



## Spare Parts Listing

### Heat Exchanger & Keel Cooled Beta10, Beta14, Beta16, Beta20 & Beta25

Description	Part Number	Qty per Engine	
Wasting <b>Zinc Anode</b>	209-61840	1	
Heat Exchanger " <b>O</b> " <b>Ring</b> (HEADER WITH SINGLE BOLT ENDCAP)	209-80110	2	
Heat Exchanger " <b>O</b> " <b>Ring</b> (2011 HEADER WITH 3 BOLT ENDCAP)	212-07273		
<b>Pressure Cap</b> 95kPa -15psl	209-80130	1	
<b>Thermostat</b> (Beta10, Beta14 & Beta20 only)	600-59290	1	
<b>Thermostat</b> (Beta16 & Beta25 only)	600-72450		
Thermostat <b>Gasket</b> (Beta10, Beta14 & Beta20 only)	600-00553	1	
Thermostat <b>Gasket</b> (Beta16 & Beta25 only)	600-80490		
<b>Fuel Filter</b>	211-60210	1	
Air Filter <b>Element –MARCH 2011 (3 CLAMP TYPE -STEEL)</b>	211-62950	1	
Air Filter <b>Element –FROM MARCH 2011 (PLASTIC BODY)</b>	211-08132	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> –Beta Marine type (from June 2013)	Sea water pump	207-08922	1
	Sea water pump clamp	202-08924	1
	Impeller Kit ( <i>includes O ring</i> )	207-09041-KIT	1
	Seal Kit	207-09228	1
	Shaft kit	207-09229	1
<b>Sea Water Pump</b> –Johnson (from July 2006 to June 2013)	Johnson (6 Screw)	207-61500/01	1
	<b>Impeller Kit Johnson 6 Screw</b> ( <i>includes gasket etc.</i> )	207-09041-KIT	1
	<b>Cover plate Johnson 6 Screw</b>	207-05478	1
	Cover plate <b>Bolt Johnson 6 Screw</b>	207-05479	6
<b>Sea Water Pump</b> –Jabsco (to July 2006)	Jabsco (3 Screw)	207-61500	1
	Impeller	207-79630	1
	Gasket (6 screw to March 2004)	207-62600	1
	O Ring (3 Screw March2004 –July2006)	207-04206	1
<b>Fuel Lift Pump</b> (Beta10, Beta14 & Beta20 only)	600-65470	1	
<b>Fuel Lift Pump</b> (Beta16 & Beta25 only)	AK/MINI/9&6/F01		
Fuel Lift Pump <b>Gasket</b>	600-00065	1	
<b>Belt</b> – Standard "PolyVee" – <b>FROM JAN2011 WITH 2011 SPEC H/E</b>	212-05074	Correctly Select a Belt	
<b>Belt</b> – Standard "Vee" – 40 Amp <b>FROM JAN2011 WITH 2011 SPEC H/E</b>	214-00126		
<b>Belt</b> – Standard "Vee" – 40 Amp <b>–TO DEC2010</b>	600-63080		
<b>Belt</b> – PolyVee 40 Amp 4PK (NOT Beta25) <b>–TO DEC2010</b>	214-04360		
<b>Belt</b> – PolyVee 40 Amp 4PK Beta25 <b>–TO DEC2010</b>	212-05074		
<b>Belt</b> – 65 Amp Alt Beta14 / Beta20 - 4PK External fan <b>–TO DEC2010</b>	214-03235		
<b>Belt</b> – 65 Amp Alternator Beta16 - 4PK Internal fan <b>–TO DEC2010</b>	214-04360		
<b>Belt</b> – 65 Amp Alternator Beta25 4PK Internal fan <b>–TO DEC2010</b>	212-05074		
<b>Belt</b> – 100 / 120 Amp Alternator 6PK Internal fan <b>–FROM AUGUST 2014</b>	214-04124		

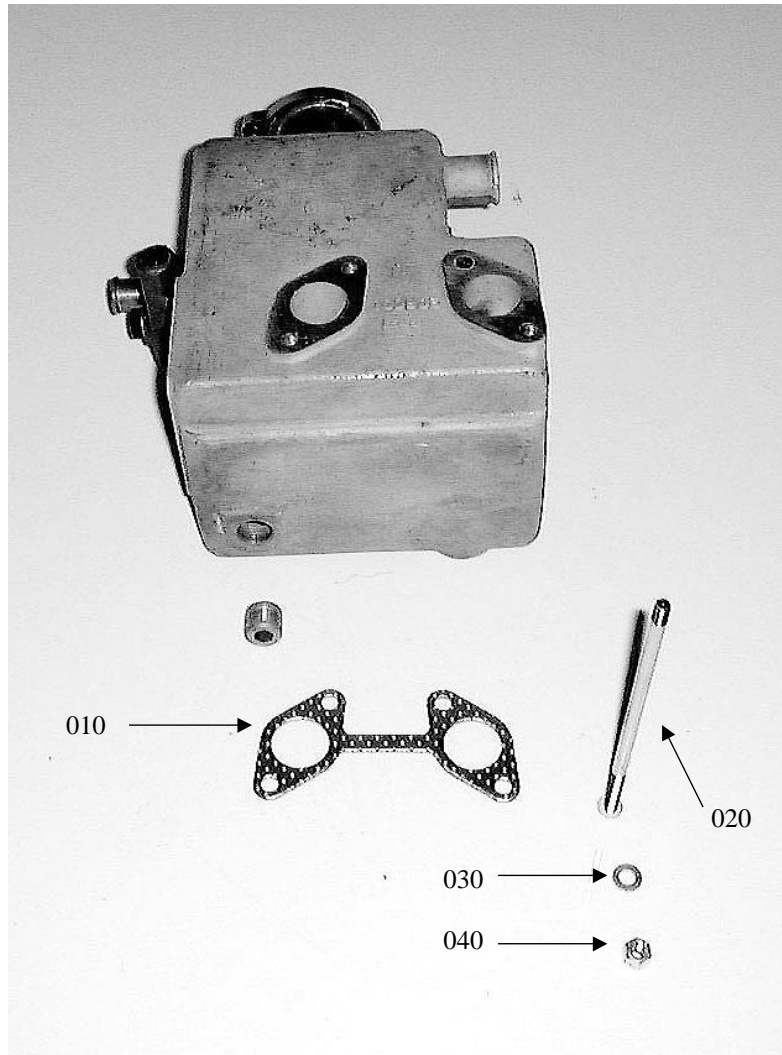
## Heat Exchanger & Keel Cooled Beta10, Beta14, Beta16, Beta20 & Beta25

Description	Part Number	Qty per Engine
Alternator 40 Amp, 2 Pin (Beta10, Beta14 & Beta20)	600-80010	1
Alternator 40 Amp, 3 Pin (Beta16, Beta25)	600-02781	
Alternator 75 Amp (Internal Fan 2011 SPEC H/E)	200-07338	
Alternator 70 Amp External Fan (H/E) (Replacement for 65A)	200-01155	
Alternator 60 Amp – Internal Fan	600-04989	
Alternator 100 Amp – Internal Fan	200-05231	
Panel A - standard	AK/2AS/KS01	1
Panel ABV with tachometer	AK/2ABV/KS01	
Panel ABVW with tachometer	AK/2ABVW/KS01	
Panel B – with tachometer and gauge	AK/2BT/KS02	
Panel C – with tachometer and three gauges	AK/2CD/KS01	
Control Panel standard Key (silver)	To June 2008	Pair (2)
	From June 2008	
Control Panel Key Switch (silver)	To June 2008	1
	From June 2008	
Control Panel Stop Button (and heat & start on ABVW)	200-00072	1
Tachometer 0-4000rpm with digital hour counter	200-02373	1
Water temperature switch Gauge (B & C panels)	200-96200	1
Oil pressure switch Gauge (C panels only)	200-96190	1
Voltmeter (C panels only)	200-96210	1
Green power on indicator lamp & retaining clip	200-04656	1
Red warning indicator lamp & retaining clip	200-04657	3 or 4
Alarm board	200-04655	1
Relay 12 Volt 40A (28Ra) fitted to rear of panels	200-87020	1
Stop Solenoid (energised to stop fuel)	600-81950	1
Fuse (Blade) 40 Amp	200-00959	1
Standard Engine Harness	200-98380/01	1
65 Amp Alternator Sub Loom (external fan)	200-01196	1
1m Panel Extension Loom	200-04588/01	1
2m Panel Extension Loom	200-04588/02	
3m panel Extension Loom	200-04588/03	
4m panel Extension Loom	200-04588/04	
Water Temperature Switch (Panel A, ABV & ABVW) NOT Beta16 or Beta25, (i.e. ONLY Beta10, Beta14 or Beta20 to March 2007)	200-01133	1
Water Temperature Switch with single terminal Beta16 & Beta25, (& standard from March 2007 for Panel A, ABV & ABVW)	600-62820	
Water Temperature Sender 5/8UNF (Panel C & B)	200-94360	
Water Temperature Sender 1/8NPT (Panel C & B) FROM APRIL2011	200-08248	
Adaptor for 1/8" temperature sender 1/8BSPF x 3/8BSPM	212-01480	
Oil Pressure Switch (Panel A, ABV, ABVW, & B)	600-62670	1
Oil Pressure Sender (Panel C)	200-94350	

## Heat Exchanger & Keel Cooled Beta10, Beta14, Beta16, Beta20 & Beta25

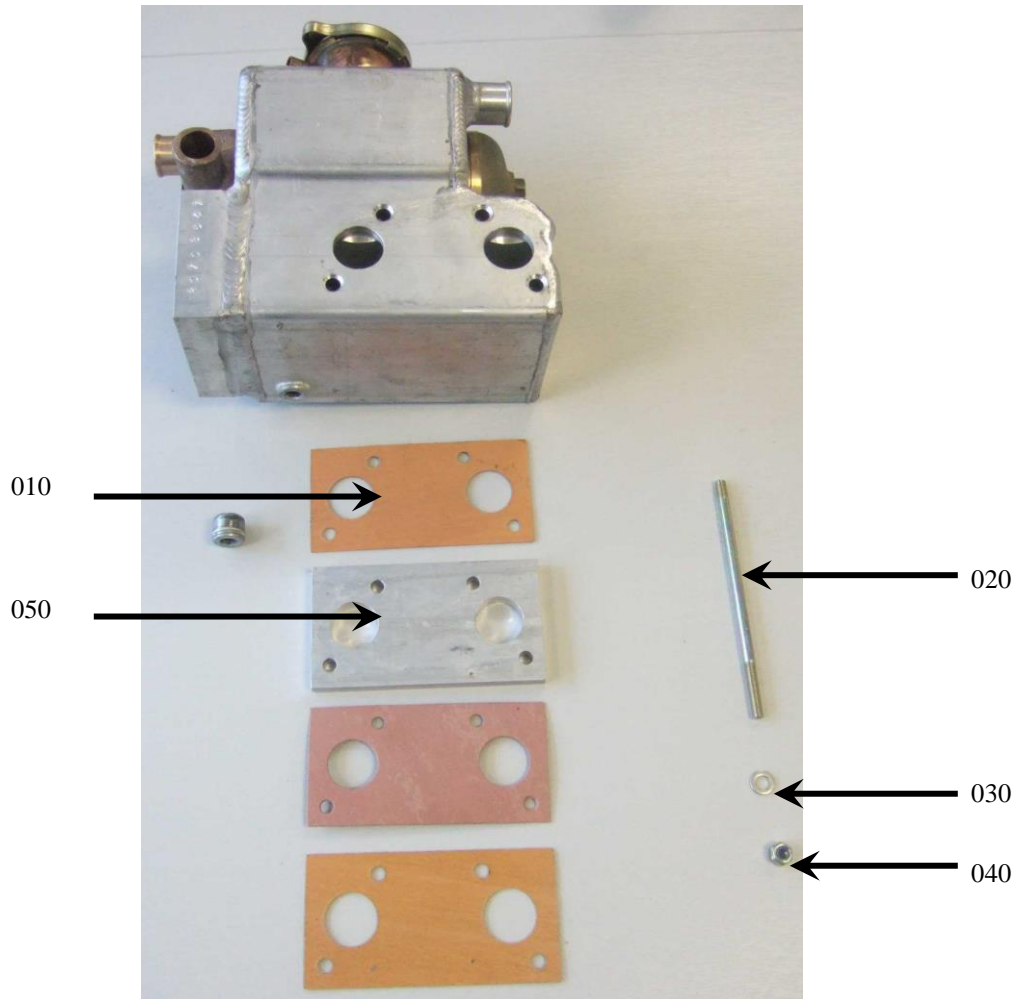
Description	Part Number	Qty per Engine
Standard 50mm Water Injection Exhaust Bend	202-02458	1
5" High Rise 50mm Water Injection Exhaust Bend	202-92400/22	
Exhaust Bend Gasket	212-09070	1
Drive Plate 22-B-60 - PRM / ZF	206-91950	1
Drive Plate 22-B-4 - TMC / PRM / ZF	206-97041	
Flexible Mountings (Trelleborg type)	213-93440	4
Rocker Cover Gasket Beta 14	600-01055	1
Rocker Cover Gasket Beta 16	600-05467	
Rocker Cover Gasket Beta 20	600-00607	
Rocker Cover Gasket Beta 25	600-05468	
Head Gasket Beta 10, Beta 14	600-00409/01	1
Head Gasket Beta 16	600-05469	
Head Gasket Beta 20	600-06548	
Head Gasket Beta 25	600-05470	
Top Gasket Set Beta 14	600-00383	1
Top Gasket Set Beta 16	600-05471	
Top Gasket Set Beta 20	600-00395	
Top Gasket Set Beta 25	600-05472	
Lower Gasket Set Beta 14	600-01056	1
Lower Gasket Set Beta 16	600-05473	
Lower Gasket Set Beta 20	600-00394	
Lower Gasket Set Beta 25	600-05474	
Kubota rocker cover oil filler cap	600-00579	1
Kubota rocker cover O ring for oil filler cap	600-00258	1
Kubota Fuel leak off rail – Beta10 & Beta14	600-00032	1
Kubota Fuel leak off rail – Beta16	600-09959	
Kubota Fuel leak off rail – Beta20	600-00031	
Kubota Fuel leak off rail – Beta25	600-09273	
Kubota Gasket to suit Fuel leak off rail to injector	600-00537	2 or 3
Kubota Gasket to suit Fuel injector to cylinder head	600-00242	
Starter motor Beta10 / Beta14 / Beta16	600-00063	1
Starter motor Beta20	600-00064	
Starter motor Beta25	600-05147	
<b>Manuals</b>		
Operators Maintenance Manual	221-02887	1
Kubota Workshop Manual, Beta10 / Beta14, Beta20	600-00756	1
Kubota Workshop Manual, Beta16 & Beta25	600-06242	
Kubota Spare Parts Manual - Beta10 & Beta14	600-02437	1
Kubota Spare Parts Manual – Beta16	600-05476	
Kubota Spare Parts Manual – Beta20	600-02438	
Kubota Spare Parts Manual - Beta25	600-05477	

**Header tank manifold fixings –Cast tanks, Beta10, Beta14 & Beta20 to Mid 2002**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	600-63070	Manifold gasket Beta10 & Beta14	1		
	600-08350	Manifold gasket Beta16		Not shown	
	600-64210	Manifold gasket Beta20		Not shown	
	600-08351	Manifold gasket Beta25		Not shown	
020	201-68450/02	Mini series manifold stud (cast tank)	4	Beta10 & Beta14	
			6	Beta20	
030	217-99276	M6 Flat washer	4	Beta10 & Beta14	
			6	Beta20	
040	217-99278	M6 Nyloc	4	Beta10 & Beta14	
			6	Beta20	

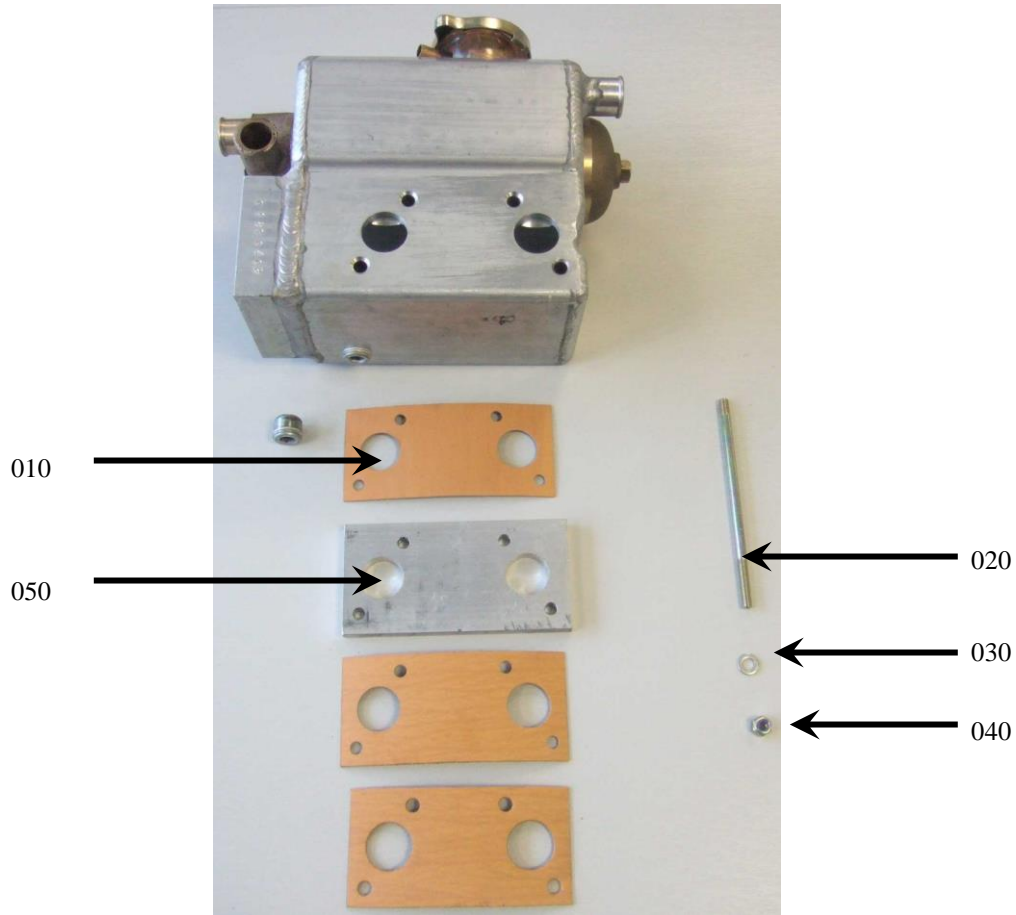
**Header tank manifold fixings –Beta 10 / Beta 14**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-05280/482	Manifold gasket Beta10 / Beta14 (Pre 2011 Spec Only)	3		
	212-08626	Manifold gasket Beta10 – Beta25 <b>2011 SPEC</b> <b>*USE WITH 600-63070 –SEE PAGE4)</b>	2	Not shown	
020	201-01915	Mini series manifold stud (extruded tank)	4		
030	217-99276	M6 Flat washer – <b>TO END 2010</b>	4	Not shown	
	217-99276	¼" Flat washer <b>2011 SPEC</b>			
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		N/A
	200-08619	Mini exhaust gasket plate <b>2011 SPEC</b>	2	Not shown	

**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.**

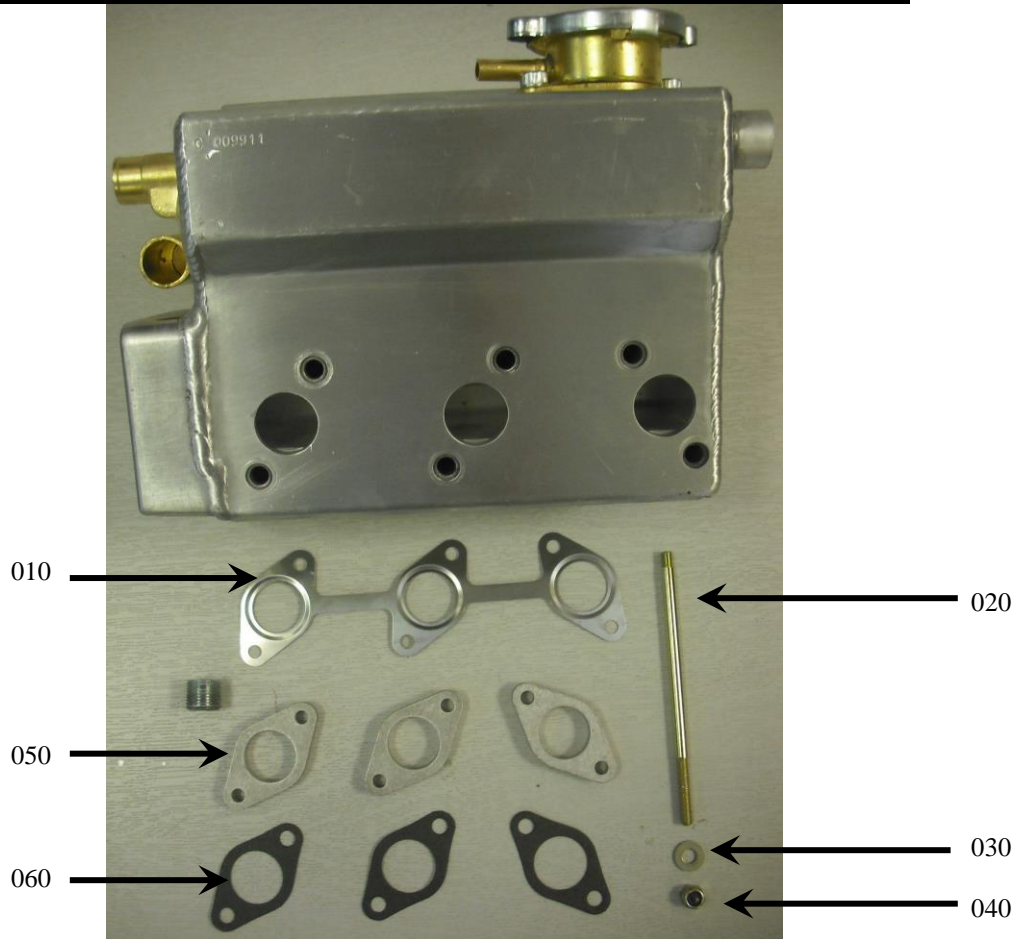
**Header tank manifold fixings –Beta 16**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-05280/602	Manifold gasket Beta16 (Pre 2011 Spec Only)	3		
	212-08626	Manifold gasket Beta10 – Beta25 <b>2011 SPEC</b> <b>*USE WITH 600-08350 –SEE PAGE4*</b>	2	Not shown	
020	201-01915	Mini series manifold stud (extruded tank)	4		
030	217-99276	M6 Flat washer <b>–TO END 2010</b>	4		
	217-99276	¼" Flat washer <b>2011 SPEC</b>		Not shown	
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		N/A
	200-08619	Mini exhaust gasket plate <b>2011 SPEC</b>	2	Not shown	

