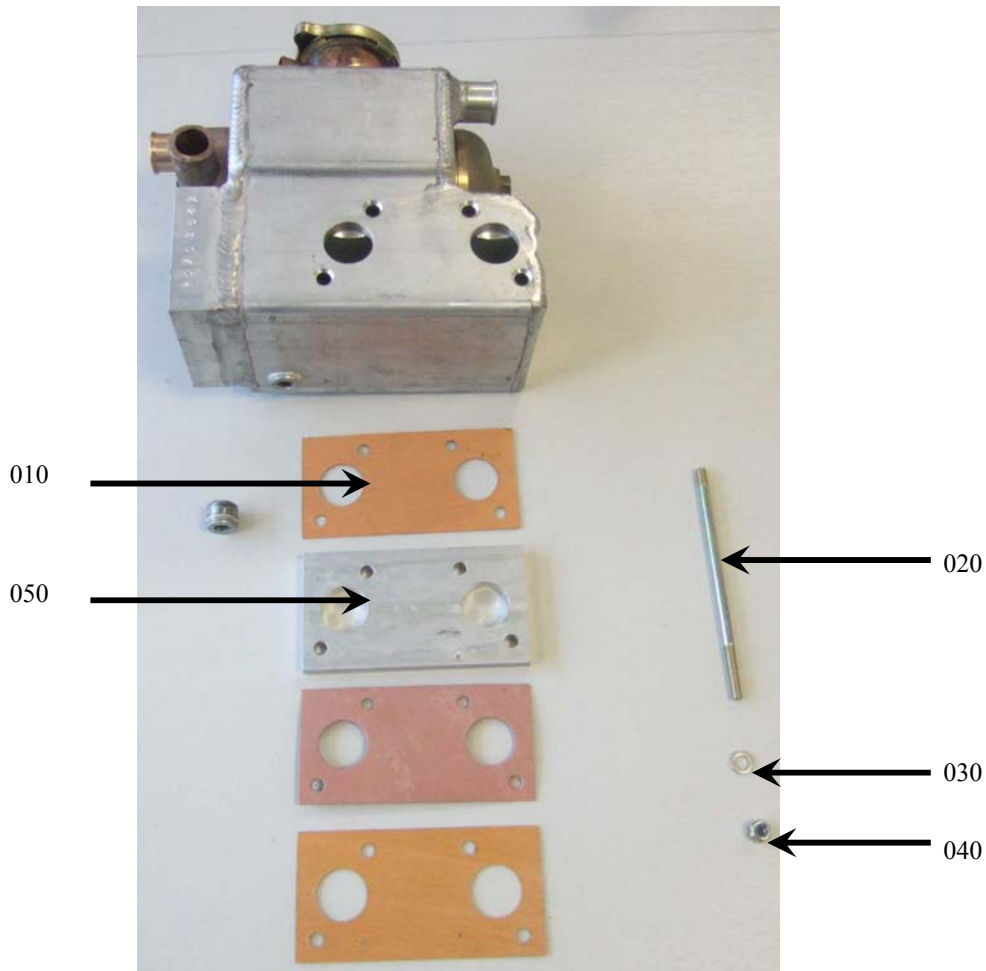
<b>Red warning indicator lamp</b> & retaining clip	200-04657	3 or 4	
<b>Alarm board</b>	200-04655	1	
<b>Relay 12 Volt 40A (28Ra)</b> fitted to rear of panels	200-87020	1	
<b>Stop Solenoid</b> (energised to stop fuel)	600-81950	1	
<b>Fuse</b> (Blade) 40 Amp	200-00959	1	
Standard <b>Engine Harness</b>	200-98380/01	1	
65 Amp Alternator <b>Sub Loom</b> (external fan)	200-01196	1	
<b>1m Panel Extension Loom</b>	200-04588/01	1	
<b>2m Panel Extension Loom</b>	200-04588/02		
<b>3m panel Extension Loom</b>	200-04588/03		
<b>4m panel Extension Loom</b>	200-04588/04		
<b>Water Temperature Switch</b> (Panel A, ABV & ABVW) NOT Beta 16 or 25, <i>NOT Beta10, BZ482 or BD722 from March 2007</i> )	200-01133	1	
<b>Water Temperature Switch</b> with single terminal Beta 16 & Beta 25, <i>(&amp; standard from March 2007 for Panel A, ABV &amp; ABVW)</i>	600-62820		
<b>Water Temperature Sender</b> (Panel C & B)	200-94360		
<b>Oil Pressure Switch</b> (Panel A, ABV, ABVW, & B)	600-62670	1	
<b>Oil Pressure Sender</b> (Panel C)	200-94350		
<b>Standard 50mm Water Injection Exhaust Bend</b>	202-02458	1	
<b>5" High Rise 50mm Water Injection Exhaust Bend</b>	202-92400/22		
Exhaust Bend <b>Gasket</b>	600-62620	1	
<b>Drive Plate 22-B-60</b> - PRM / ZF	206-91950	1	
<b>Drive Plate 22-B-4</b> - TMC / ZF	206-97041		
<b>Flexible Mountings</b> (Trelleborg RA60)	213-93440	4	
<b>Rocker Cover Gasket</b> BZ482	600-01055	1	
<b>Rocker Cover Gasket</b> Beta 16	600-05467		
<b>Rocker Cover Gasket</b> BD722	600-00607		
<b>Rocker Cover Gasket</b> Beta 25	600-05468		
<b>Head Gasket</b> Beta 10, BZ482	600-00409	1	
<b>Head Gasket</b> Beta 16	600-05469		
<b>Head Gasket</b> BD722	600-01562		
<b>Head Gasket</b> Beta 25	600-05470		
<b>Top Gasket Set</b> BZ482	600-00383	1	
<b>Top Gasket Set</b> Beta 16	600-05471		
<b>Top Gasket Set</b> BD722	600-00395		
<b>Top Gasket Set</b> Beta 25	600-05472		
<b>Lower Gasket Set</b> BZ482	600-01056	1	
<b>Lower Gasket Set</b> Beta 16	600-05473		
<b>Lower Gasket Set</b> BD722	600-00394		
<b>Lower Gasket Set</b> Beta 25	600-05474		
<b>Manuals</b>			
<b>Operators Maintenance Manual</b>	221-02887	1	
<b>Kubota Workshop Manual</b> , Beta 10 / BZ482, BD722	600-00756	1	
<b>Kubota Workshop Manual</b> , Beta 16 & Beta 25	600-00756		
<b>Kubota Spare Parts Manual</b> - Beta 10 & BZ482	600-02437	1	
<b>Kubota Spare Parts Manual</b> – Beta 16	600-05476		
<b>Kubota Spare Parts Manual</b> – BD722	600-02438		
<b>Kubota Spare Parts Manual</b> - Beta 25	600-05477		

**Header tank manifold fixings –Cast tanks, Beta10, BZ482 & BD722 to Mid 2002**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	600-63070	Manifold gasket B10 & BZ482	1	
010	600-64210	Manifold gasket BD722	1	Not shown
020	201-68450/02	Mini series manifold stud (cast tank)	4 6	B10 & BZ482 BD722
030	217-99276	M6 Flat washer	4 6	B10 & BZ482 BD722
040	217-99278	M6 Nyloc	4 6	B10 & BZ482 BD722

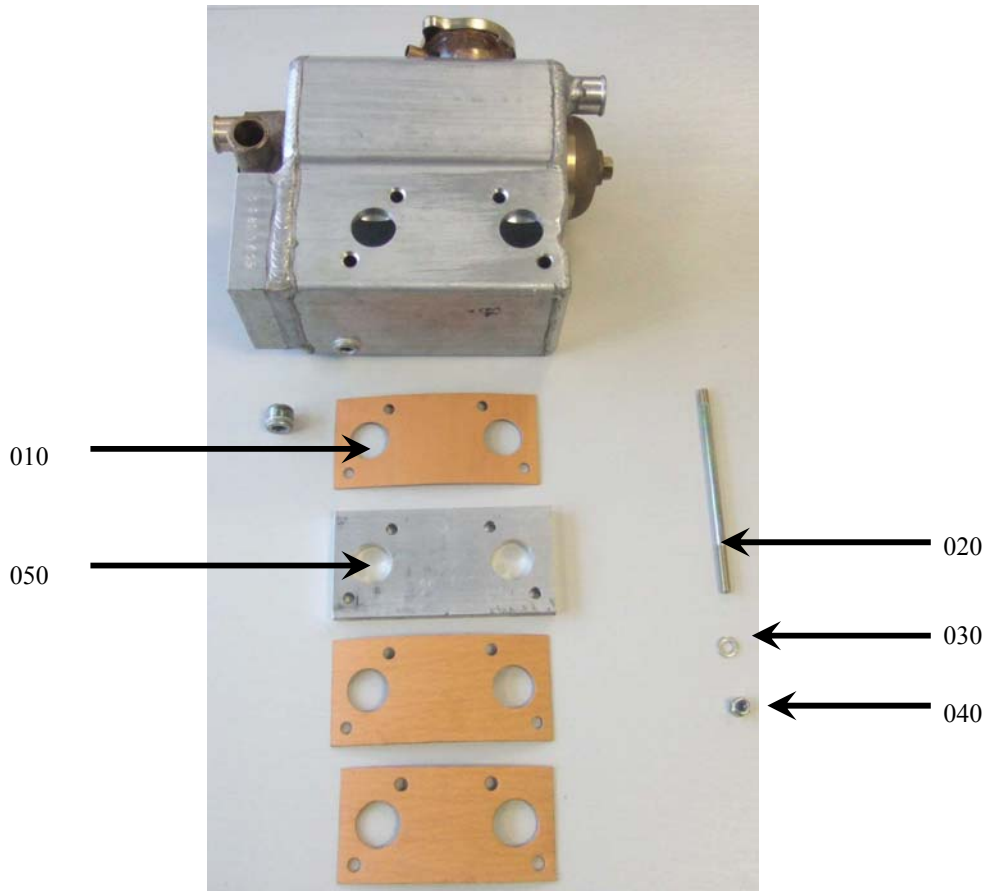
**Header tank manifold fixings –Beta 10 / BZ482**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-05280/482	Manifold gasket Beta10 / BZ482	3		
020	201-01915	Mini series manifold stud (extruded tank)	4		
030	217-99276	M6 Flat washer	4		
040	217-99278	M6 Nyloc	4		
050	N/A	Aluminium spacer plate (between engine & header tank) –Part of 209-01922 (header tank) & 209-01826/01 (heat exchange tank)	1	Not shown	N/A

**PLEASE NOTE: IF THE ORIGINAL THICK EXHAUST MANIFOLD GASKET IS AVAILABLE FROM KUBOTA, YOU DO NOT REQUIRE THE TWO ADDITIONAL PAPER GASKETS TO MAINTAIN CORRECT ALIGNMENT OF THE HEADER / HEAT EXCHANGE TANK.**

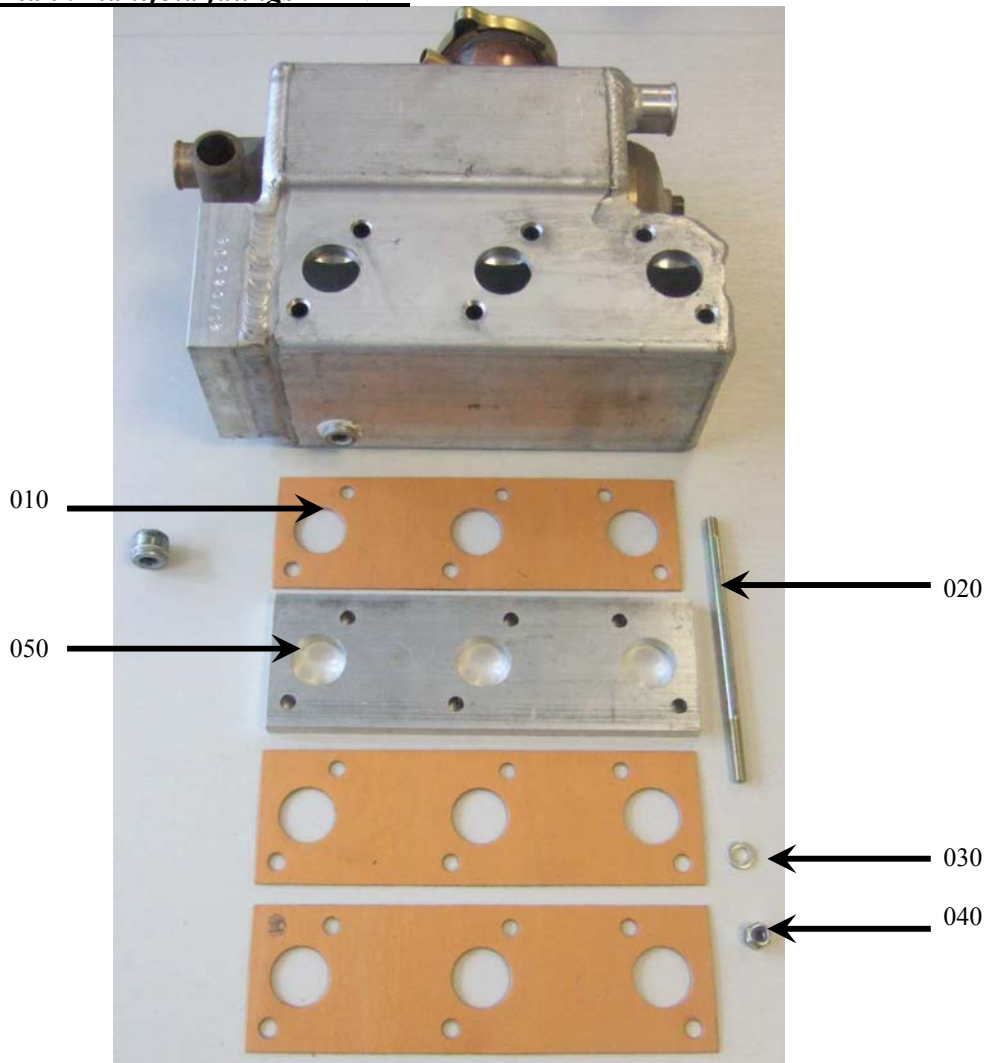
**Header tank manifold fixings –BZ602 / Beta16**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-05280/602	Manifold gasket Beta16 / BZ602	3		
020	201-01915	Mini series manifold stud (extruded tank)	4		
030	217-99276	M6 Flat washer	4		
040	217-99278	M6 Nyloc	4		
050	N/A	Aluminium spacer plate (between engine & header tank) –Part of 209-05277 (header tank) & 209-06266 (heat exchange tank)	1	Not shown	N/A

**PLEASE NOTE: IF THE ORIGINAL THICK EXHAUST MANIFOLD GASKET IS AVAILABLE FROM KUBOTA, YOU DO NOT REQUIRE THE TWO ADDITIONAL PAPER GASKETS TO MAINTAIN CORRECT ALIGNMENT OF THE HEADER / HEAT EXCHANGE TANK.**

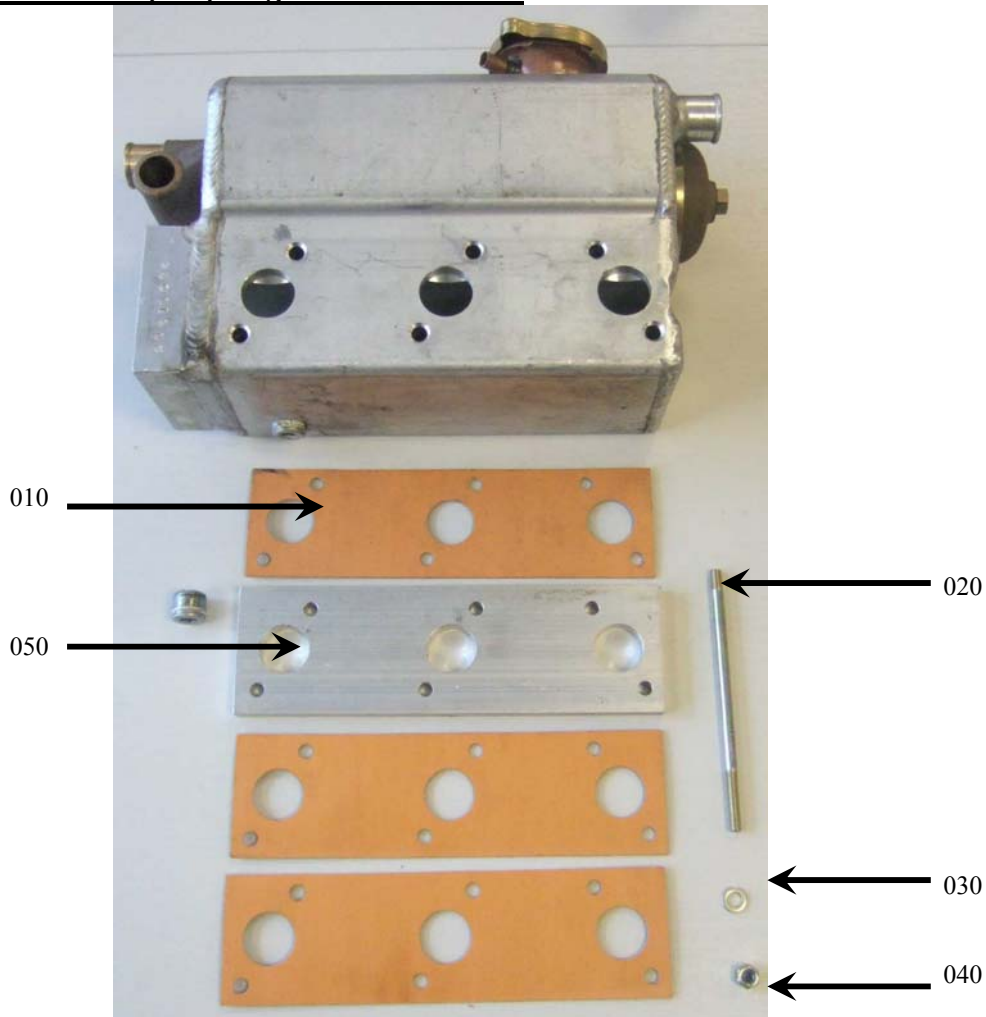
**Header tank manifold fixings –BD722**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-05280/722	Manifold gasket BD722	3		
020	201-01915	Mini series manifold stud (extruded tank)	6		
030	217-99276	M6 Flat washer	6		
040	217-99278	M6 Nyloc	6		
050	N/A	Aluminium spacer plate (between engine & header tank) –Part of 209-01923 (header tank) & 209-01827/01 (heat exchange tank)	1		N/A

**PLEASE NOTE: IF THE ORIGINAL THICK EXHAUST MANIFOLD GASKET IS AVAILABLE FROM KUBOTA, YOU DO NOT REQUIRE THE TWO ADDITIONAL PAPER GASKETS TO MAINTAIN CORRECT ALIGNMENT OF THE HEADER / HEAT EXCHANGE TANK.**

**Header tank manifold fixings –BD902 / Beta25**

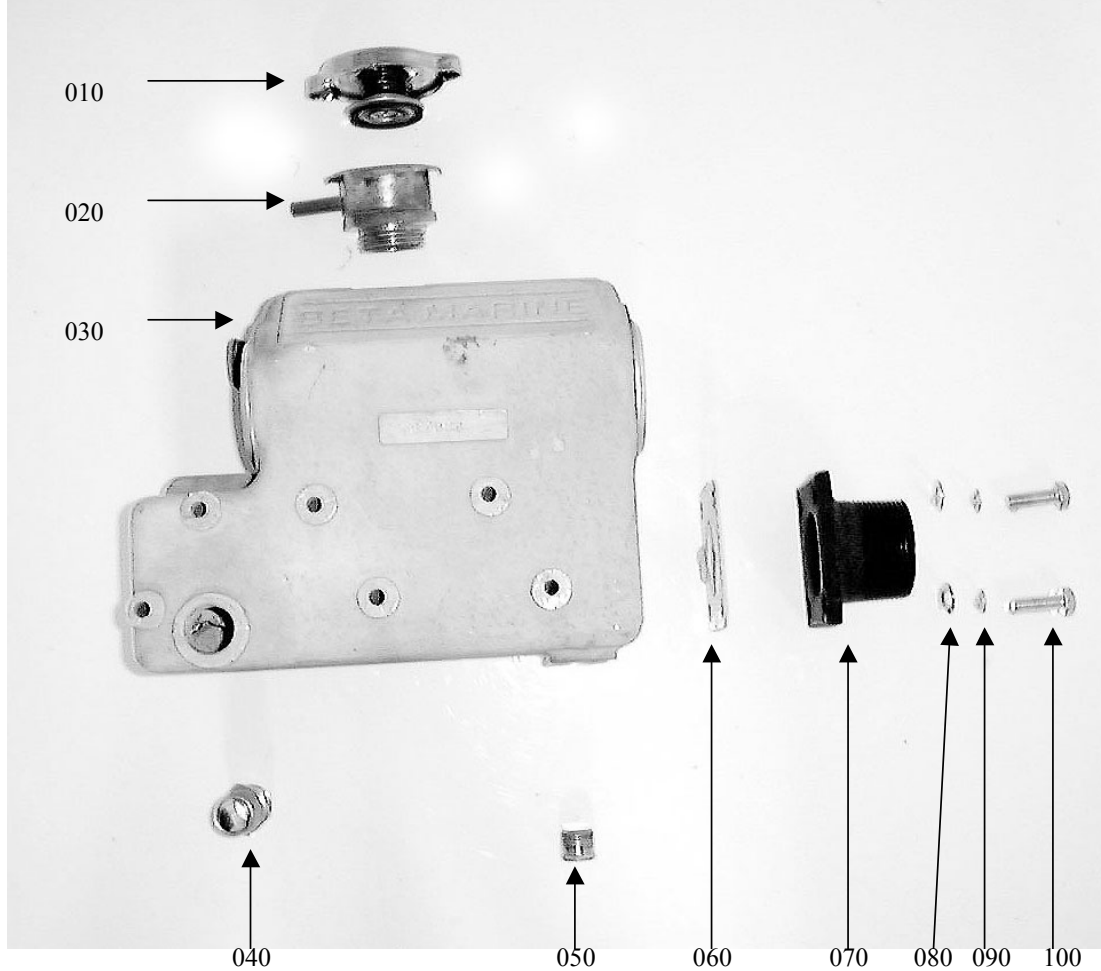


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-05280/902	Manifold gasket BD722	3		
020	201-01915	Mini series manifold stud (extruded tank)	6		
030	217-99276	M6 Flat washer	6		
040	217-99278	M6 Nyloc	6		
050	N/A	Aluminium spacer plate (between engine & header tank) –Part of 209-05797 (header tank) & 209-04826 (heat exchange tank)	1		N/A

**PLEASE NOTE: IF THE ORIGINAL THICK EXHAUST MANIFOLD GASKET IS AVAILABLE FROM KUBOTA, YOU DO NOT REQUIRE THE TWO ADDITIONAL PAPER GASKETS TO MAINTAIN CORRECT ALIGNMENT OF THE HEADER / HEAT EXCHANGE TANK.**

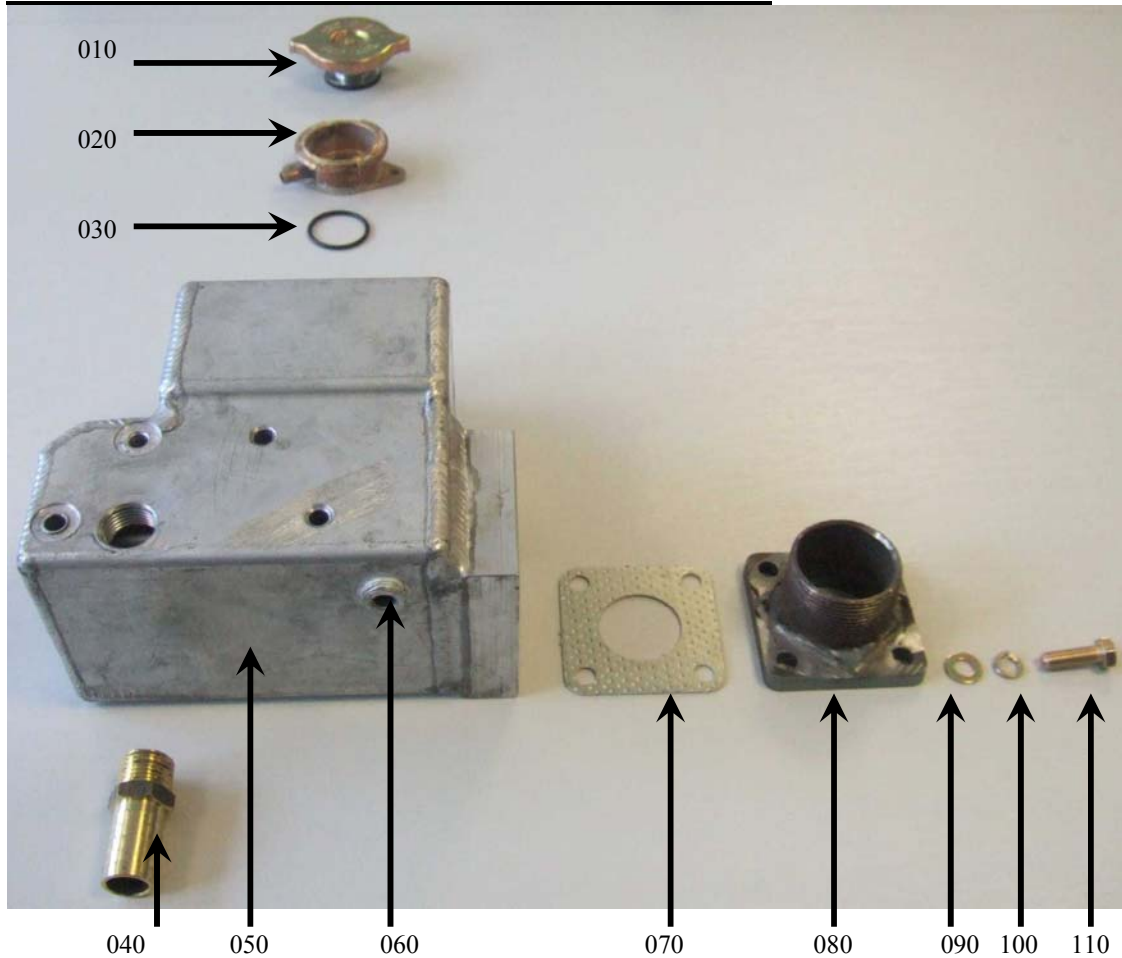


**Keel cooled header tank –Cast tanks: Beta10, BZ482 & BD722 to Mid 2002**



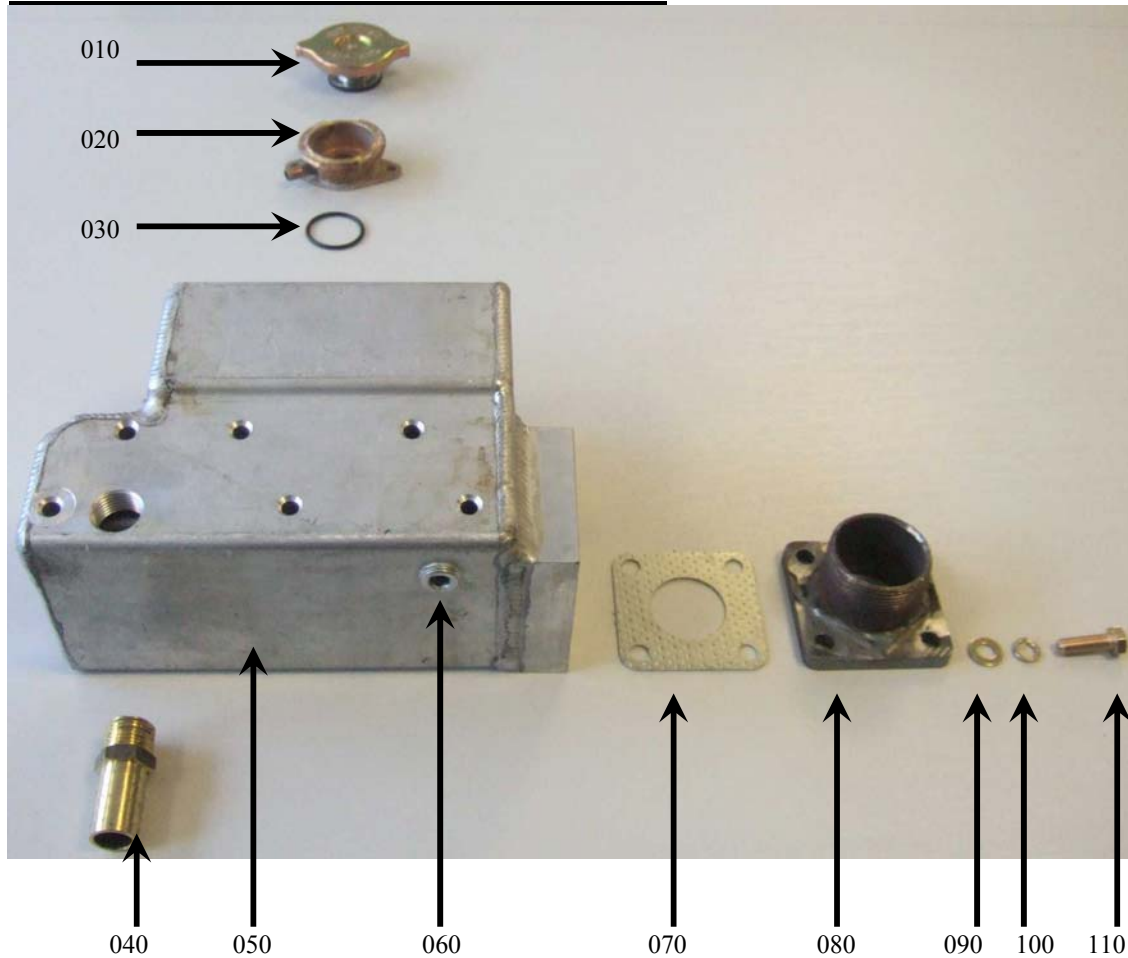
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80130	95kPa Pressure cap	1		
020	209-00015	Filler neck assembly (cast tank)	1		
030	209-61970	B10 & BZ482 Keel cooled manifold (cast)	1	Not shown Assembly inc. 010, 020 & 050	N/A
030	209-61980	BD722 Keel cooled manifold (cast)	1	Assembly inc. 010, 020 & 050	N/A
040	212-99232	1/2"BSPT-3/4" Hose connector	1		
050	209-80050	3/8"BSP plug	1		
060	600-62620	Exhaust gasket 2"	1		
070	202-61350	Keel cooled exhaust flange 1 1/2"BSP	1		
080	217-99293	M8 Flat washer	4		
090	217-99292	M8 Spring washer	4		
100	217-99299	M8 x 25mm set	4		