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**Header tank manifold fixings –Beta 20 (2011 Spec 3 Bolt Manifold Shown)**

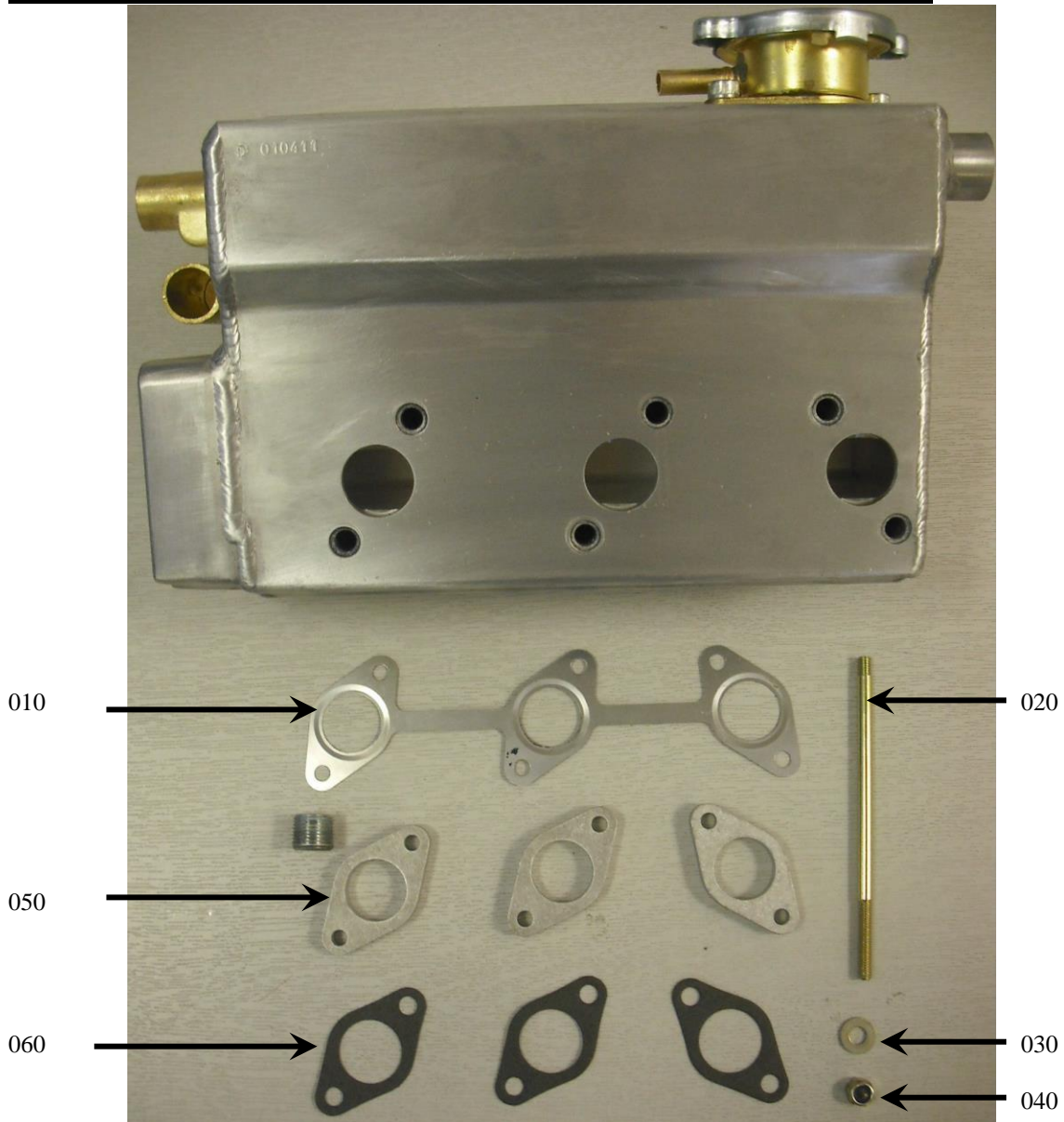


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-05280/722	Manifold gasket Beta 20 (Pre 2011 Spec Only)	3	Not shown	
	600-64210	Gasket -BD722 Exhaust Manifold	1		
020	201-01915	Mini series manifold stud (extruded tank)	6		
030	217-99276	M6 Flat washer –TO END 2010	6	Not shown	
	217-99276	¼" Flat washer 2011 SPEC			
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	Not shown	N/A
	200-08619	Mini exhaust gasket plate 2011 SPEC	3		
060	212-08626	Manifold gasket Beta10 – Beta25 2011 SPEC *USE WITH 600-64210*	3		

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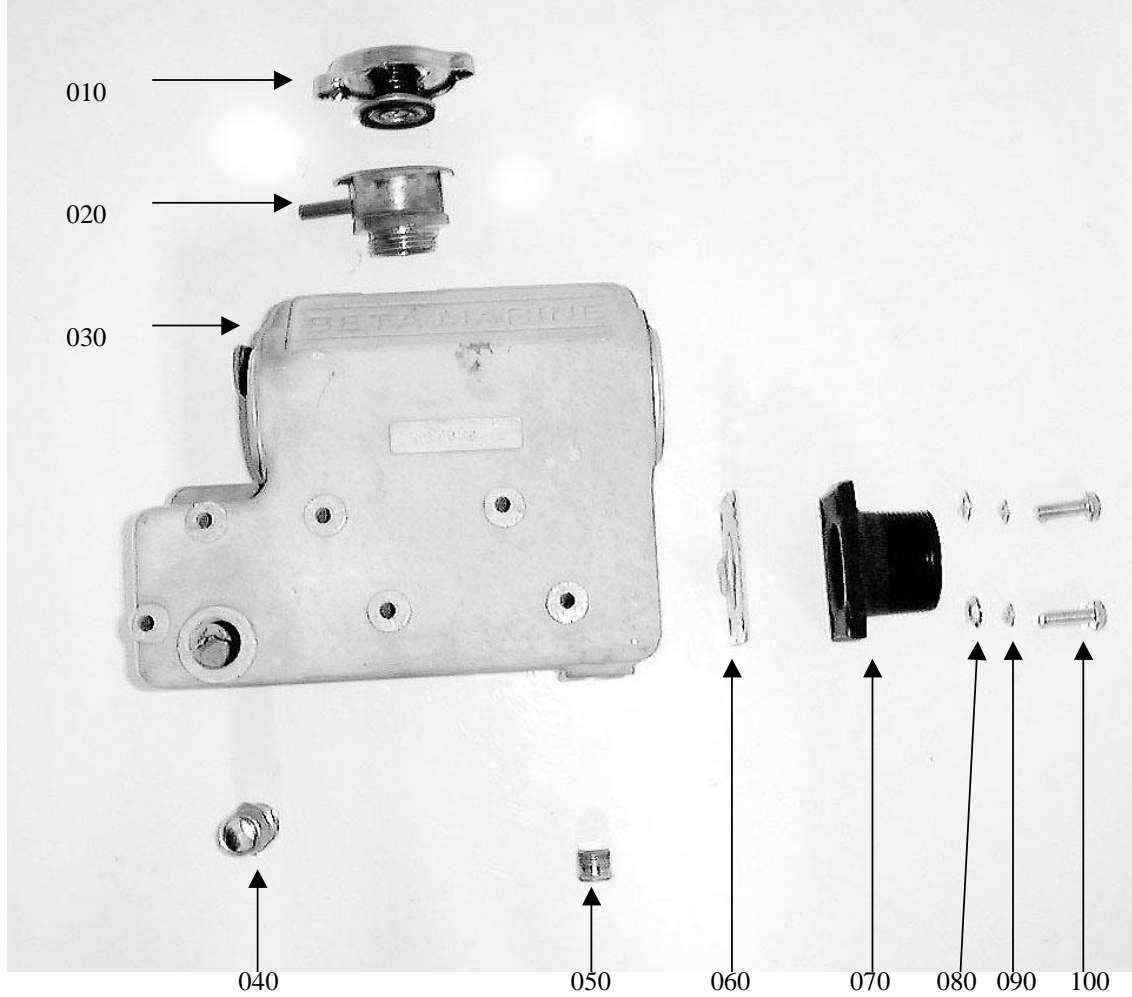
**Header tank manifold fixings –Beta 25 (2011 Spec 3 Bolt Manifold Shown)**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-05280/902	Manifold gasket Beta 25 (Pre 2011 Spec Only)	3	Not shown	
	600-08351	BD902 Exhaust manifold gasket	1		
020	201-01915	Mini series manifold stud (extruded tank)	6		
030	217-99276	M6 Flat washer <b>-TO END 2010</b>	6	Not shown	
	217-99276	¼" Flat washer <b>2011 SPEC</b>	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	Not shown	N/A
	200-08619	Mini exhaust gasket plate <b>2011 SPEC</b>	3		
060	212-08626	Manifold gasket Beta10 / Beta14 <b>2011 SPEC</b> <b>*USE WITH 600-08351)</b>	3		

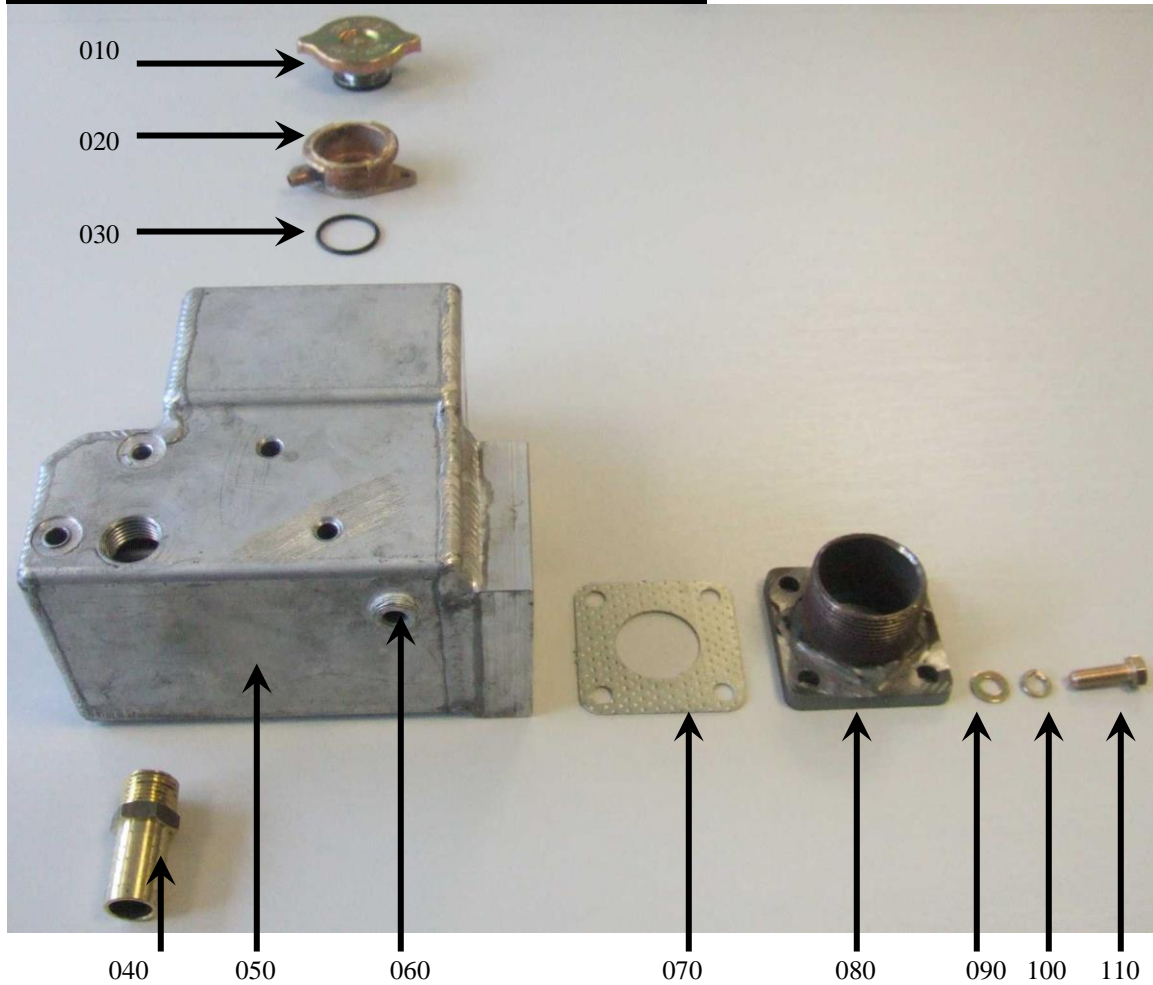
**PLEASE NOTE: IF THE ORIGINAL THICK EXHAUST MANIFOLD GASKET IS AVAILABLE FROM KUBOTA, YOU DO NOT REQUIRE THE TWO ADDITIONAL PAPER GASKETS TO MAINTAIN CORRECT ALIGNMENT OF THE HEADER / HEAT EXCHANGE TANK.**

***Keel cooled header tank –Cast tanks: Beta10, Beta14 & Beta20 to Mid 2002***



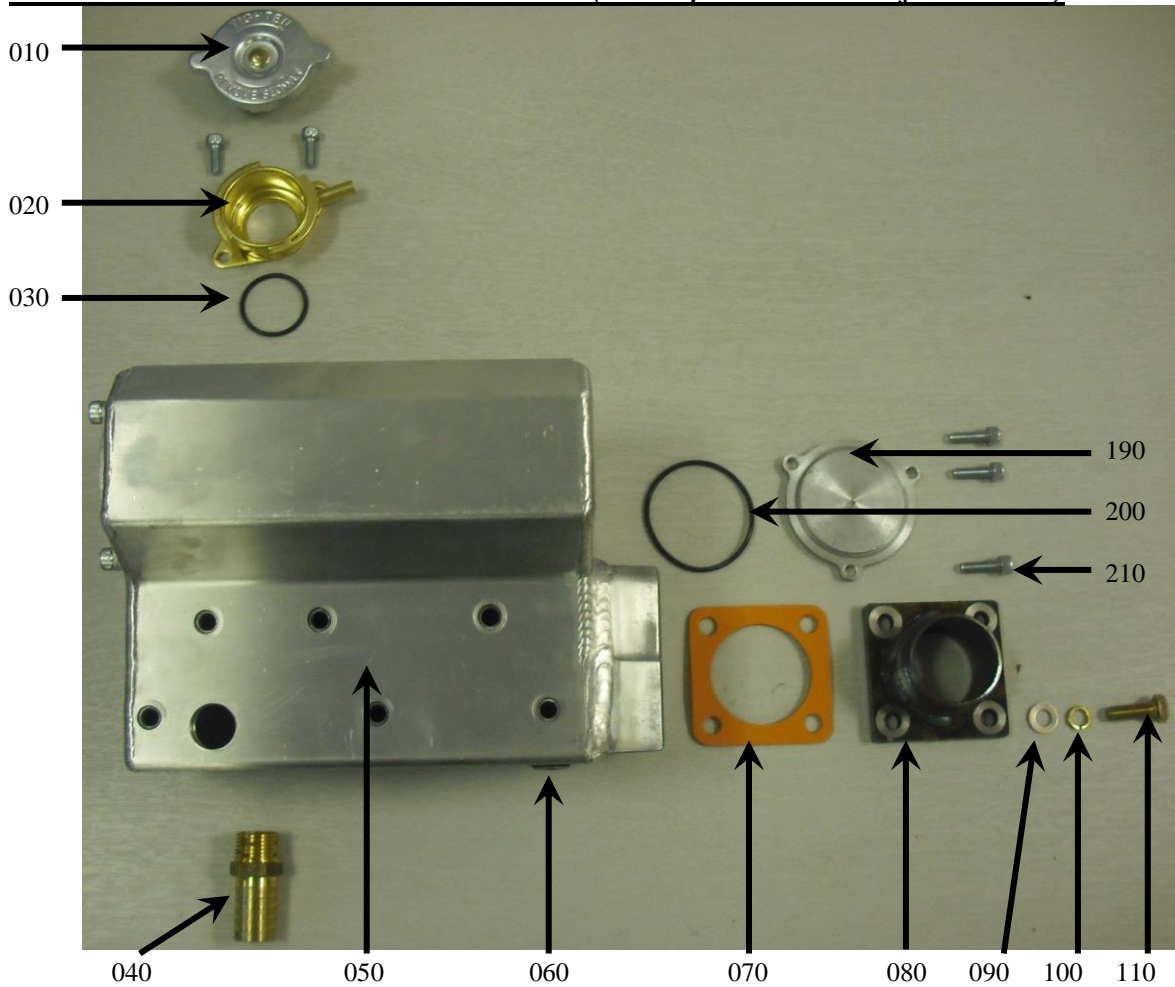
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80130	95kPa Pressure cap	1		
020	209-00015	Filler neck assembly (cast tank)	1		
030	209-61970	Beta10 & Beta14 Keel cooled manifold (cast)	1	Not shown Assembly inc. 010, 020 & 050	N/A
030	209-61980	Beta20 Keel cooled manifold (cast)	1	Assembly inc. 010, 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" –Silver type	1		
	212-09070	Exhaust gasket 2" –Orange waterproof type	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 –Beta 10 / Beta 14 / Beta 16**



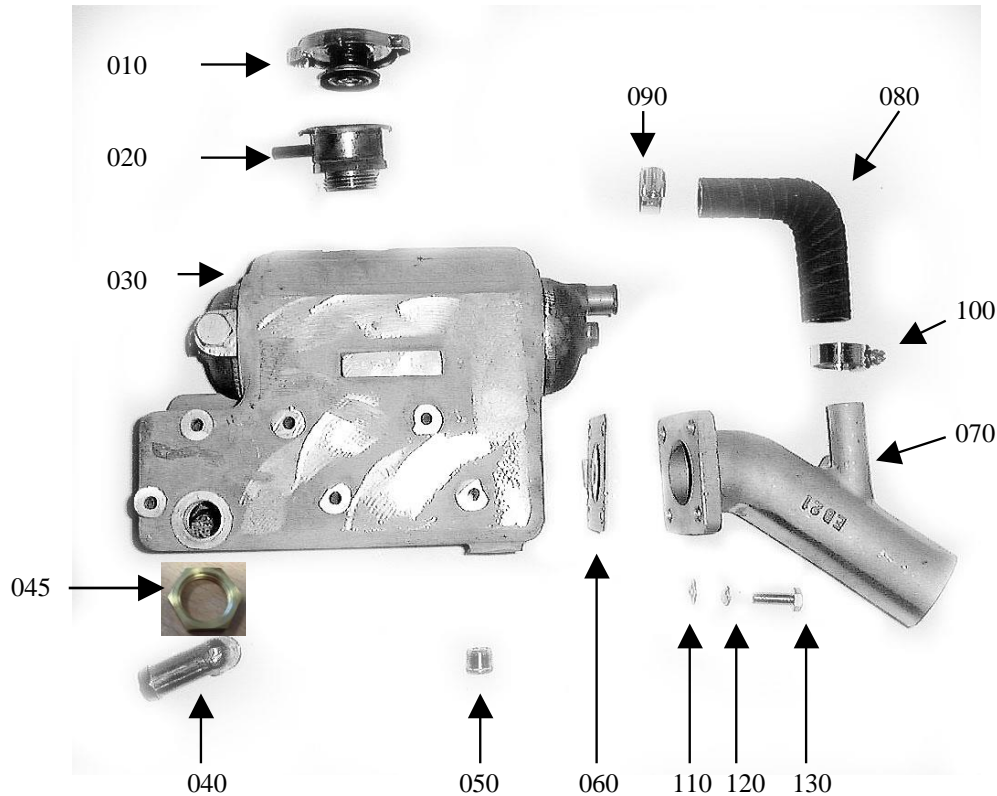
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80130	95kPa Pressure cap	1		
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring	
030	N/A	Part of 020	1		N/A
010-030	209-08352	Filler neck assembly <b>2011 spec</b>	1	Inc Pressure cap, O ring & filler neck	
040	212-99232	½"BSPT-3/4" Hose connector	1		
050	209-01922	Beta10 / Beta14 Keel cooled manifold (extruded)	1	Inc. 010, 020 030 & 060	N/A
	209-08432	Beta 14 Keel cooled manifold <b>2011 SPEC</b>		Not shown, Assembly inc. 010, 020 030 & 060	
	209-05177	Beta 16 Keel cooled manifold (extruded)			N/A
	209-08516	Beta 14 Keel cooled manifold <b>2011 SPEC</b>			
060	209-80050	3/8"BSP plug	1		
070	212-09070	Exhaust gasket 2"	1		
080	202-61350	Keel cooled exhaust flange ½"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	212-98308	Silencer ½"BSP M-M 27" OAL	1	Not shown	
150	212-02425	Silencer ½"BSP M-M 18" OAL	1	Not shown, not standard	
160	212-00033	Hospital silencer M-M ½"BSP	1	Not shown	
170	212-00306	Socket ½"BSP F-F	1	Not shown	
180	212-00234/01	Glass fibre exhaust lagging 3x50mm	30m	Not shown	
190	202-08429	Keel cooled bolt on end cap <b>2011 SPEC</b>	2	Not shown	
200	212-07273	Keel cooled end cap O Ring <b>2011 SPEC</b>	2	Not shown	
210	217-00190Z	Keel cooled end cap bolt <b>2011 SPEC</b>	6	Not shown	

***Keel cooled header tank –Beta 20 / Beta 25 (2011 Spec 3 Bolt Manifold Shown)***

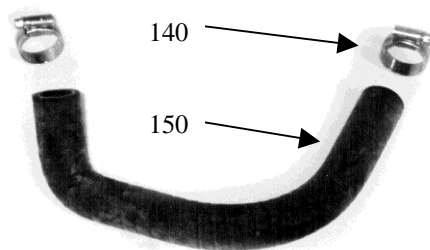


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80130	95kPa Pressure cap	1		
020	209-08352	Filler neck assembly (extruded tank)	1	Includes O ring	
030	N/A	Part of 020	1		N/A
010-030	209-08352	Filler neck assembly <b>2011 spec</b>	1	Includes Pressure cap, O ring & filler neck	
040	212-99232	½"BSPT-3/4" Hose connector	1		
050	209-01923	Beta 20 Keel cooled manifold (extruded)	1	Inc. 010, 020 030 & 060	N/A
	209-08521	Beta 20 Keel cooled manifold <b>2011 SPEC</b>		Assembly inc. 010, 020 030 & 060	
	209-05797	Beta 25 Keel cooled manifold (extruded)			N/A
	209-08428	Beta 25 Keel cooled manifold <b>2011 SPEC</b>			
060	209-80050	3/8"BSP plug	1		
070	212-09070	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	212-98308	Silencer 1½"BSP M-M 27" OAL	1	Not shown	
150	212-02425	Silencer 1½"BSP M-M 18" OAL	1	Not shown, not standard	
160	212-00033	Hospital silencer M-M 1½"BSP	1	Not shown	
170	212-00306	Socket 1½"BSP F-F	1	Not shown	
180	212-00234/01	Glass fibre exhaust lagging 3x50mm	30m	Not shown	
190	202-08429	Keel cooled bolt on end cap <b>2011 SPEC</b>	2		
200	212-07273	Keel cooled end cap O Ring <b>2011 SPEC</b>	2		
210	217-00190Z	Keel cooled end cap bolt <b>2011 SPEC</b>	6		

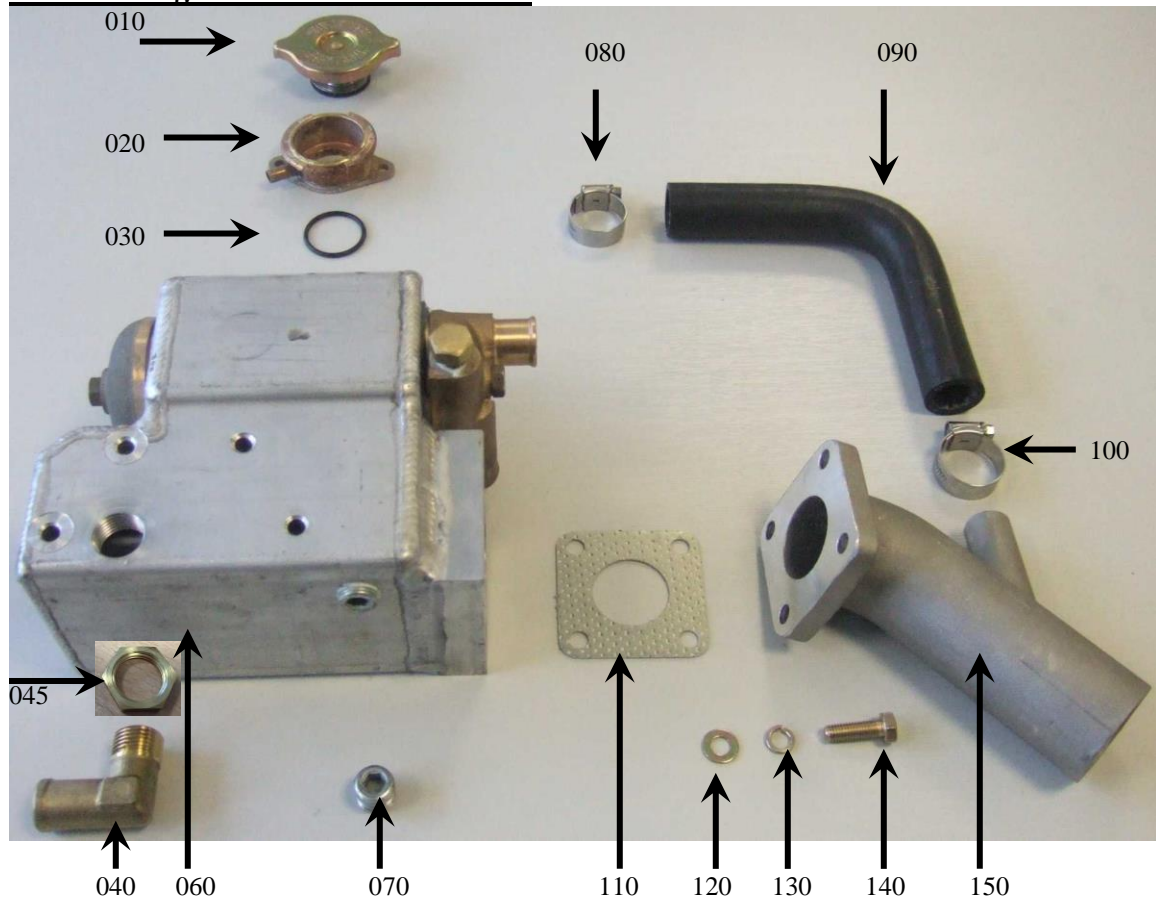
***Heat exchange tank –Cast tanks: Beta 10, Beta 14 & Beta 20 to Mid 2002***



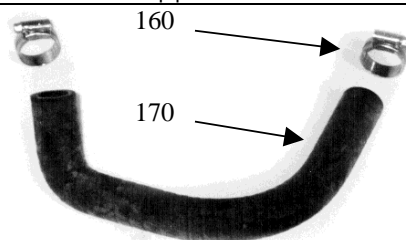
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80130	95kPa Pressure cap (Not USA)	1		
	209-02323	13PSI Twin seal pressure cap (USA only)	1		
020	209-00015	Filler neck assembly (cast tank)	1		
030	209-61930	Beta10 & Beta14 heat exchange tank (cast)	1	Inc. 010, 020 & 050	N/A
	209-61940	Beta20 heat exchange tank (cast)	1	Inc. 010, 020 & 050	N/A
040	212-99236	½"BSP-3/4" hose connector	1		
045	212-07371	Nut for manifold elbow 040	1		
050	209-80050	3/8"BSP plug	1		
060	212-09070	Exhaust Gasket 2"	1		
070	202-98330	2" x 22mm Aluminium water injection bend	1	To March 2002	N/A
	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 –Beta 10 / Beta 14



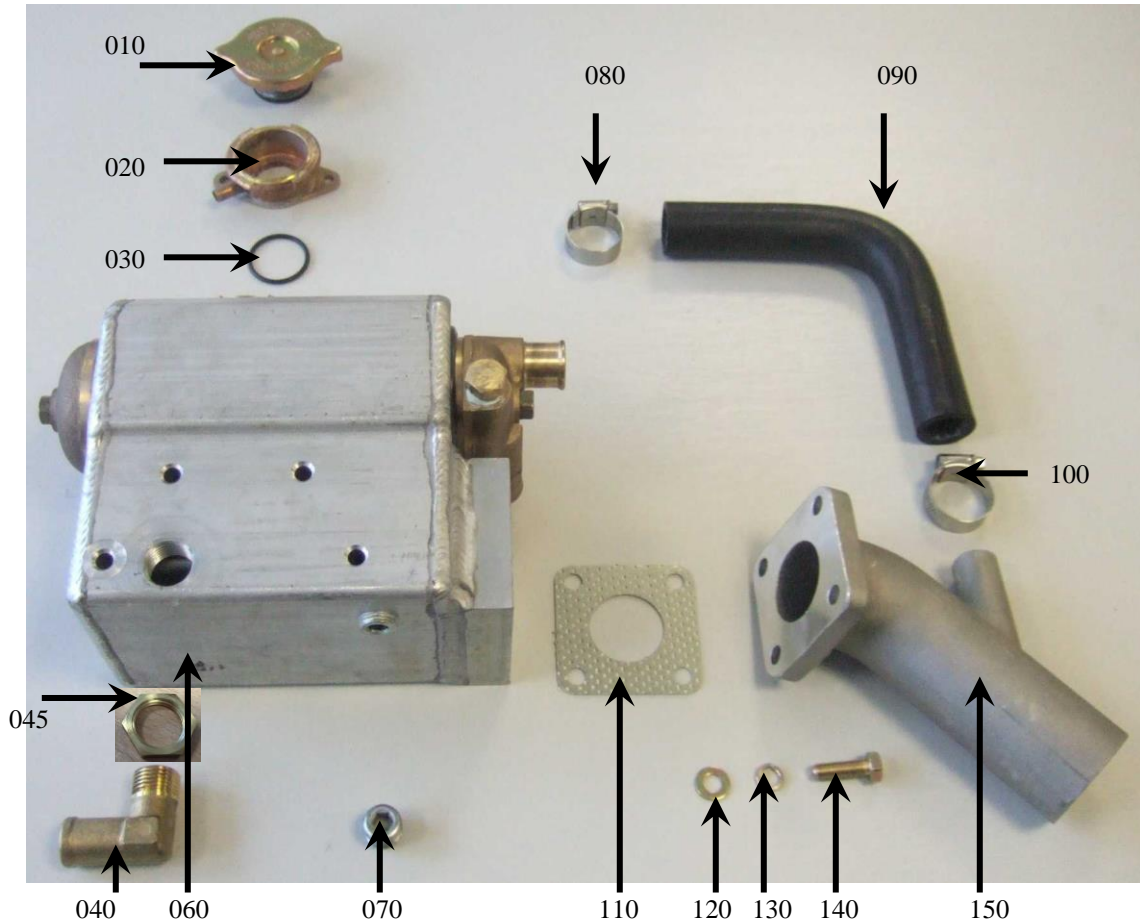
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80130	95kPa Pressure cap (Not USA)	1	
	209-02323	13PSI Twin seal pressure cap (for USA only)	1	
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring
	209-08352	Filler neck assembly <b>2011 SPEC</b>		Includes 010 & 030
030	209-02167/01	Filler neck O ring (Part of 020)	1	
040	212-99236	½"BSP-3/4" hose connector	1	
045	212-07371	Nut for manifold elbow 040	1	
050	212-07371	½"BSP Brass locking nut <b>2011 SPEC</b>	1	Not Shown
060	209-01826/01	Beta10 / Beta14 heat exchange tank (extruded)	1	Inc. 010, 020, 030 & 070
	AK/MINI/2CYL /482/E01	Beta10/Beta14 heat exchange tank <b>2011 SPEC</b>		Inc. 010, 020, 030 & 070
070	209-80050	3/8"BSP plug	1	
080	212-98464	Stainless steel hose clip 22-30mm	1	
090	209-91760/01	22mm I/D Elbow	1	
100	212-98464	Stainless steel hose clip 22-30mm	1	
110	212-09070	Exhaust Gasket 2"	1	
120	217-99293	M8 flat washer	4	
130	217-99292	M8 spring washer	4	
140	217-99299	M8 x 25mm set	4	
150	202-02458	2" x 22mm Aluminium water injection bend	1	
160	212-98464	Stainless steel hose clip 22-30mm	2	
170	209-92150	Mini silicon fresh water pipe	1	



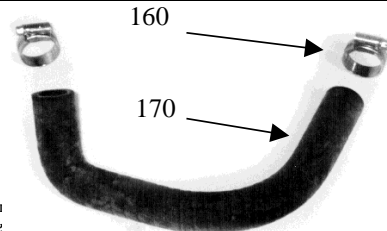
Prices and specifications are subject to amend  
please quote **Beta Marine WOC 'K' number** and Engine Type. Beta Marine will not be held responsible for incorrect supply without this information.

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***Heat exchange tank – Beta 16***



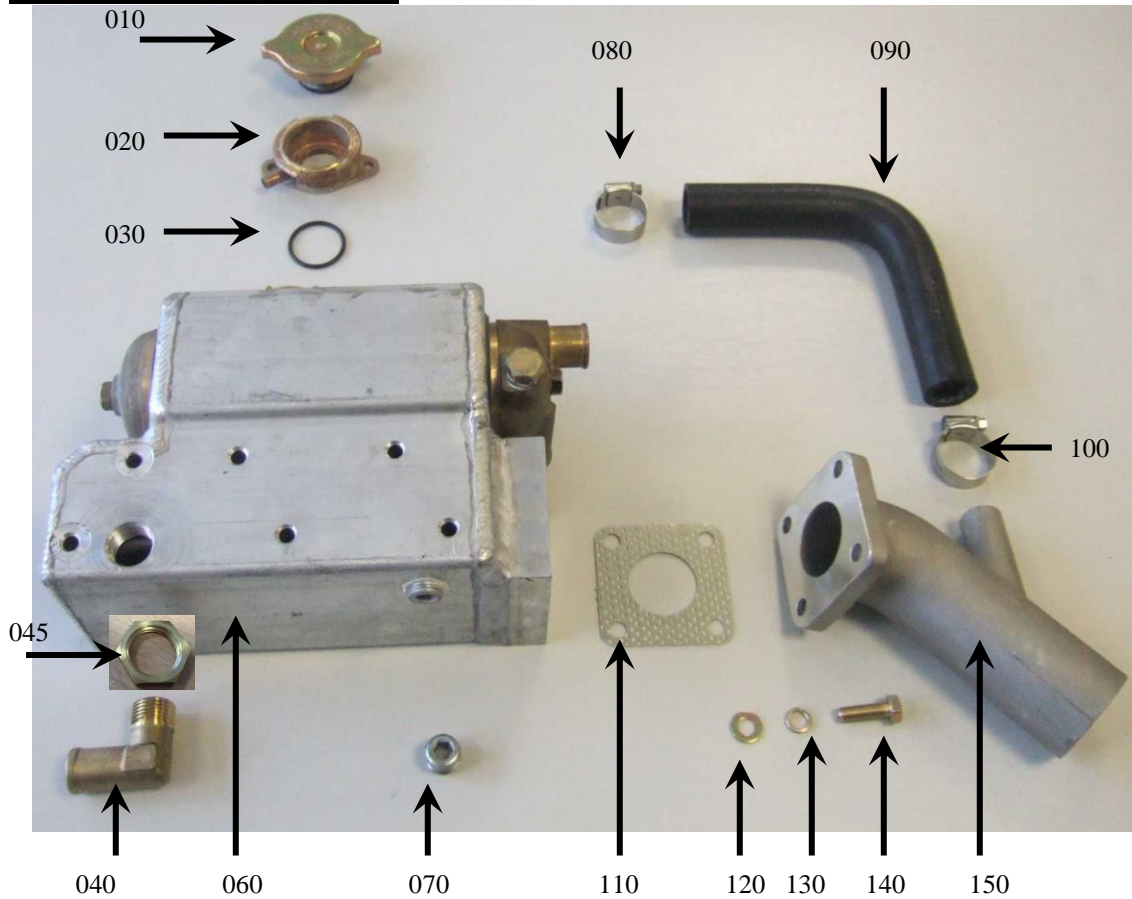
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80130	95kPa Pressure cap (Not USA)	1	
	209-02323	13PSI Twin seal pressure cap (for USA only)	1	
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring
	209-08352	Filler neck assembly <b>2011 SPEC</b>		Includes 010 & 030
030	209-02167/01	Filler neck O ring (Part of 020)	1	
040	212-99236	½" BSP-3/4" hose connector	1	
045	212-07371	Nut for manifold elbow 040	1	
050	212-07371	½" BSP Brass locking nut <b>2011 SPEC</b>	1	Not Shown
060	209-06266	Beta 16 heat exchange tank (extruded)	1	Inc. 010, 020, 030 & 060
	AK/MINI/2CYL /602/E01	Beta 16 heat exchange tank <b>2011 SPEC</b>		Inc. 010, 020, 030 & 060
070	209-80050	3/8" BSP plug	1	
080	212-98464	Stainless steel hose clip 22-30mm	1	
090	209-91760/01	22mm I/D Elbow	1	
100	212-98464	Stainless steel hose clip 22-30mm	1	
110	212-09070	Exhaust Gasket 2"	1	
120	217-99293	M8 flat washer	4	
130	217-99292	M8 spring washer	4	
140	217-99299	M8 x 25mm set	4	
150	202-02458	2" x 22mm Aluminium water injection bend	1	
160	212-98464	Stainless steel hose clip 22-30mm	2	
170	209-92150	Mini silicon fresh water pipe	1	



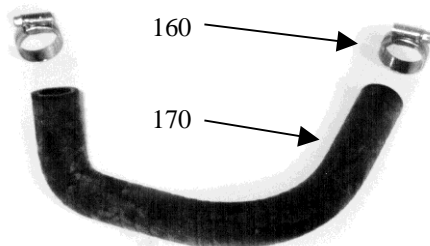
Prices and specifications are subject to amendment. Please quote *Beta Marine WOC 'K' number*

under current conditions of tender and sale. In all cases, we are not responsible for incorrect supply without this information.

***Heat exchange tank –Beta 20***



Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80130	95kPa Pressure cap (Not USA)	1	
	209-02323	13PSI Twin seal pressure cap (for USA only)	1	
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring
	209-08352	Filler neck assembly <b>2011 SPEC</b>		Includes 010 & 030
030	209-02167/01	Filler neck O ring (Part of 020)	1	
040	212-99236	½" BSP-3/4" hose connector	1	
045	212-07371	Nut for manifold elbow 040	1	
050	212-07371	½" BSP Brass locking nut <b>2011 SPEC</b>	1	
060	209-01827/01	Beta 20 heat exchange tank (extruded)	1	Inc. 010, 020, 030 & 070
	AK/MINI/3CYL /722/E01	Beta 20 heat exchange tank <b>2011 SPEC</b>		Inc. 010, 020, 030 & 070
070	209-80050	3/8" BSP plug	1	
080	212-98464	Stainless steel hose clip 22-30mm	1	
090	209-91760/01	22mm I/D Elbow	1	
100	212-98464	Stainless steel hose clip 22-30mm	1	
110	212-09070	Exhaust Gasket 2"	1	
120	217-99293	M8 flat washer	4	
130	217-99292	M8 spring washer	4	
140	217-99299	M8 x 25mm set	4	
150	202-02458	2" x 22mm Aluminium water injection bend	1	
160	212-98464	Stainless steel hose clip 22-30mm	2	
170	209-92150	Mini silicon fresh water pipe	1	

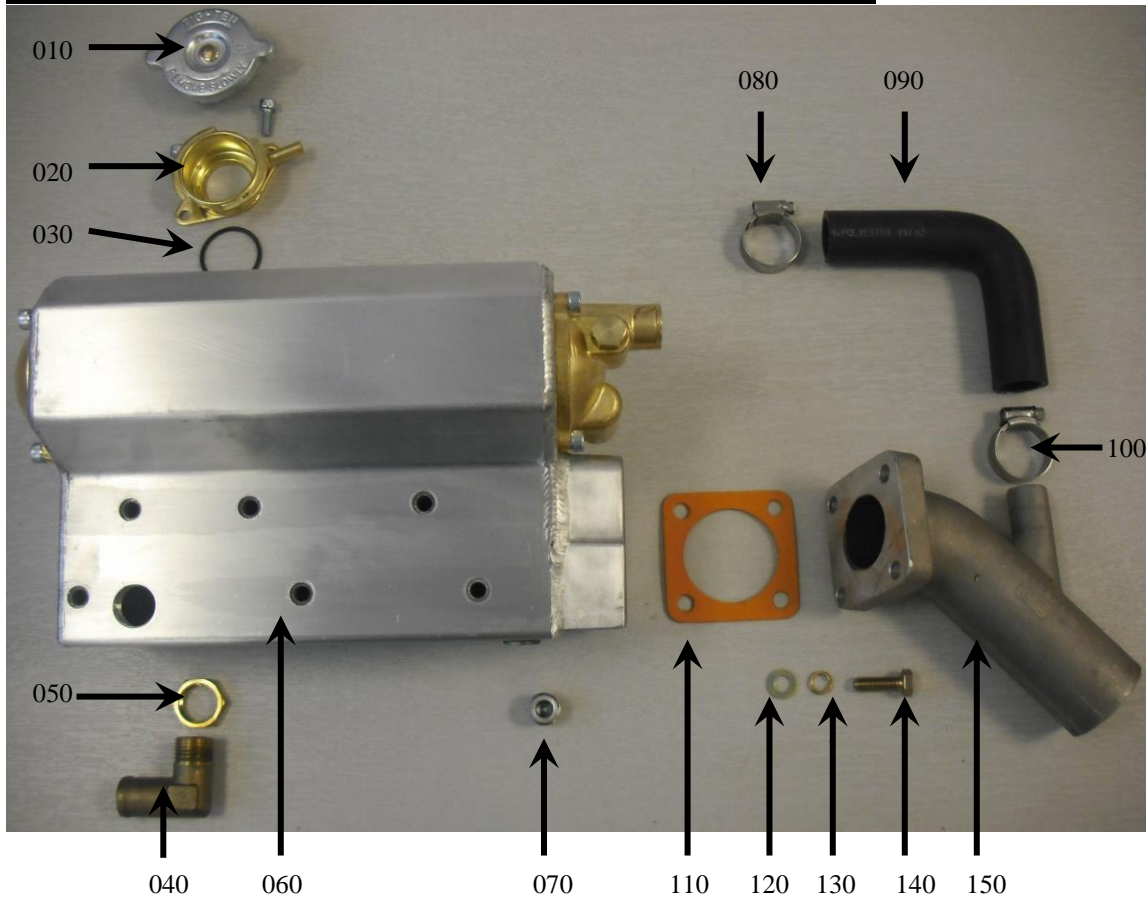


Prices and specifications are subject to amendment. Please quote *Beta Marine WOC 'K' number*

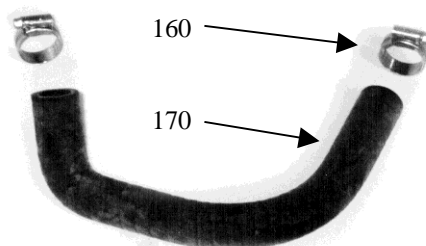
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**Heat exchange tank – Beta 25(2011 Spec 3 Bolt Manifold Shown)**