**Keel cooled header tank –Beta10 / BZ482 / BZ602 / Beta16**



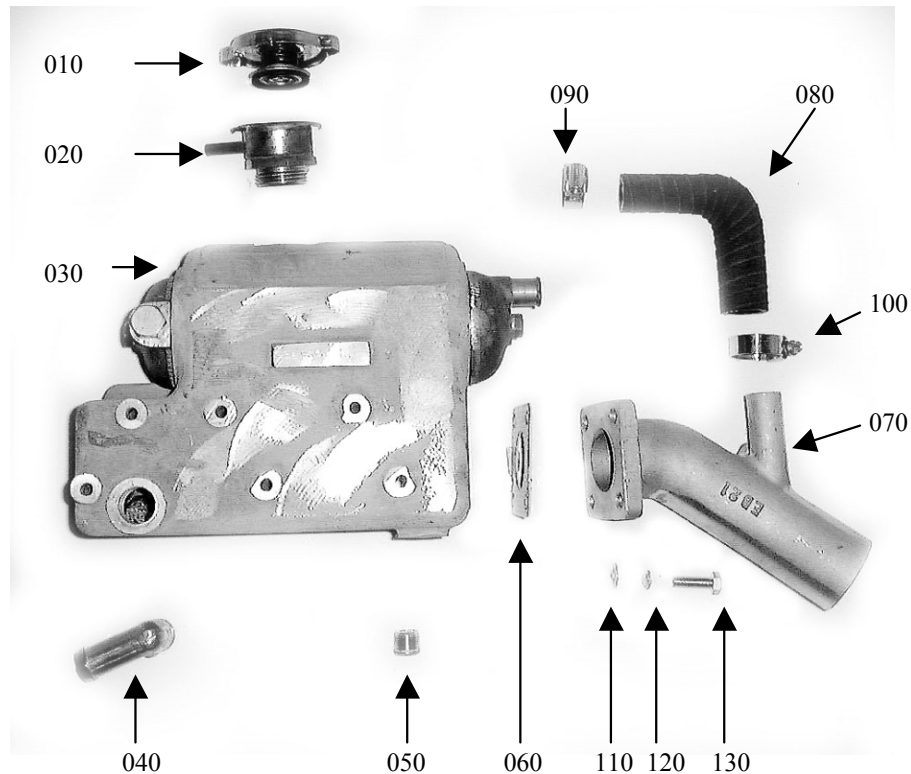
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80130	95kPa Pressure cap	1	
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring
030	N/A	Part of 020	1	N/A
040	212-99232	½"BSPT-3/4" Hose connector	1	
050	209-01922	Beta10 / BZ482 Keel cooled manifold (extruded)	1	Assembly inc. 010, 020 030 & 060
050	209-05177	Beta16 / BZ602 Keel cooled manifold (extruded)	1	Not shown, Assembly inc. 010, 020 030 & 060
060	209-80050	3/8"BSP plug	1	
070	600-62620	Exhaust gasket 2"	1	
080	202-61350	Keel cooled exhaust flange 1½"BSP M	1	
090	217-99293	M8 Flat washer	4	
100	217-99292	M8 Spring washer	4	
110	217-99299	M8 x 25mm set	4	
120	220-02106	Beta Marine brass logo	1	Not shown
130	212-96121	Braided flexible exhaust bellows 1½"BSP M-M x 15" OAL	1	Not shown
140	212-01149/MF	Braided flexible exhaust bellows 1½"BSP M-F x 24" OAL	1	Not shown
150	212-98308	Silencer 1½"BSP M-M 27" OAL	1	Not shown
160	212-02425	Silencer 1½"BSP M-M 18" OAL	1	Not shown, not standard
170	212-00033	Hospital silencer M-M 1½"BSP	1	Not shown
180	212-00306	Socket 1½"BSP F-F	1	Not shown
190	212-00234/01	Glass fibre exhaust lagging 3x50mm	30m	Not shown

**Keel cooled header tank –BD722 / BD902 / Beta25**

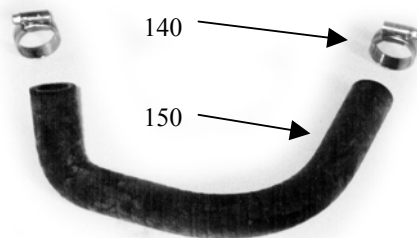


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80130	95kPa Pressure cap	1		
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring	
030	N/A	Part of 020	1		N/A
040	212-99232	½"BSPT-3/4" Hose connector	1		
050	209-01923	BD722 Keel cooled manifold (extruded)	1	Assembly inc. 010, 020 030 & 060	
050	209-05797	Beta25 / BD902 Keel cooled manifold (extruded)	1	Not shown, Assembly inc. 010, 020 030 & 060	
060	209-80050	3/8"BSP plug	1		
070	600-62620	Exhaust gasket 2"	1		
080	202-61350	Keel cooled exhaust flange 1½"BSP M	1		
090	217-99293	M8 Flat washer	4		
100	217-99292	M8 Spring washer	4		
110	217-99299	M8 x 25mm set	4		
120	220-02106	Beta Marine brass logo	1	Not shown	
130	212-96121	Braided flexible exhaust bellows 1½"BSP M-M x 15" OAL	1	Not shown	
140	212-01149/MF	Braided flexible exhaust bellows 1½"BSP M-F x 24" OAL	1	Not shown	
150	212-98308	Silencer 1½"BSP M-M 27" OAL	1	Not shown	
160	212-02425	Silencer 1½"BSP M-M 18" OAL	1	Not shown, not standard	
170	212-00033	Hospital silencer M-M 1½"BSP	1	Not shown	
180	212-00306	Socket 1½"BSP F-F	1	Not shown	
190	212-00234/01	Glass fibre exhaust lagging 3x50mm	30m	Not shown	

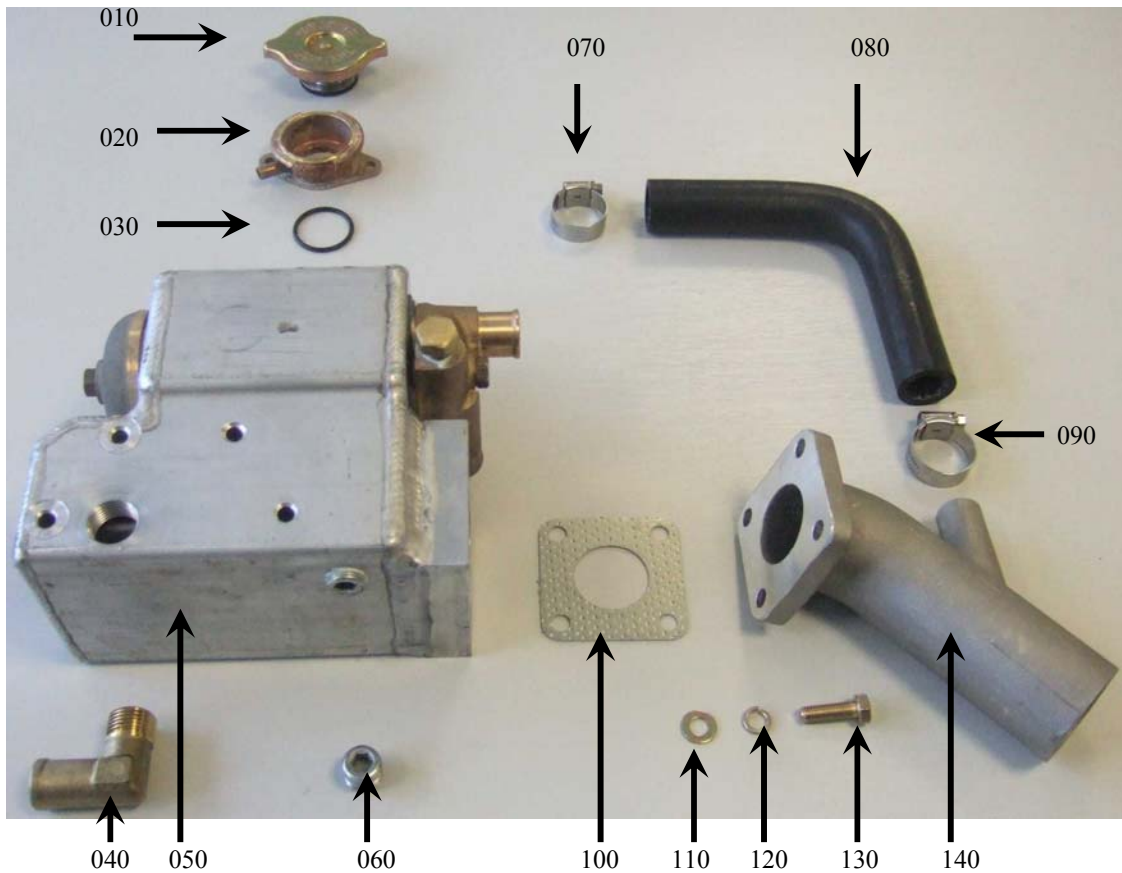
**Heat exchange tank –Cast tanks: Beta10, BZ482 & BD722 to Mid 2002**



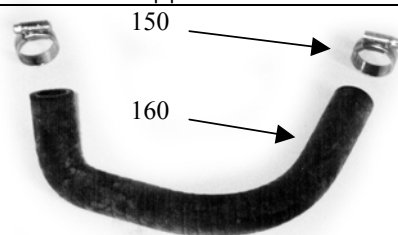
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80130	95kPa Pressure cap (Not USA)	1		
010	209-02323	13PSI Twin seal pressure cap (USA only)	1		
020	209-00015	Filler neck assembly (cast tank)	1		
030	209-61930	B10 & BZ482 heat exchange tank (cast)	1	Inc. 010, 020 & 050	N/A
030	209-61940	BD722 heat exchange tank (cast)	1	Inc. 010, 020 & 050	N/A
040	212-99236	½"BSP-3/4" hose connector	1		
050	209-80050	3/8"BSP plug	1		
060	600-62620	Exhaust Gasket 2"	1		
070	202-98330	2" x 22mm Aluminium water injection bend	1	To March 2002	N/A
070	202-02458	2" x 22mm Aluminium water injection bend	1	From March 2002	
080	209-98232	16x22 Silicon elbow	1		
090	212-98462	Stainless steel Jubilee 17-25mm	1		
100	212-98464	Stainless steel Jubilee 22-30mm	1		
110	217-99293	M8 flat washer	4		
120	217-99292	M8 spring washer	4		
130	217-99299	M8 x 25mm set	4		
140	212-98464	Stainless steel Jubilee 22-30mm	2		
150	209-92150	Mini silicon fresh water pipe	1		



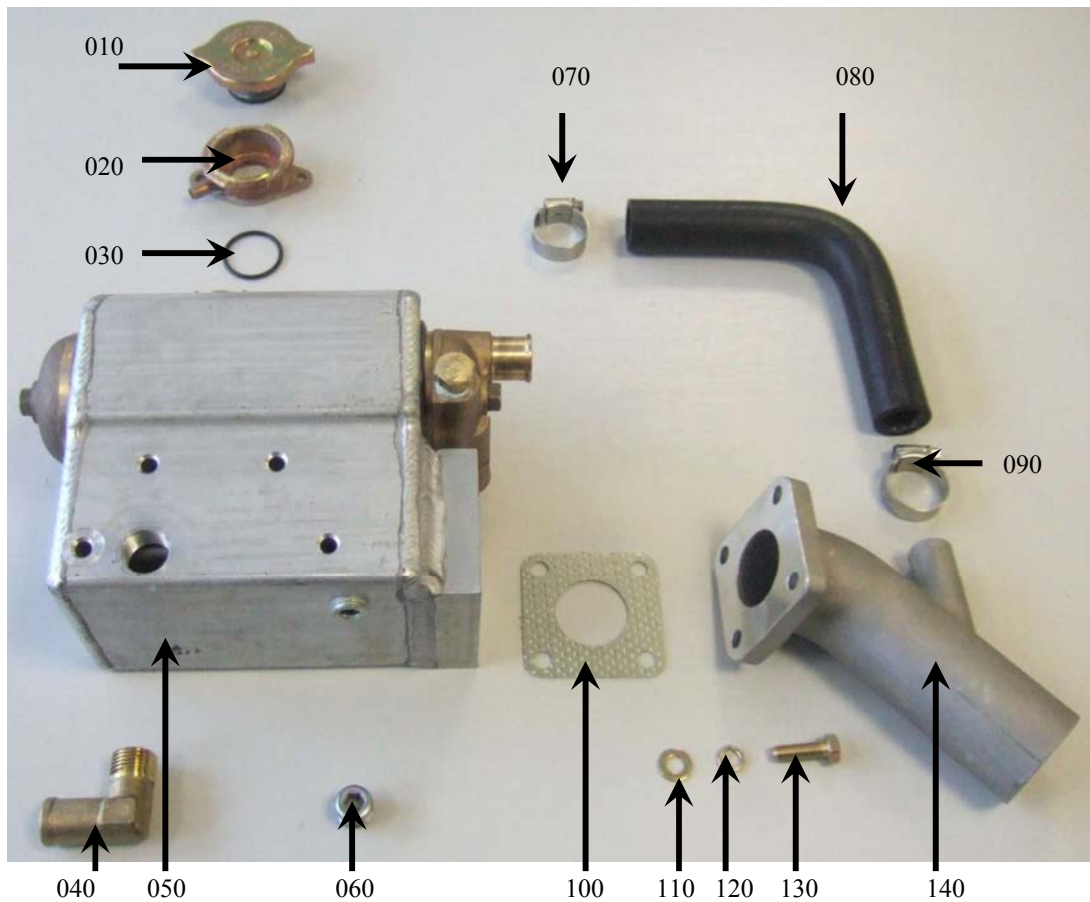
**Heat exchange tank –Beta10 / BZ482**



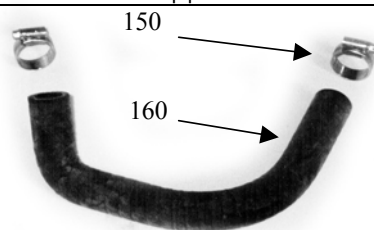
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80130	95kPa Pressure cap (Not USA)	1	
010	209-02323	13PSI Twin seal pressure cap (standard for USA only)	1	
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring
030	N/A	Part of 020	1	N/A
040	212-99236	½" BSP-3/4" hose connector	1	
050	209-01826/01	Beta10 / BZ482 heat exchange tank (extruded)	1	Inc. 010, 020, 030 & 060
060	209-80050	3/8" BSP plug	1	
070	212-98464	Stainless steel hose clip 22-30mm	1	
080	209-91760/01	22mm I/D Elbow	1	
090	212-98464	Stainless steel hose clip 22-30mm	1	
100	600-62620	Exhaust Gasket 2"	1	
110	217-99293	M8 flat washer	4	
120	217-99292	M8 spring washer	4	
130	217-99299	M8 x 25mm set	4	
140	202-02458	2" x 22mm Aluminium water injection bend	1	
150	212-98464	Stainless steel hose clip 22-30mm	2	
160	209-92150	Mini silicon fresh water pipe	1	



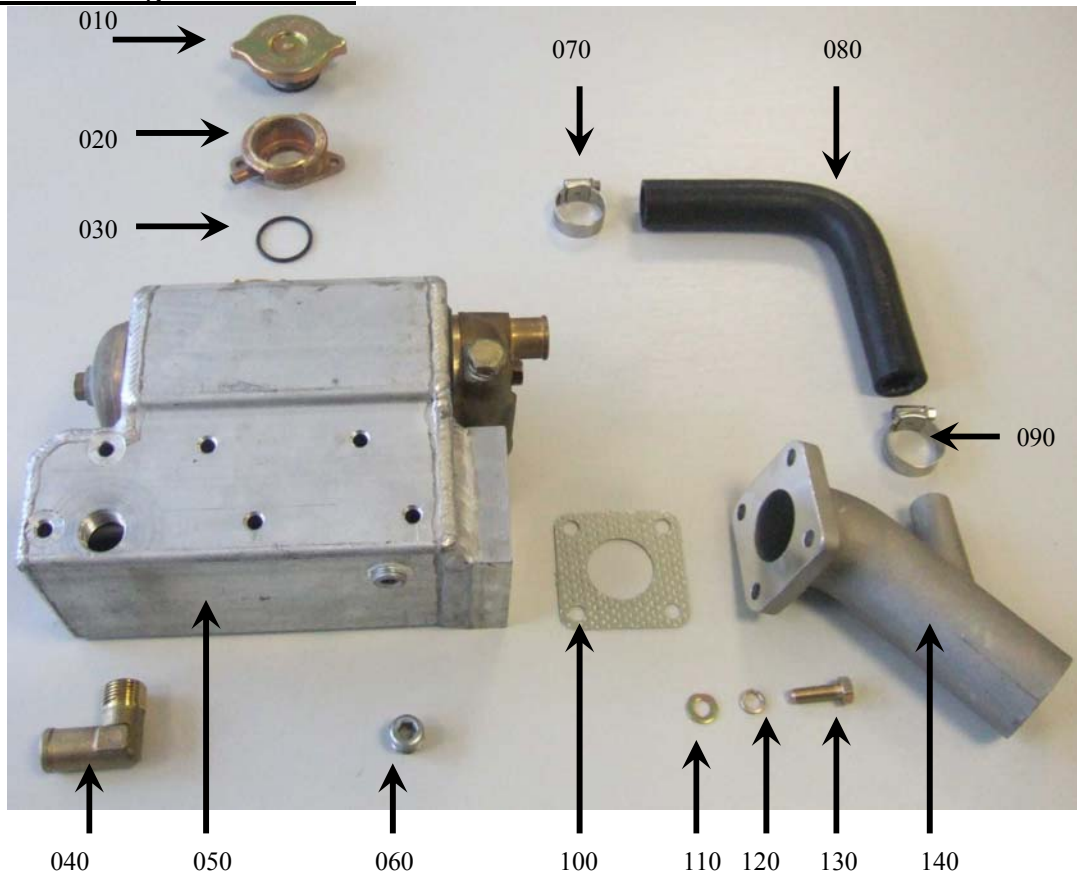
**Heat exchange tank –BZ602 / Beta16**



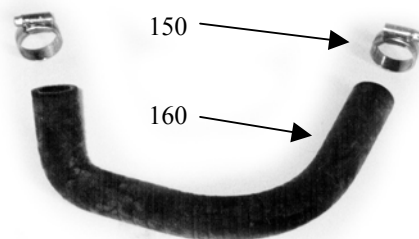
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80130	95kPa Pressure cap (Not USA)	1	
010	209-02323	13PSI Twin seal pressure cap (standard for USA only)	1	
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring
030	N/A	Part of 020	1	N/A
040	212-99236	½"BSP-3/4" hose connector	1	
050	209-06266	Beta16 / BZ602 heat exchange tank (extruded)	1	Inc. 010, 020, 030 & 060
060	209-80050	3/8"BSP plug	1	
070	212-98464	Stainless steel hose clip 22-30mm	1	
080	209-91760/01	22mm I/D Elbow	1	
090	212-98464	Stainless steel hose clip 22-30mm	1	
100	600-62620	Exhaust Gasket 2"	1	
110	217-99293	M8 flat washer	4	
120	217-99292	M8 spring washer	4	
130	217-99299	M8 x 25mm set	4	
140	202-02458	2" x 22mm Aluminium water injection bend	1	
150	212-98464	Stainless steel hose clip 22-30mm	2	
160	209-92150	Mini silicon fresh water pipe	1	



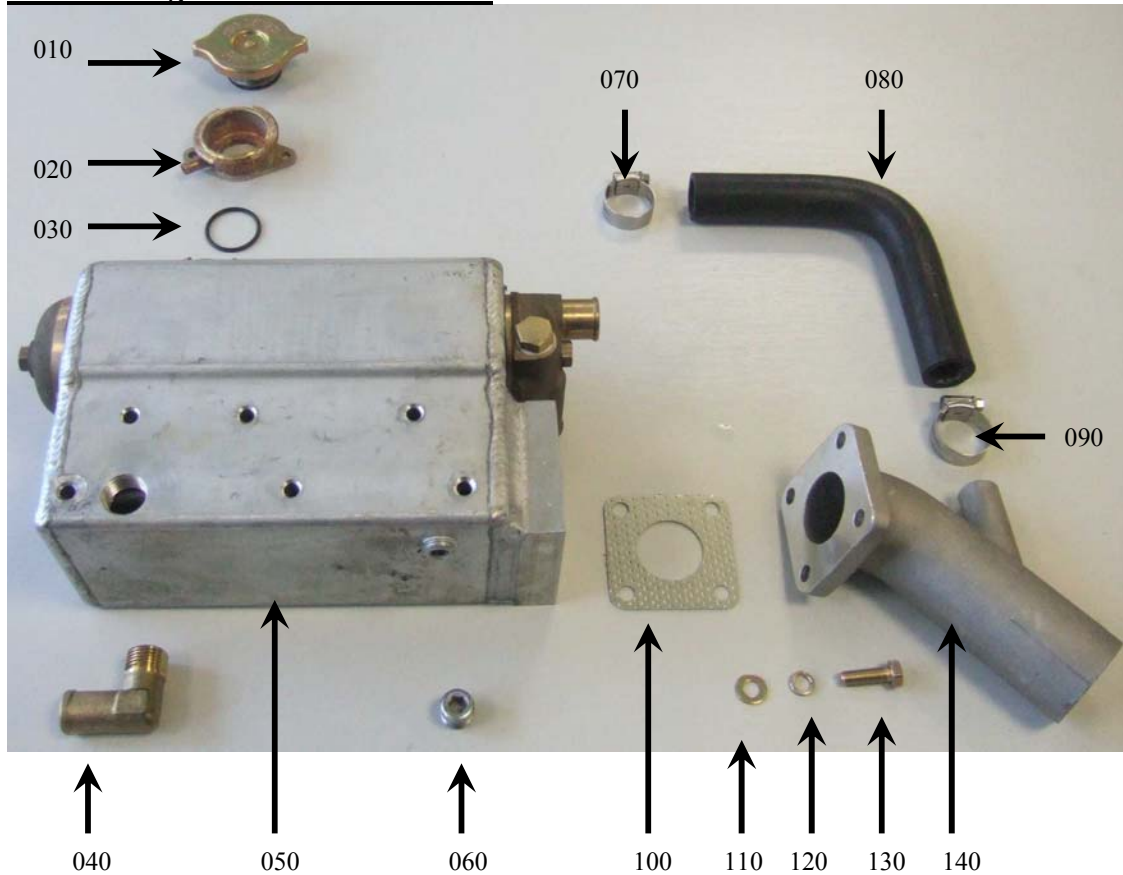
**Heat exchange tank –BD722**



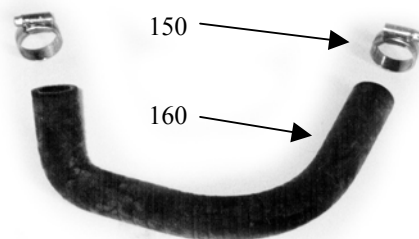
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80130	95kPa Pressure cap (Not USA)	1		
010	209-02323	13PSI Twin seal pressure cap (standard for USA only)	1		
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring	
030	N/A	Part of 020	1		N/A
040	212-99236	½" BSP-3/4" hose connector	1		
050	209-01827/01	BD722 heat exchange tank (extruded)	1	Inc. 010, 020, 030 & 060	
060	209-80050	3/8" BSP plug	1		
070	212-98464	Stainless steel hose clip 22-30mm	1		
080	209-91760/01	22mm I/D Elbow	1		
090	212-98464	Stainless steel hose clip 22-30mm	1		
100	600-62620	Exhaust Gasket 2"	1		
110	217-99293	M8 flat washer	4		
120	217-99292	M8 spring washer	4		
130	217-99299	M8 x 25mm set	4		
140	202-02458	2" x 22mm Aluminium water injection bend	1		
150	212-98464	Stainless steel hose clip 22-30mm	2		
160	209-92150	Mini silicon fresh water pipe	1		



**Heat exchange tank –BD902 / Beta25**

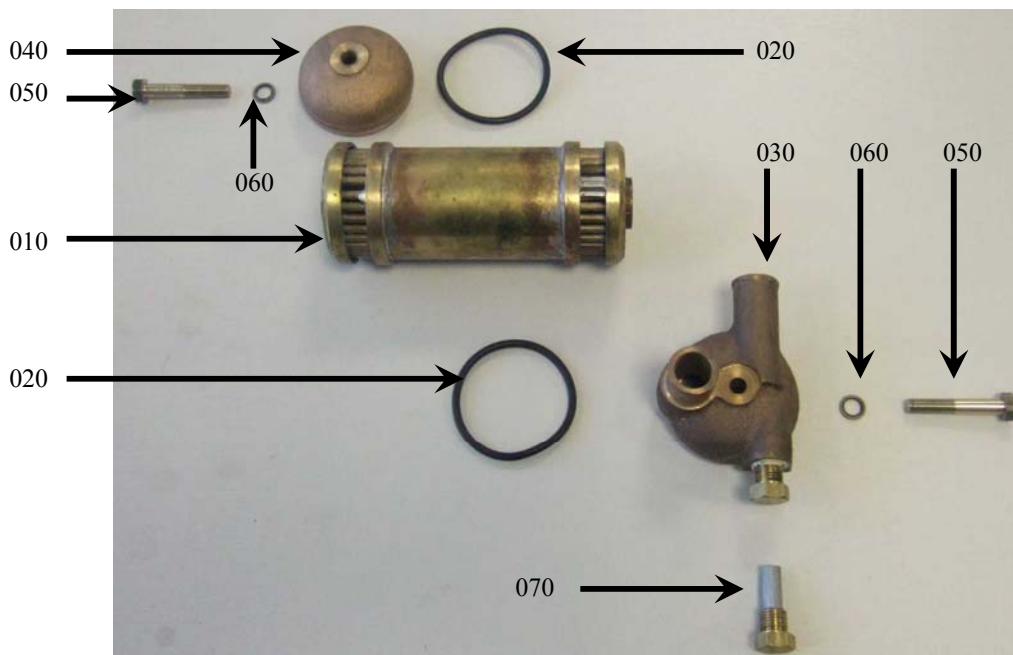


Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80130	95kPa Pressure cap (Not USA)	1	
010	209-02323	13PSI Twin seal pressure cap (standard for USA only)	1	
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring
030	N/A	Part of 020	1	N/A
040	212-99236	1/2" BSP-3/4" hose connector	1	
050	209-04826	BD902 / Beta25 heat exchange tank (extruded)	1	Inc. 010, 020, 030 & 060
060	209-80050	3/8" BSP plug	1	
070	212-98464	Stainless steel hose clip 22-30mm	1	
080	209-91760/01	22mm I/D Elbow	1	
090	212-98464	Stainless steel hose clip 22-30mm	1	
100	600-62620	Exhaust Gasket 2"	1	
110	217-99293	M8 flat washer	4	
120	217-99292	M8 spring washer	4	
130	217-99299	M8 x 25mm set	4	
140	202-02458	2" x 22mm Aluminium water injection bend	1	
150	212-98464	Stainless steel hose clip 22-30mm	2	
160	209-92150	Mini silicon fresh water pipe	1	



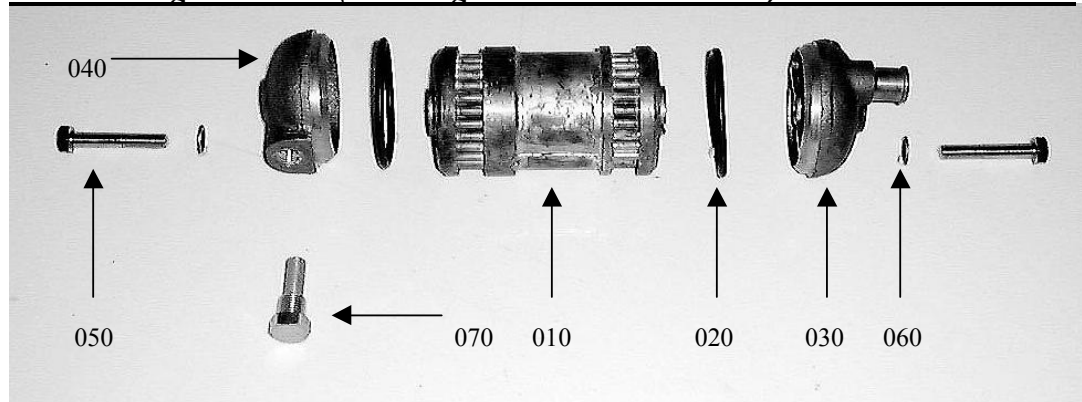


**Heat exchange tubestack (with 22mm header & anode on aft end)**



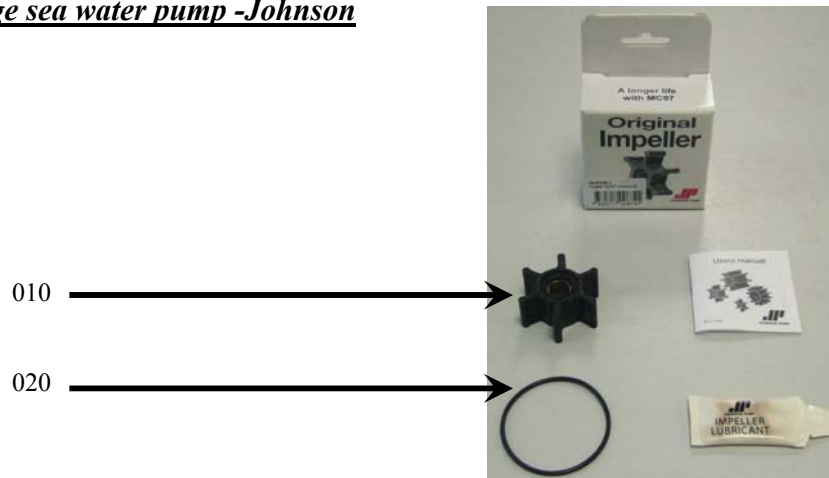
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-03975	Beta10 / BZ482 Tube stack	1	
010	209-03976	Beta16 / BZ602 / BD722 Tube stack	1	
010	209-80210	Beta25 / BD902 Tube stack	1	
020	209-80110	Nitrile 'O' ring for tubestack	2	
030	209-80440	22mm Gunmetal header & anode	1	
040	209-80100/01	Heat exchange endcap	1	
050	209-00016	M8 Phosphur bronze bolt	2	
060	209-00017	M8 Bonded seal	2	
070	209-61840	Zinc anode	1	¼" BSP

**Heat exchange tubestack (older engines with 15mm header) –Not BZ602 or BD902**



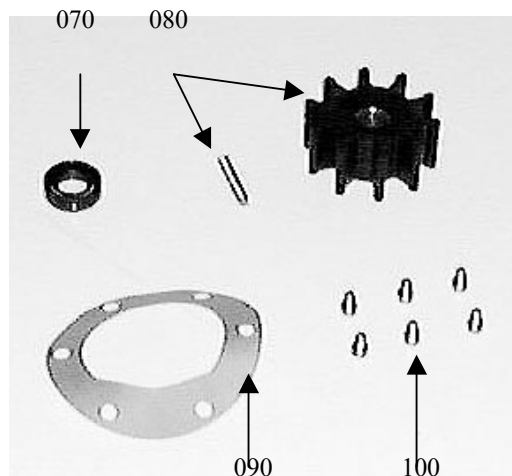
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-03975	Beta10 / BZ482 Tube stack	1	
010	209-03976	BD722 Tube stack	1	
020	209-80110	Nitrile 'O' ring for tubestack	2	
030	209-92110	15mm Gunmetal header	1	
040	209-80100	Heat exchange endcap & anode	1	
050	209-00016	M8 Phosphur bronze bolt	2	
060	209-00017	M8 Bonded seal	2	
070	209-61840	Zinc anode	1	¼" BSP

**Heat exchange sea water pump -Johnson**



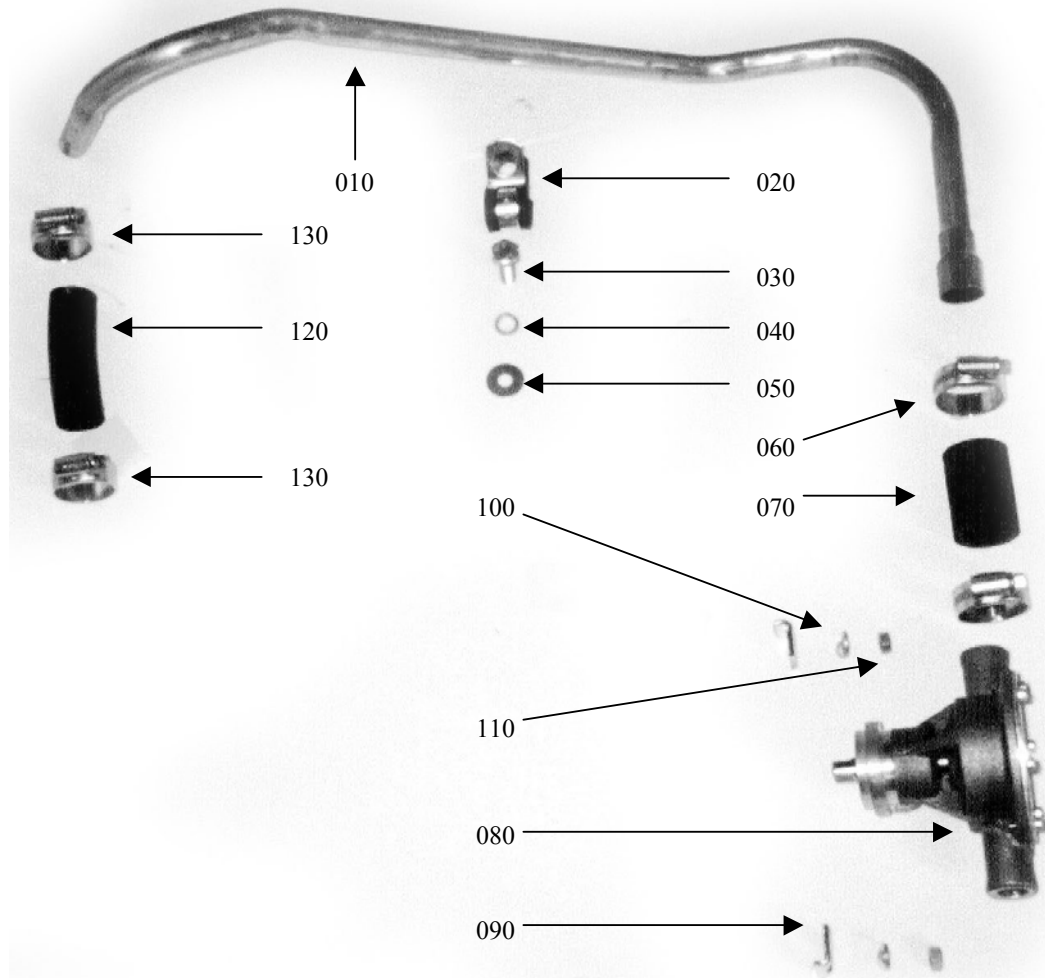
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	207-05355	Johnson pump impeller	1	Johnson from July 2006 (Note: O ring & lubricant)	
020	N/A	O ring for Johnson -Part of 010	1	Johnson from July 2006	N/A
030	207-06494	Johnson pump lip seal	1	Johnson from July 2006	
040	207-05479	Johnson pump screws	6	Johnson from July 2006	
050	207-05478	Johnson pump cover plate	1	Johnson from July 2006	
060	TBA	Johnson pump shaft	1	Johnson from July 2006	

**Heat exchange sea water pump –Jabsco –engines to July 2006 only**



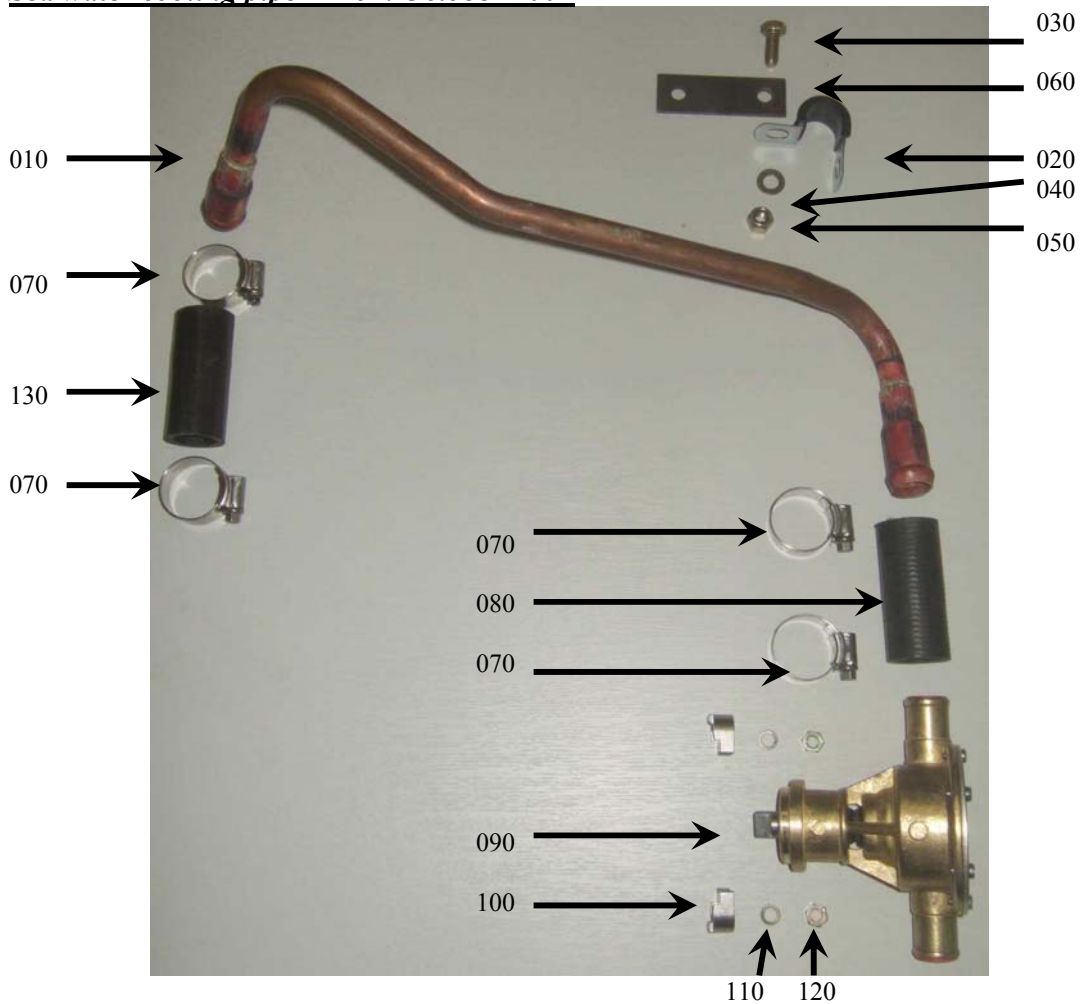
Ref. No.	Part No.	Part Name	Qty	Remarks	
070	207-02239	Jabsco pump lip seal	2	March 2004 to July 2006	
080	207-79630	Jabsco pump impeller	1	March 2004 to July 2006	
090	207-62600	Jabsco pump paper gasket	1	To March 2004 only	
090	207-04206	Jabsco pump O ring	1	March 2004 to July 2006	
100	207-00062	Jabsco pump screws	6	To March 2004 only	
100	207-04207	Jabsco pump screws	3	March 2004 to July 2006	
110	207-61470	Jabsco pump service kit	1	To March 2004 only Includes 70,80, 90 & 100	
110	AK/MINI/HE/SWPI/001	Jabsco pump service kit	1	March 2004 to July 2006 Includes 70,80, 90 & 100	
120	207-00507	Jabsco pump cover plate	1	To March 2004 only	
120	207-00138/01	Jabsco pump cover plate	1	March 2004 to July 2006	
140	207-01060	Jabsco pump shaft	1	March 2004 to July 2006	

**Sea water cooling pipe –To October 2002**



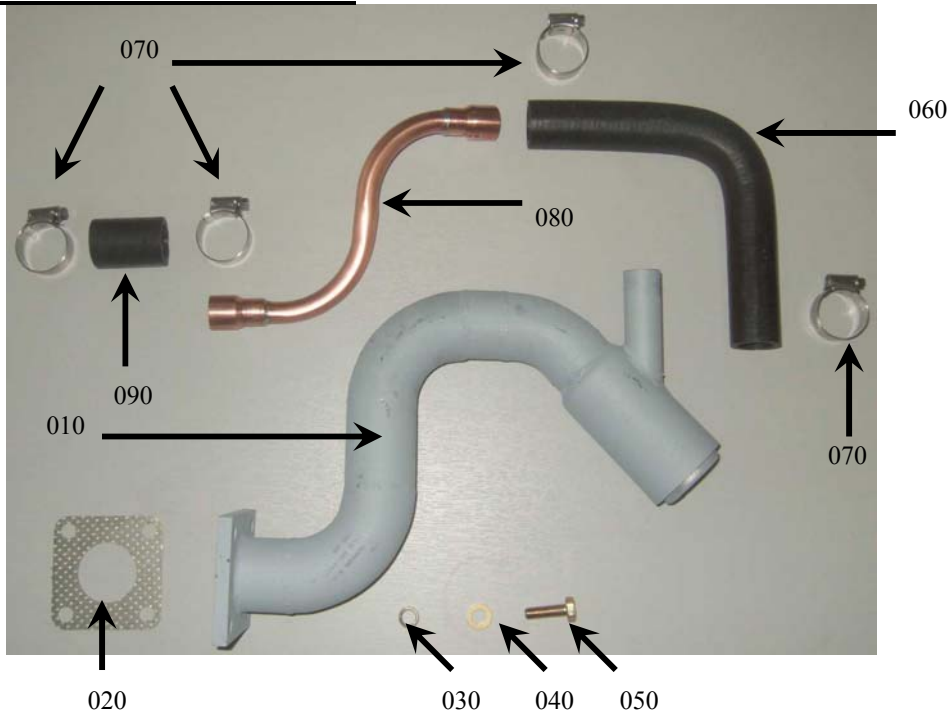
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80040/15	Raw water cooling pipe BZ482 & B10 To suit 15mm endcaps	1	To October 2002	
010	209-00071/15	Raw water cooling pipe BD722 To suit 15mm endcaps	1	To October 2002 (Not shown)	
020	212-99264	Fitting clip	1		
030	217-99279	M6 x 10mm set	1		
040	217-99275	M6 Spring washer	1		
050	217-99277	M6 Penny washer	1		
060	212-98464	Stainless steel Jubilee 22-30mm	2		
070	218-99249	Raw water pipe – sea water pump hose	0.04m	22mm ID x 0.04m	
080	207-61500	Sea water pump	1	Use 207-61500/01	N/A
090	207-62760	Pump clamp	2		
100	217-99275	M6 Spring washer	2		
110	217-00052	M6 Nut	2		
120	218-99390	Raw water pipe – heat exchanger hose 15mm	0.06m	To October 2002	
130	212-98462	Stainless steel Jubilee 17-25mm	2	To October 2002	

**Sea water cooling pipe –From October 2002**

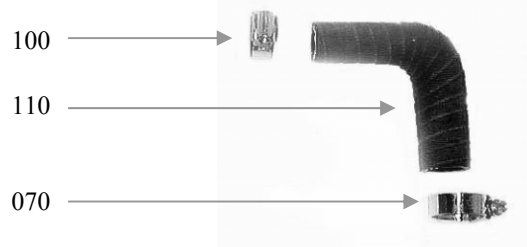


Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80040	Raw water cooling pipe Beta10, BZ482 & BZ602 -To suit 22mm endcaps	1	Includes 080 & 130
010	209-00071	Raw water cooling pipe BD722 & BD902 To suit 22mm endcaps	1	Includes 080 & 130 Not shown
020	212-99264	Fitting clip	1	
030	217-99298	M8 x 20mm set	1	
040	217-99293	M8 Flat washer	1	
050	217-99296	M8 Nyloc	1	
060	202-05488	Mini raw water pipe support bracket	1	
070	212-98464	Stainless steel hose clip 22-30mm	2	
080	218-99249	Raw water pipe – sea water pump hose	0.04m	
090	207-61500/01	Sea water pump –Johnson (from July 2006)	1	Use Johnson to replace Jabsco
100	207-06446	Johnson pump clamp	2	
110	217-99275	M6 Spring washer	2	
120	217-00052	M6 Nut	2	
130	218-99249	Raw water pipe – heat exchanger hose 22mm	0.06m	
140	212-00471	¾" I/D PVC Reinforced water inlet hose	2m	Not shown
150	212-00462	1"BSP M x 3/4" hose connector	1	Not shown –for 170
160	212-98464	Stainless steel hose clip 22-30mm	2	Not shown –for 170
170	212-99890	Seawater strainer, gunmetal 1"BSP	1	Not shown
180	212-00038/BALL	Ball valve 1"BSP FxF DZR	1	Not shown –for 170
190	212-99900	Skin fitting, gun metal 1"BSP M	1	Not shown –for 170

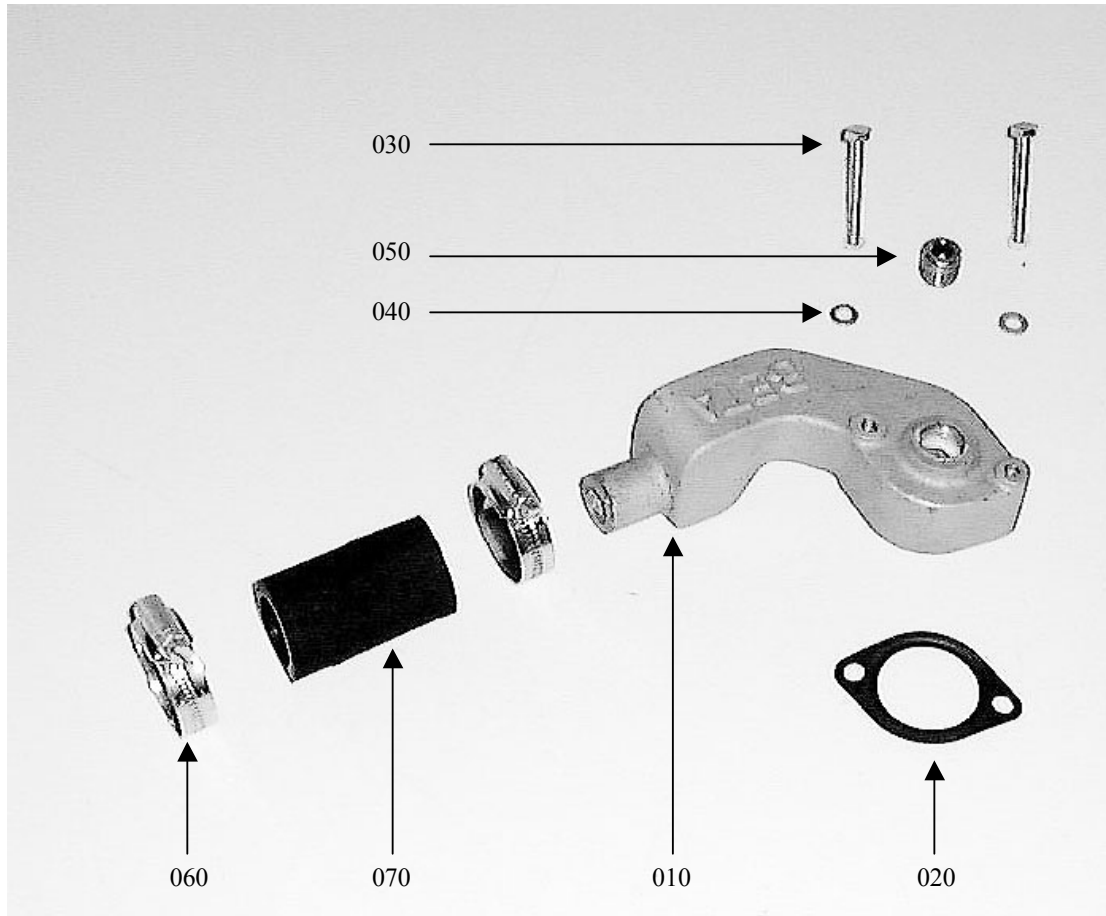
**Water injection bends –non standard**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	202-59050/01	1 1/2" O/D x 22mm Stainless steel water injection bend (double skin)	1	Not standard
010	202-04828	1 5/8" O/D Stainless steel water injection bend x 16mm	1	Not standard
010	202-90610	2" O/D Stainless steel water injection bend x 22mm	1	Not standard
010	202-92400/22	5" Stainless steel high rise water injection bend 2" O/D x22mm	1	(Shown) Optional
010	202-01597/22	5" Stainless steel high rise water injection bend 1 5/8" O/D x22mm	1	Not standard
010	202-06504	Volvo replacement stainless steel crossover high rise water injection bend 2" O/D x 22mm	1	From June 2006
010	202-94330/22	8" Stainless steel high rise water injection bend 2" O/D x22mm	1	Not standard
020	600-62620	Exhaust gasket 2"	1	
030	217-99293	M8 Flat washer	4	
040	217-99292	M8 Spring washer	4	
050	217-99299	M8 x 25mm set	4	
060	209-91760/01	22mm I/D Elbow	1	To suit 22mm exhaust
070	212-98464	Stainless steel hose clip 22-30mm (4 required for standard high rise system)	2	Only 1 required for 16mm exhaust
080	209-06445	Raw water pipe for high rise exhaust 22mm In x 22mm Out	1	
090	218-99249	22mm (7/8") I/D Black radiator hose	0.045m	
100	212-98462	Stainless steel hose clip 17-25mm	1	Only required for 16mm exhaust
110	209-98232	16 x 22mm I/D Reducing elbow	1	To suit 16mm exhaust
120	212-00234/01	Glass fibre exhaust lagging 3x50mm	5m	Not shown



## Thermostat housing



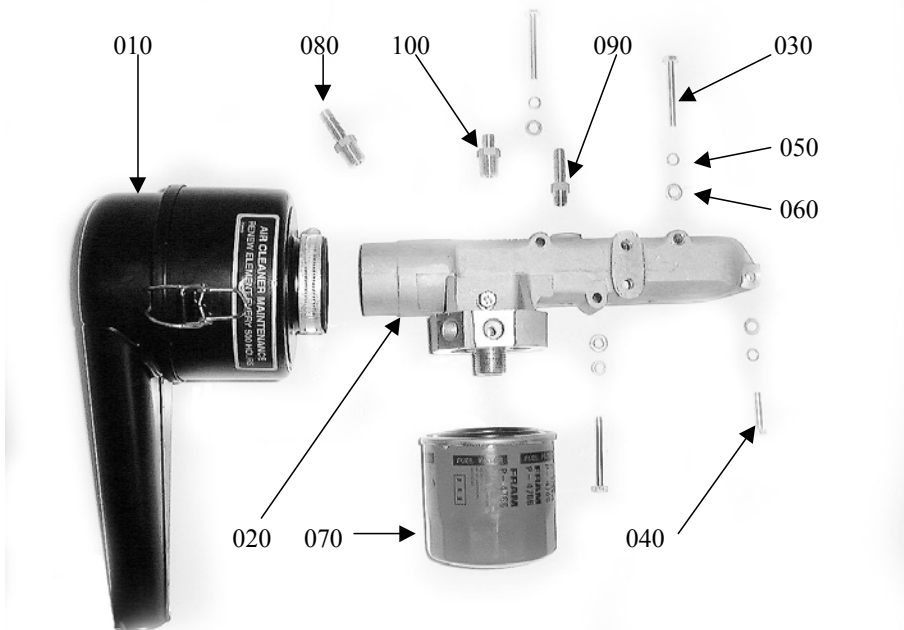
### For Beta 10 / BZ482 & BD722:

Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-60920	Beta10 / BZ482 & BD722 thermostat housing	1	
020	600-62590	Beta10 / BZ482 & BD722 thermostat gasket	1	
030	217-99285	M6 x 45mm set	2	
040	217-99276	M6 Flat washer	2	
050	209-80050	3/8" BSP plug	1	
060	212-98466	Stainless steel hose clip 25-35mm	2	
070	218-99249	Thermostat to heat exchange tank hose	0.05m	7/8" I/D
080	600-59290	Thermostat	1	Not shown
090	600-00624	Water return pipe –water pump to thermostat housing body	1	Not shown