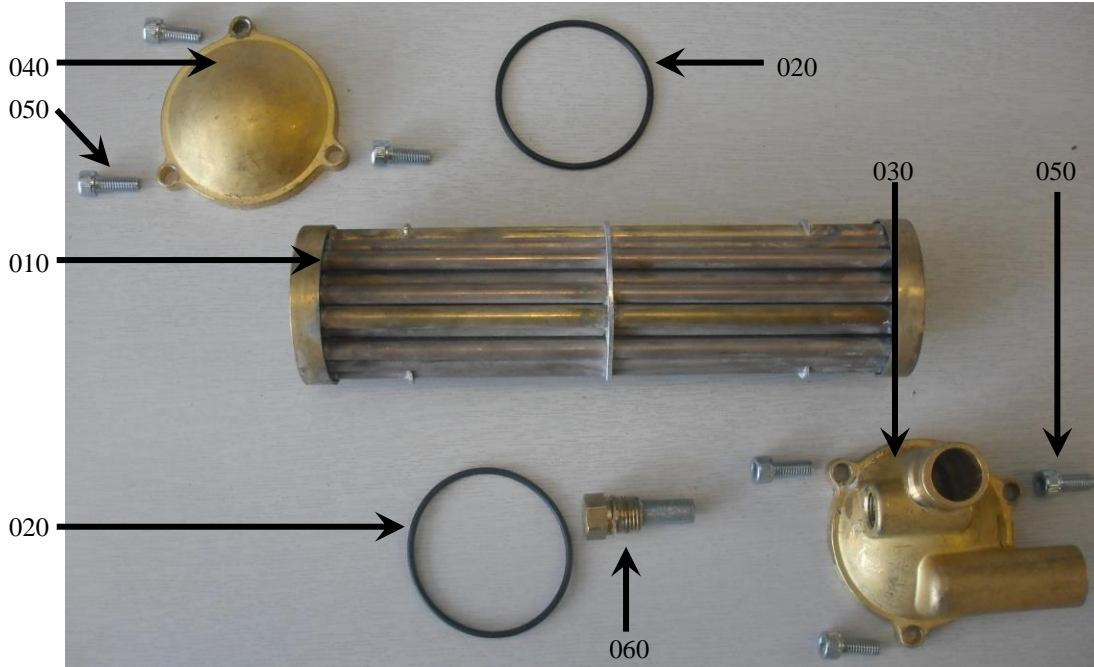
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-80130	95kPa Pressure cap (Not USA)	1	
	209-02323	13PSI Twin seal pressure cap (for USA only)	1	
020	209-02167	Filler neck assembly (extruded tank)	1	Includes O ring
	209-08352	Filler neck assembly <b>2011 SPEC</b>		Includes 010 & 030
030	209-02167/01	Filler neck O ring (Part of 020)	1	
040	212-99236	½" BSP-3/4" hose connector	1	
050	212-07371	½" BSP Brass locking nut <b>2011 SPEC</b>	1	
060	209-04826	Beta 25 heat exchange tank (extruded)	1	Inc. 010, 020, 030 & 070
	AK/MINI/3CYL /902/E01	Beta 25 heat exchange tank <b>2011 SPEC</b>		Inc. 010, 020, 030 & 070
070	209-80050	3/8" BSP plug	1	
080	212-98464	Stainless steel hose clip 22-30mm	1	
090	209-91760/01	22mm I/D Elbow	1	
100	212-98464	Stainless steel hose clip 22-30mm	1	
110	212-09070	Exhaust Gasket 2"	1	
120	217-99293	M8 flat washer	4	
130	217-99292	M8 spring washer	4	
140	217-99299	M8 x 25mm set	4	
150	202-02458	2" x 22mm Aluminium water injection bend	1	
160	212-98464	Stainless steel hose clip 22-30mm	2	
170	209-92150	Mini silicon fresh water pipe	1	



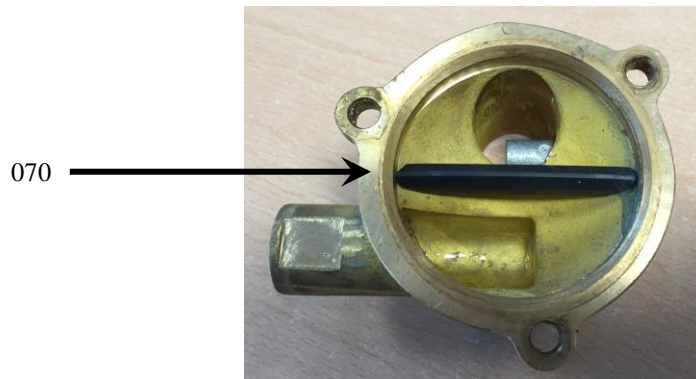
Prices and specifications are subject to amend  
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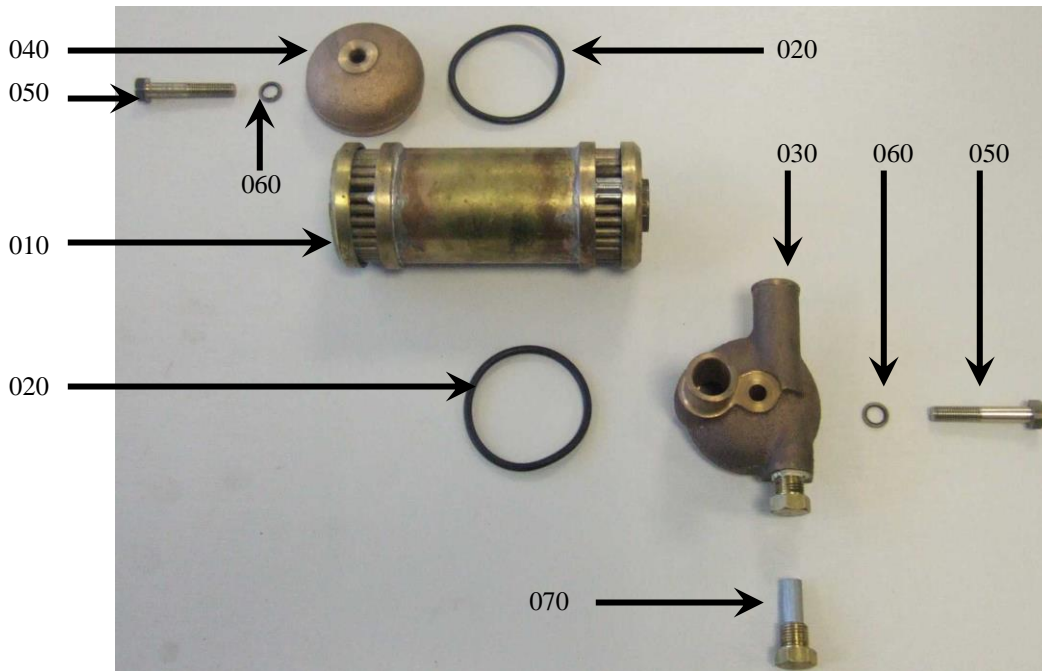
**Heat exchange tubestack (2011 SPEC HEAT EXCHANGER MANIFOLD)**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-08426	Beta10 / Beta14 / Beta16 Tube stack 2011 SPEC	1	
	209-08577	Beta20 Tube stack 2011 SPEC	1	
	209-07270	Beta25 Tube stack 2011 SPEC	1	
020	212-07273	Nitrile 'O' ring for tubestack 2011 SPEC	2	
030	208-07271	22mm Gunmetal header suits anode 2011 SPEC	1	
040	208-07272	Heat exchange return endcap 2011 SPEC	1	
050	217-00190Z	Heat exchanger end cap bolt 2011 SPEC	6	
060	209-61840	Zinc anode	1	1/4" BSP
070	212-08730/55	Seal, 55mm OAL, to suit 030 endcap 2011 SPEC	1	

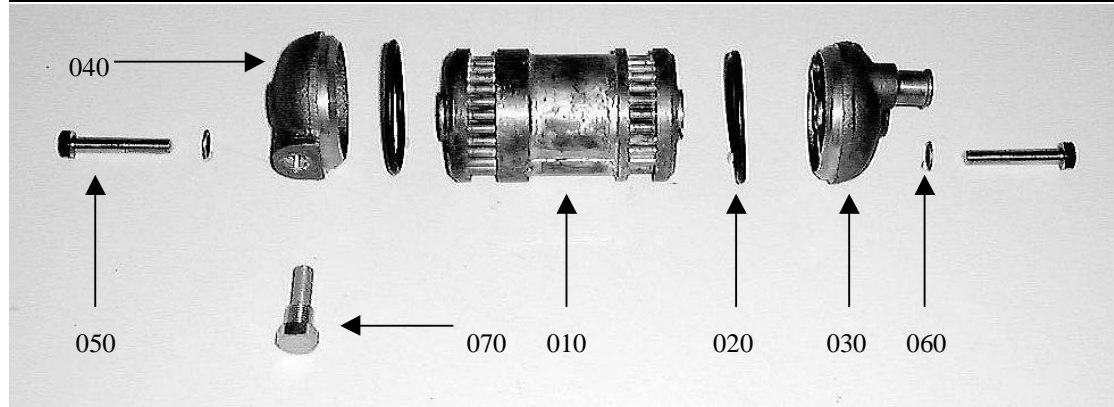


**Heat exchange tubestack (with 22mm header & anode on aft end) From January 2002**



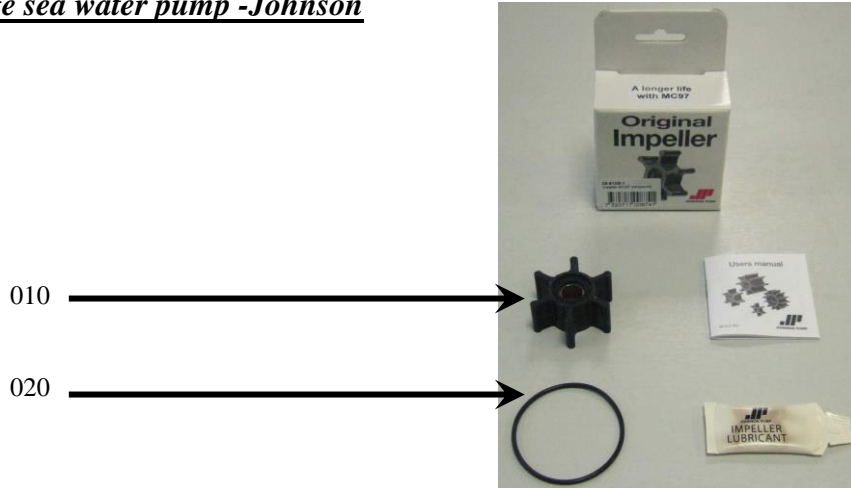
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-03975	Beta10 / Beta14 Tube stack	1	
	209-03976	Beta16 / Beta20 Tube stack	1	
	209-80210	Beta25 Tube stack	1	
020	209-80110	Nitrile 'O' ring for tubestack	2	
030	209-80440	22mm Gunmetal header & anode	1	
040	209-80100/01	Heat exchange endcap	1	
050	209-00016	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 Beta16 or Beta25 To end 2001**

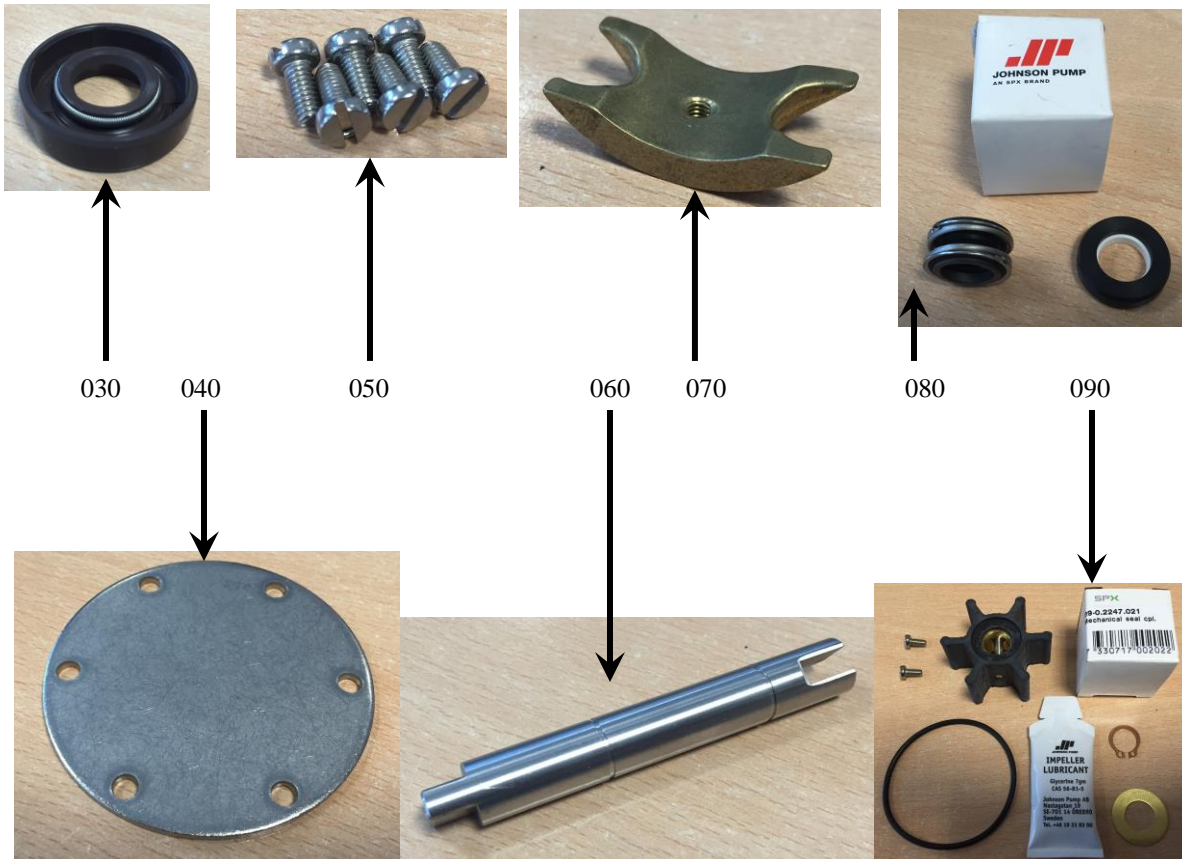


Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-03975	Beta 10 / Beta 14 Tube stack	1	
	209-03976	Beta 20 Tube stack	1	
020	209-80110	Nitrile 'O' ring for tubestack	2	
030	209-92110	15mm Gunmetal header	1	
040	209-80100	Heat exchange endcap & anode	1	
050	209-00016	M8 Phosphur bronze bolt	2	
060	209-00017	M8 Bonded seal	2	
070	209-61840	Zinc anode	1	¼"BSP

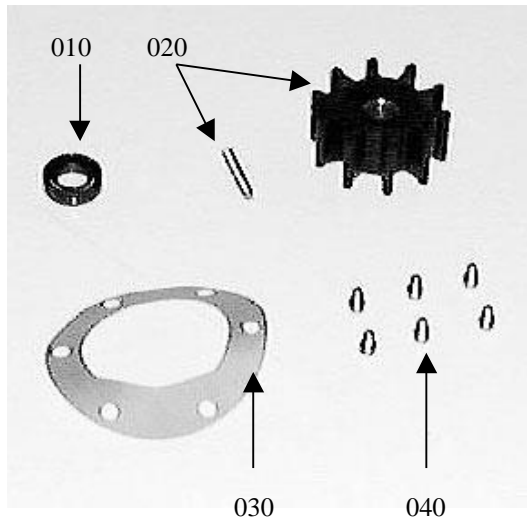
**Heat exchange sea water pump -Johnson**



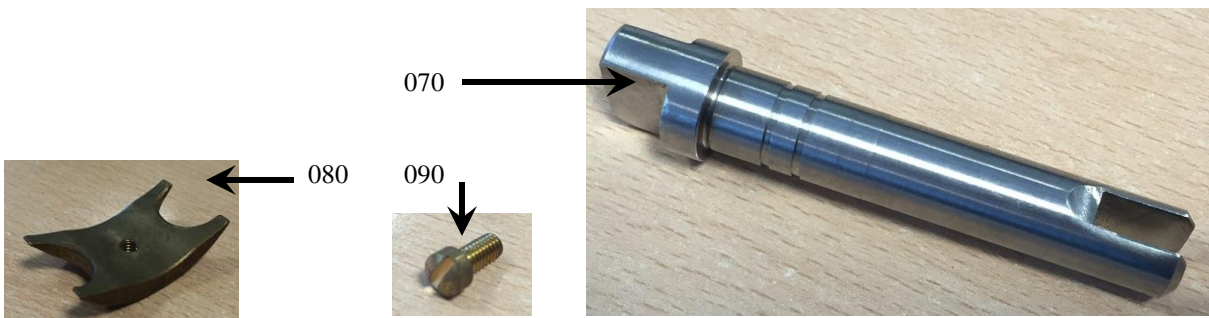
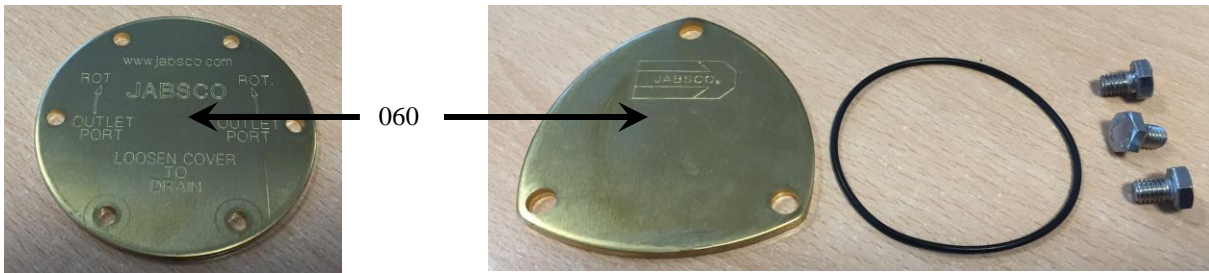
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	207-05355	Johnson pump impeller	1	Johnson from July 2006 (Note: O ring & lubricant)	
020	209-07291	O ring for Johnson -Part of 010	1	Johnson from July 2006	N/A
	207-09279	O ring for Beta pump	1	Beta from June 2013	
030	207-06494	Johnson pump lip seal	1	Johnson from July 2006	
040	207-05478	Johnson pump cover plate	1	Johnson from July 2006	
050	207-05479	Johnson pump screws	6	Johnson from July 2006	
060	207-06520	Johnson pump shaft	1	Johnson from July 2006	
070	207-06152	Johnson pump cam	1	Johnson from July 2006	
080	207-08636	Johnson pump mechanical seal	1	Johnson from July 2006	
090	207-07714	Johnson pump service kit	1	Johnson from July 2006	



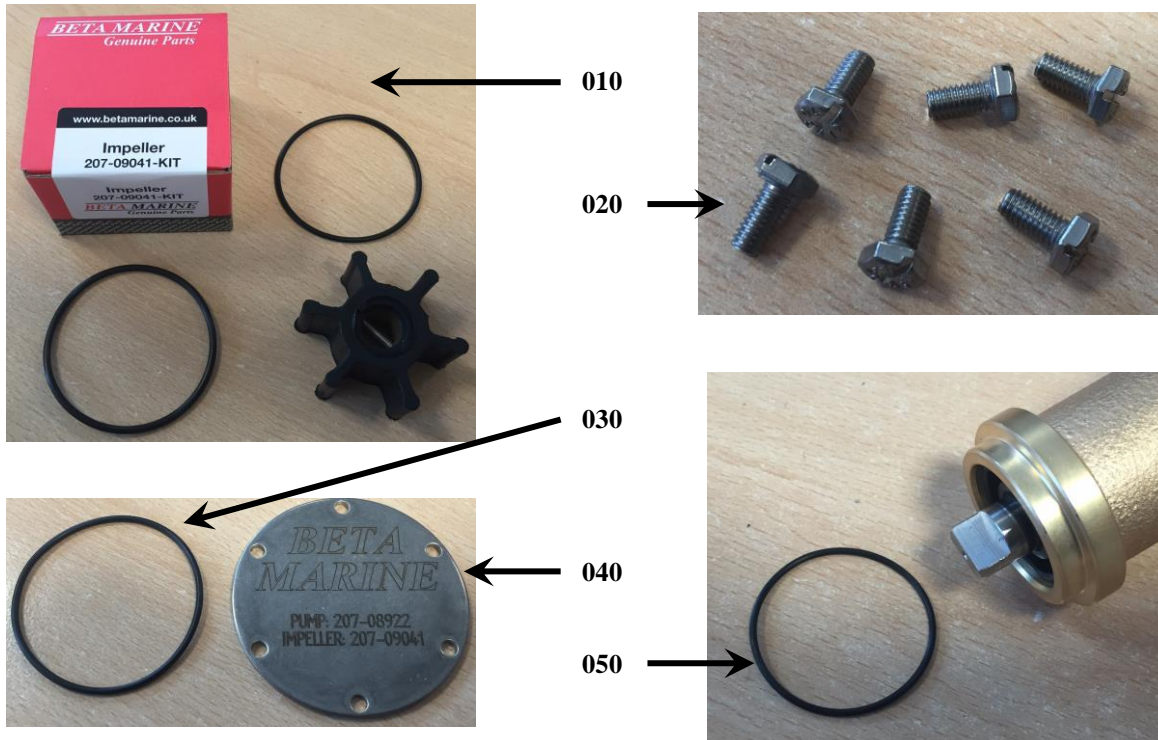
**Heat exchange sea water pump –Jabsco –engines to July 2006 only**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	207-02239	Jabsco pump lip seal	2	March 2004 to July 2006	
020	207-79630	Jabsco pump impeller	1	March 2004 to July 2006	
030	207-62600	Jabsco pump paper gasket	1	To March 2004 only	
	207-04206	Jabsco pump O ring	1	March 2004 to July 2006	
040	207-00062	Jabsco pump screws	6	To March 2004 only	
	207-04207	Jabsco pump screws	3	March 2004 to July 2006	
050	207-61470	Jabsco pump service kit	1	To March 2004 only Includes 10,20, 30 & 40	
	AK/MINI/HE/SWPI/001	Jabsco pump service kit	1	March 2004 to July 2006 Includes 10,20, 30 & 40	
060	207-00507	Jabsco pump cover plate	1	To March 2004 only	Round
	207-00138/01	Jabsco pump cover plate kit	1	March 2004 to July 2006	Triangular
070	207-01060	Jabsco pump shaft	1	March 2004 to July 2006	
080	207-01134	Jabsco pump cam	1	March 2004 to July 2006	Round pump
090	207-01322	Jabsco pump cam screw	1	March 2004 to July 2006	Round pump