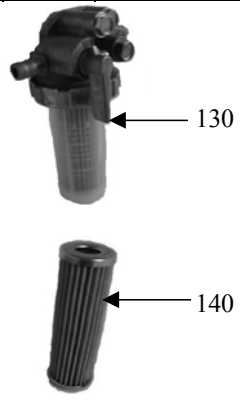
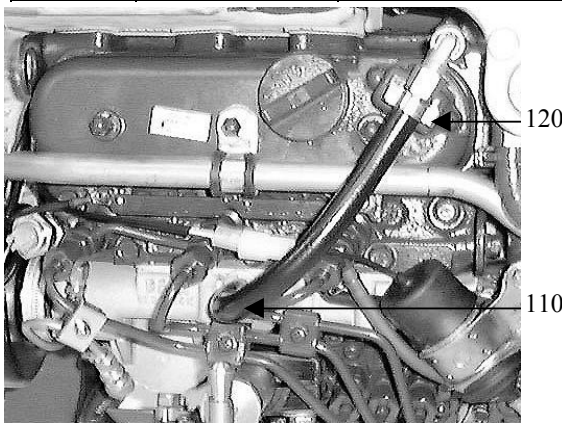
### For Beta16 (BZ602) & Beta25 (BD902):

Ref. No.	Part No.	Part Name	Qty	Remarks
010	208-06280	Beta16 / Beta25 thermostat housing	1	
020	600-80490	Beta16 / Beta25 thermostat gasket	1	
030	217-99302	M8 x 40mm set	2	
040	217-99293	M8 Flat washer	2	
050	209-80050	3/8" BSP plug	1	
060	212-98466	Stainless steel hose clip 25-35mm	2	
070	218-99249	Thermostat to heat exchange tank hose	0.05m	7/8" I/D
080	600-72450	Thermostat	1	Not shown
090	600-00624	Water return pipe –water pump to thermostat housing body	1	Not shown

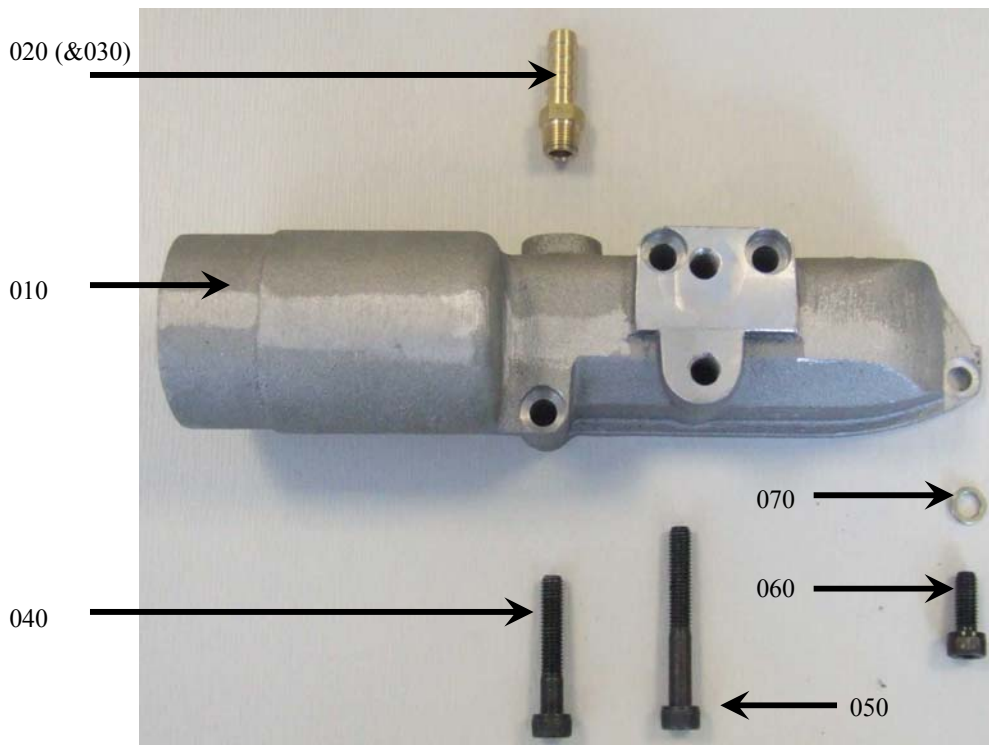
**Air inlet manifold & fuel system-Beta10, BZ482 & BD722 to December 2005**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	211-60320	Mini air cleaner assembly	1		
020	212-93430REV00	Inlet manifold B10 & BZ482	1	B10 & BZ482	N/A
020	212-93490REV00	Inlet manifold BD722	1	BD722	N/A
030	217-99286	M6 x 50mm set	2	B10 & BZ482	
030	217-99285	M6 x 45mm set	4	BD722	
040	217-99282	M6 x 25mm set	1		
050	217-99275	M6 Spring washer	3	B10 & BZ482	
			5	BD722	
060	217-99276	M6 Flat washer	3	B10 & BZ482	
			5	BD722	
070	211-60210	Fuel filter	1		
080	212-99253	1/4"BSPT Male x 5/16" Hose tail	1		
090	212-99254	1/8"BSPT Male x 5/16" Hose tail	1		
100	212-00018	1/4"BSPT Male x 5/16" Hose tail short	1		
110	218-00053	Breather hose – rocker cover	0.04m	8mm ID x 0.4m	
120	217-99245	9/16" O Clip	1		
130	600-92120	Clear fuel filter assembly	1	Not standard	
140	600-00088	Pencil type fuel filter element	1	Not standard	



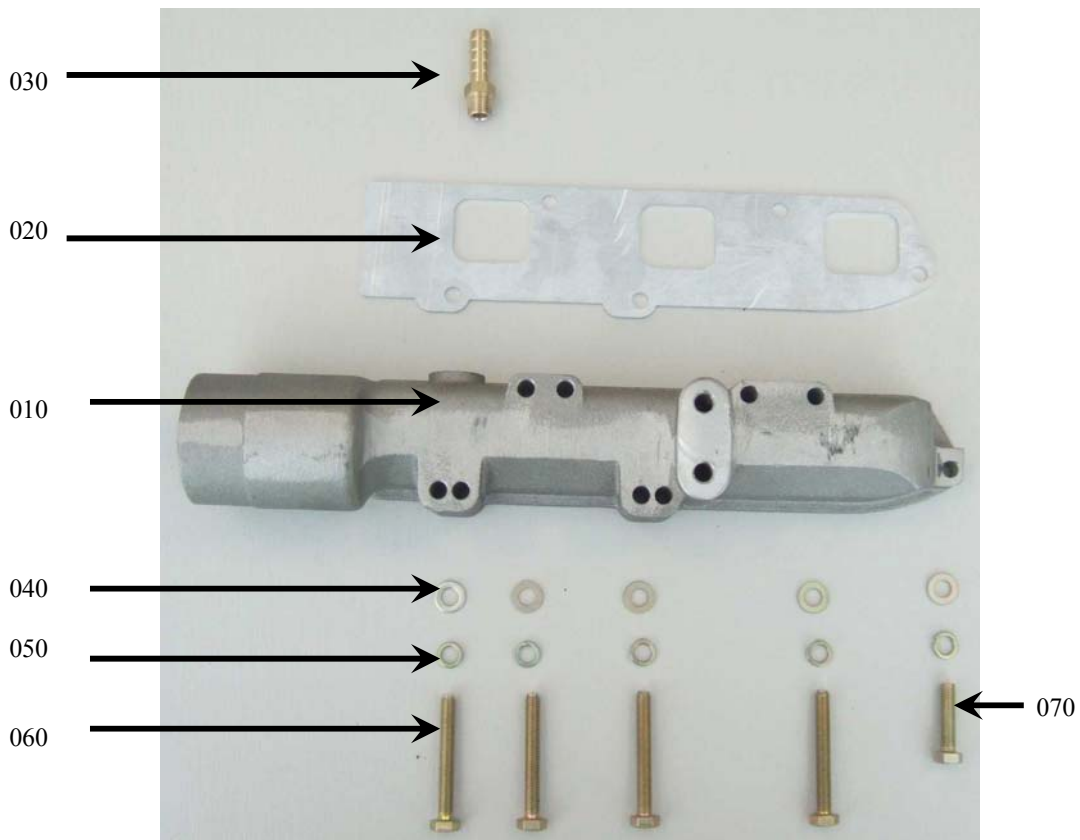
*Air inlet manifold –Beta 10 / BZ482 & BZ602 From December 2005*



Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-93430	Inlet manifold B10 ,BZ482 & BZ602	1	BZ482 & BZ602
020	212-99254	1/8"BSPT Male x 5/16" Hose tail	1	
030	212-99254/05	Modification to 212-99254 to 30mm OAL	1	Essential modification to 020 on all 2 cylinder engines
040	217-99284/01	M6 x 35mm socket cap screw	1	
050	217-05032	M6 x 45mm socket cap screw	1	
060	217-05033	M6 x 16mm socket cap screw	1	
070	217-99275	M6 Spring washer	1	

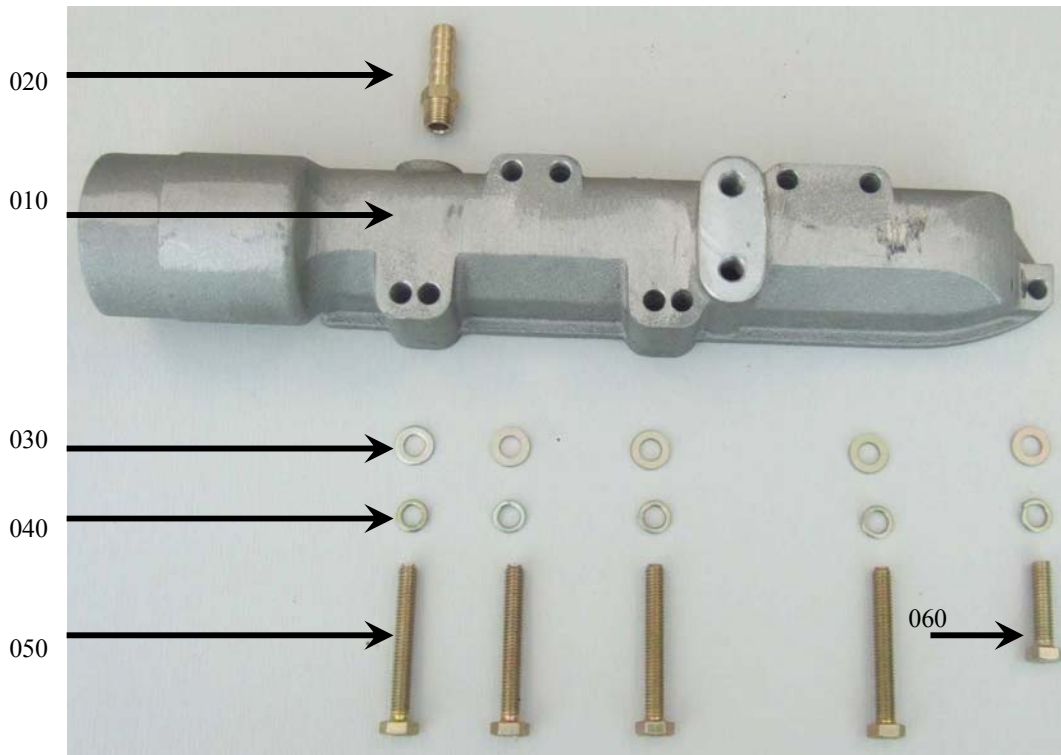


*Air inlet manifold –BD722 From December 2005*



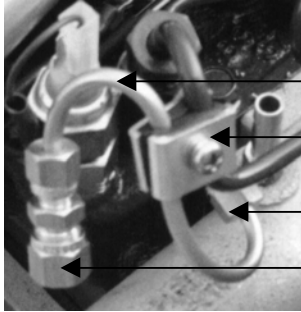
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-93490	Inlet manifold BD722 & BD902	1	BD722 & BD902	
020	202-06564	Inlet manifold adaptor BD722	1	BD722 Only	
030	212-99254	1/8"BSPT Male x 5/16" Hose tail	1		
040	217-99276	M6 Flat washer	5		
050	217-99275	M6 Spring washer	5		
060	217-99285	M6 x 45mm set	4		
070	217-99282	M6 x 25mm set	1		

*Air inlet manifold –BD902 From December 2005*

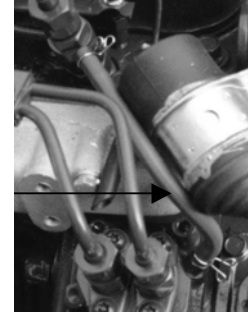


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-93490	Inlet manifold BD722 & BD902	1	BD722 & BD902	
020	212-99254	1/8" BSPT Male x 5/16" Hose tail	1		
030	217-99276	M6 Flat washer	5		
040	217-99275	M6 Spring washer	5		
050	217-99285	M6 x 45mm set	4		
060	217-99282	M6 x 25mm set	1		
070					

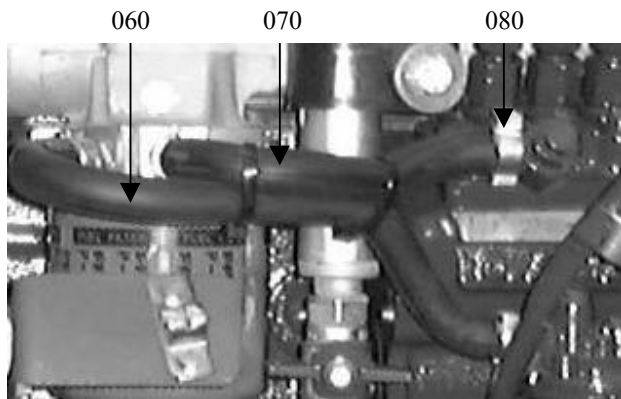
**Sea spec fuel system –to suit side mounted fuel filter to June 2005**  
**-Beta10, BZ482 & BD722 Only**



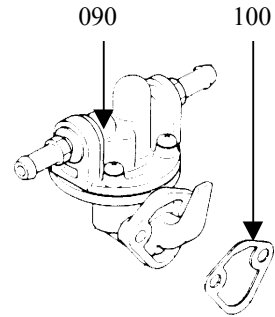
010  
020  
030  
040



050



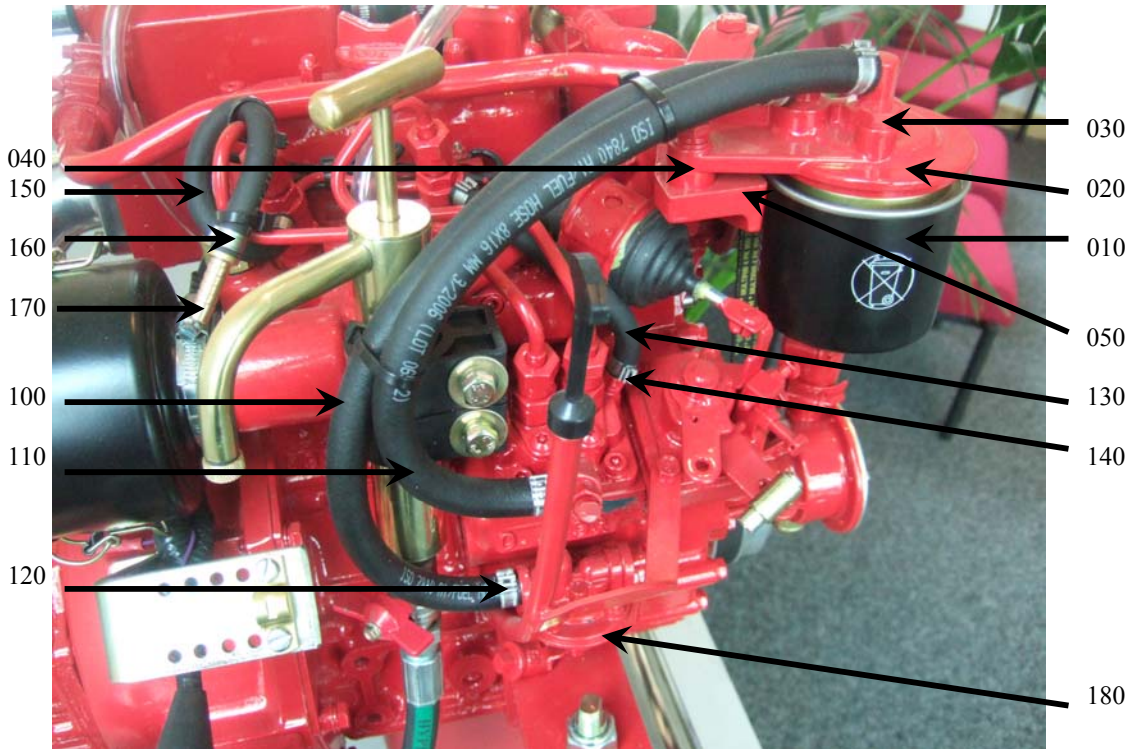
060      070      080



090      100

Ref. No.	Part No.	Part Name	Qty	Remarks	
010	218-99416	Fuel leak off –tank (5mm)	0.18m	5mm x 0.18m	
020	600-91801	Pipe clamp with thread	1		
	600-91802	Pipe clamp no thread	1		
	600-91803	Pipe clamp screw with washer	1		
030	212-97109	5mm Equal ended coupling	1		
040	212-97116	8x5mm Tube / tube reducer	1		
050	600-00077	Fuel leak off pipe & clips –injection pump	1		
060	212-02423	8mm Fuel pipe –fuel filter ISO 7480 A1	0.20m		
070	212-02423	8mm Fuel pipe –injection pump ISO 7480 A1	0.30m		
080	212-02826	Stainless steel hose clip type 15	4		
090	600-65470	Fuel Lift Pump (Beta10, BZ482 & BD722 only)	1		
100	600-00065	Fuel Lift Pump gasket	1		
110	207-00503	Electric fuel lift pump 12V	1	Not shown	
120	212-97117	8mm compression fitting for electric fuel lift pump	2	For 110	
120	212-99254	8mm hose tail fitting for electric fuel lift pump	2	For 110	

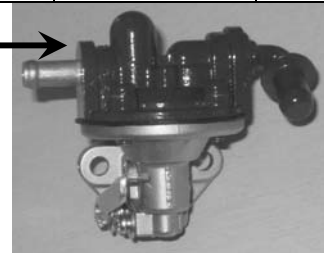
**Front mounted fuel filter system – From December 2005**



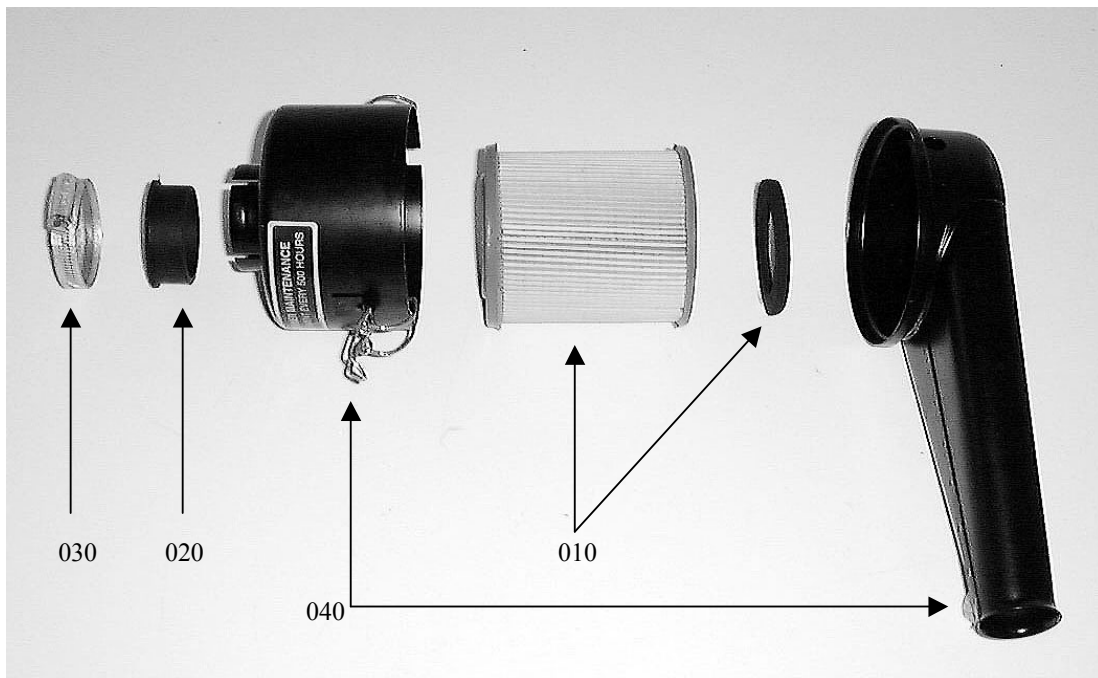
Ref. No.	Part No.	Part Name	Qty	Remarks
010	211-60210	Fuel filter	1	
020	600-80290	Fuel filter assembly aluminium	1	Complete with fuel filter 010 & 030
030	600-00594	Fuel filter bleed screw	1	
035	600-00592	O Ring for fuel filter bleed screw 030	1	
040	201-01204	Spacer 7mm (to raise fuel filter)	2	
050	208-06317	Mini Kubota fuel filter bracket	1	
060	217-05331	M6 x 25 Cap head (for fuel filter block –engine)	2	Not shown
070	217-99300	M8 x 30mm Set -for fuel filter 020 to bracket 050	2	Not shown
080	217-99292	M8 Spring washer -for fuel filter 020 to bracket 050	2	Not shown
090	217-99293	M8 Flat washer -for fuel filter 020 to bracket 050	2	Not shown
100	212-02423	Fuel hose, lift pump to filter, ISO7840 A1	0.5m	
110	212-02423	Fuel hose, filter to injection pump, ISO7840 A1	0.5m	
120	212-02826	Fuel hose stainless crimp type 15	4	
130	218-02827	Fuel return hose to injection pump, ISO7840 A1	0.25m	
140	212-04627	Fuel hose stainless crimp type 11	2	
150	218-02827	Fuel leak off hose to fuel tank, ISO7840 A1	0.25m	
160	212-04627	Fuel hose stainless crimp type 11	2	
170	212-99254	Fuel hose tail adaptor 5mm IN x 8mm OUT	1	
180	600-65470	Fuel Lift Pump (Beta10, BZ482 & BD722 only)	1	
180	AK/MINI/9&6/F01	Fuel Lift Pump (BZ602 & BD902 only)	1	
190	600-00065	Fuel Lift Pump gasket	1	Not shown



180



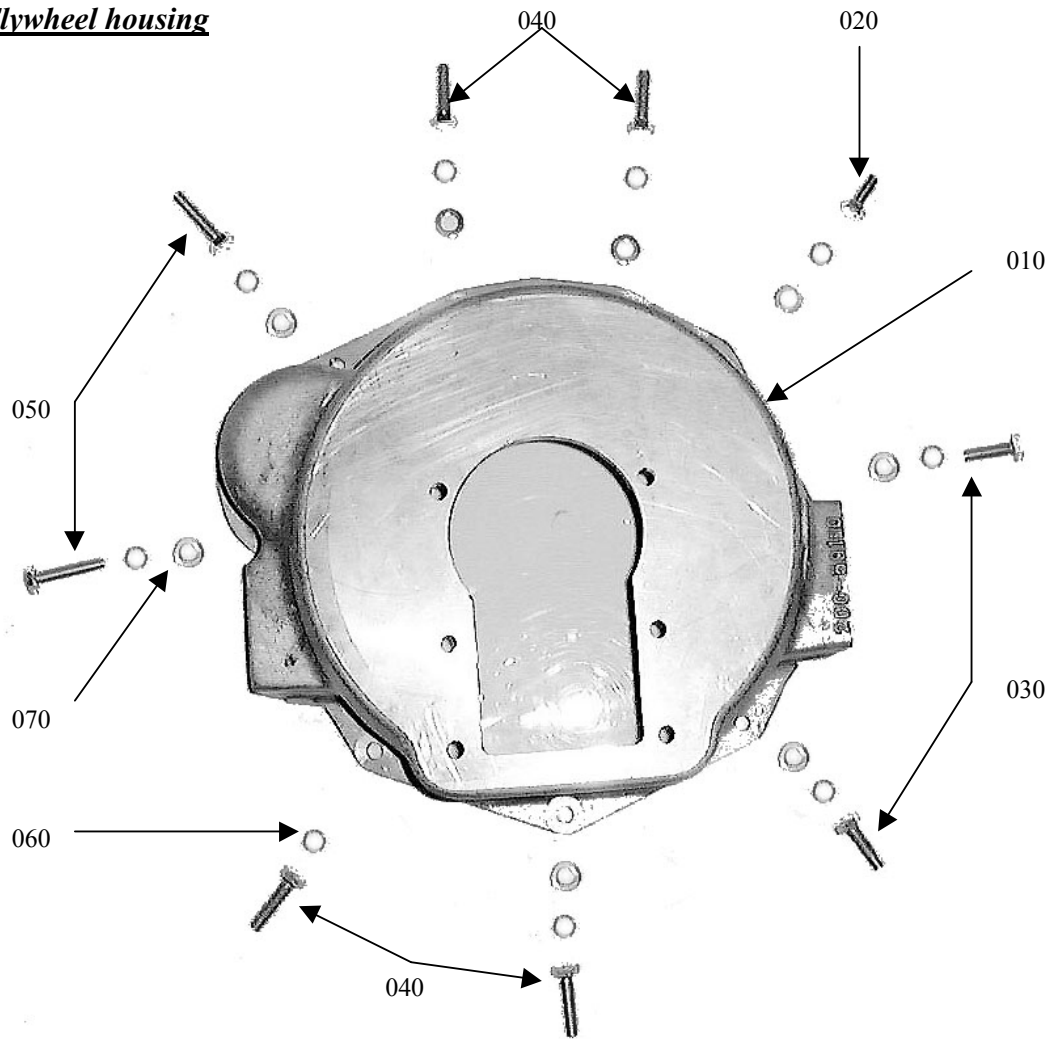
## Air filter



Ref. No.	Part No.	Part Name	Qty	Remarks
010	211-62950	Mini air filter element	1	Includes foam washer
020	211-00022	Rubber grommit	1	
030	212-00117	Stainless steel hose clip 45-60mm	1	
040	211-60320	Mini air cleaner assembly	1	Assembly: Inc. 010 020 & 030
050	211-91610	Mini air filter element (blue) to suit Virgis air filter	1	Old style only, to suit air filter assembly with wing nut