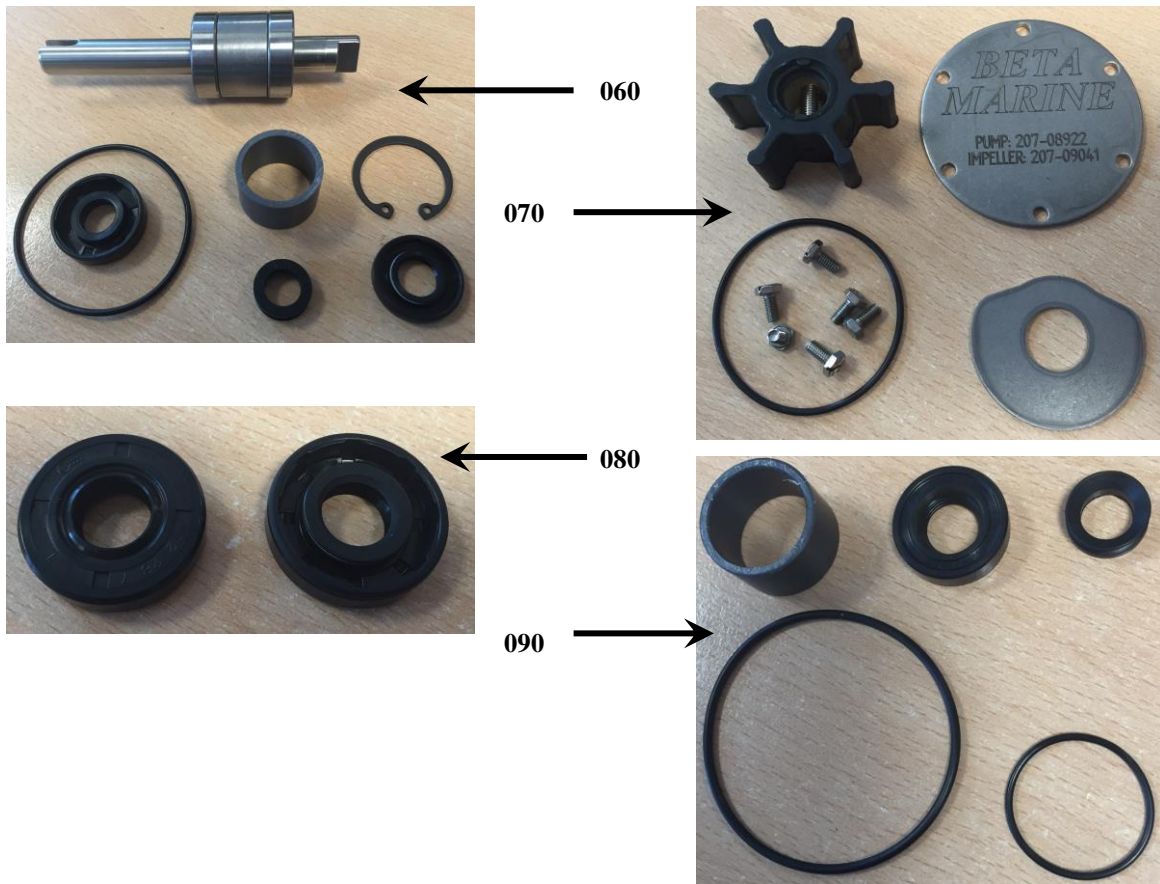


Heat exchange sea water pump –Beta type from June 2013



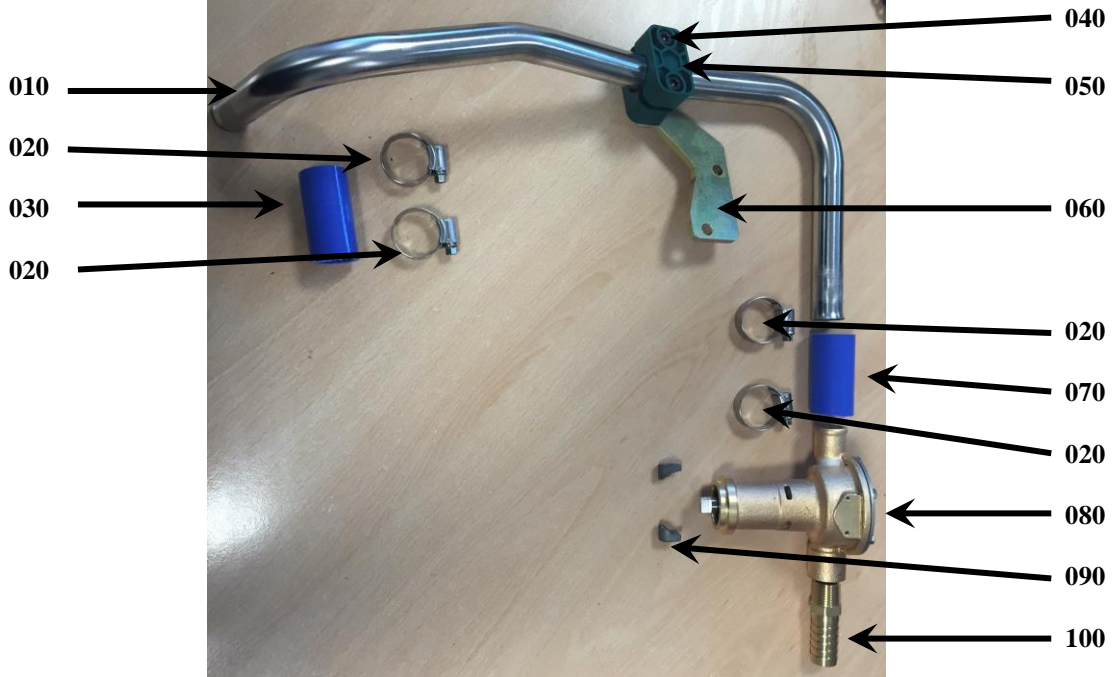
Ref. No.	Part No.	Part Name	Qty	Remarks
010	207-09041-KIT	Sea water pump impeller kit	1	Includes O ring for Beta & Johnson pumps
020	207-09483	Sea water pump cover plate screw	6	From June 2013
030	207-09279	Sea water pump cover plate O ring	1	From June 2013
040	207-09481	Sea water pump cover plate	1	From June 2013
050	209-08266	Sea water pump O ring	1	Seals all Mini pumps to engine front cover

**Heat exchange sea water pump –Beta type from June 2013**



Ref. No.	Part No.	Part Name	Qty	Remarks
060	207-09229	Sea water pump shaft kit	1	From June 2013 Includes shaft, 2 x lip seal, lip seal spacer, bearing spacer, circlip, V ring seal, O ring for cover plate, 2 x bearings
070	207-09909	Sea water pump wear kit	1	From June 2013 Includes: wear plate, cover plate, cover plate O ring, cover plate screws
080	207-09351	Sea water pump lip seal	2	From June 2013
090	207-09228	Sea water pump seal kit	1	From June 2013 Includes: 1 x lip seal, lip seal spacer, V ring seal, O ring for cover plate & O ring

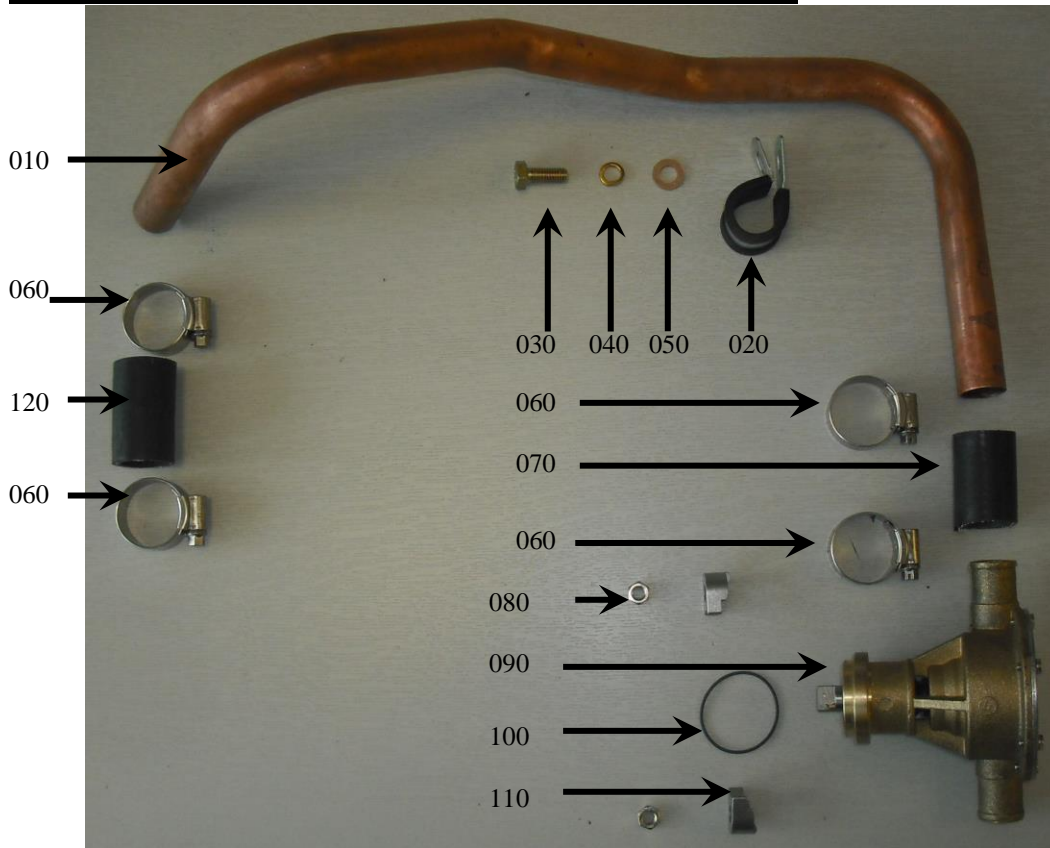
**Sea water cooling pipe –From June 2013**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-09198	Raw water cooling pipe Beta10, Beta14	1	
	209-09199	Raw water cooling pipe Beta16	1	
	209-09200	Raw water cooling pipe Beta20	1	
	209-09201	Raw water cooling pipe Beta25	1	
020	212-98464	Stainless steel hose clip 22-30mm	4	
030	209-91760/02	22mm Silicon hose	0.06m	
040	217-99284/01	M6 x 35mm socket cap screw	2	
050	212-09281	22mm pipe clamp (pair)	1	
060	202-08867	Sea water pipe bracket	1	
070	209-91760/02	22mm Silicon hose	0.06m	
080	207-08922	Sea water pump (Beta type from June2013)	1	
090	202-08924	Sea water pump clamp (pair)	1	
100	212-99232	½"BSP M x ¾" hose connector	1	

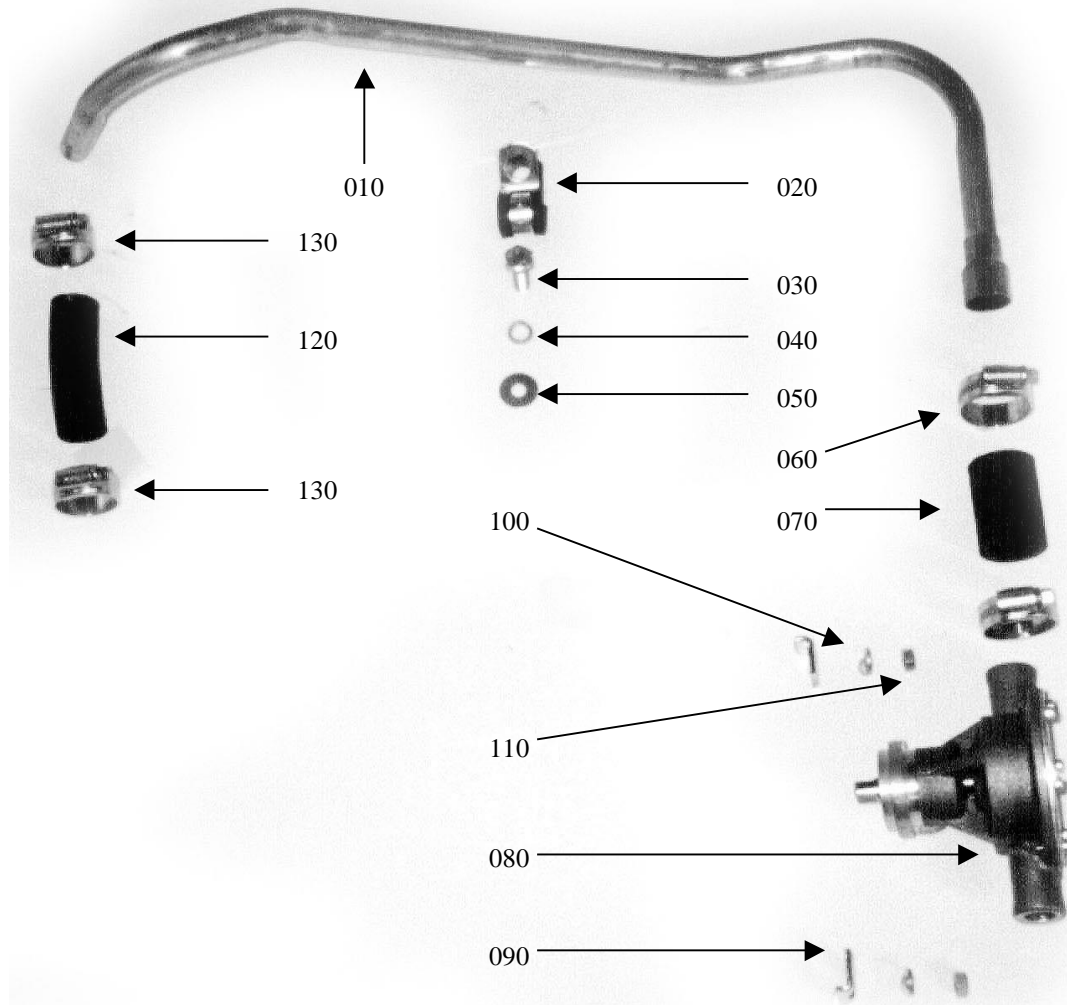


**Sea water cooling pipe –From December 2010 to June 2013**



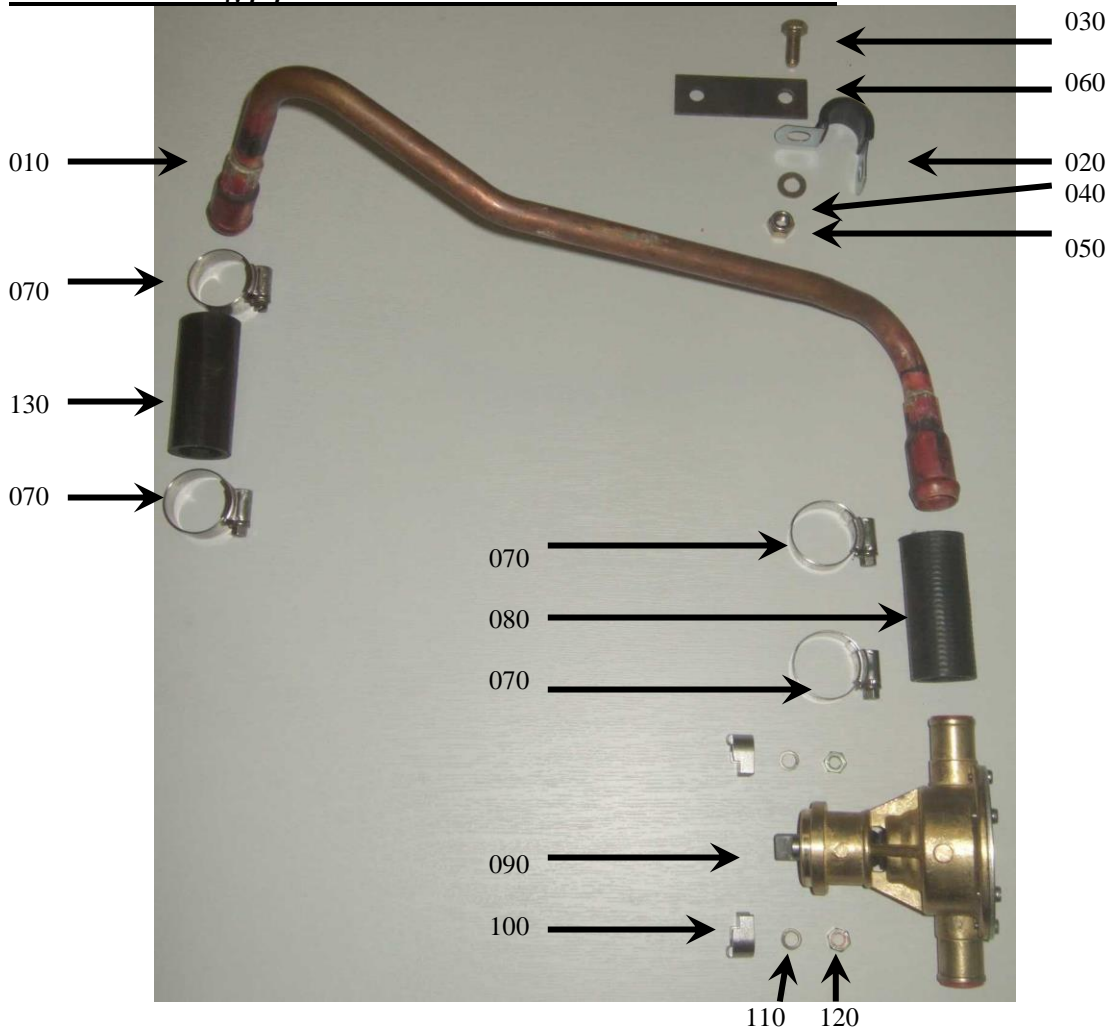
Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-08933	Raw water cooling pipe Beta10, Beta14	1	
	209-08931	Raw water cooling pipe Beta16	1	
	209-08932	Raw water cooling pipe Beta20	1	
	209-08868	Raw water cooling pipe Beta25	1	
020	212-08056	Fitting clip	1	
030	217-99298	M8 x 20mm set	1	
040	217-99292	M8 Spring washer	1	
050	217-99293	M8 Flat washer	1	
060	212-98464	Stainless steel hose clip 22-30mm	4	
070	218-99249	Raw water pipe – sea water pump hose	0.04m	
080	217-00052	M6 Nut	2	
090	207-61500/01	Sea water pump –Johnson (from July 2006)	1	Use Johnson to replace Jabsco
100	209-08266	O Ring –Mini Series Johnson pump from March 2011	2	
110	207-06446	Johnson pump clamp	2	
120	218-99249	Raw water pipe – heat exchanger hose 22mm	0.06m	
130	212-99890	Seawater strainer, gunmetal 1"BSP	1	Not shown
140	212-00471	¾" I/D PVC Reinforced water inlet hose	2m	Not shown –for 130
150	212-00462	1"BSP M x 3/4" hose connector	1	Not shown –for 130
160	212-98464	Stainless steel hose clip 22-30mm	2	Not shown –for 130
170	212-00038/BALL	Ball valve 1"BSP FxF DZR	1	Not shown –for 130
180	212-99900	Skin fitting, gun metal 1"BSP M	1	Not shown –for 130

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



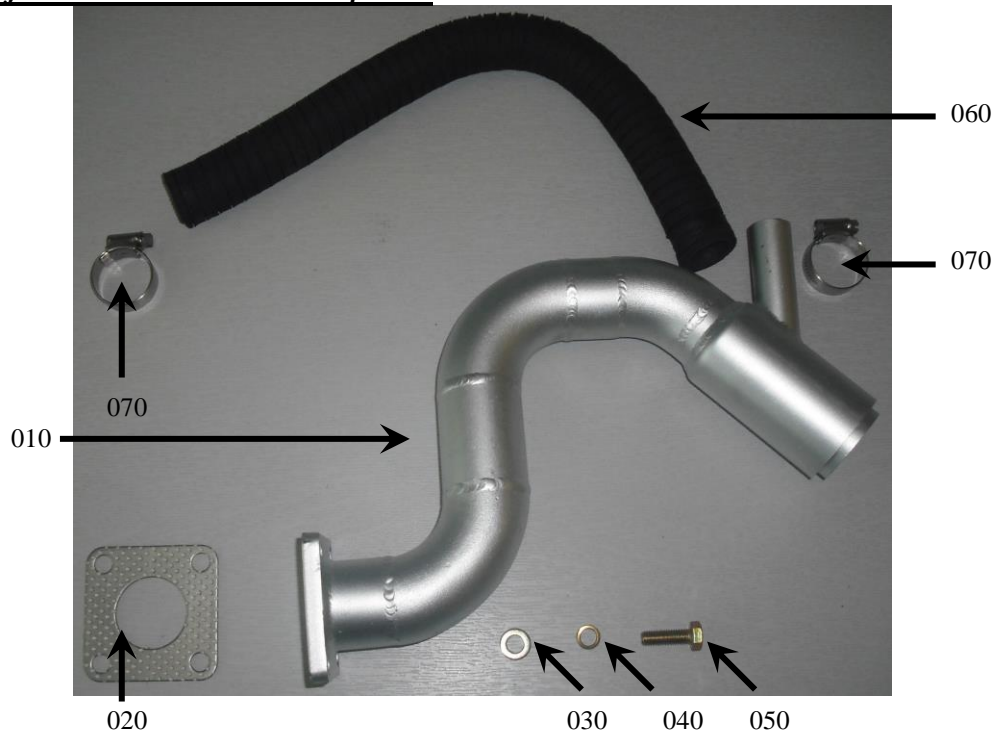
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	209-80040/15	Raw water cooling pipe Beta10 & Beta14 To suit 15mm endcaps	1	To October 2002	
	209-00071/15	Raw water cooling pipe Beta20 To suit 15mm endcaps	1	To October 2002 (Not shown)	
020	212-99264	Fitting clip	1		
030	217-99279	M6 x 10mm set	1		
040	217-99275	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 to December 2010***



Ref. No.	Part No.	Part Name	Qty	Remarks
<b>010</b>	209-80040	Raw water cooling pipe Beta10, Beta14 & Beta16 -To suit 22mm endcaps	1	Includes 080 & 130
	209-00071	Raw water cooling pipe Beta20 & Beta25 To suit 22mm endcaps	1	Includes 080 & 130 Not shown
<b>020</b>	212-99264	Fitting clip	1	
<b>030</b>	217-99298	M8 x 20mm set	1	
<b>040</b>	217-99293	M8 Flat washer	1	
<b>050</b>	217-99296	M8 Nyloc	1	
<b>060</b>	202-05488	Mini raw water pipe support bracket	1	
<b>070</b>	212-98464	Stainless steel hose clip 22-30mm	2	
<b>080</b>	218-99249	Raw water pipe – sea water pump hose	0.04m	
<b>090</b>	207-61500/01	Sea water pump –Johnson (from July 2006)	1	Use Johnson to replace Jabsco
<b>100</b>	207-06446	Johnson pump clamp	2	
<b>110</b>	217-99275	M6 Spring washer	2	
<b>120</b>	217-00052	M6 Nut	2	
<b>130</b>	218-99249	Raw water pipe – heat exchanger hose 22mm	0.06m	
<b>140</b>	212-00471	¾" I/D PVC Reinforced water inlet hose	2m	Not shown
<b>150</b>	212-00462	1"BSP M x ¾" hose connector	1	Not shown –for 170
<b>160</b>	212-98464	Stainless steel hose clip 22-30mm	2	Not shown –for 170
<b>170</b>	212-99890	Seawater strainer, gunmetal 1"BSP	1	Not shown
<b>180</b>	212-00038/BALL	Ball valve 1"BSP FxF DZR	1	Not shown –for 170
<b>190</b>	212-99900	Skin fitting, gun metal 1"BSP M	1	Not shown –for 170