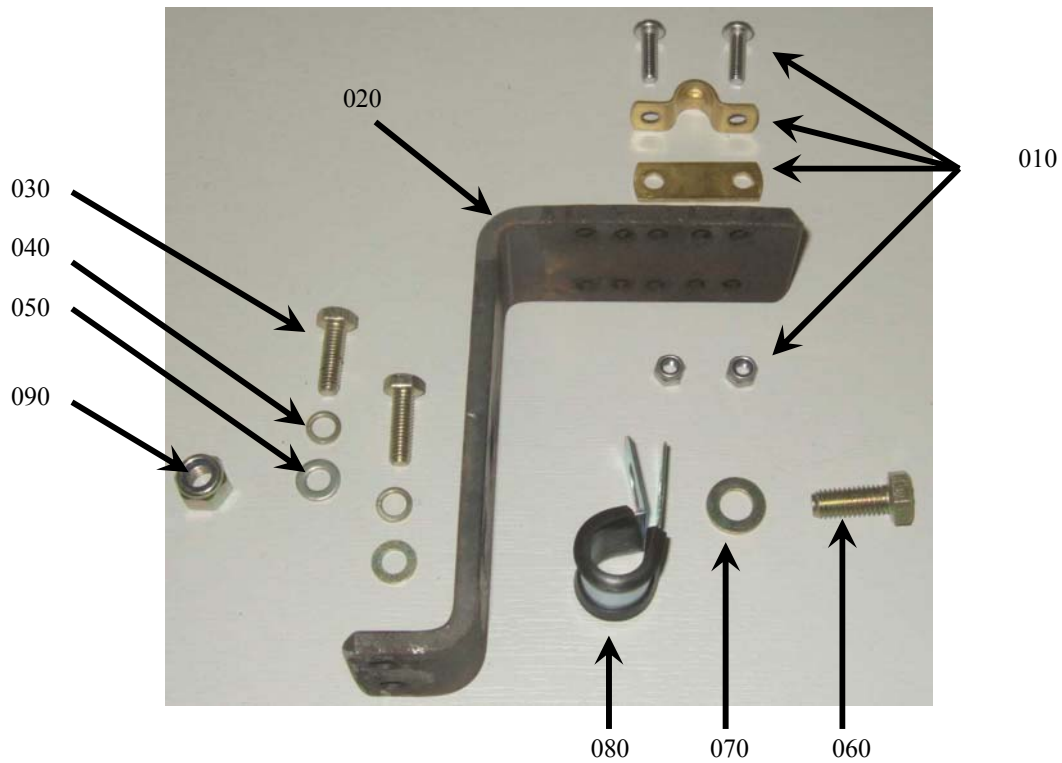


**Flywheel housing**



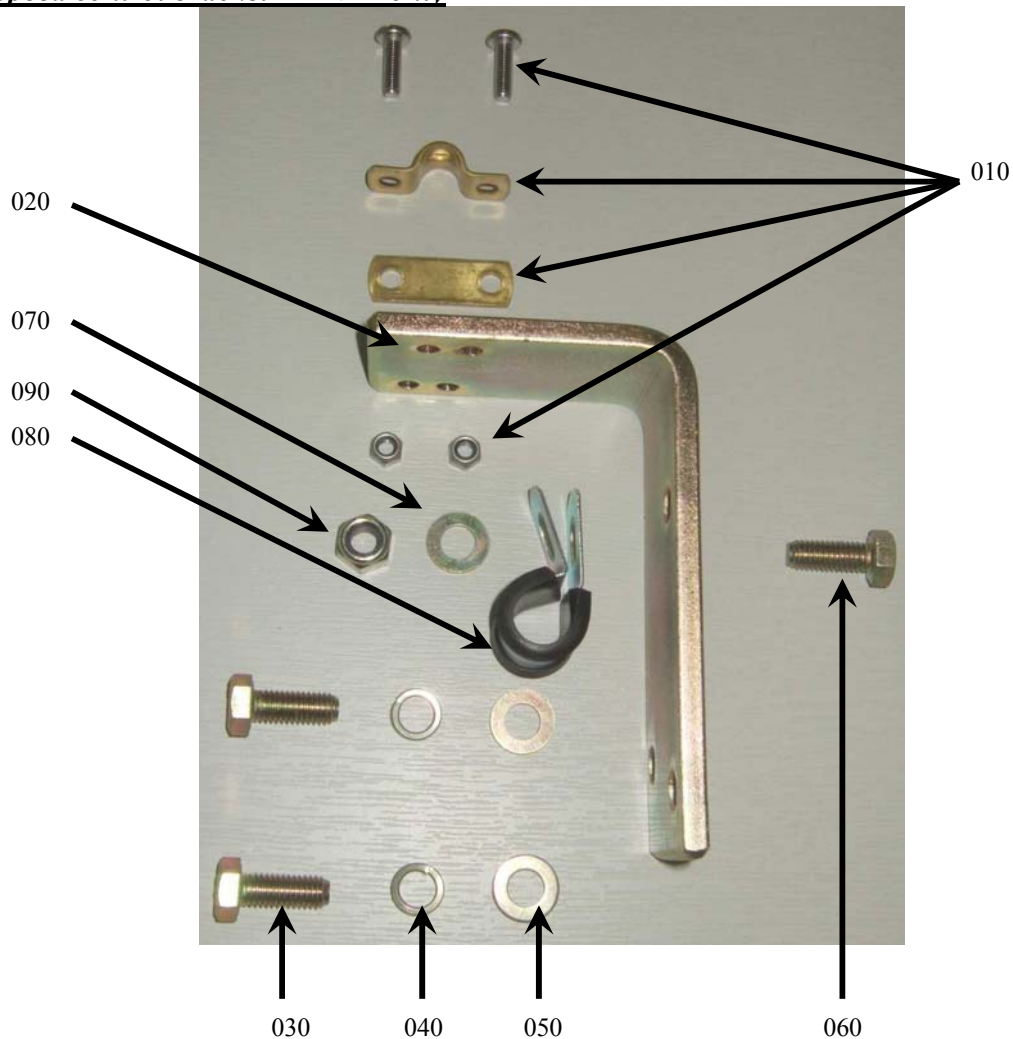
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	208-59190	Mini flywheel housing	1		
020	217-99298	M8 x 20mm set	1		
030	217-99299	M8 x 25mm set	2		
040	217-99300	M8 x 30mm set	4		
050	217-99301	M8 x 35mm set	2		
060	217-99292	M8 Spring washer	9		
070	217-99293	M8 Flat washer	9		

**Speed control bracket –Beta10 & BZ482 only**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-99241/01	Speed & gear cable clamp	1		
020	202-97640	B10 & BZ482 Speed control bracket	1		
030	217-99281	M6 x 20mm set	2		
040	217-99275	M6 Spring washer	2	B10 & BZ482	
050	217-99276	M6 Flat washer	2	B10 & BZ482	
060	217-99298	M8 x 20mm set	1		
070	217-99293	M8 Flat washer	1		
080	212-99264	Fitting clip	1		
090	217-99296	M8 Nyloc	1		
100	212-96070/01	Single lever control cable 3m	2	Not shown	
110	212-04346	Side mount single lever control unit	1	Not shown	
120	220-06162	Beta Marine sticker to suit 212-04346	1	Not shown	

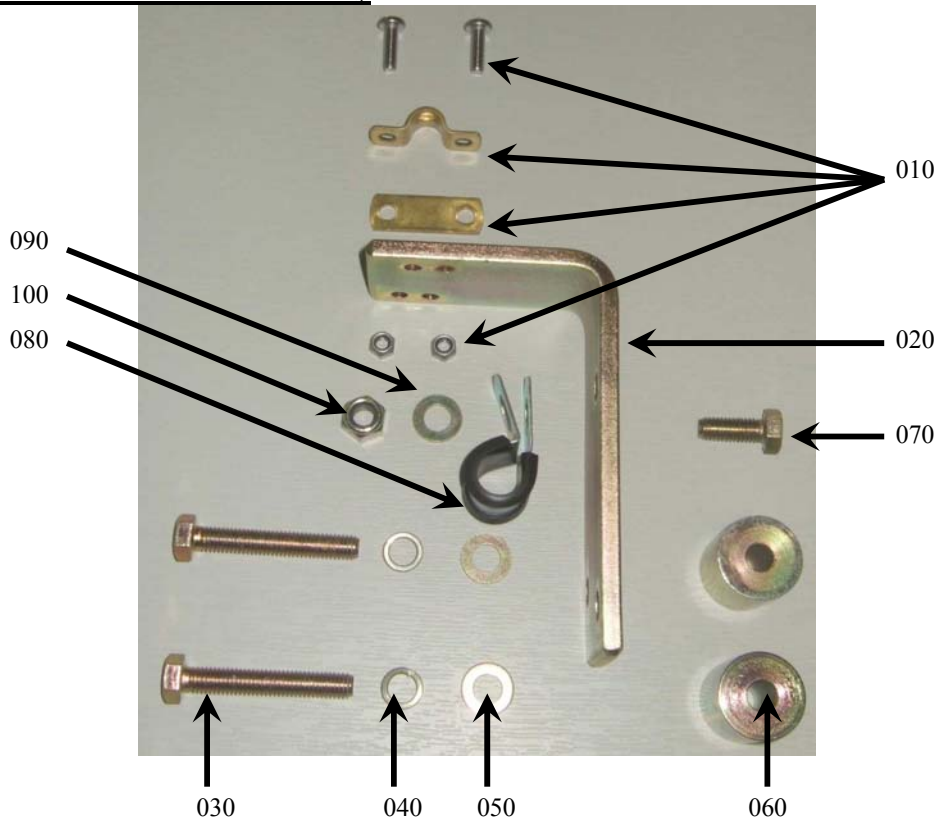
**Speed control bracket –BD722 only**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-99241/01	Speed & gear cable clamp	1		
020	202-89360	BD722 & BD902 Speed control bracket	1		
030	217-99298	M8 x 20mm set	2		
040	217-99292	M8 Spring washer	2		
050	217-99293	M8 Flat washer	2		
060	217-99298	M8 x 20mm set	1		
070	217-99293	M8 Flat washer	1		
080	212-99264	Fitting clip	1		
090	217-99296	M8 Nyloc	1		
100	212-96070/01	Single lever control cable 3m	2	Not shown	
110	212-04346	Side mount single lever control unit	1	Not shown	
120	220-06162	Beta Marine sticker to suit 212-04346	1	Not shown	

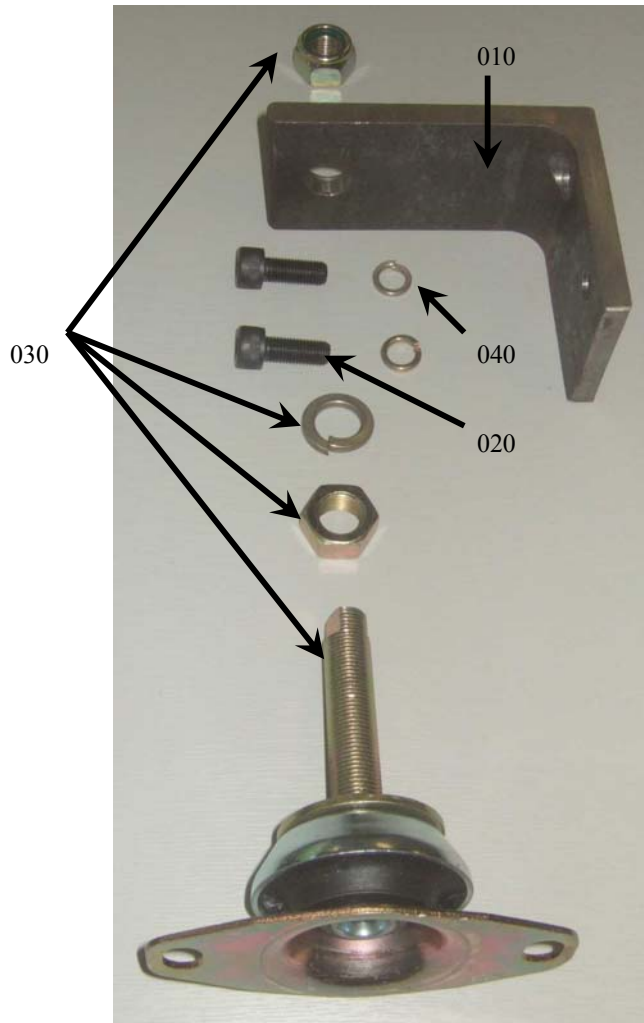


**Speed control bracket –BD902 only**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-99241/01	Speed & gear cable clamp	1		
020	202-89360	BD902 Speed control bracket	1		
030	217-99303	M8 x 50mm set	2		
040	217-99292	M8 Spring washer	2		
050	217-99293	M8 Flat washer	2		
060	201-61420	Spacer 25Dia x 20.5mm (to extend speed control bracket)	2		
070	217-99298	M8 x 20mm set	2		
080	212-99264	Fitting clip	1		
090	217-99293	M8 Flat washer	1		
100	217-99296	M8 Nyloc	1		
110	212-96070/01	Single lever control cable 3m	2	Not shown	
120	212-04346	Side mount single lever control unit	1	Not shown	
130	220-06162	Beta Marine sticker to suit 212-04346	1	Not shown	

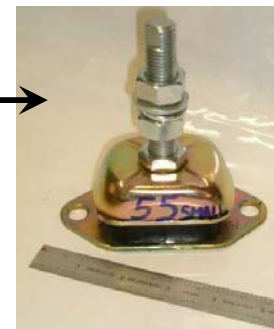
**Front feet**



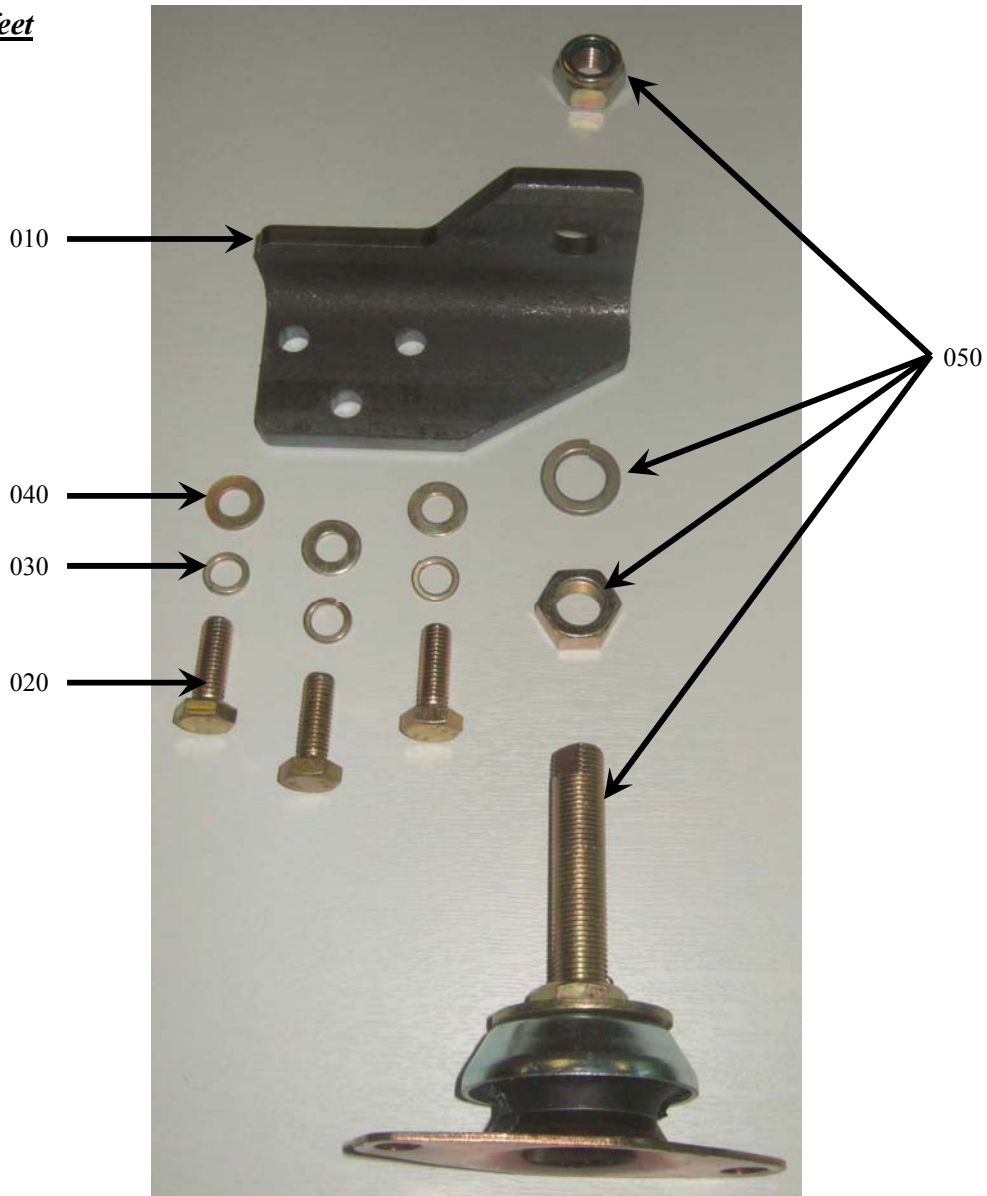
Ref. No.	Part No.	Part Name	Qty	Remarks
010	202-97671P	Mini series front foot (port)	1	Not shown
010	202-97671L	Mini series front foot (starboard)	1	
020	217-99335	M10 x 25mm Fine socket cap head	2	Quantity required per foot
030	213-93440	RA60 Flexible mount (complete)	1	Quantity required per foot
030	213-60910	CT213S Flexible mount	1	(per foot) Not standard fit
030	213-80170/01	Metalastic type flexible mount 100ctrs 55 shore	1	(per foot) Not standard fit
040	217-99320	M10 Spring washer	2	American engines only
050	217-04671	RA60 Flexible mount M16 nyloc nut	1	(Part of 213-93440)
060	217-04671/01	RA60 Flexible mount M16 plain nut	1	(Part of 213-93440)
070	217-01411	RA60 Flexible mount M16 spring washer	1	(Part of 213-93440)



030



**Rear feet**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	202-59261	Mini rear foot (port)	1		
010	202-59251	Mini rear foot (star)	1	Not shown	
020	217-99325	M10 x 30mm set	3	Quantity required per foot	
030	217-99320	M10 Spring washer	3	Quantity required per foot	
040	217-99321	M10 Flat washer	3	Quantity required per foot	
050	213-93440	RA60 Flexible mount (complete)	1	Quantity required per foot	
050	213-60910	CT213S Flexible mount	1	(per foot) Not standard fit	
050	213-80170/01	Metalastic type flexible mount 100ctrs 55 shore	1	(per foot) Not standard fit	
060	217-04671	RA60 Flexible mount M16 nyloc nut	1	(Part of 213-93440)	
070	217-04671/01	RA60 Flexible mount M16 plain nut	1	(Part of 213-93440)	
080	217-01411	RA60 Flexible mount M16 spring washer	1	(Part of 213-93440)	

**Gearbox driveplate**



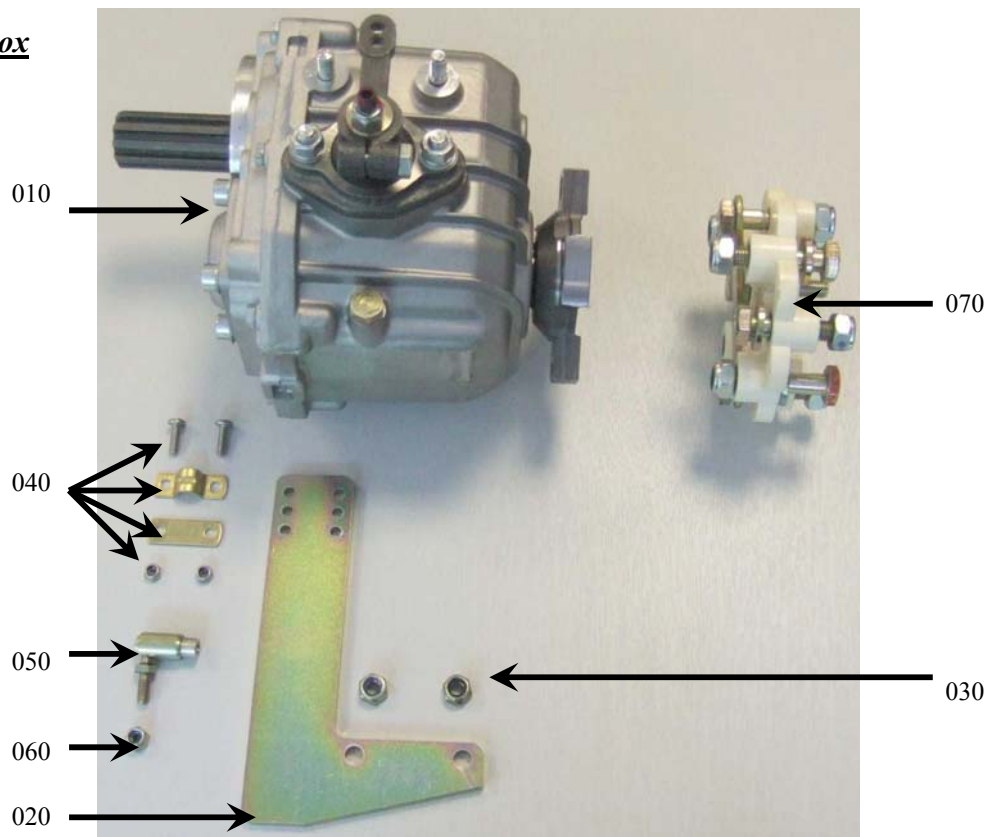
Ref. No.	Part No.	Part Name	Qty	Remarks
010	206-97041	22-B-4 Mini damper –TMC / PRM	1	<b>Requires counterbore for Selva</b>
010	202-97041/05	5mm Counterbore to 206-97041 to suit Selva & BZ482 –BD722	1	Require in addition to 206-97041
010	202-97041/10	10mm Counterbore to 206-97041 to suit Selva & BD902	1	Require in addition to 206-97041
010	206-00895	43-AC-60 SAE6.5 damper to suit ZF15A	1	Requires special adaptor ring <b>Requires counterbore</b>
010	202-00895/05	5mm Counterbore to 206-00895 to suit ZF15A BZ482 –BD722	1	Require in addition to 206-00895
010	TBA	Counterbore to 206-00895 to suit ZF15A BD902	1	Require in addition to 206-00895
010	206-01739	2-B-4 Mini damper –Kanzaki	1	
010	206-04108	63-B-123 Split damper to suit Volvo 110S	1	
010	206-04876	66-B-60 SAE6.5 damper to Volvo 120S	1	Not BD902 / Beta25 Requires special adaptor ring
010	206-05176	66-B-4 Mini damper to Volvo 120S	1	BD902 only
020	217-99280	M6 x 16mm Set	5	All engines (from Mid 2007)
020	217-01009	¼"UNF x 5/8" Set	5	Most engines (to Mid 2007)
030	217-99276	M6 Flat washer	5	All engines (from Mid 2007)
030	217-01010	¼"UNF Flat washer	5	Most engines (to Mid 2007)
040	217-99275	M6 Spring washer	5	All engines (from Mid 2007)
040	217-01011	¼"UNF Spring washer	5	Most engines (to Mid 2007)
050	206-98990	Circlip –DS10 damper	1	Not shown, not standard
050	206-00480	Circlip –DS15 damper	1	Not shown, not standard
060	206-98995	Roller rubber –DS10 damper	4	Not shown, not standard
060	206-00013	Roller rubber –DS15 damper	4	Not shown, not standard

**Driveplate spacer ring**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	201-00847	Adaptor for 22-B-4 damper (damper requires 1/4UNF set screws to mid 2007)	1	<b>Standard adaptor</b> Also BD902 Nov 2005-	
010	201-06595	Adaptor Mini -22-B-4 to suit BD902 (damper requires 1/4UNF set screws to mid 2007)	1	BD902 to November 2005	
010	206-97042	Spacer BD902 to 22-B-4 damper (damper requires M6 set screws)	1	BD902 from November 2005	
010	201-06595	Adaptor Mini -22-B-4 to suit BD902 (damper requires 1/4UNF set screws to mid 2007)	1	BD902 with 3:1 gearbox from Dec 2006	
010	201-02096	Adaptor for SAE6.5 damper –Volvo120S & ZF15A (damper requires 1/4UNF set screws to mid 2007)	1	Not BD902 / Beta25	
010	201-05312	Adaptor for SAE6.5 damper to ZF15V (damper requires 1/4UNF set screws to mid 2007)	1	Not BD902 / Beta25	
020	217-99309	M8 x 16mm Socket screw	5		
020	217-99315	M8 x 20mm Countersink screw	5	To suit 206-97042 only	

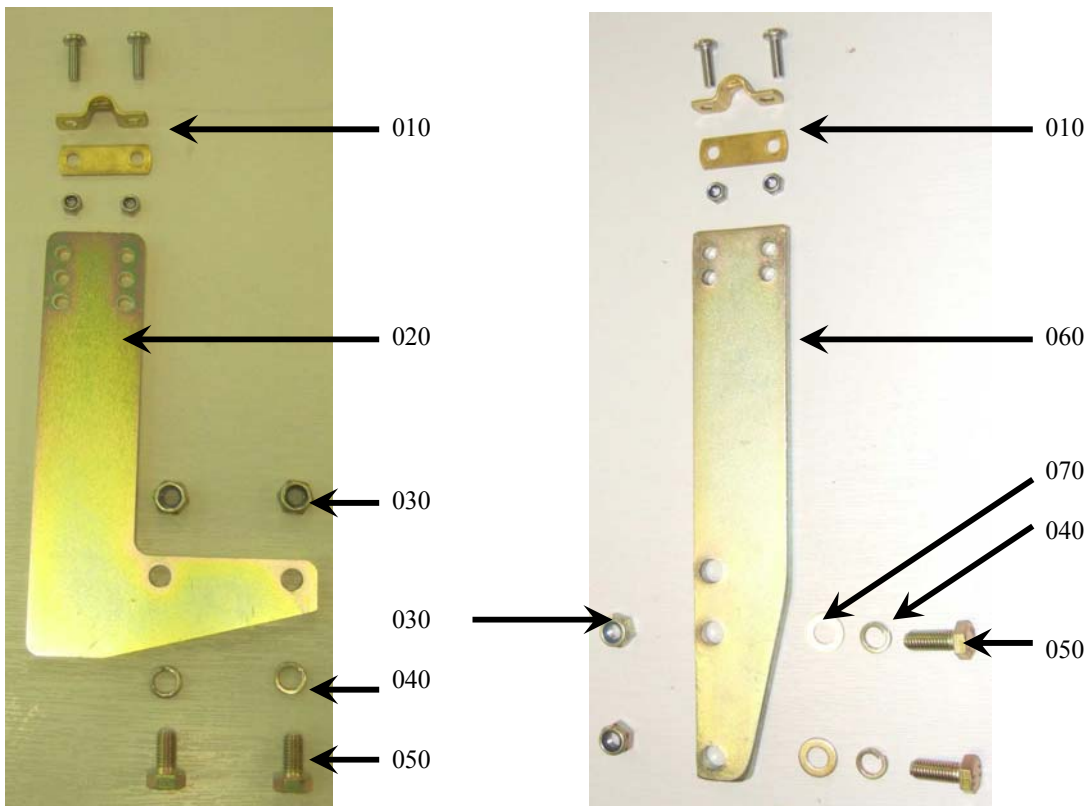
## Gearbox



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	204-91690	Technodrive TMC 40 'P' 2R	1	'P' replaces 'M' April 2007	
010	204-91671	Technodrive TMC 40 'P' 3R Long shaft	1	'P' replaces 'M' April 2007	
010	204-91641	ZF5 (Hurth HBW 50) 2R Long shaft	1	Not shown	
010	204-94510	ZF5 (Hurth HBW 50) 3R Long shaft	1	Not shown	
010	204-80340	ZF10 (Hurth HBW 100) 2R	1	Not shown	
010	204-91650	ZF10 (Hurth HBW 100) 3R	1	Not shown	
010	204-00277	Newage PRM 80 D2	1	Not shown	
010	204-01007	Newage PRM 80 D2.5	1	Not shown	
010	204-04315	Kanzaki TTMC35A-2 (7° downangle) F=2.33 R=3.06	1	Not shown	
010	204-04315/01	Kanzaki TTMC35A-2 (7° downangle) F=2.64 R=3.06	1	Not shown	
020	202-61582/01	TMC vertical Morse control bracket	1		
020	202-61582	HBW / ZF Vertical Morse control bracket	1	Not shown	
020	202-05129	PRM Morse control bracket	1	Not shown	
020	202-61582	TMC / ZF horizontal Morse control bracket	1	Not shown	
020	202-05208	PRM horizontal Morse control bracket	1	Not shown	
030	217-06472	M8 Nyloc halfnut	2	TMC40'P' from April 2007	
030	217-99297	M8 x 16mm set	2	For 020 –TMC 'M' & PRM	
030	217-99295	M8 Nut	2	For 020 –ZF	
040	212-99241/01	Saddle clamp fitting kit	1		
050	212-99240/01	Ball joint Z/P Steel	1		
060	217-99278	M6 Nyloc nut for 212-99240/01	1		
070	212-93690	Flexible coupling –TMC / PRM / ZF	1		
070	212-04689	Flexible coupling -Kanzaki	1		
080	217-99299	M8 x 25mm set	6	Not shown (for 010 – flywheel housing)	
090	217-99292	M8 Spring washer	6	Not shown (for 070)	
100	217-99293	M8 Flat washer	6	Not shown (for 070)	

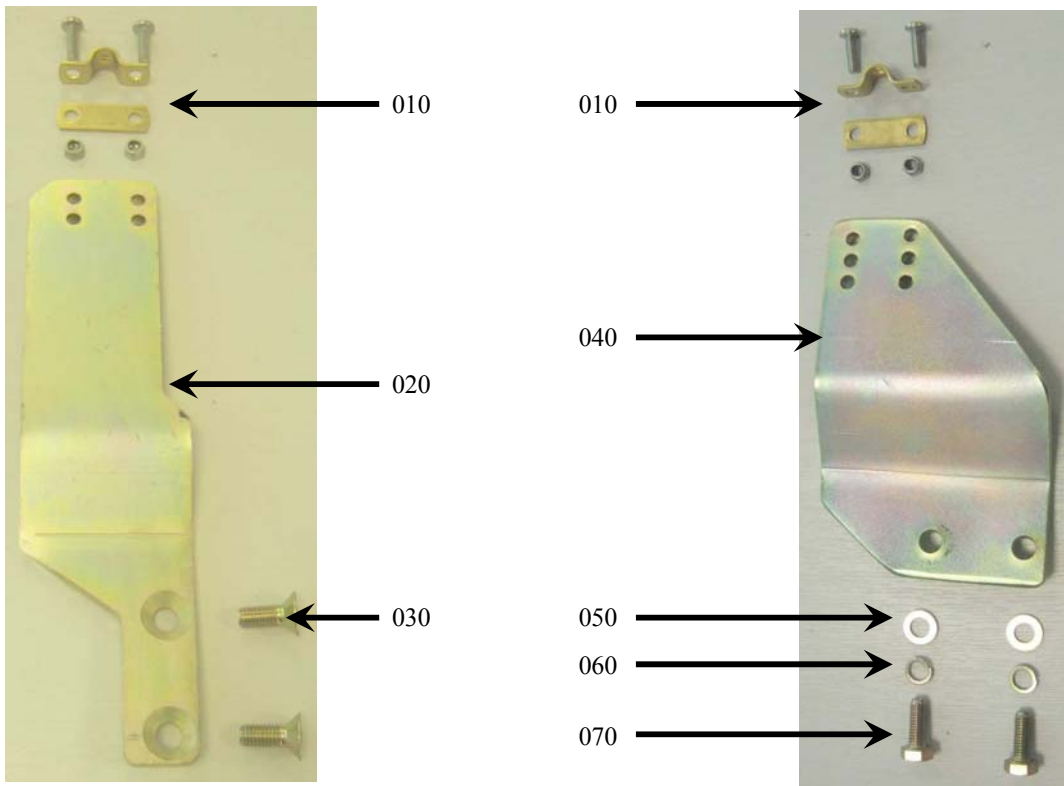
NOTE: GEARBOX PRICES ARE QUOTED AS NETT PRICES, NO DISCOUNT GIVEN

**Gearbox –TMC 40 Gear control brackets**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-99241/01	Saddle clamp fitting kit	1	
020	202-61582/01	TMC vertical Morse control bracket	1	
030	217-06472	M8 Nyloc halfnut	2	TMC40'P' from April 2007
040	217-99292	M8 Spring washer	2	TMC40'M' to April 2007
050	217-99297	M8 x 16mm set	2	TMC40'M' to April 2007
060	202-61582	TMC 40 Horizontal Morse control bracket	1	
070	217-99293	M8 Flat washer	2	

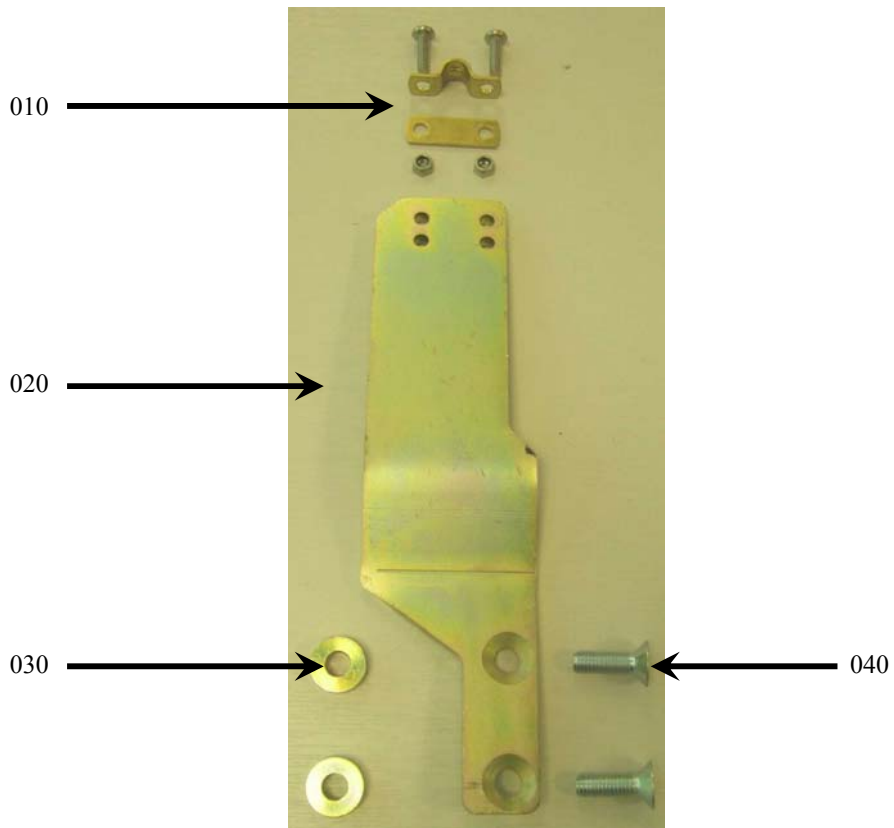
**Gearbox –PRM 80 & 120 Gear control brackets**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-99241/01	Saddle clamp fitting kit	1	
020	202-05129	PRM Morse control bracket	1	
030	217-99315	M8 x 20mm Countersunk set scew	2	
040	202-05208	PRM horizontal Morse control bracket	1	
050	217-99293	M8 Flat washer	2	
060	217-99292	M8 Spring washer	2	
070	217-99297	M8 x 16mm set	2	



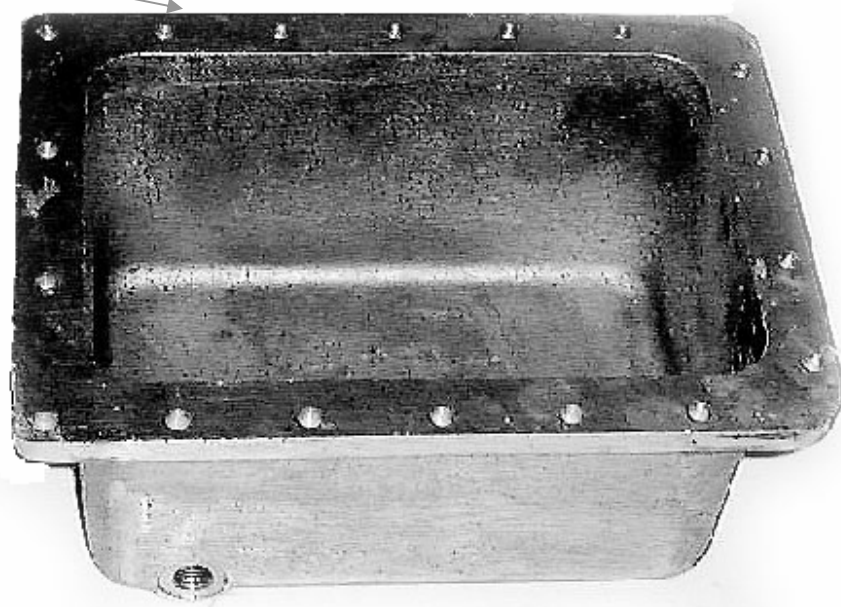
**Gearbox –TMC 60 Gear control bracket**



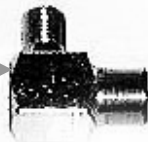
Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-99241/01	Saddle clamp fitting kit	1	
020	202-05129	TMC60 Vertical Morse control bracket	1	
030	201-01204	Spacer 7mm	2	
040	217-02482	M8 x 20mm Countersunk set screw	2	

**Shallow sump**

010



020



050



040

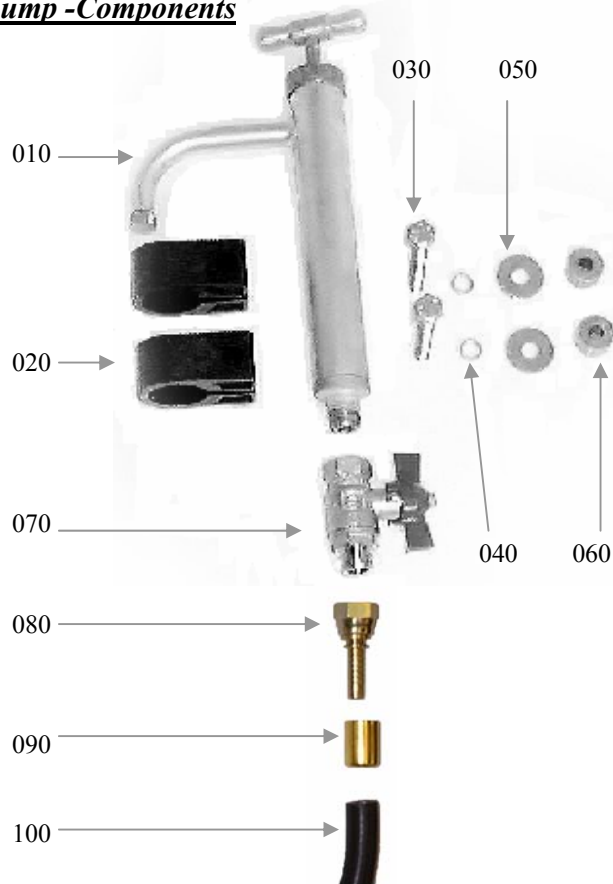


030



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	210-92130	BZ482 & B10 Shallow sump	1	Not shown	
010	208-06617	BZ602 Shallow sump	1	Not shown	
010	210-92140	BD722 Shallow sump	1		
010	208-06602	BD902 Shallow sump	1	Not shown	
020	212-00082	Sump plug elbow 1/4" BSP x 1/4" BSPT	1		
030	217-99281	M6 x 20mm set	14 18 22	BZ482 & BZ602 BD722 BD902	
040	217-99275	M6 Spring washer	14 18 22	BZ482 & BZ602 BD722 BD902	
050	217-99276	M6 Flat washer	14 18 22	BZ482 & BZ602 BD722 BD902	
060	219-99369	Tube neutral silicon sealant	1	Not shown	
070	210-04311	Sump pump pipe –shallow sump	1	Not shown	

### Sump drain pump -Components

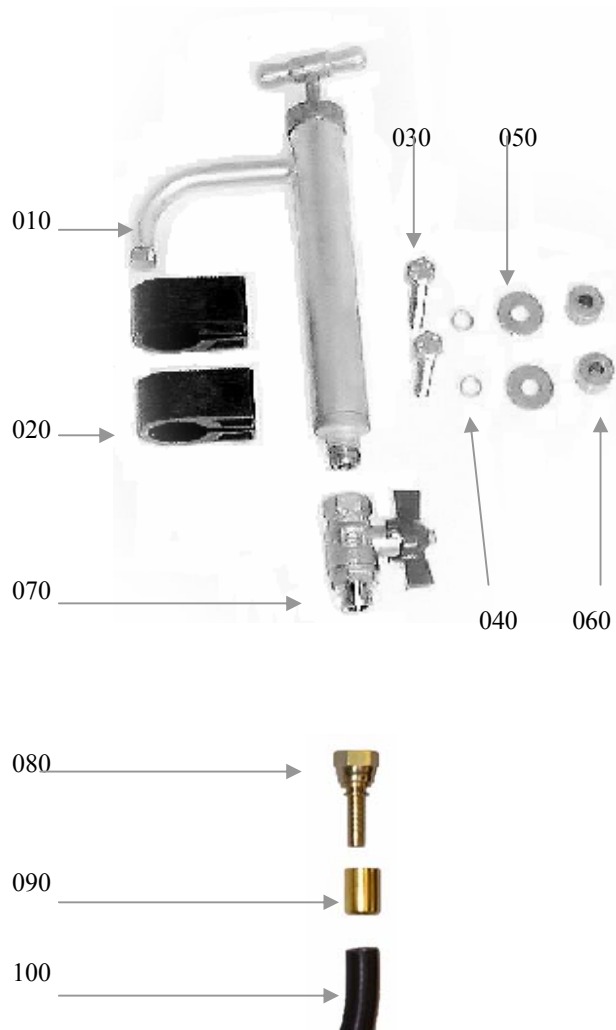


Ref. No.	Part No.	Part Name	Qty	Remarks
010	210-80061	Sump drain pump	1	
020	217-99436	Pump clamp PCL12	2	To September 2001
020	212-00793	Pump clamp PCL14	2	From September 2001
030	217-99304	M8 x 60mm set	2	To September 2001
030	217-99305	M8 x 70mm set	2	From September 2001
040	217-99292	M8 Spring washer	1	
050	217-99294	M8 Penny washer	1	
060	201-58920	Short sump pump spacer	2	To September 2001
060	201-58920/01	Short sump pump spacer	2	From September 2001
070	210-94530	3/8"BSP Sump drain pump tap	1	
080	210-00137	3/8"BSPF x 3/8BSP hose tail	2 2 1 1	B10/482 Std sump BD722 Std sump B10/482 Shallow sump BD722 Shallow sump
090	210-00145	Brass ferrule	2	
100	218-99387	Sump drain pump hose	0.33 0.35 0.30 0.25	B10/482 Std sump BD722 Std sump B10/482 Shallow sump BD722 Shallow sump
110	212-00083	1/4"BSP x 3/8"BSP hose tail	1 1	B10/482 Shallow sump BD722 Shallow sump

**Please note:**

Sump drain pump hoses will be sent out as a complete assembly with all connections crimped together to suit each particular application unless otherwise requested. (See over)

**Sump drain pump –hose assembly From December 2002**

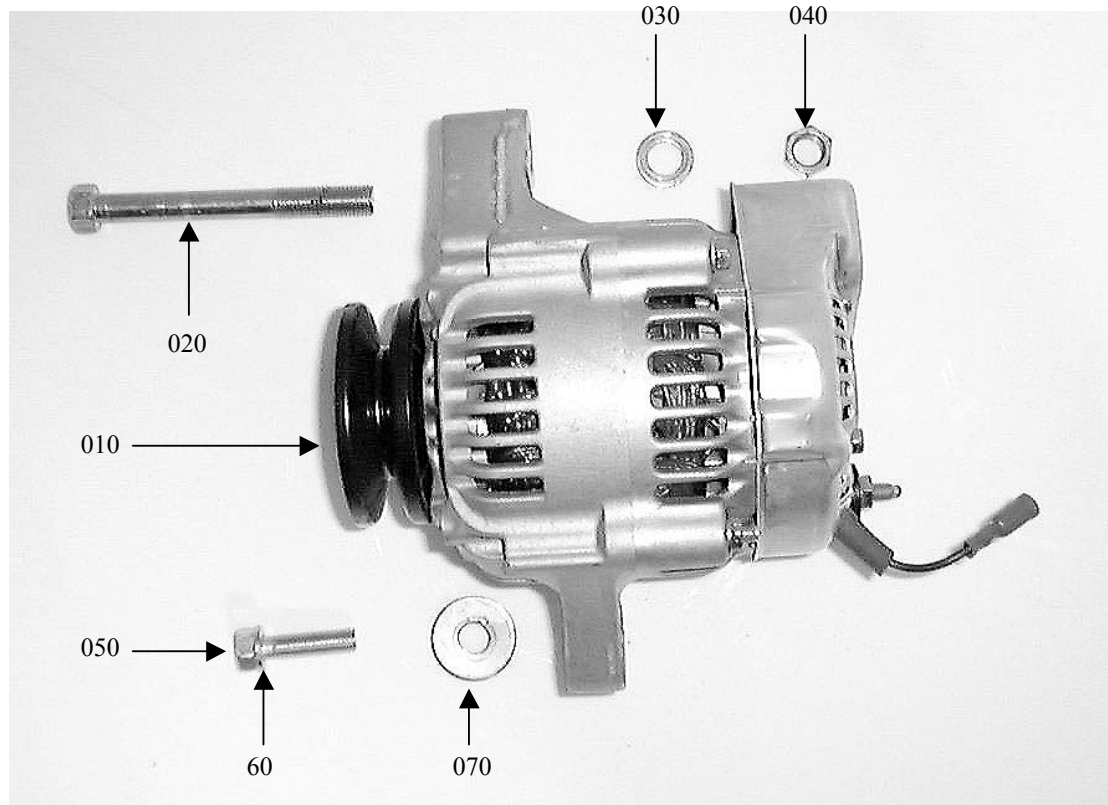


Ref. No.	Part No.	Part Name	Qty	Remarks	
080-100	210-03154	Sump pump pipe 3/8BSP 390mm STR-STR	1	B10/482 Std sump	
080-100	210-05047	Sump pump pipe 3/8BSP 380mm STR-M22 banjo	1	BZ602 Std sump	
080-100	210-03155	Sump pump pipe 3/8BSP 410mm STR-STR	1	BD722 Std sump	
080-100	210-05040	Sump pump pipe 3/8x1/4BSP 360mm STR-STR	1	BD902 Std sump	
080-100	210-04311	Sump pump pipe –shallow sump	1	Not shown	

**Please note:**

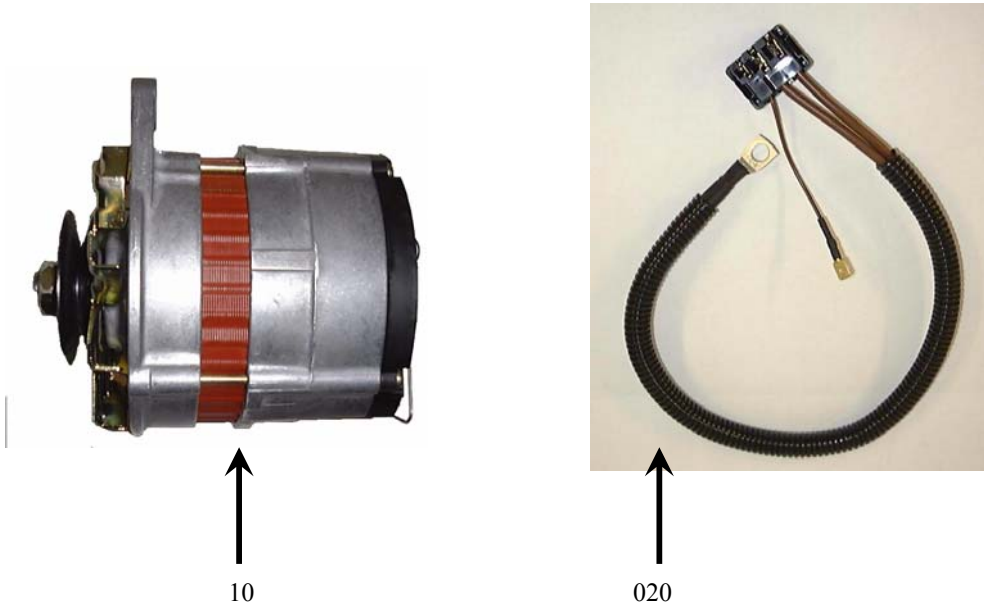
These are complete assemblies with all connections crimped together to suit each particular standard application.

### Alternators –12 Volt 40 & 60Amp



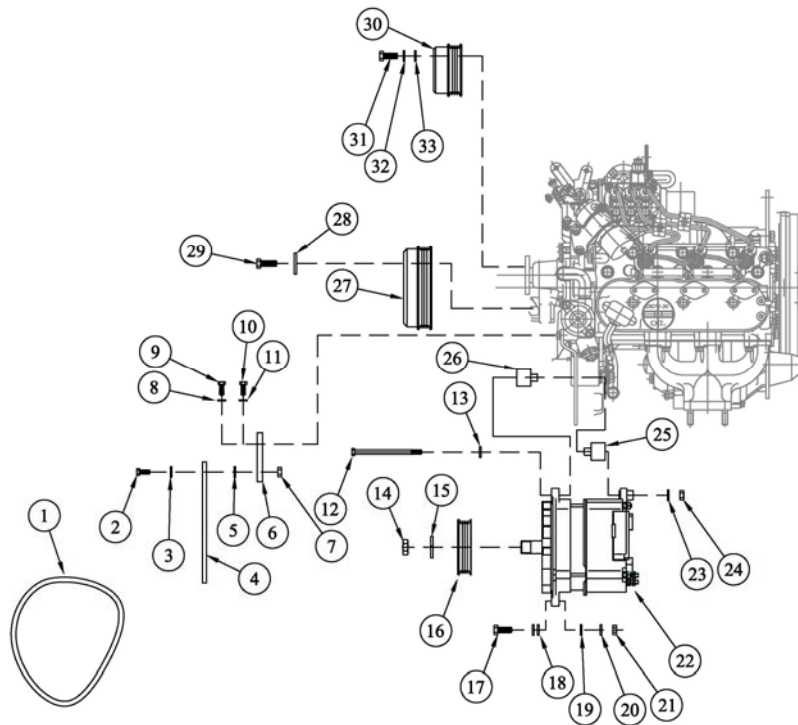
Ref. No.	Part No.	Part Name	Qty	Remarks
010	600-80010	40 Amp 12 volt Denso alternator (2 Pin)	1	
010	600-02781	40 Amp 12 volt Denso alternator (3 Pin)	1	
010	600-04989	60 Amp 12 volt Denso alternator (3 Pin)	1	Must use 4K drivebelt
020	600-00019	M10 x 80mm Fine pitch bolt	1	
030	217-99320	M10 Spring washer	1	
040	600-00020	M10 Fine pitch nut	1	
050	217-99300	M8 x 30mm set	1	
060	217-99292	M8 Spring washer	1	
070	217-99294	M8 Penny washer	1	
080	600-63080	Mini series 40 amp alternator drivebelt	1	Not shown
080	214-00126	BD902 40 amp alternator drivebelt, special	1	To suit crank with PTO only
080	214-04360	4K poly-vee drivebelt 48354 (Also 4PK898, 4PK900 & 4PK905)	1	Suits 40 Amp & 4K drive (Not BD902)
080	212-05074	4K poly-vee drivebelt 48358 (Also 4PK913)	1	BD902 only
080	214-03235	4K poly-vee drivebelt 48361 (Also 4PK950) Suits 65 Amp external fan alternator	1	Not BD902
080	214-04360	4K poly-vee drivebelt 48354 (Also 4PK898, 4PK900 & 4PK905)	1	BD602 65Amp
090	600-00746	Alternator arm	1	Not shown
100	201-06149	Alternator 4K drive pulley (Denso alt)	1	Not shown
110	201-05547	Mini 4K water pump drive pulley 75mm dia	1	
120	217-99280	M6 x 16mm Set	4	To suit 201-05547
130	217-99275	M6 Spring washer	4	To suit 201-05547
150	217-99276	M6 Flat washer	4	To suit 201-05547
160	201-05548	Mini 4K overpulley 120mm DIA	1	(Not BD902)
170	201-05154	BD902 4K overpulley 130mm DIA	1	BD902 Only
180	217-99311	M8 x 25mm socket cap screw	3	To suit 201-05548 & 05154
190	217-99293	M8 Flat washer	3	To suit 201-05548 & 05154
200	600-01481	Crankshaft pulley with PTO facility BZ602	1	Some BZ482 / All BZ602
210	600-05019	Crankshaft pulley with PTO facility BD902	1	BD902 Only
220	600-02405	Alternator plug -3 pin coupler	1	For 3 pin Denso alt

**Alternator –12 Volt 65 Amp (Beta10, BZ482 & BD722 Only)**



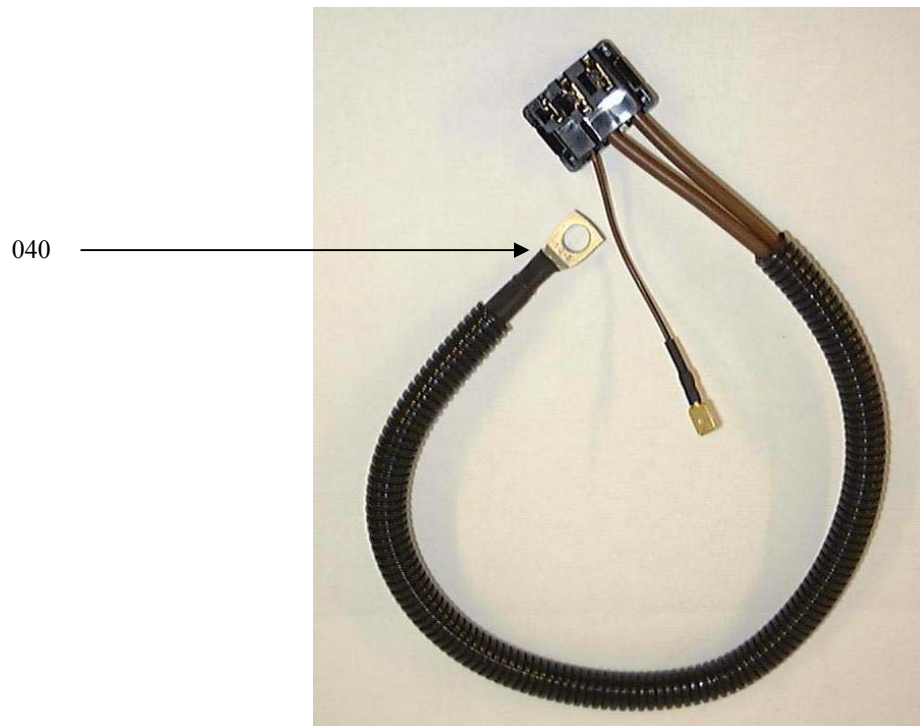
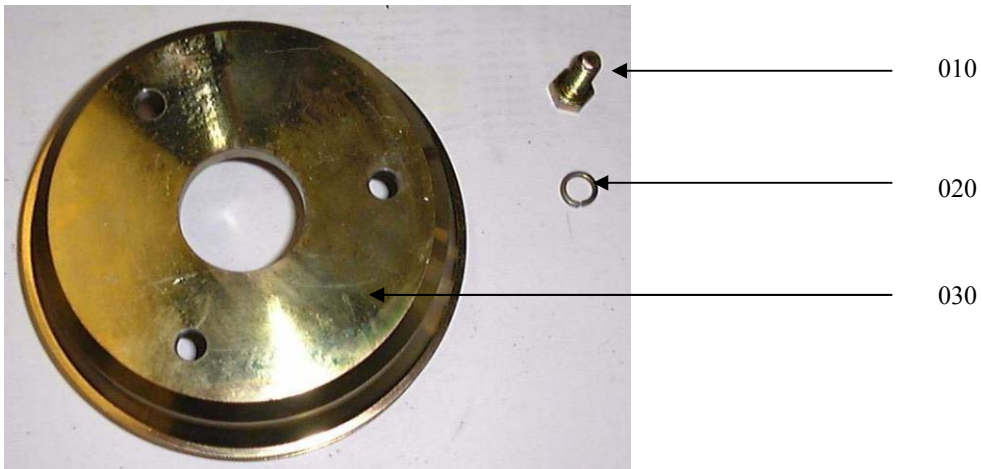
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-01155	65 Amp 12 volt alternator (external fan)	1	Excluding 4K pulley	
010	200-01384	70 Amp 12 volt insulated alternator (external fan)	1	Insulated earth wiring no longer available from Jan 2005	
010	200-69190	55 Amp 12 volt A127 insulated alternator (external fan)	1	No longer available on production engines	
020	200-01196	65Amp alternator wiring loom	1	(For 200-01155)	
030	AK/MINI/65APV/S01	Beta10 / BZ482 / BD722 - 65 Amp with poly-vee drive system –spares only	1	Complete kit including 010 & 020	