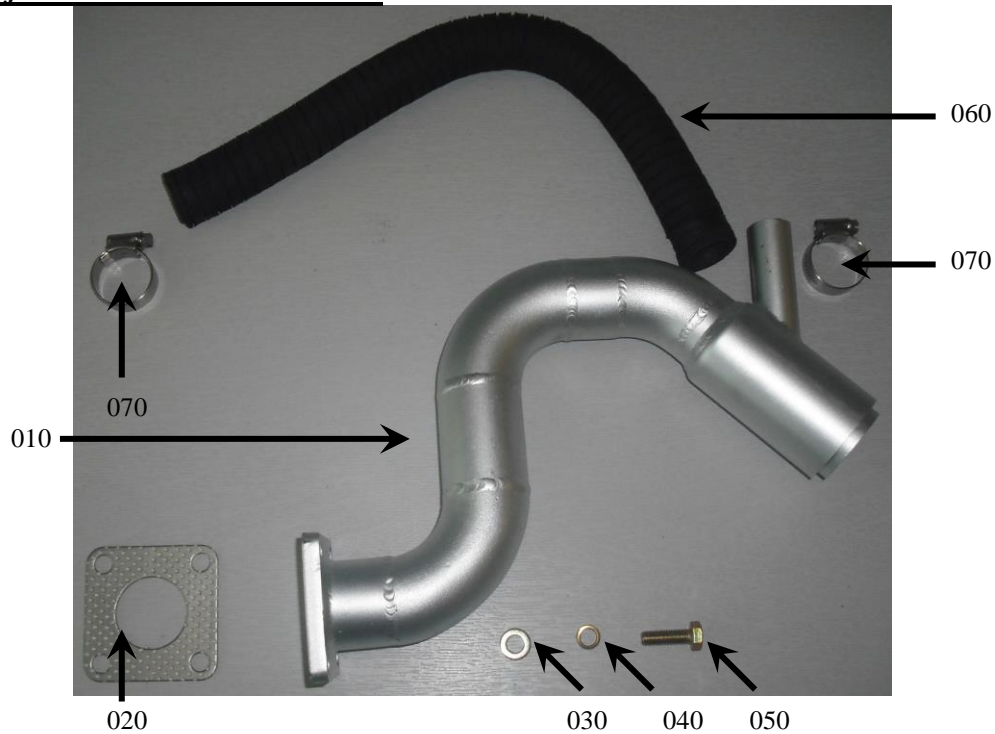
**Water injection bends –Standard options**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	202-02458	2" O/D x 25mm Aluminium water injection bend	1	25mm from June 2013
	202-90610	2" O/D Stainless steel water injection bend x 25mm	1	25mm from June 2013
	202-92400/22	5" Stainless steel high rise water injection bend 2" O/D x25mm	1	25mm from June 2013
	202-06504	Volvo replacement stainless steel crossover injection bend 2" O/D x 25mm	1	25mm from June 2013
	202-94330/22	8" Stainless steel high rise cross-over water injection bend 2" O/D x25mm	1	25mm from June 2013
020	212-09070	Exhaust gasket 2", waterproof orange type	1	
030	217-99293	M8 Flat washer	4	
040	217-99292	M8 Spring washer	4	
050	217-99299	M8 x 25mm set	4	
060	218-03471	Corrugated radiator hose 25mm I/D -FROM JUNE'13 (430mm OAL)	0.43m	To suit 25mm exhaust
070	212-98464	Stainless steel hose clip 22-30mm	2	To suit 25mm exhaust
080	209-05125/01	25 x 25mm elbow to suit standard aluminium exhaust elbow	1	To suit 25mm exhaust
090	212-07575	Hose adaptor 22mm – 25mm ID	1	To suit 22mm manifold
100	212-00234/01	Glass fibre exhaust lagging 3x50mm	5m	Not shown
110	212-09630	Stainless steel tie, 300mm OAL, used to strap exhaust lagging	2	Not shown



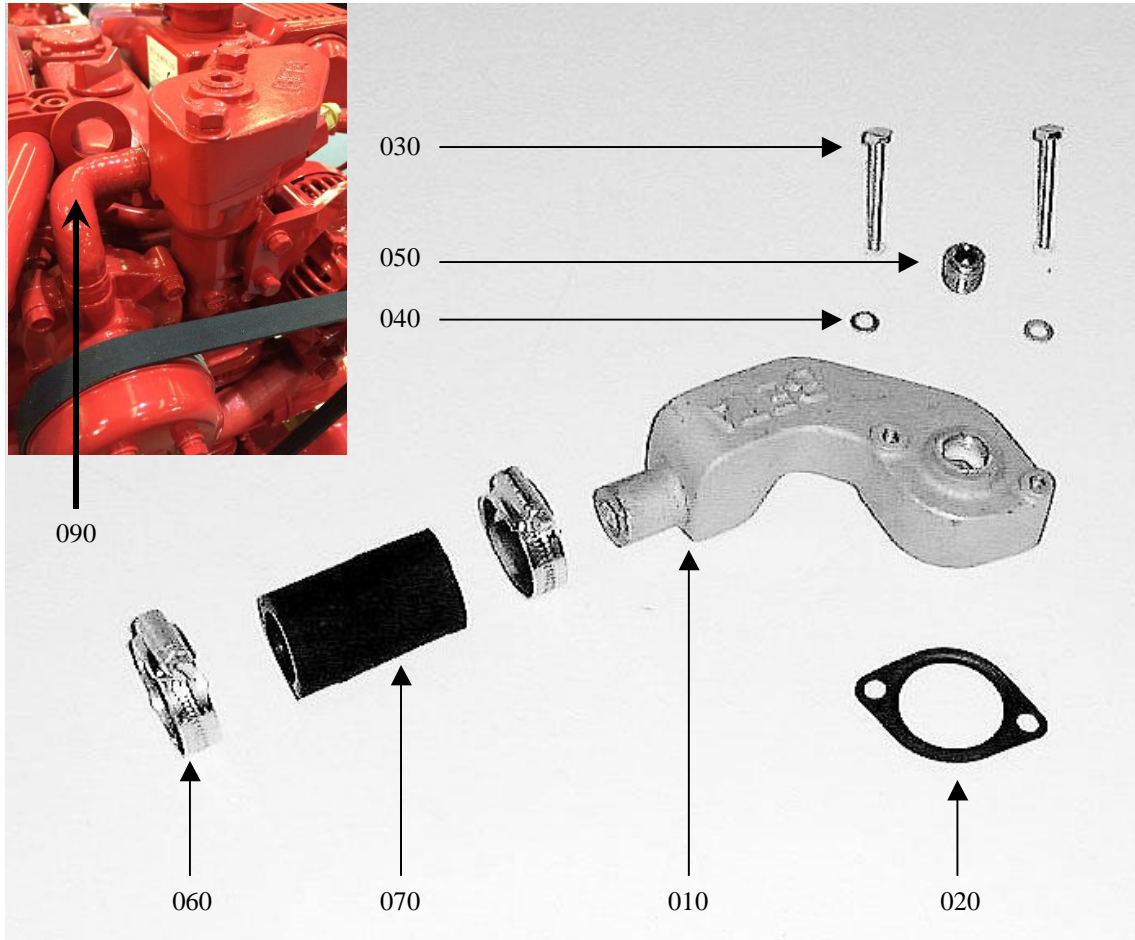
**Water injection bends –non standard**



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	25mm from June'13
	202-04828	1 5/8" O/D Stainless steel water injection bend x 16mm	1	25mm from June'13
	202-90610	2" O/D Stainless steel water injection bend x 22mm	1	25mm from June'13
	202-92400/22	5" Stainless steel high rise water injection bend 2" O/D x22mm	1	25mm from June'13
	202-01597/22	5" Stainless steel high rise water injection bend 1 5/8" O/D x22mm	1	25mm from June'13
	202-06504	Volvo replacement stainless steel crossover high rise water injection bend 2" O/D x 22mm (Fits Beta16 & Beta25 only)	1	25mm from June'13
	202-94330/22	8" Stainless steel high rise water injection bend 2" O/D x22mm	1	25mm from June'13
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	218-06368	Corrugated radiator hose 22mm I/D -FROM SEPT'09 (430mm OAL)	0.43m	To suit 22mm exhaust
070	212-98464	Stainless steel hose clip 22-30mm (2 required for standard high rise system)	2	Only 1 required for 16mm exhaust
080	212-98462	Stainless steel hose clip 17-25mm	1	Only required for 16mm exhaust
090	209-98232	16 x 22mm I/D Reducing elbow	1	To suit 16mm exhaust
100	212-07575	Hose adaptor 22mm – 25mm ID	1	To suit 22mm manifold
110	212-00234/01	Glass fibre exhaust lagging 3x50mm	5m	Not shown
120	212-09630	Stainless steel tie, 300mm OAL, used to strap exhaust lagging	2	Not shown



## Thermostat housing



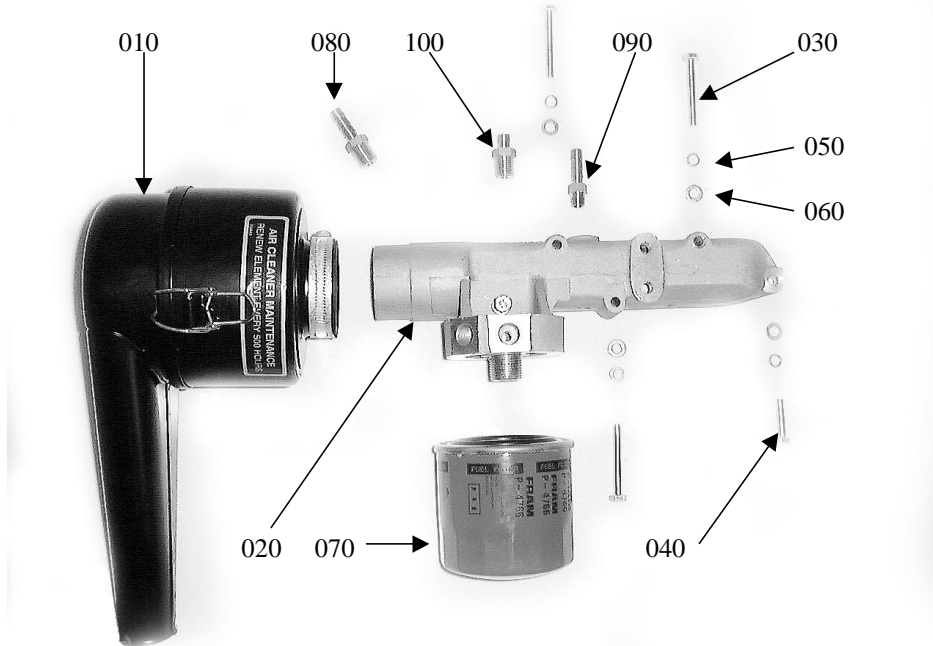
### For Beta 10 / Beta 14 & Beta 20:

Ref. No.	Part No.	Part Name	Qty	Remarks
010	209-60920	Beta10 / Beta14 & Beta20 thermostat housing –END 2010	1	
	208-08560	Beta10 / Beta14 & Beta20 thermostat housing -2011 Spec		
020	600-62590	Beta10 / Beta14 & Beta20 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	

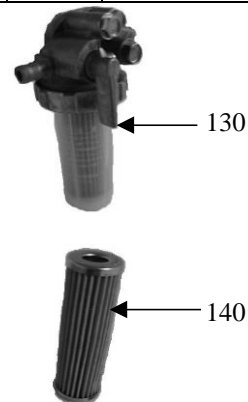
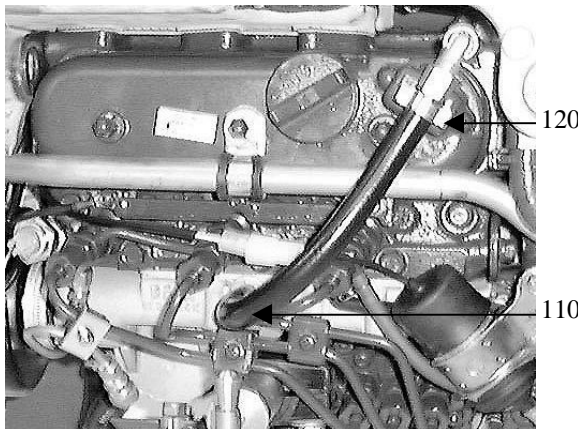
### For Beta16 & Beta25:

Ref. No.	Part No.	Part Name	Qty	Remarks
010	208-06280	Beta 16 / Beta 25 thermostat housing	1	
020	600-80490	Beta 16 / Beta 25 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	

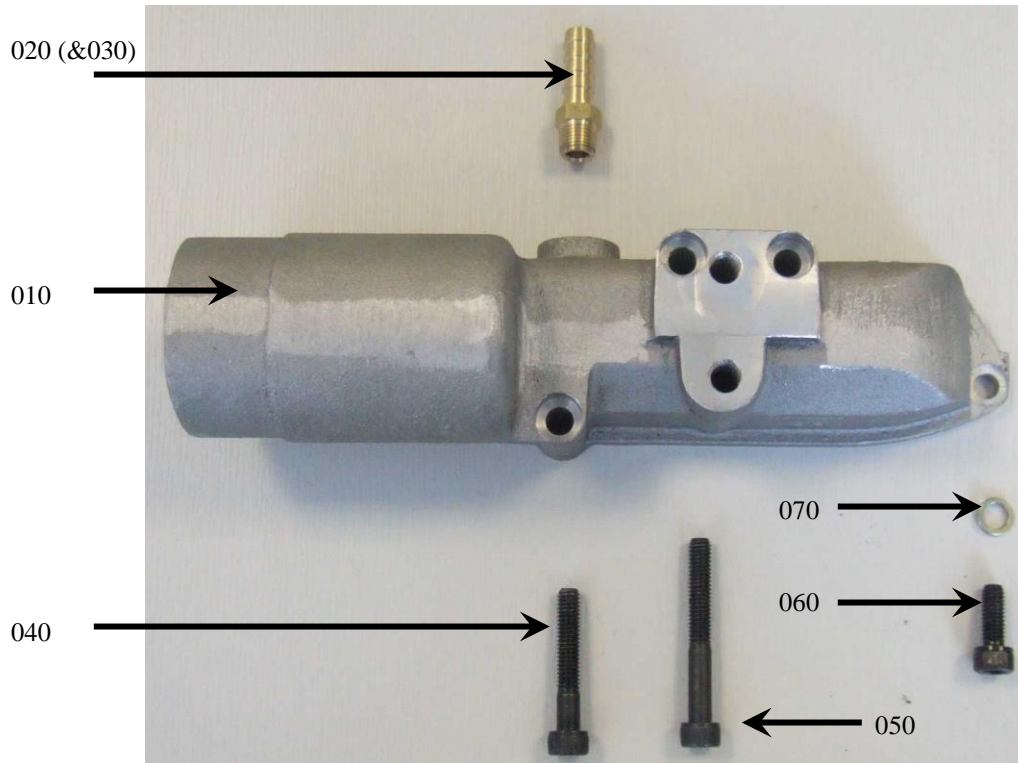
***Air inlet manifold & fuel system-Beta10, Beta14 & Beta20 to December 2005***



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	211-60320	Mini air cleaner assembly	1	<b>USE 211-08132 MARCH 2011</b>	
020	212-93430REV00	Inlet manifold Beta10 & Beta14	1	Beta10 & Beta14	N/A
	212-93490REV00	Inlet manifold Beta20	1	Beta20	N/A
030	217-99286	M6 x 50mm set	2	Beta10 & Beta14	
	217-99285	M6 x 45mm set	4	Beta20	
040	217-99282	M6 x 25mm set	1		
050	217-99275	M6 Spring washer	3	Beta10 & Beta14	
			5	Beta20	
			5	Beta20	
060	217-99276	M6 Flat washer	3	Beta10 & Beta14	
070	211-60210	Fuel filter	1		
			1		
			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	



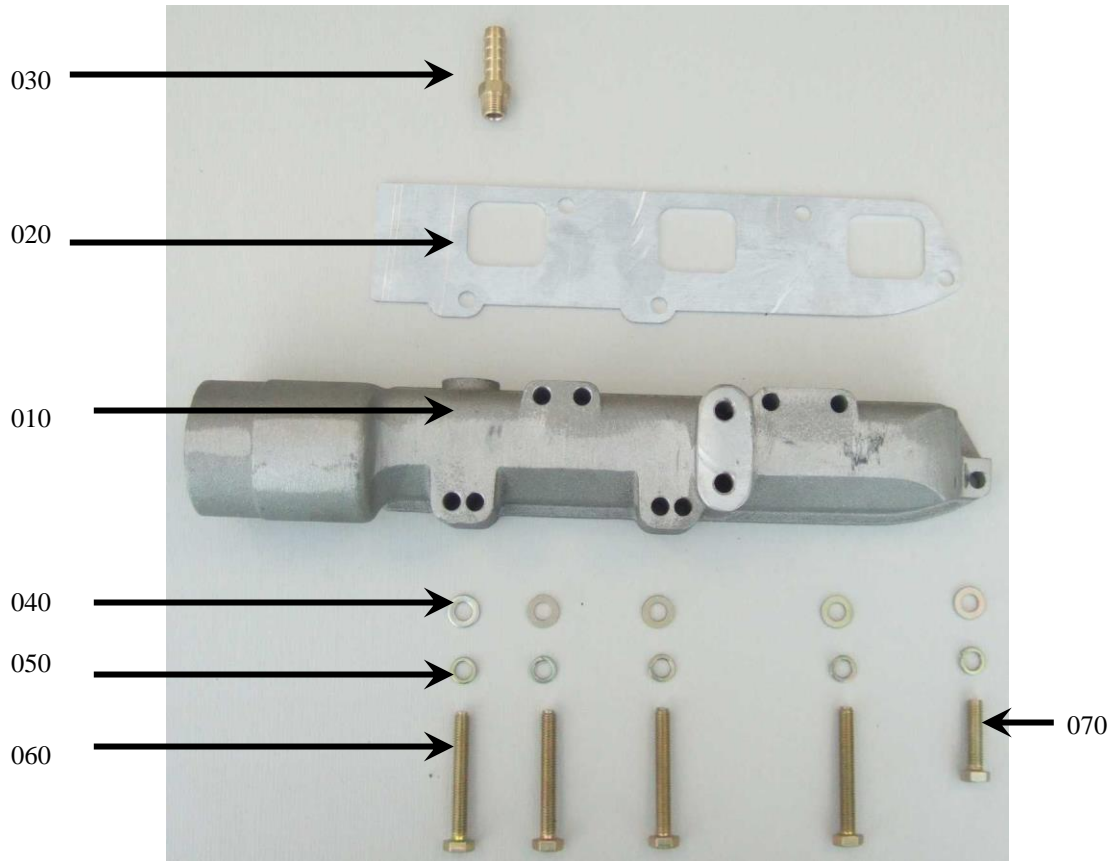
*Air inlet manifold –Beta 10 / Beta 14 & Beta 16 From December 2005*



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-93430	Inlet manifold Beta10, Beta14 & Beta16	1		
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		

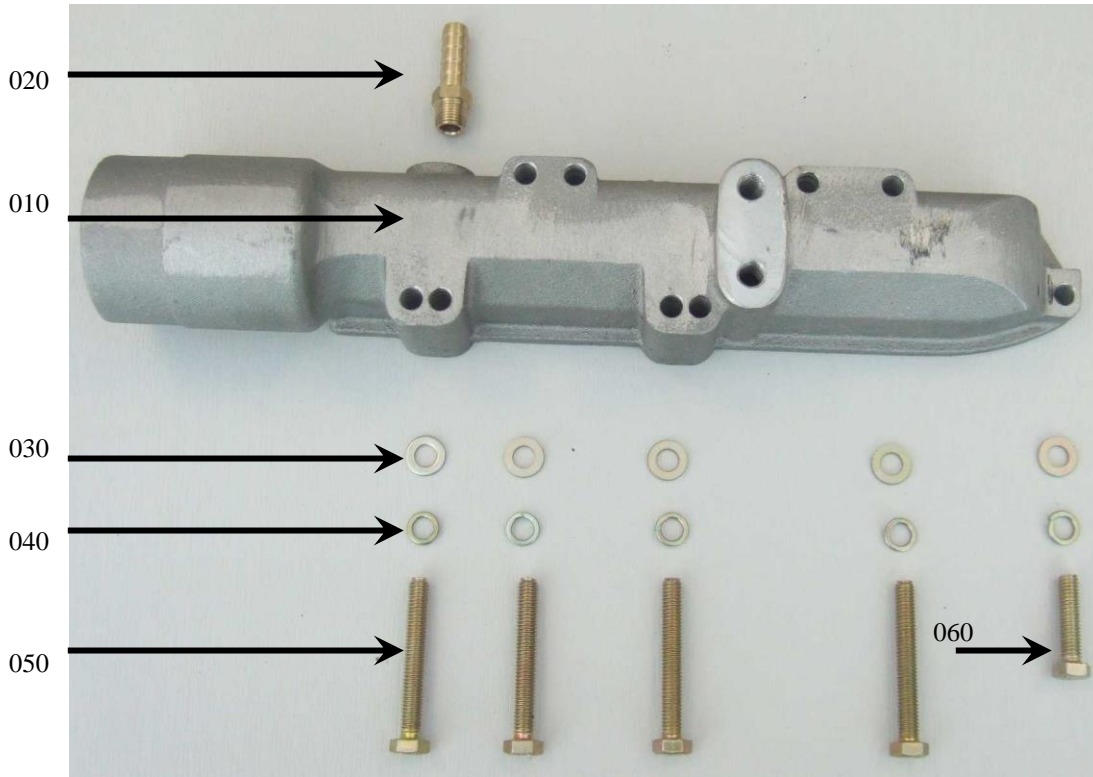


*Air inlet manifold –Beta20 From December 2005*



Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-93490	Inlet manifold Beta20	1	
020	202-06564	Inlet manifold adaptor Beta20	1	Beta20 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	

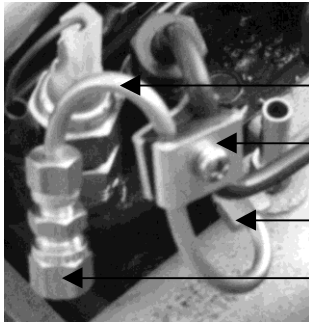
*Air inlet manifold –Beta 25 From December 2005*



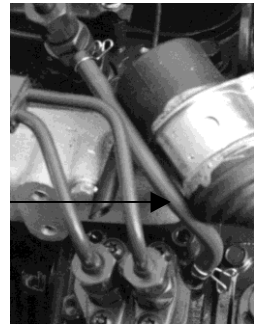
Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-93490	Inlet manifold Beta 25	1	
020	212-99254	1/8"BSPT Male x 5/16" Hose tail	1	
030	217-99276	M6 Flat washer	5	
040	217-99275	M6 Spring washer	5	Not required from February 2015
050	217-99285	M6 x 45mm set	4	To February 2015
	217-05032	M6 x 45mm socket cap screw	4	From February 2015
060	217-99282	M6 x 25mm set	1	
070	202-10221	Inlet manifold spacer	1	From February 2015



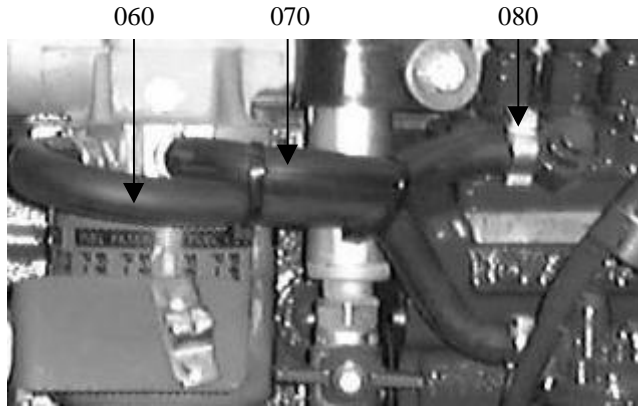
**Sea spec fuel system –to suit side mounted fuel filter to June 2005**  
**-Beta 10, Beta 14 & Beta 20 Only**



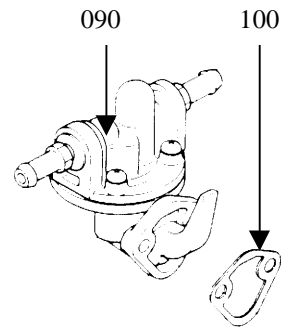
010  
020  
030  
040



050



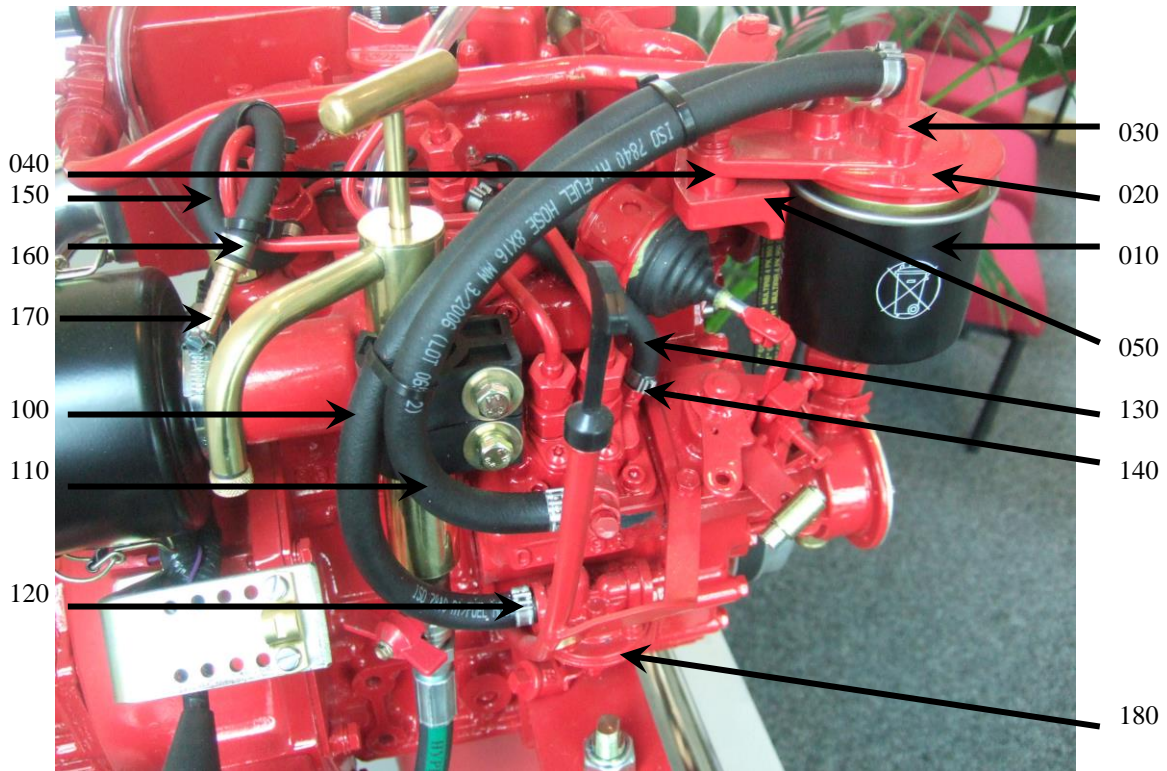
060      070      080



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, Beta14 & Beta20 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	
	212-99254	8mm hose tail fitting for electric fuel lift pump	2	For 110	

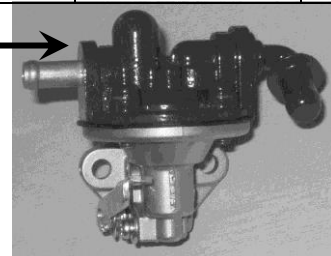
***Front mounted fuel filter system – From December 2005***



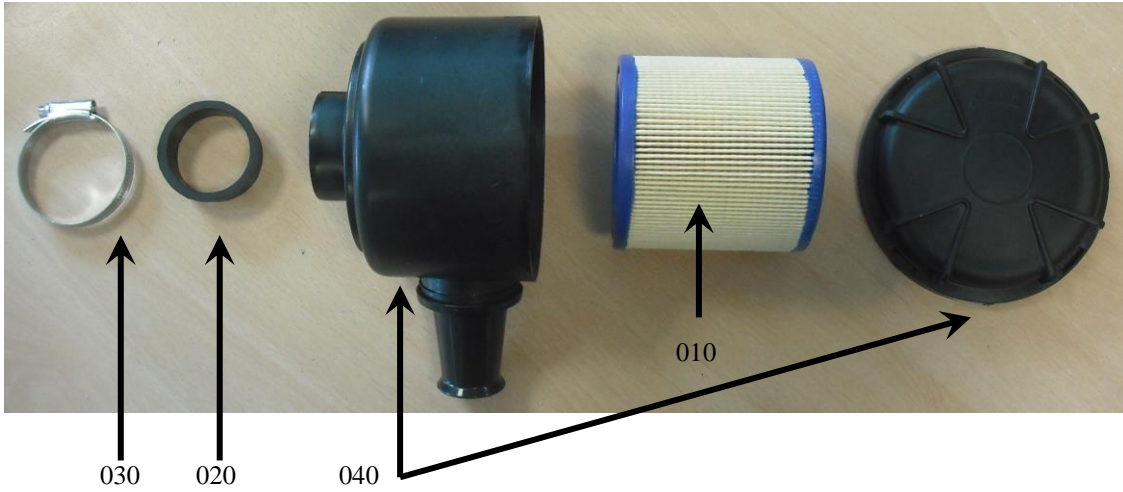
Ref. No.	Part No.	Part Name	Qty	Remarks
000	AK/MINI/CFP/KS01	Front mount fuel filter kit, complete	1	To convert side mount
010	211-60210	Fuel filter	1	
020	600-80290	Fuel filter assembly aluminium	1	Complete with fuel filter 010 & 030
030	600-00594	Fuel filter bleed screw	1	
035	600-00592	O Ring for 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, Beta14 & Beta20 only)	1	
	AK/MINI/9&6/F01	Fuel Lift Pump (Beta16 & Beta25 only)	1	
190	600-00065	Fuel Lift Pump gasket	1	Not shown



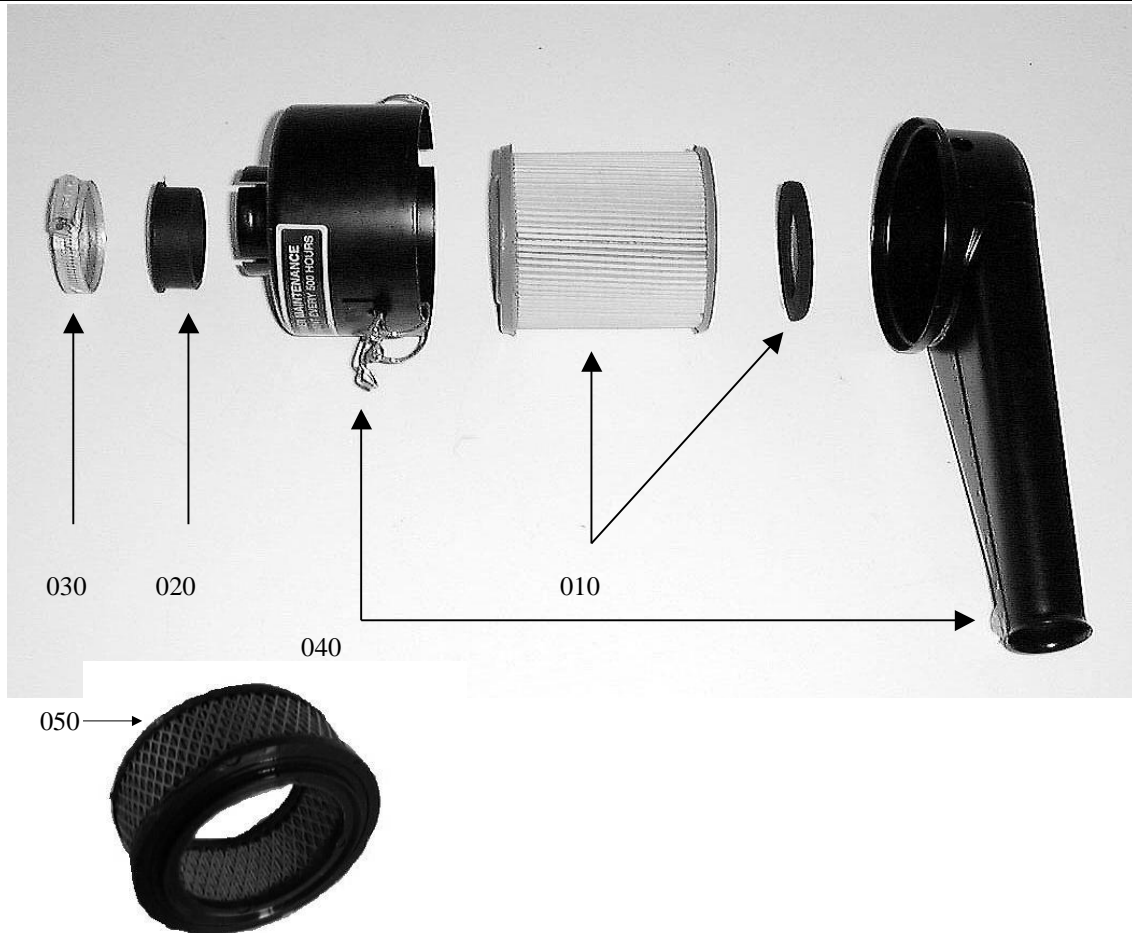
180



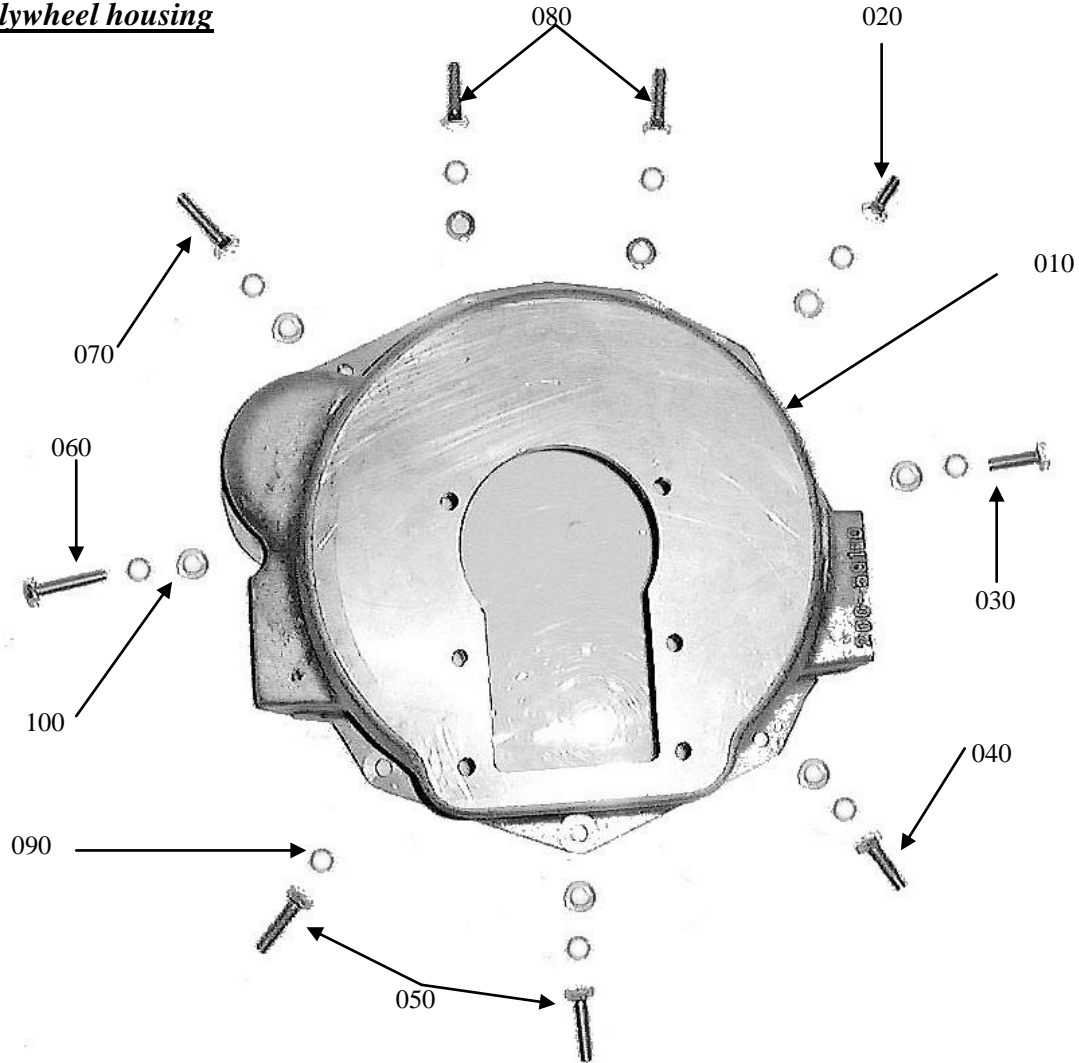
**Air filter**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	211-62950	Mini air filter element –to March 2011	1	Includes foam washer
	211-08132	Mini air filter element –From March 2011		
020	211-00022	Rubber grommit	1	
030	212-00117	Stainless steel hose clip 45-60mm	1	
040	211-60320	Mini air cleaner assembly (STEEL) –to March 2011	1	N/A USE 211-08130
	211-08130	Mini air cleaner assembly (PLASTIC) –from March 2011		
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

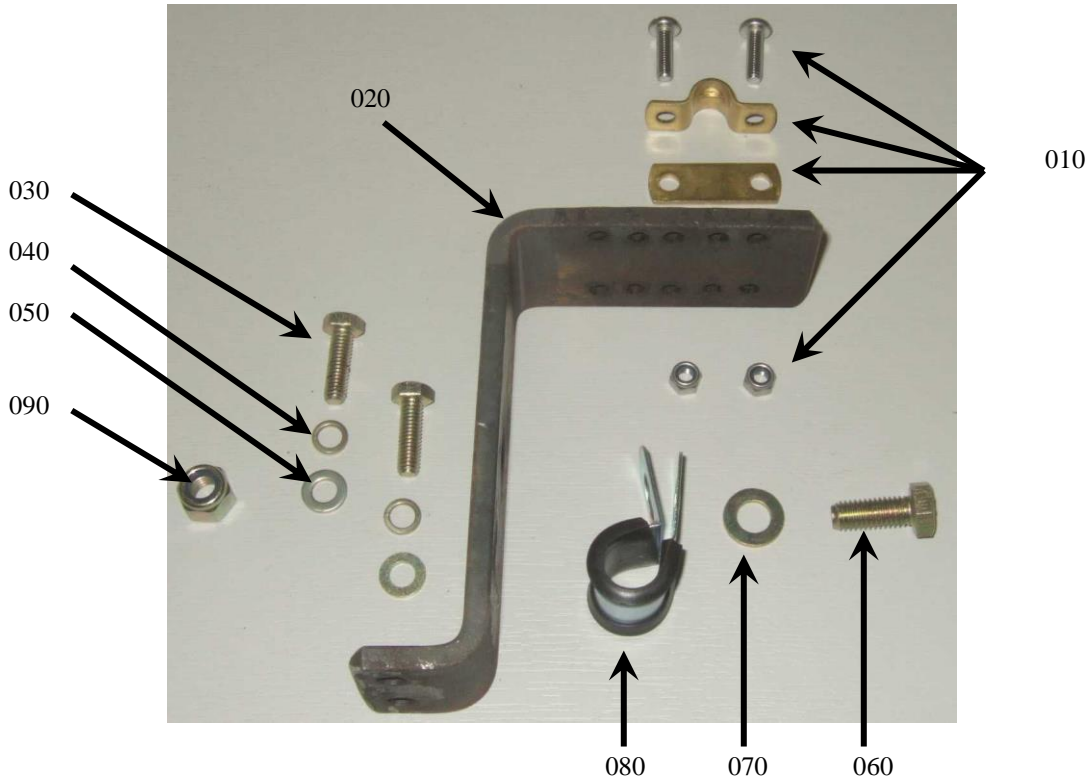


**Flywheel housing**

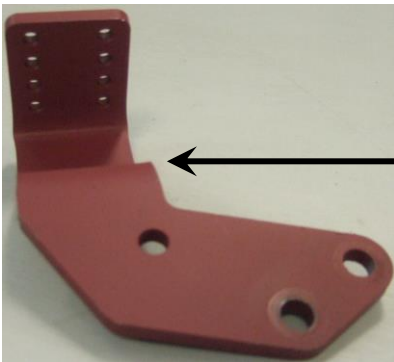


Ref. No.	Part No.	Part Name	Qty	Remarks
010	208-59190	Mini flywheel housing	1	<i>To June 2008 Pictured</i>
020	217-99298	M8 x 20mm set	1	
030	217-99299	M8 x 25mm set	1	
040	217-99299	M8 x 25mm set <i>-To June 2008</i>	1	
	217-99298	M8 x 20mm set <i>-From June 2008</i>		
050	217-99300	M8 x 30mm set <i>-To June 2008</i>	2	
	217-99299	M8 x 25mm set <i>-From June 2008</i>		
060	217-99301	M8 x 35mm set <i>-To June 2008</i>	1	
	217-99302	M8 x 40mm set <i>-From June 2008</i>		
070	217-99301	M8 x 35mm set <i>-To June 2008</i>	1	
	217-00286	M8 x 45mm set <i>-From June 2008</i>		
080	217-99300	M8 x 30mm set	2	
090	217-99292	M8 Spring washer	9	
100	217-99293	M8 Flat washer	9	

**Speed control bracket –Beta 10, Beta 14 & Beta 16 only**



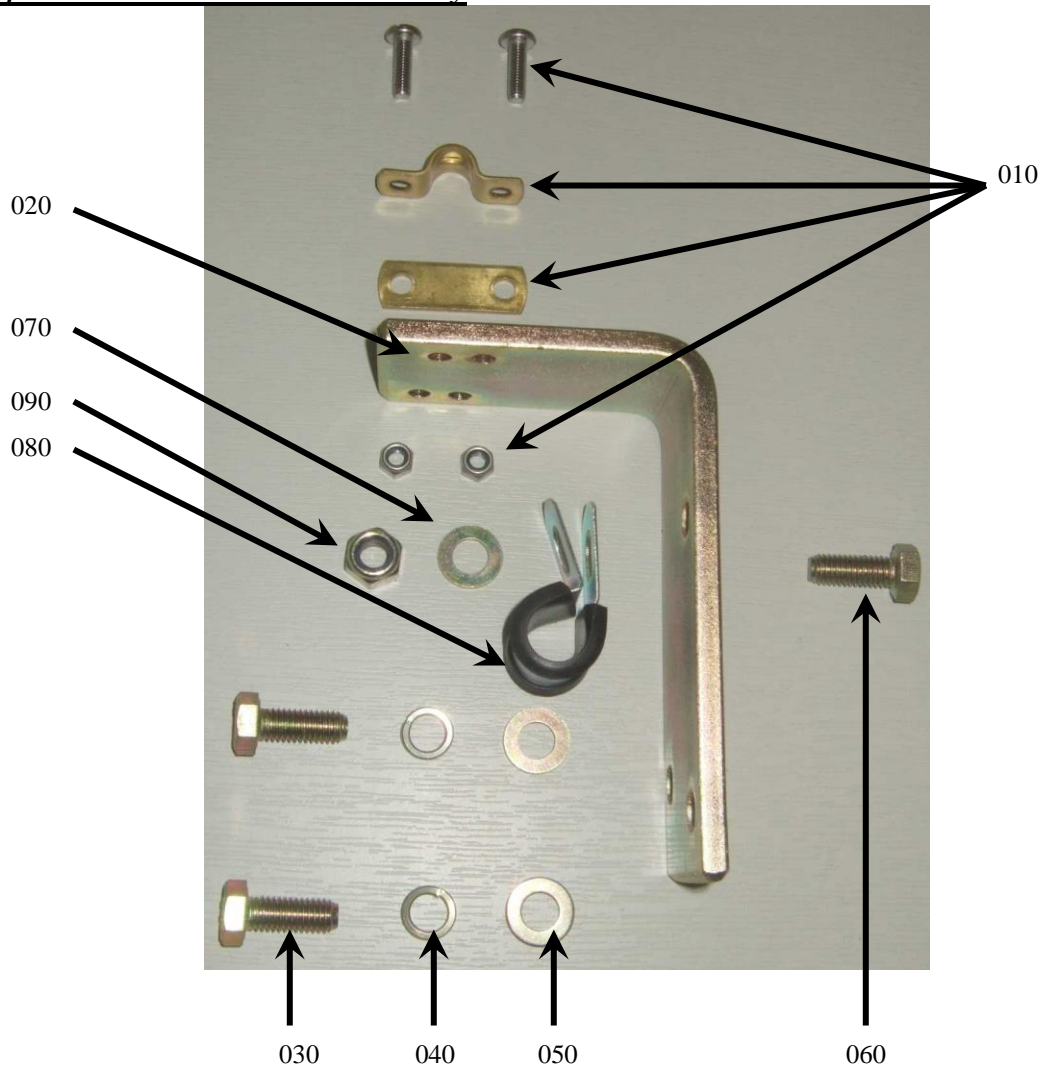
Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-99241/01	Speed & gear cable clamp	1	
020	202-97640	B10 & BZ482 Speed control bracket	1	<b>To June 2008 Pictured</b>
030	217-99281	M6 x 20mm set	2	
040	217-99275	M6 Spring washer	2	B10 & BZ482
050	217-99276	M6 Flat washer	2	B10 & BZ482
060	217-99298	M8 x 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
130	202-97640	B10 & BZ482 Speed control bracket	1	<b>From June 2008 Pictured</b>