**Alternator –12 Volt 65 Amp (Beta10, BZ482 & BD722 Only) From Jan 2003**



Ref. No.	Part No.	Part Name	Qty	Remarks
1	214-03235	4PK drivebelt to suit 65 Amp alternator	1	
2	217-99300	M8 x 30mm set	1	
3	217-99293	M8 Flat washer	1	
4	202-96260	Alternator tensioning arm	1	
5	217-99293	M8 Flat washer	1	
6	202-05575	Alternator arm link bracket	1	
7	217-99296	M8 Nyloc nut	1	
8	217-99275	M6 Spring washer	1	
9	217-99281	M6 x 20mm Set	1	
10	217-99281	M6 x 20mm Set	1	
11	217-99275	M6 Spring washer	1	
12	217-99307	M8 x 120mm Bolt	1	
13	217-99293	M8 Flat washer	1	
14	N/A	Part of 200-01155	1	N/A
15	N/A	Part of 200-01155	1	N/A
16	201-05549	Mini 4K 65 Amp alternator drive pulley	1	
17	217-99301	M8 x 35mm Set	1	
18	217-99294	M8 Penny washer	2	
19	217-99293	M8 Flat washer	1	
20	217-99292	M8 Spring washer	1	
21	217-99295	M8 Nut	1	
22	200-01155	65 Amp 12 volt alternator (external fan)	1	
23	217-99292	M8 Spring washer	1	
24	217-99295	M8 Nut	1	
25	201-05550A/01	Spacer -Mini 65A Alt, Short 19mm O/D x 24.5mm	1	
26	201-05550B/01	Spacer -Mini 65A Alt, Long 19mm O/D x 37.5mm	1	
27	201-05548	Mini 4K crank drive pulley (Not BD902 / Beta25)	1	
28	217-99293	M8 Flat washer	3	
29	217-99311	M8 x 25mm Socket capscrew	3	
30	201-05547	Mini 4K water pump drive pulley	1	
31	217-99280	M6 x 16mm Set	4	
32	217-99275	M6 Spring washer	4	
33	217-99276	M6 Flat washer	4	

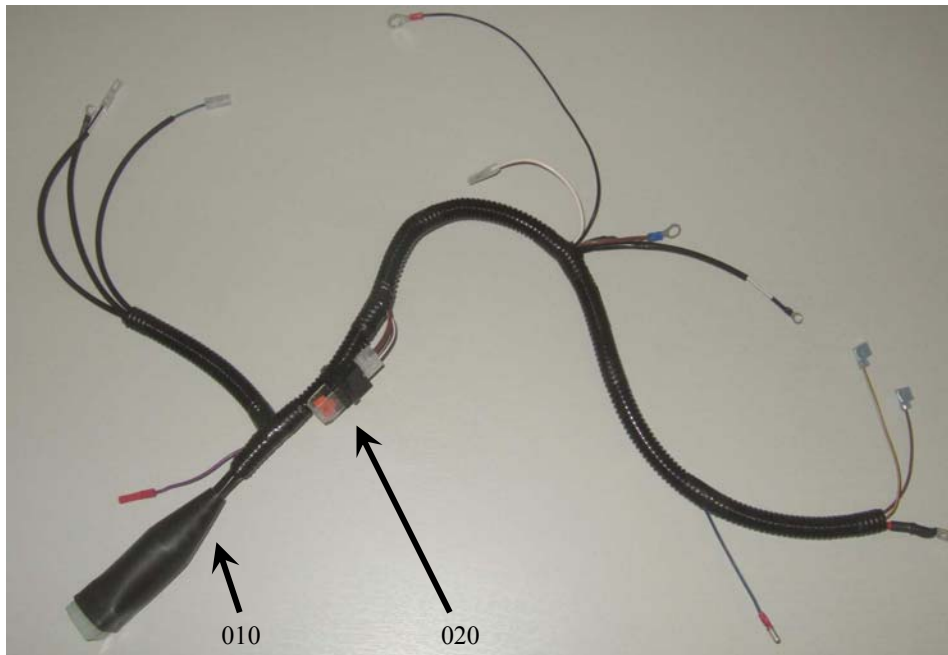
**Alternator Accessories–12 Volt 55 & 65 Amp (Beta10, BZ482 & BD722 Only)**



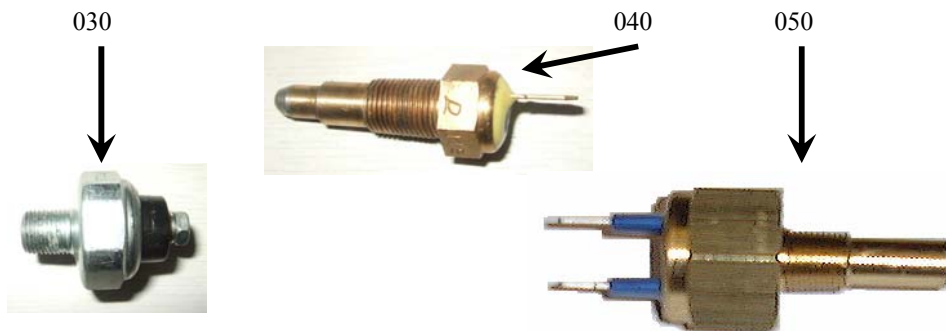
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	201-94660/01	Mini overpulley	1	Obsolete –no longer available Replaced with 4k system –To January 2003	N/A
020	217-99298	M8 x 20mm set	3		
030	217-99292	M8 Spring washer	3		
040	200-01196	65Amp alternator wiring loom	1		



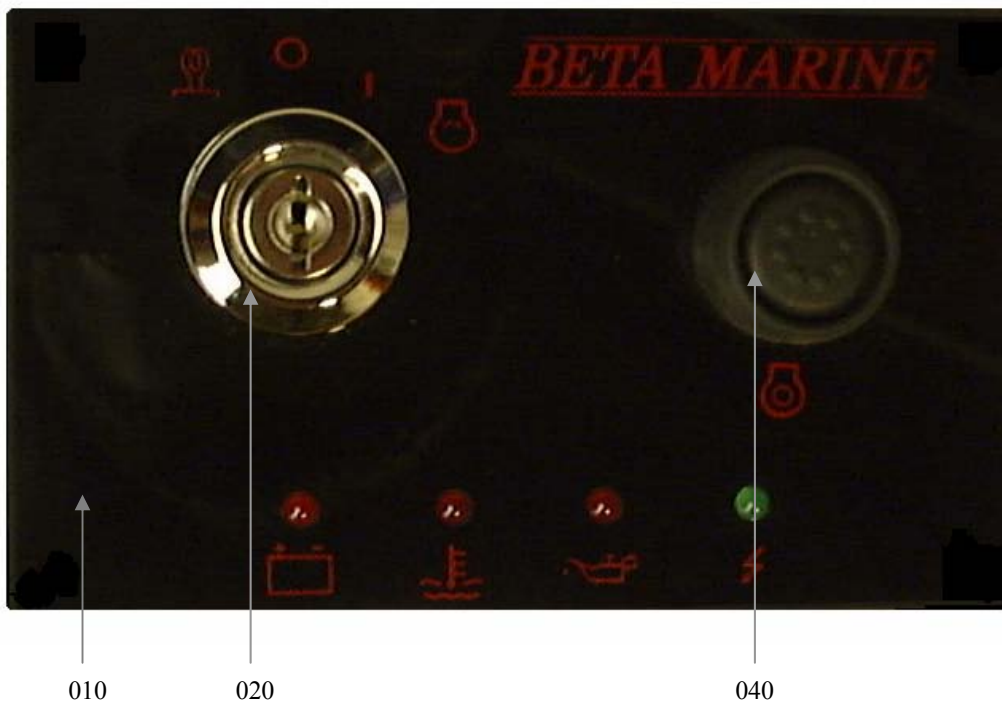
**Wiring harness & switches**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	200-98380/01	Mini series engine harness (with fuse)	1	Includes fuse
020	200-00959	Engine harness fuse (blade type)	1	
030	600-62670	Oil pressure switch (not 2C panel)	1	
040	600-62820	Water temperature switch (not 2C panel)	1	Std on Beta16 & 25 & all from March 2007
050	200-01133	Water temperature switch / sender 95°C (Not 2C panel) 1/8BSP	1	Not Beta16 or 25
060	212-01480	3/8BSPT Male x1/8BSP Female galvanised adaptor for 200-01133	1	Required if temp sender being fitted into 3/8BSP thread
070	200-04588/01	1 metre extension harness	1	Not shown
080	200-04588/02	2 metre extension harness	1	Not shown
090	200-04588/03	3 metre extension harness	1	Not shown
100	200-04588/04	4 metre extension harness	1	Not shown
110	200-04588/05	5 metre extension harness	1	Not shown
120	200-04588/06	6 metre extension harness	1	Not shown
130	200-04588/08	8 metre extension harness	1	Not shown
140	200-04588/10	10 metre extension harness	1	Not shown
150	200-04588/15	15 metre extension harness	1	Not shown
160	200-57640	Relay (for extension harnesses)	1	Not shown



Simple 2A panel –LED type to May 2005



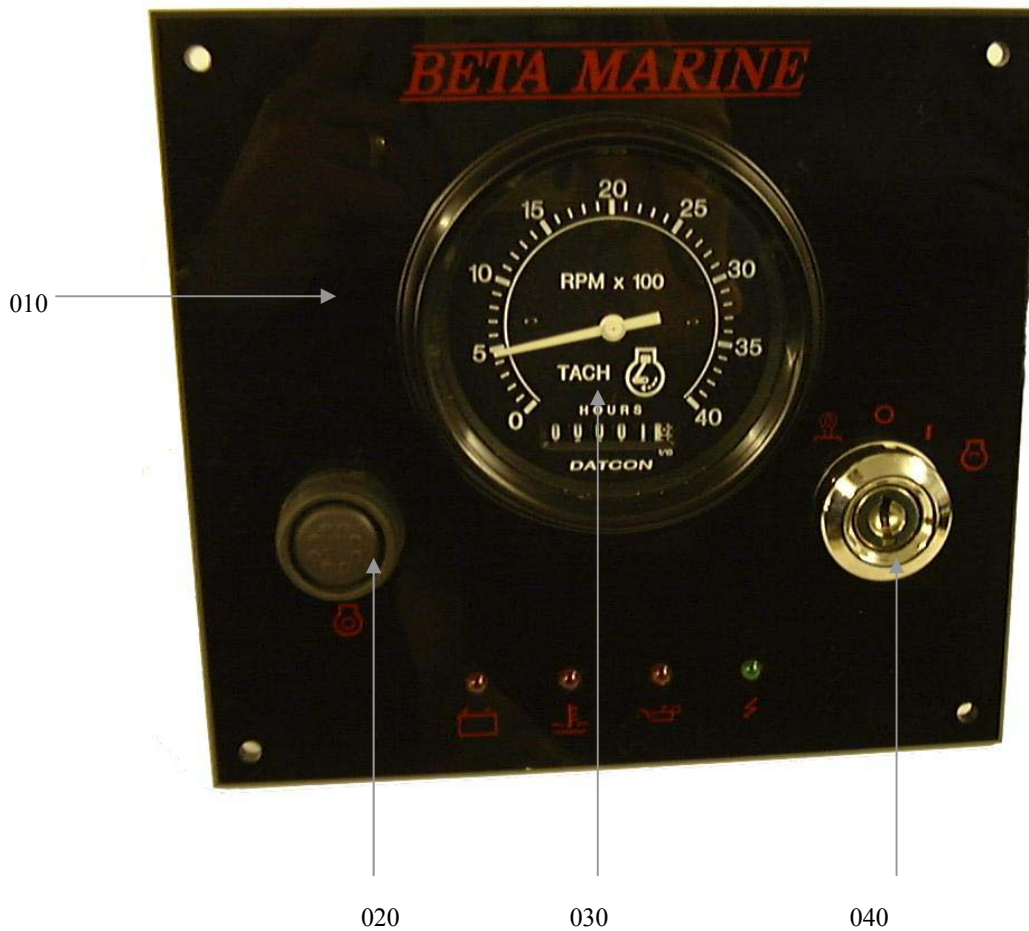
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	N/A	Simple panel (complete with LED pack)	1	No longer available, Use AK/2AS/KS01	N/A
020	600-00057	Kubota keyswitch	1		
030	600-00058	Kubota keys -PAIR	1	Not shown	
040	200-00072	Panel stop button	1		
050	200-01295	LED Pack assembly & buzzer (SEASPEC)	1	Not shown	
050	200-01296	LED Pack assembly & buzzer (DOMESTIC)	1	Not shown	
060	200-01288	Panel blank 2A –LED SEASPEC	1	Check availability Does not include 050	
060	200-01291	Panel blank 2A –LED DOMESTIC	1	Check availability Does not include 050	
070	200-00639	11 Way plug to suit male type spade	1	Not shown	
080	200-00048	Large shroud for 11 way plug	1	Not shown	
090	200-00047	Male spade for 11 way plug	11	Not shown	
100					

Simple 2A panel –LAMP type from May 2005



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2AS/KS01	Simple panel with 3m loom (complete)	1	
020	600-00057	Kubota keyswitch	1	
030	600-00058	Kubota keys -PAIR	1	Not shown
040	200-00072	Panel stop button	1	
050	200-04657	Red 12V warning lamp & retaining clip	3	
060	200-04656	Green 12V power on lamp & retaining clip	1	
070	N/A	Panel blank 2A –LAMP TYPE	1	Check availability
080	200-00639	11 Way plug to suit male type spade	1	Not shown
090	200-00048	Large shroud for 11 way plug	1	Not shown
100	200-00047	Male spade for 11 way plug	11	Not shown
110	200-04655	Alarm board with buzzer	1	Not shown
120				

2AB panel –LED type to May 2005



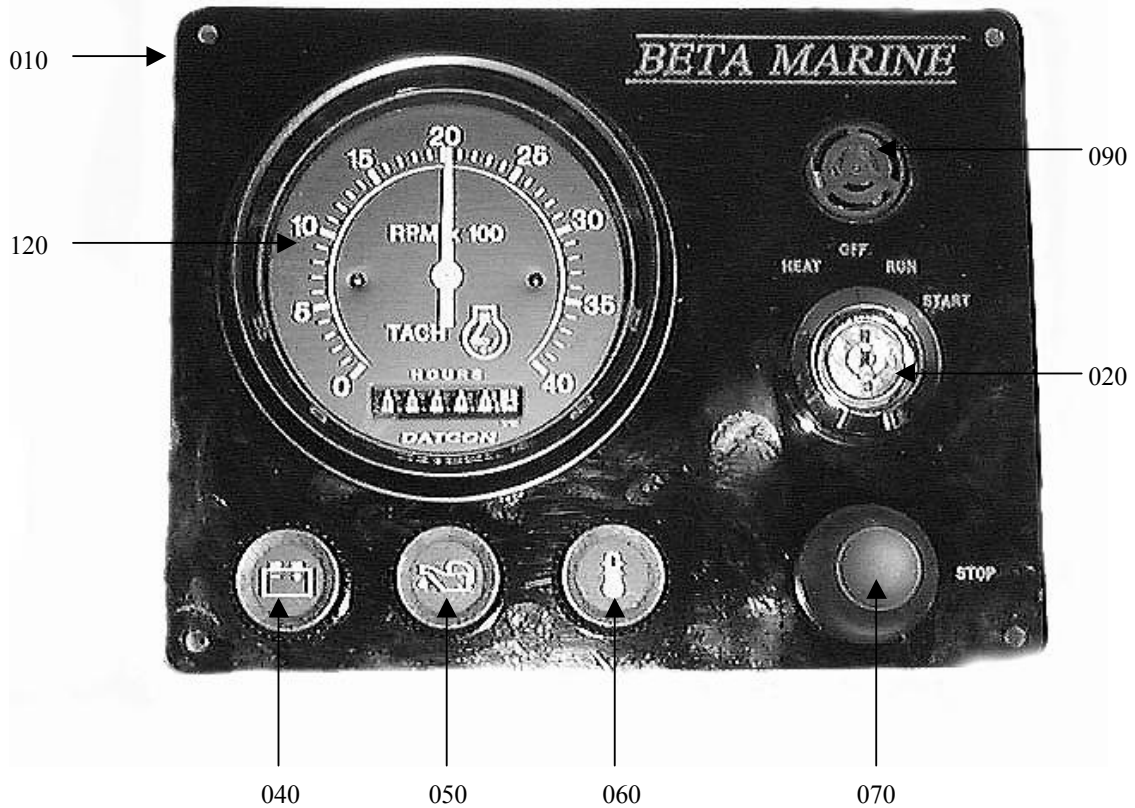
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00853	2AB panel (excludes tacho –see 030)	1	No longer available, Use AK/2ABD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00054	0-4000 RPM tacho & hourmeter (DATCON)	1	To March 2002	
030	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002	
040	600-00057	Kubota keyswitch	1		
050	600-00058	Kubota keys -PAIR	1	Not shown	
060	200-01295	LED Pack assembly & buzzer (SEASPEC)	1	Not shown	
060	200-01296	LED Pack assembly & buzzer (DOMESTIC)	1	Not shown	
070	200-01289	Panel blank 2AB (SEASPEC)	1	Check availability Does not include 050	
070	200-01292	Panel blank 2AB (DOMESTIC)	1	Check availability Does not include 050	
080	200-00639	11 Way plug to suit male type spade	1	Not shown	
090	200-00048	Large shroud for 11 way plug	1	Not shown	
100	200-00047	Male spade for 11 way plug	11	Not shown	
110					

**2AB panel –LAMP type from May 2005**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2ABD/KS01	2AB panel with 3m loom (Complete)	1	
020	200-00072	Panel stop button	1	
030	200-02373	0-4000 RPM tachometer & hourmeter (VDO)	1	From March 2002
040	600-00057	Kubota keyswitch	1	
050	600-00058	Kubota keys -PAIR	1	Not shown
060	200-04657	Red 12V warning lamp & retaining clip	4	
070	200-04656	Green 12V power on lamp & retaining clip	1	
080	N/A	Panel blank 2AB (DOMESTIC)	1	Check availability
090	200-00639	11 Way plug to suit male type spade	1	Not shown
100	200-00048	Large shroud for 11 way plug	1	Not shown
110	200-00047	Male spade for 11 way plug	11	Not shown
120	200-04655	Alarm board with buzzer	1	Not shown
130	200-87020	12V 28Ra 40Amp relay	1	Not shown
140				

**2AB'V' panel –LAMP type to May 2005**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-89421	2AB'V' panel (excludes tacho –see 120)	1	No longer available, Use AK/2ABV/KS01	N/A
020	600-00057	Kubota keyswitch	1		
030	600-00058	Kubota keys -PAIR	1	Not shown	
040	200-00059	Warning lamp battery	1		
050	200-00060	Warning lamp oil	1		
060	200-00061	Warning lamp water	1		
070	200-00072	Panel stop button	1		
080	200-97490	12V bulb	3	Not shown	
090	200-06434	12V DC buzzer to suit 2AB'V' panel	1	Not shown	
100	200-98980	Panel diode pack	1	Not shown	
110	200-00042	Panel blank 2AB'V'	1	Check availability Includes 090 only	
120	200-00054	0-4000 RPM tacho & hourmeter (DATCON)	1	To March 2002	
120	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002	
130	200-00639	11 Way plug to suit male type spade	1	Not shown	
140	200-00048	Large shroud for 11 way plug	1	Not shown	
150	200-00047	Male spade for 11 way plug	11	Not shown	
160					

**2AB'V' panel –LAMP type from May 2005**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2ABV/KS01	2AB'V' panel with 3m loom (complete)	1	
020	600-00057	Kubota keyswitch	1	
030	600-00058	Kubota keys -PAIR	1	Not shown
040	200-04657	Red 12V warning lamp & retaining clip	3	
050	200-04656	Green 12V power on lamp & retaining clip	1	
060	200-00072	Panel stop button	1	
070	200-02373	0-4000 RPM tachometer & hourmeter (VDO)	1	From March 2002
080	N/A	Panel blank 2ABV	1	Check availability
090	200-00639	11 Way plug to suit male type spade	1	Not shown
100	200-00048	Large shroud for 11 way plug	1	Not shown
110	200-00047	Male spade for 11 way plug	11	Not shown
120	200-04655	Alarm board with buzzer	1	Not shown
130				

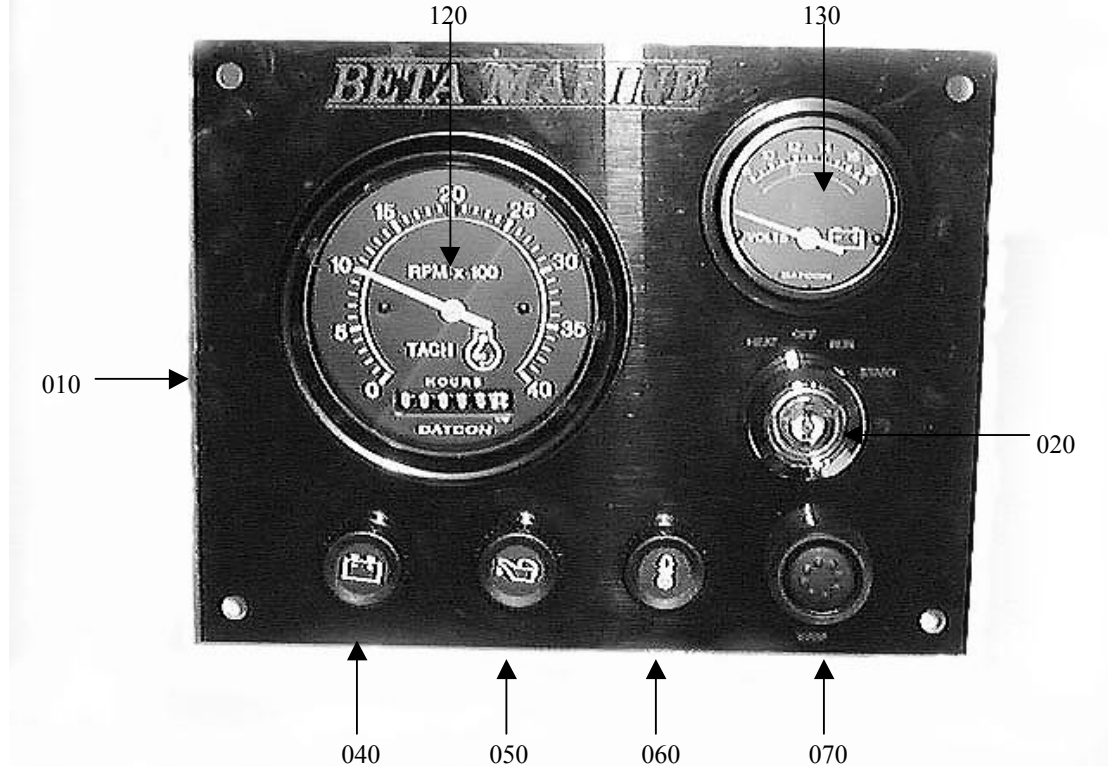
**2AB'V'W pushbutton control panel –LAMP type from May 2005**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/2ABVW/KS01	2AB'V'W panel with 3m loom (complete)	1		
020	200-00072	Panel stop / start / heat button	3		
030	200-04657	Red 12V warning lamp & retaining clip	3		
040	200-04656	Green 12V power on lamp & retaining clip	1		
050	200-02373	0-4000 RPM tachometer & hourmeter (VDO)	1	From March 2002	
060	N/A	Panel blank 2ABVW	1	Check availability	
070	200-00639	11 Way plug to suit male type spade	1	Not shown	
080	200-00048	Large shroud for 11 way plug	1	Not shown	
090	200-00047	Male spade for 11 way plug	11	Not shown	
100	200-04655	Alarm board with buzzer	1	Not shown	
110	200-87020	12V 28Ra 40Amp relay	2	Not shown	
120	200-03466	Pektron diode	1	Not shown	
130	200-02618	Diode bridge	1	Not shown	



**SFIA 2B panel –LAMP type to May 2005**



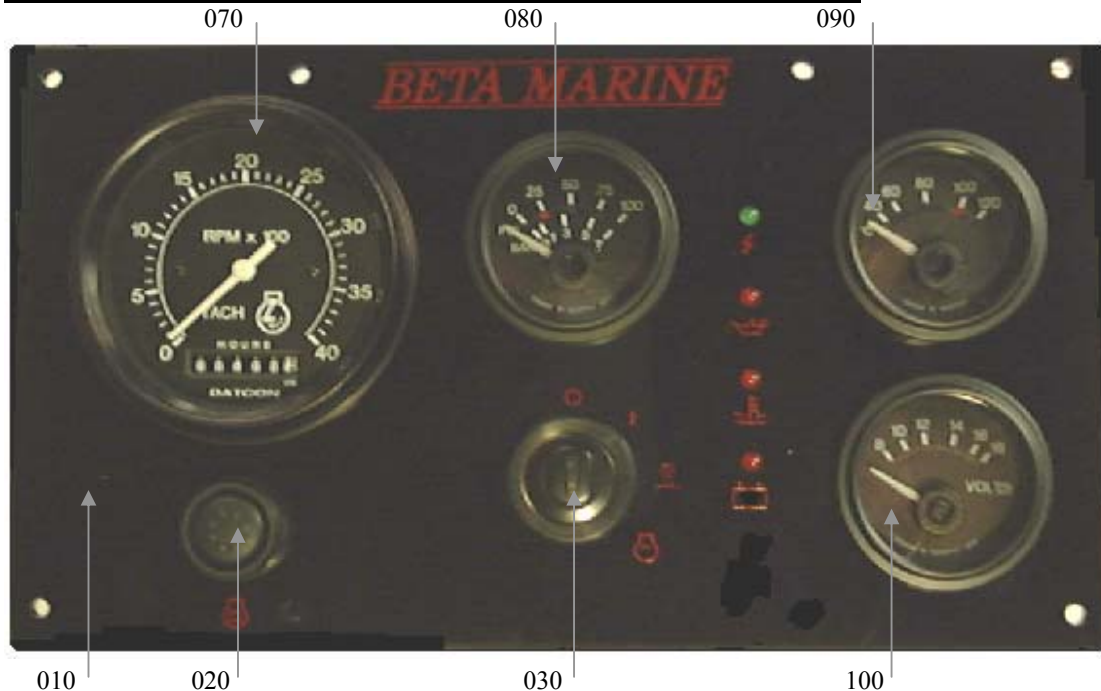
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-05408	SFIA 2B Panel –with temperature gauge From February 2003 (excludes tacho -see 120)	1	No longer available, Use AK/2BT/KS01	N/A
010	200-60952	SFIA 2B Panel –with voltmeter To February 2003 (excludes tacho –see 120)	1	No longer available, Use AK/2BT/KS01	N/A
020	600-00057	Kubota keyswitch	1		
030	600-00058	Kubota keys -PAIR	1	Not shown	
040	200-00059	Warning lamp battery	1		
050	200-00060	Warning lamp oil	1		
060	200-00061	Warning lamp water	1		
070	200-00072	Panel stop button	1		
080	200-97490	12V bulb	3	Not shown	
090	200-99433	12V DC Buzzer	1	Not shown	
100	200-98980	Panel diode pack	1	Not shown	
110	200-00043	Panel blank SFIA 2B	1	Check availability	
120	200-00054	0-4000 RPM tacho & hourmeter (DATCON)	1	To March 2002	
120	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002	
130	200-91400	Water temperature gauge (from February 2003)	1	From February 2003	
130	200-91390	Voltmeter gauge (-February 2003)	1	To February 2003	
140	200-00639	11 Way plug to suit male type spade	1	Not shown	
150	200-00048	Large shroud for 11 way plug	1	Not shown	
160	200-00047	Male spade for 11 way plug	11	Not shown	

**SFIA 2B panel –LAMP type from May 2005**

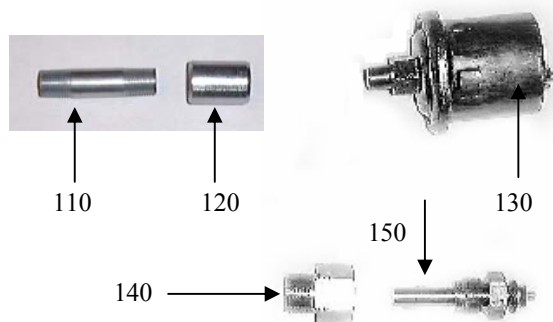


Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2BT/KS01	SFIA 2B Panel –with temperature gauge From May 2005 (complete)	1	With Murphy temp gauge
020	600-00057	Kubota keyswitch	1	
030	600-00058	Kubota keys -PAIR	1	Not shown
040	200-04657	Red 12V warning lamp & retaining clip	3	
050	200-04656	Green 12V power on lamp & retaining clip	1	
060	200-00072	Panel stop button	1	
070	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	
080	200-96200	Murphy water temperature gauge	1	(Murphy not shown)
090	N/A	Panel blank 2B	1	Check availability
100	200-04655	Alarm board with buzzer	1	Not shown
110	200-00639	11 Way plug to suit male type spade	1	Not shown
120	200-00048	Large shroud for 11 way plug	1	Not shown
130	200-00047	Male spade for 11 way plug	11	Not shown
140				

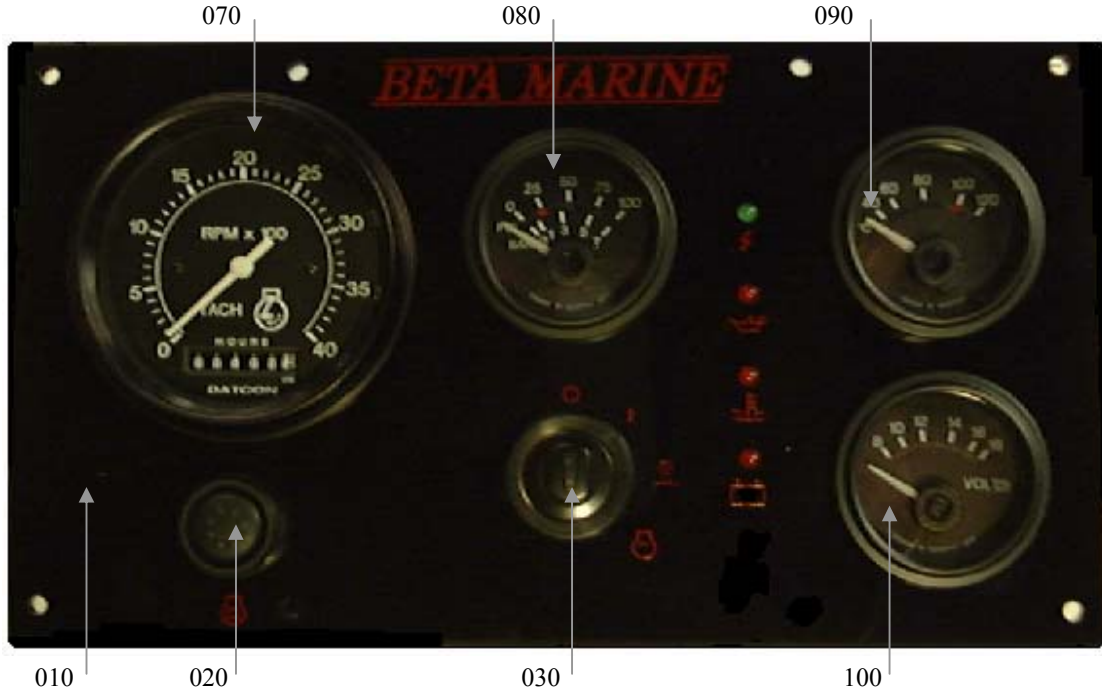
**Murphy deluxe 2C panel & senders –Seaspec 4 Lamp-to May 2005**



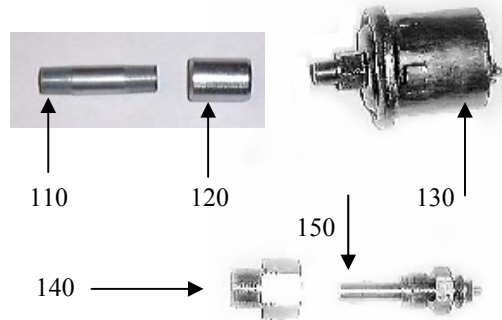
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00854	Murphy 2C deluxe panel –Seaspec 4 Lamp (Excludes gauges & loom –See 070, 080, 090, 100 & 160)	1	No longer available, Use AK/2CD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00073	Murphy panel keyswitch	1		
040	200-98965	Murphy deluxe panel single key	2	Not shown	
050	200-01295	LED Pack assembly & buzzer –Seaspec 4 Lamp	1	Not shown	
060	200-01290	Murphy deluxe panel blank (Seaspec 4 Lamp)	1	Excludes LED pack	
070	200-00054	0-4000 RPM tacho & hourmeter	1	To March 2002	
070	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002	
080	200-96190	Murphy oil pressure gauge	1		
090	200-96200	Murphy water temperature gauge	1		
100	200-96210	Murphy voltmeter gauge	1		
110	212-99397	1/8" BSP Galvanised barrel	1		
120	212-99396	1/8" BSP Galvanised socket	1		
130	200-94350	Murphy pressure sender	1		
140	200-91980	Water temperature sender adaptor	1		
150	200-94360	Murphy temperature sender	1		
160	200-93830	Murphy deluxe 3m connecting loom	1	Not shown	
170	200-00046	11 Way socket to suit female type spade	1	Not shown	
180	200-00181	Female spade for 11 way plug	11	Not shown	
190					



**Murphy deluxe 2C panel & senders –Domestic 5 Lamp –to May 2005**



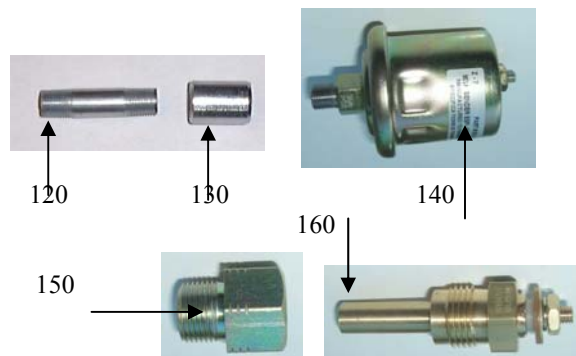
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00851	Murphy 2C deluxe panel –Domestic 5 Lamp (Excludes gauges & loom –See 070, 080, 090, 100 & 160)	1	No longer available, Use AK/2CD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00073	Murphy panel keyswitch	1		
040	200-98965	Murphy deluxe panel single key	2	Not shown	
050	200-01296	LED Pack assembly & buzzer –Domestic 5 Lamp	1	Not shown	
060	200-01293	Murphy deluxe panel blank (Domestic 5 Lamp)	1	Excludes LED pack	
070	200-00054	0-4000 RPM tacho & hourmeter	1	To March 2002	
070	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002	
080	200-96190	Murphy oil pressure gauge	1		
090	200-96200	Murphy water temperature gauge	1		
100	200-96210	Murphy voltmeter gauge	1		
110	212-99397	1/8" BSP Galvanised barrel	1		
120	212-99396	1/8" BSP Galvanised socket	1		
130	200-94350	Murphy pressure sender	1		
140	200-91980	Water temperature sender adaptor	1		
150	200-94360	Murphy temperature sender	1		
160	200-93830	Murphy deluxe 3m connecting loom	1	Not shown	
170	200-00046	11 Way socket to suit female type spade	1	Not shown	
180	200-00181	Female spade for 11 way plug	11	Not shown	
190					



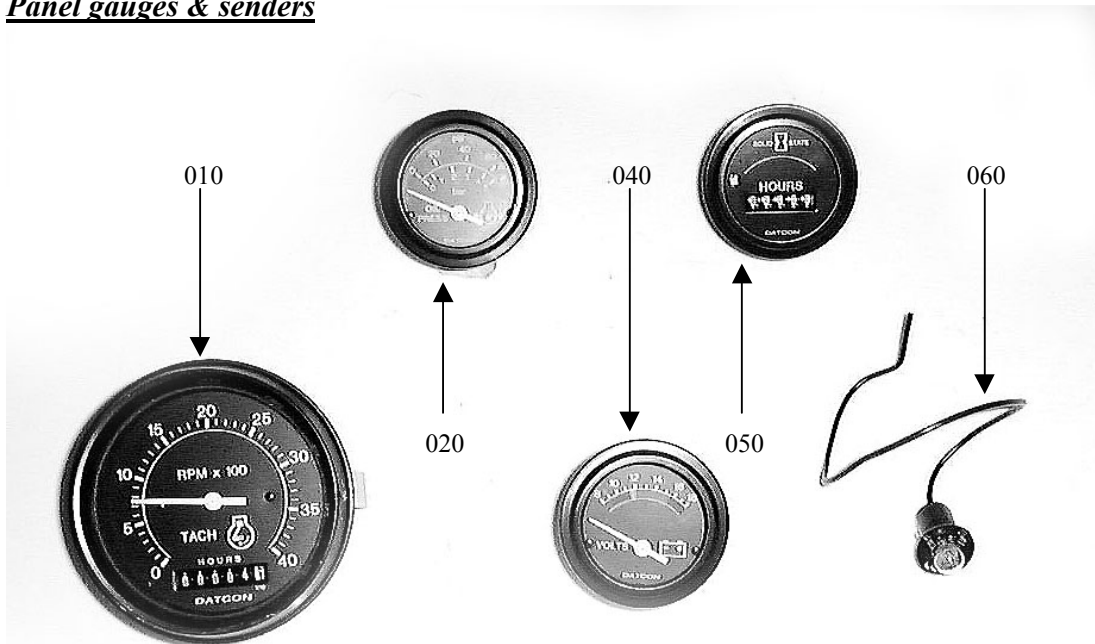
**Murphy deluxe 2C panel & senders –Domestic 5 Lamp –from May 2005**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2CD/KS01	Murphy 2C deluxe panel –Domestic 5 Lamp (Complete, less 3m interconnection cable 170)	1	
020	200-00072	Panel stop button	1	
030	600-00057	Kubota keyswitch	1	
040	600-00058	Kubota keys -PAIR	1	Not shown
050	200-04657	Red 12V warning lamp & retaining clip	4	
060	200-04656	Green 12V power on lamp & retaining clip	1	
070	N/A	Murphy deluxe panel blank (Domestic 5 Lamp)	1	Check availability
080	200-02373	0-4000 RPM tachometer & hourmeter (VDO)	1	From March 2002
090	200-96190	Murphy oil pressure gauge	1	
100	200-96200	Murphy water temperature gauge	1	
110	200-96210	Murphy voltmeter gauge	1	
120	212-99397	1/8" BSP Galvanised barrel	1	
130	212-99396	1/8" BSP Galvanised socket	1	
140	200-94350	Murphy pressure sender	1	
150	200-91980	Water temperature sender adaptor	1	
160	200-94360	Murphy temperature sender	1	
170	200-04588/03	3m extension harness	1	Not shown
180	200-00639	11 Way plug to suit male type spade	1	Not shown
190	200-00047	Male spade for 11 way plug	11	Not shown



**Panel gauges & senders**

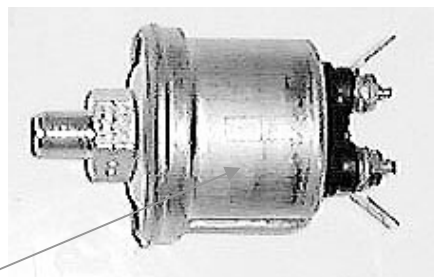


Ref. No.	Part No.	Part Name	Qty	Remarks
010	200-00054	0-4000 RPM tacho & hourmeter	1	To March 2002
010	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002
020	200-91380	Oil pressure gauge	1	
030	200-91390	Water temperature gauge	1	Not shown
040	200-91400	Voltmeter gauge	1	
050	200-90000	Hourmeter gauge	1	
060	200-96220	Datcon gauge bulb 12V	1	
070	212-99397	1/8" BSP Galvanised barrel	1	
080	212-99396	1/8" BSP Galvanised socket	1	
090	200-62680	0-5 Bar switch / sender	1	
100	200-01133	Water temperature switch / sender 95C	1	



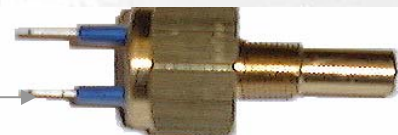
70

080

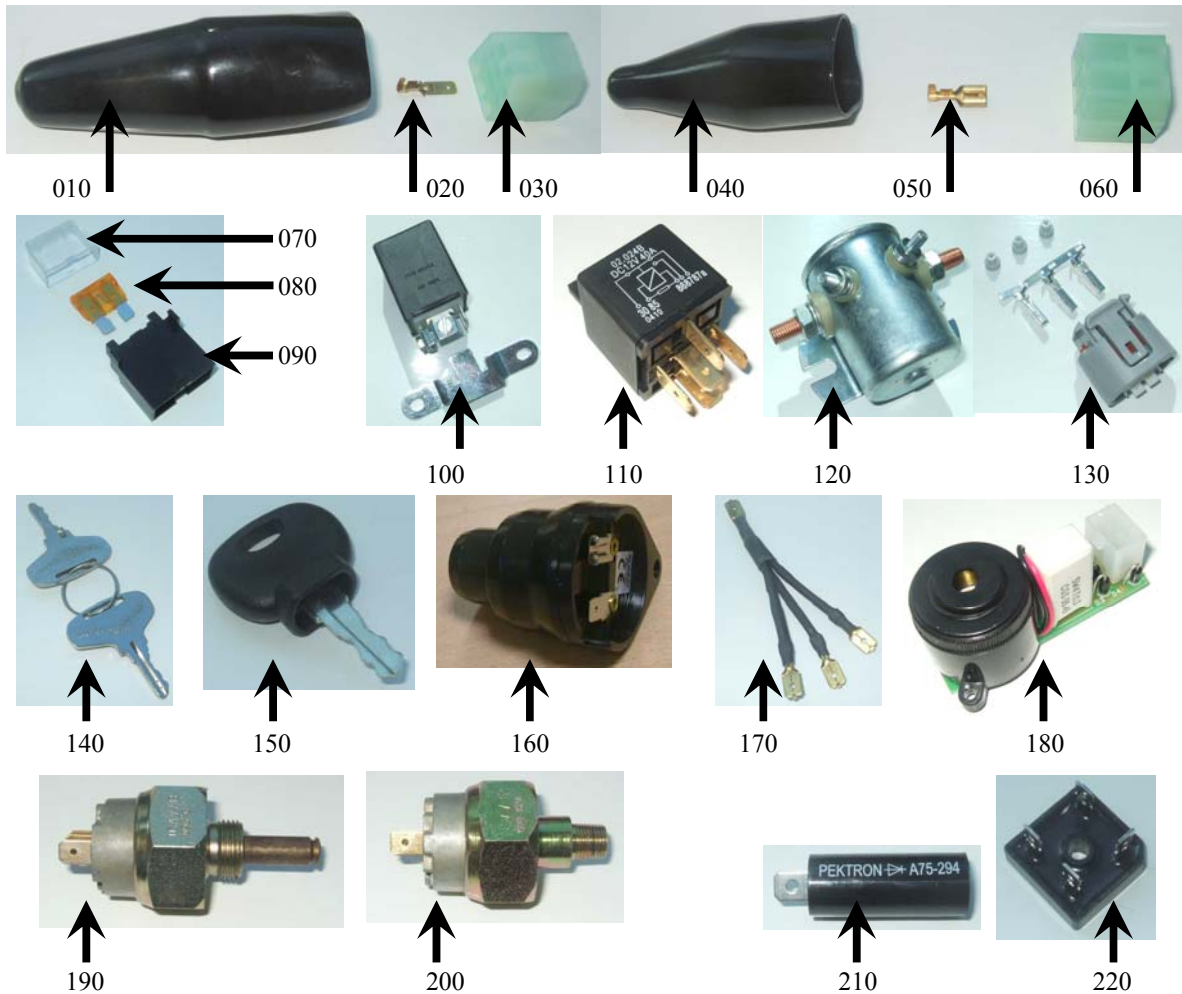


090

100

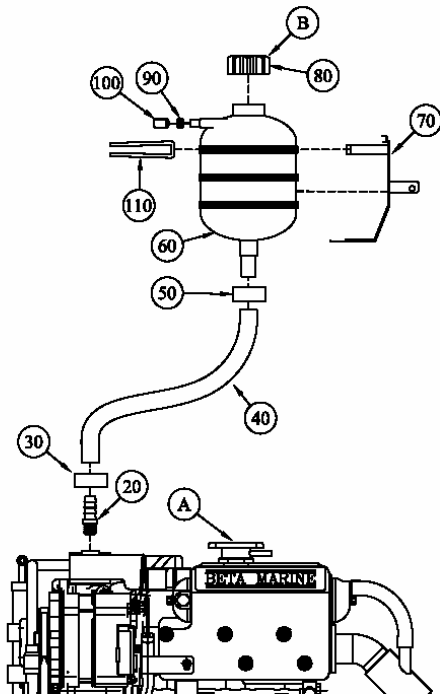


**Various electrical & panel parts and components**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00048	Large shroud for 11 way plug	1	On panel connection	
020	200-00047	Male spade for 11 way plug	11	On panel connection	
030	200-00639	11 Way plug to suit male type spade	1	On panel connection	
040	200-00638	Small shroud for 11 way socket	1	On engine harness	
050	200-00181	Female spade for 11 way socket	11	On engine harness	
060	200-00046	11 Way socket to suit female type spade	1	On engine harness	
070	200-01426	Plastic clear fuse cover	1	On engine harness	
080	200-00959	Fuse, blade type 40 Amp	1	On engine harness	
090	200-00640	Fuse holder, blade type for 40 Amp	1	On engine harness	
100	200-57640	12V 33Ra 70Amp relay	1	For extended looms	
110	200-87020	12V 28Ra 40Amp relay	1	On rear of panel	
120	200-89950/01	12V heavy duty relay	1	For insulated earth	
130	600-02405	Kubota alternator 3 pin coupler	1	For 3 pin Denso alt	
140	600-00058	Kubota keys -PAIR	1	Standard	
150	200-98965	Murphy deluxe panel single key	2	Deluxe to May 2005	
160	200-99433	12V buzzer	1	2B to May 2005	
170	200-98980	Panel diode pack	1	2ABV to May 2005	
180	200-04655	Alarm board with buzzer	1	Std from May 2005	
190	200-02069	Water temperature switch 096C 3/8BSP	1	Genset standard	
200	200-61190	Oil pressure switch 98kPa 1/8BSP	1	Genset standard	
210	200-03466	Pektron diode	1	Push button panels	
220	200-02618	Diode bridge	1	Push button panels	
230	200-04623	14 Core panel cable	/m	Not shown	

**Expansion water bottle & spare parts list –all engines**



10	EXPANSION TANK KIT COMPLETE	AK/SML/EXP/001
----	-----------------------------	----------------

REF	PART NAME	PART NO
20	3/8 BSPT - 3/4 HOSE TAIL	210-03297
30	30mm S/S HOSE CLIP	212-98464
40	3/4 BORE HEATER HOSE	212-00471
50	30mm S/S HOSE CLIP	212-98464
60	EXPANSION TANK	209-03065
70	MOUNTING BRACKET	209-03067
80	EXPANSION TANK CAP	209-03066
90	LARGE FUEL CLIP (NO:17)	212-03393
100	HOSE CAP (10mm ID)	212-03303
110	EXPANSION TANK HOLDING BAND	209-03068

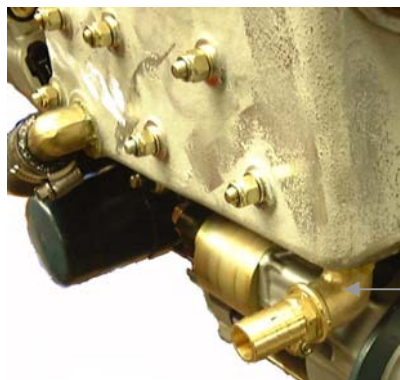
WHEN FILLING, FILL POINT A AND REPLACE WATER CAP THEN FILL POINT B.

POINT A MUST BE STANDARD FILLER CAP P/N 209-80130 (PRESSURE 13 PSI)

Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/SML/EXP/001	Expansion tank kit, complete	1	
<b>(This kit consists of all items listed individually below)</b>				
020	210-03297	3/8BSPT-3/4" Hose connector	1	
030	212-98464	Stainless steel hose clip 22-30mm	1	
040	212-00471	3/4" Bore water hose	1.5m	
050	212-98464	Stainless steel hose clip 22-30mm	1	
060	209-03065	Expansion tank	1	
070	209-03067	Expansion tank mounting bracket	1	
080	209-03066	Expansion tank lid	1	
090	212-03393	No 17 Stainless steel hose clip	1	
100	212-03303	Hose cap blanking plug 10mm I/D	1	
110	209-03068	Expansion tank holding band	1	



**Calorifier connections**

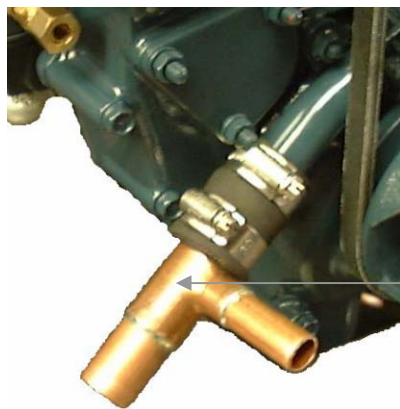


010

010  
020

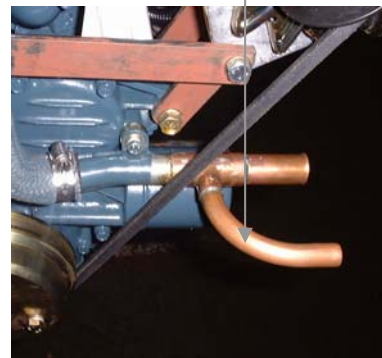


020  
040



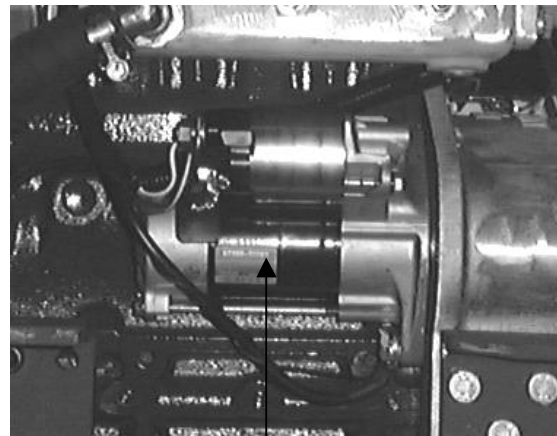
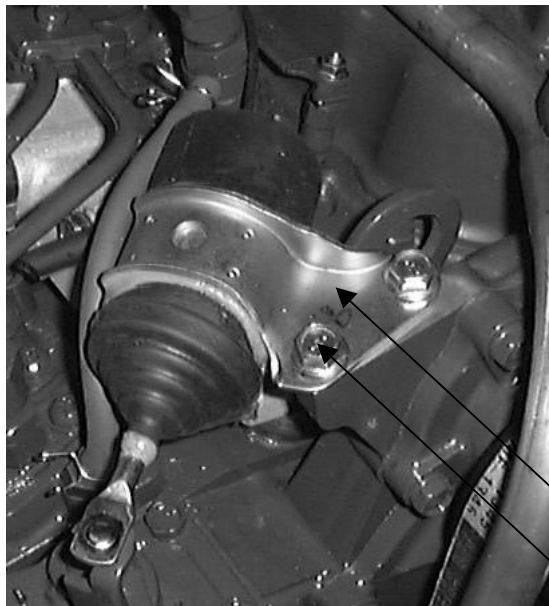
040

050



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/BD1005HE/CAL/001	Calorifier kit: Mini heat exchange – 40 amp alternator	1	From Nov 2003	
020	AK/HE/CAL/001	Calorifier kit: Mini heat exchange – 40 amp alternator	1	To Nov 2003	
030	AK/MINI/HE/L/CAL/001	Calorifier kit: Mini heat exchange – 65 amp alternator	1		
040	AK/MINI/KC/CAL/001	Calorifier kit: Mini keel cooled – 40 amp alternator	1		
050	AK/MINI/KC/L/CAL/001	Calorifier kit: Mini keel cooled – 65 amp alternator	1		

**Electrical, Oil system & Miscellaneous**



010

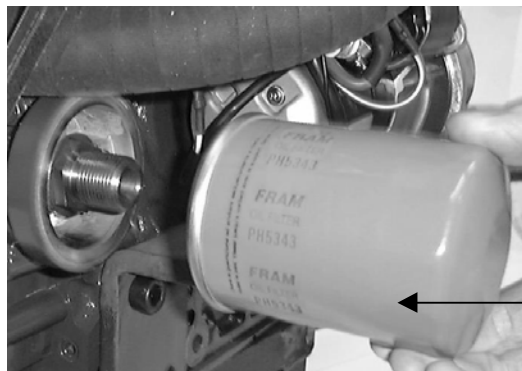
020

030

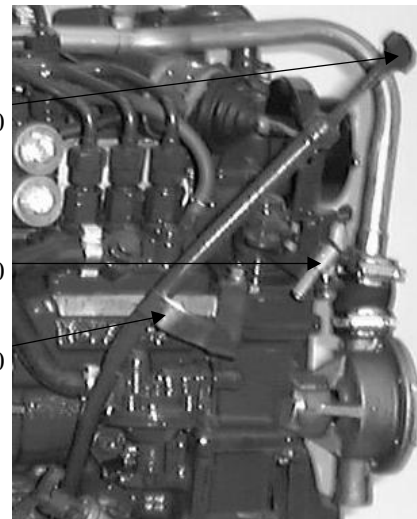
050

070

060



080



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	600-00063	Beta 10, BZ482 & BZ602 Starter motor	1	Not shown	
010	600-00064	BD722 Starter motor	1		
010	600-05147	BD902 Starter motor	1		
020	600-81950	Fuel stop solenoid Mini Series	1		
030	600-00078	M6 Flanged bolt	2		
040	200-96180	Blocking diode (40 amp alt.)	1	Not shown	
050	600-96280	Extended dipstick	1		
060	600-96290	Extended dipstick guide	1		
070	212-99240/01	Ball joint Z/P Steel	1		
080	211-63760	Mini Series oil filter	1		
090	219-00678	Brunswick green gloss paint	1	BS227 green full gloss	N/A
100	219-99257	Beta red gloss paint	1	RAL3002 red full gloss	N/A
110	201-61640	Extension shaft, 32mm dia	1	Not shown	
120	217-99292	M8 spring washer	3	Not shown, for 110	
130	217-99302	M8 x 40mm set	3	Not shown, for 110	
140	600-00579	Oil filler cap	1	Not shown	
150	600-00258	O ring for oil filler cap	1	Not shown	
160	207-00503	Electric fuel lift pump	1	Not shown	
170	212-97117	8mm compression fitting –electric fuel pump	1	Not shown, for 160	
180	212-99254	8mm hose tail fitting –electric fuel lift pump	1	Not shown, for 160	
190	600-00580	Water drain tap (3 cylinder engines, std feet)	1	Not shown	

## **SPARES & REPLACEMENT PARTS**

These items are available from

---

***BETA MARINE***

---

Beta Marine Limited  
Davy Way  
Waterwells  
Quedgeley  
Gloucester  
GL2 2AD, UK

Telephone: 01452 723492      Int. Tel: 44 1452 723492  
Fax: 01452 729916  
Internet: [www.betamarine.co.uk](http://www.betamarine.co.uk)  
Spares email: [spares@betamarine.co.uk](mailto:spares@betamarine.co.uk)