**Note: from June 2008 engines with speed control bracket as pictured below require to fit to engine:**

- 2 off 217-99298 M8x20mm set**
- 2 off 217-99293 M8 Flat washer**
- 2 off 217-99292 M8 Spring washer**

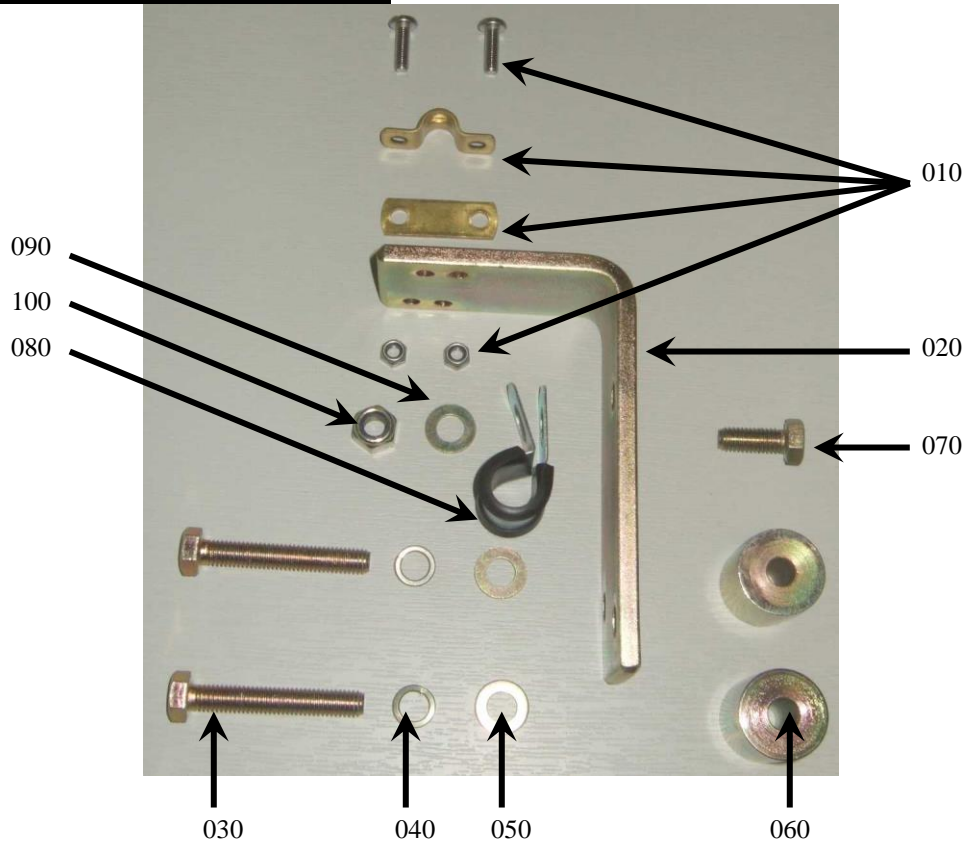
***Speed control bracket –Beta 20 only***



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-99241/01	Speed & gear cable clamp	1		
020	202-89360	Beta20 & Beta25 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	

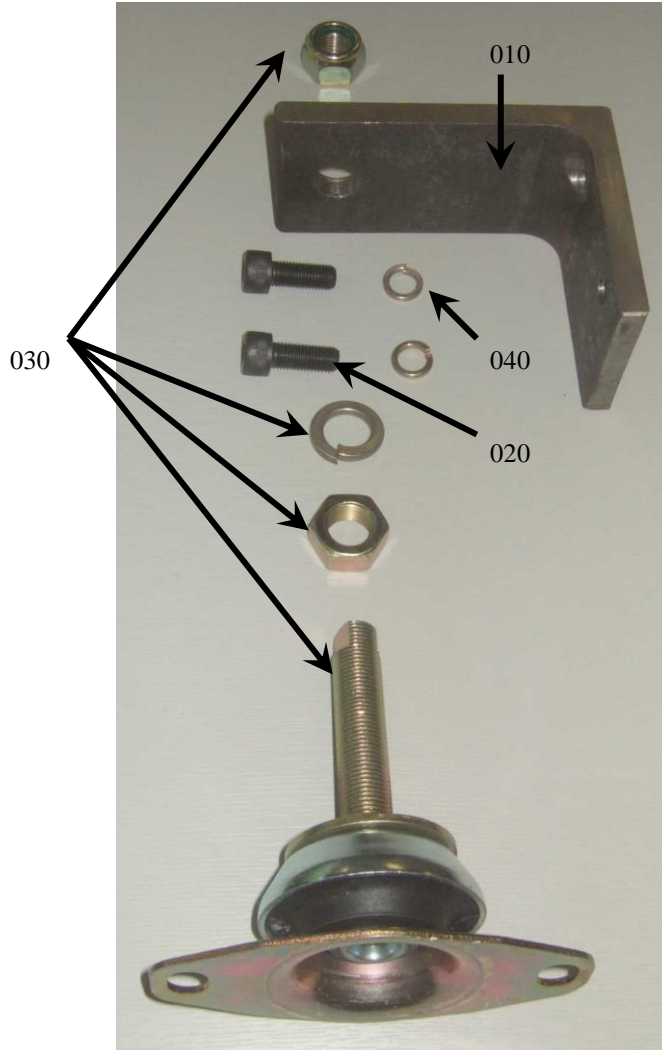


**Speed control bracket –Beta 25 only**



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	212-99241/01	Speed & gear cable clamp	1		
020	202-89360	Beta 25 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	

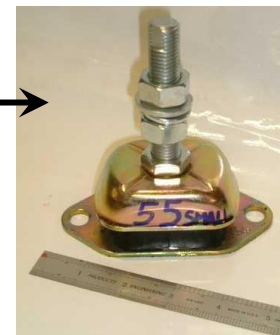
**Front feet**



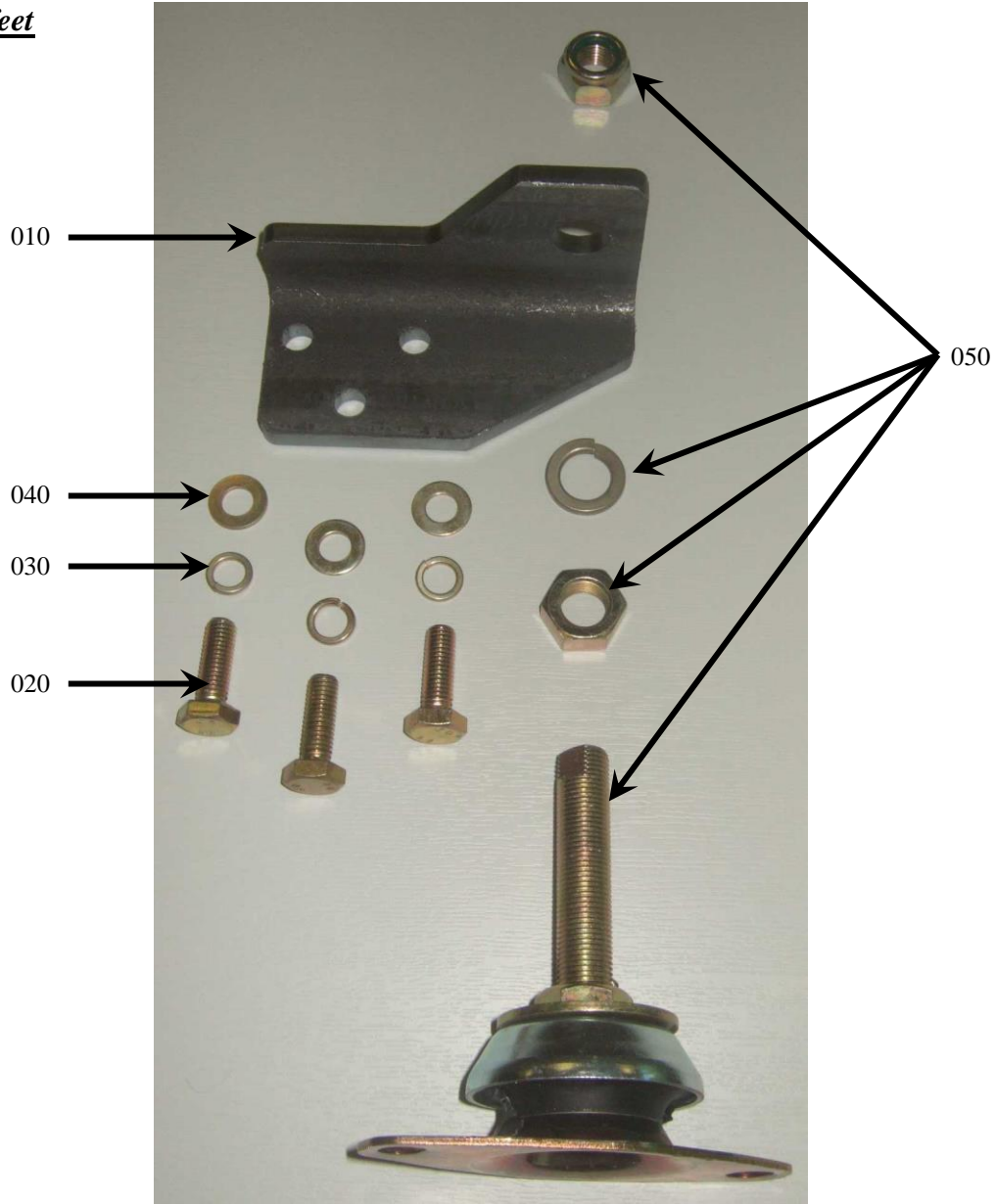
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	202-97671P	Mini series front foot (port)	1	Not shown	
	202-97671L	Mini series front foot (starboard)	1		
020	217-99335	M10 x 25mm Fine socket cap head	2	Quantity required per foot	
030	213-93440	RA60 Flexible mount (complete)	1	Quantity required per foot	
	213-60910	CT213S Flexible mount	1	(per foot) Not standard fit	
	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	
	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
	213-60910	CT213S Flexible mount	1	(per foot) Not standard fit
	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



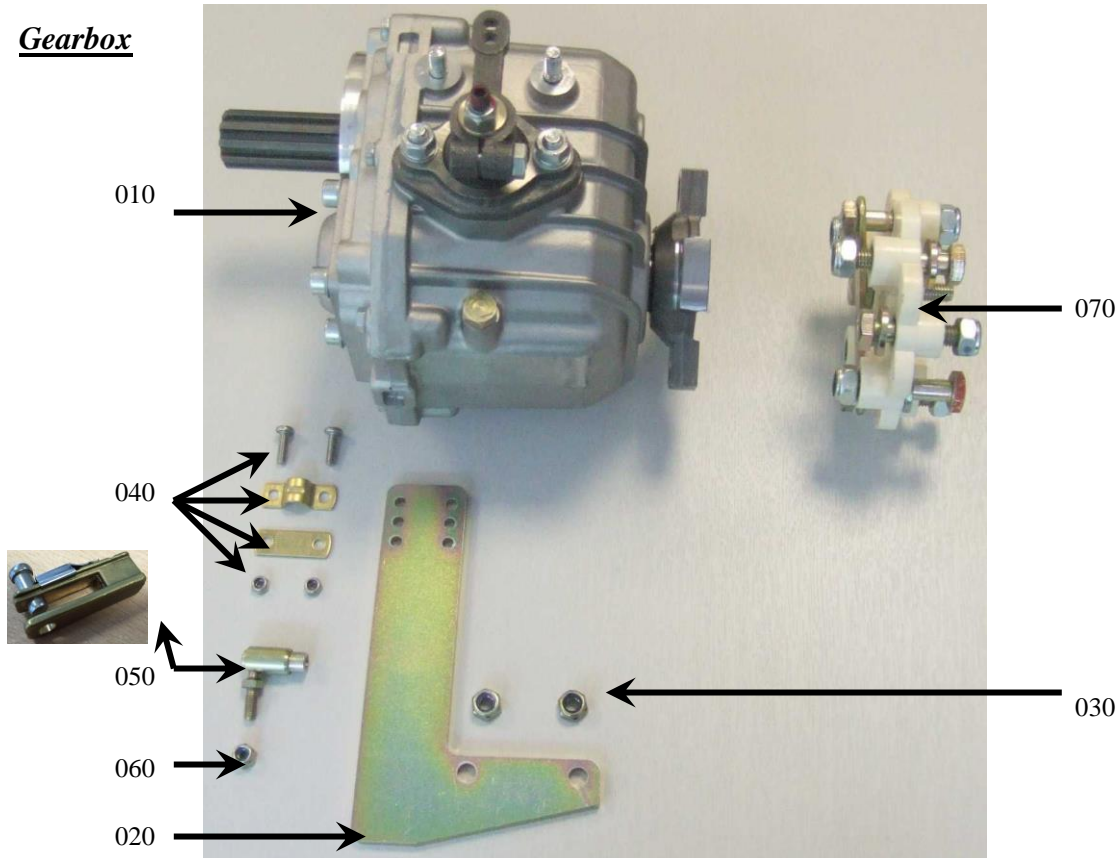
Ref. No.	Part No.	Part Name	Qty	Remarks
010	206-97041	22-B-4 Mini damper –TMC / PRM	1	<b>Requires counterbore for Selva</b>
	202-97041/05	5mm Counterbore to 206-97041 to suit Selva & BZ482 –BD722	1	Require in addition to 206-97041
	202-97041/10	10mm Counterbore to 206-97041 to suit Selva & BD902	1	Require in addition to 206-97041
	206-00895	43-AC-60 SAE6.5 damper to suit ZF15A	1	Requires special adaptor ring <b>Requires counterbore</b>
	202-00895/05	5mm Counterbore to 206-00895 to suit ZF15A Beta10 – Beta20	1	Require in addition to 206-00895
	TBA	Counterbore to 206-00895 to suit ZF15A Beta25	1	Require in addition to 206-00895
	206-01739	2-B-4 Mini damper –Kanzaki	1	
	206-04108	63-B-123 Split damper to suit Volvo 110S	1	
	206-04876	66-B-60 SAE6.5 damper to Volvo 120S	1	Not Beta25 Requires special adaptor ring
	206-05176	66-B-4 Mini damper to Volvo 120S	1	Beta25 only
020	217-99280	M6 x 16mm Set	5	All engines (from Mid 2007)
	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)
	217-01010	¼"UNF Flat washer	5	Most engines (to Mid 2007)
040	217-99275	M6 Spring washer	5	All engines (from Mid 2007)
	217-01011	¼"UNF Spring washer	5	Most engines (to Mid 2007)
050	206-98990	Circlip –DS10 damper	1	Not shown, not standard
	206-00480	Circlip –DS15 damper	1	Not shown, not standard
060	206-98995	Roller rubber –DS10 damper	4	Not shown, not standard
	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 Beta25 Nov 2005-	
	201-06595	Adaptor Mini -22-B-4 to suit BD902 (damper requires 1/4UNF set screws to mid 2007)	1	Beta25 to November 2005	
	206-97042	Spacer BD902 to 22-B-4 damper (damper requires M6 set screws)	1	Beta25 from November 2005	
	201-06595	Adaptor Mini -22-B-4 to suit BD902 (damper requires 1/4UNF set screws to mid 2007)	1	Beta25 with 3:1 gearbox from Dec 2006, & All Beta25 from Mid 2007	
	201-02096	Adaptor for SAE6.5 damper –Volvo120S & ZF15A (damper requires 1/4UNF set screws to mid 2007)	1	Not Beta25	
	201-05312	Adaptor for SAE6.5 damper to ZF15V (damper requires 1/4UNF set screws to mid 2007)	1	Not Beta25	
020	217-99309	M8 x 16mm Socket screw	5		
	217-99315	M8 x 20mm Countersink screw	5	To suit 206-97042 only	

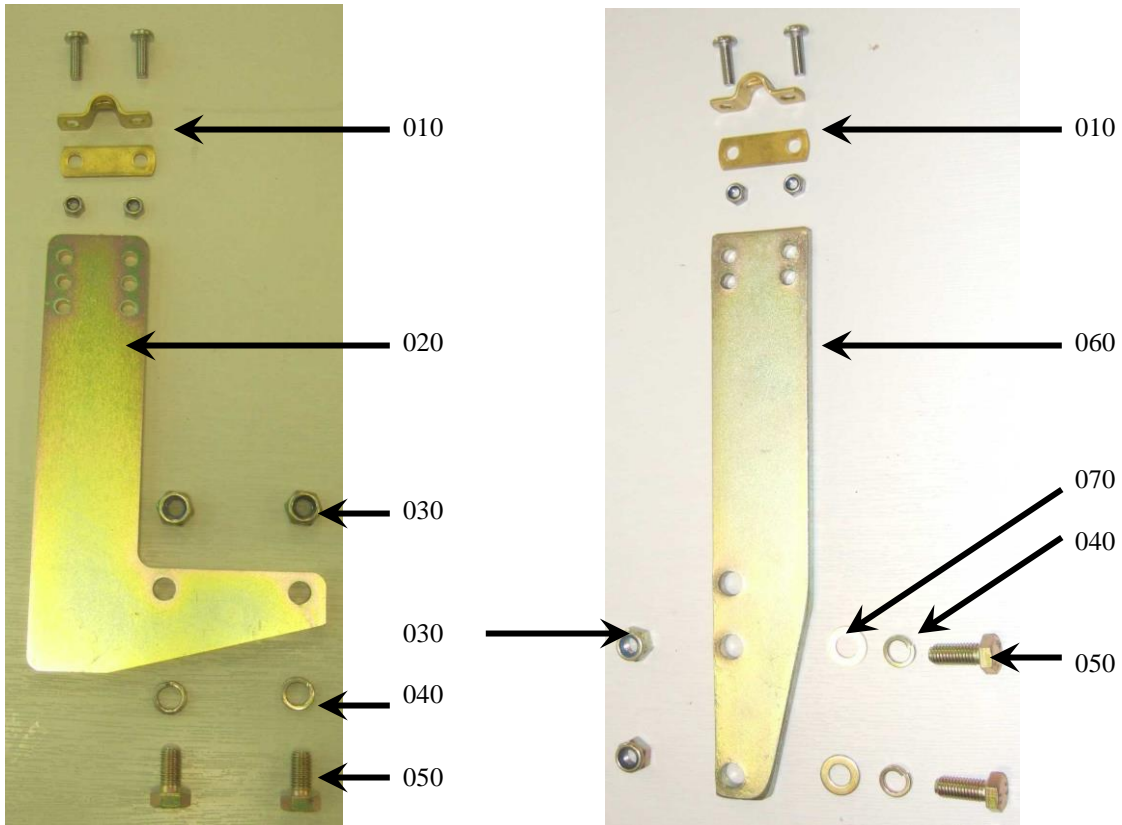
## Gearbox



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	204-91690	Technodrive TMC 40 'P' 2R Long shaft	1	'P' replaces 'M' April 2007	
	204-91671	Technodrive TMC 40 'P' 3R Long shaft	1	'P' replaces 'M' April 2007	
	204-00278	Technodrive TMC 40 1.45R Long shaft	1	'P' replaces 'M' April 2007	
	204-91680	Technodrive TMC 60 2R	1	Not shown	
	204-07724	Technodrive TMC 60A 2R (downangle)	1	Not shown	
	204-07928	Technodrive TMC 60A 2.5R (downangle)	1	Not shown	
	204-00277	Newage PRM 80 D2	1	Not shown	
	204-01007	Newage PRM 80 D2.5	1	<b>Check availability</b>	
	204-04315	Kanzaki TTMC35A-2 (7° downangle) F=2.33 R=3.06	1	Not shown	N/A
204-04315/01	Kanzaki TTMC35A-2 (7° downangle) F=2.64 R=3.06	1	<b>Check availability</b>	<b>CHECK AVAILABILITY</b>	
020	202-61582/01	TMC vertical Morse control bracket	1		
	202-61582	HBW / ZF Vertical Morse control bracket	1	Not shown	
	202-05129	PRM Morse control bracket	1	Not shown	
	202-61582	TMC / ZF horizontal Morse control bracket	1	Not shown	
	202-05208	PRM horizontal Morse control bracket	1	Not shown	
030	217-06472	M8 Nyloc halfnut	2	TMC40'P' from April 2007	
	217-99297	M8 x 16mm set	2	For 020 –TMC 'M' & PRM	
	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	For all gearboxes until October 2015	
	212-07665	Clevis		For mechanical gearboxes from October 2015	
060	217-99278	M6 Nyloc nut for 212-99240/01	1		
070	212-93690	Flexible coupling –TMC / PRM / ZF	1		
	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)	

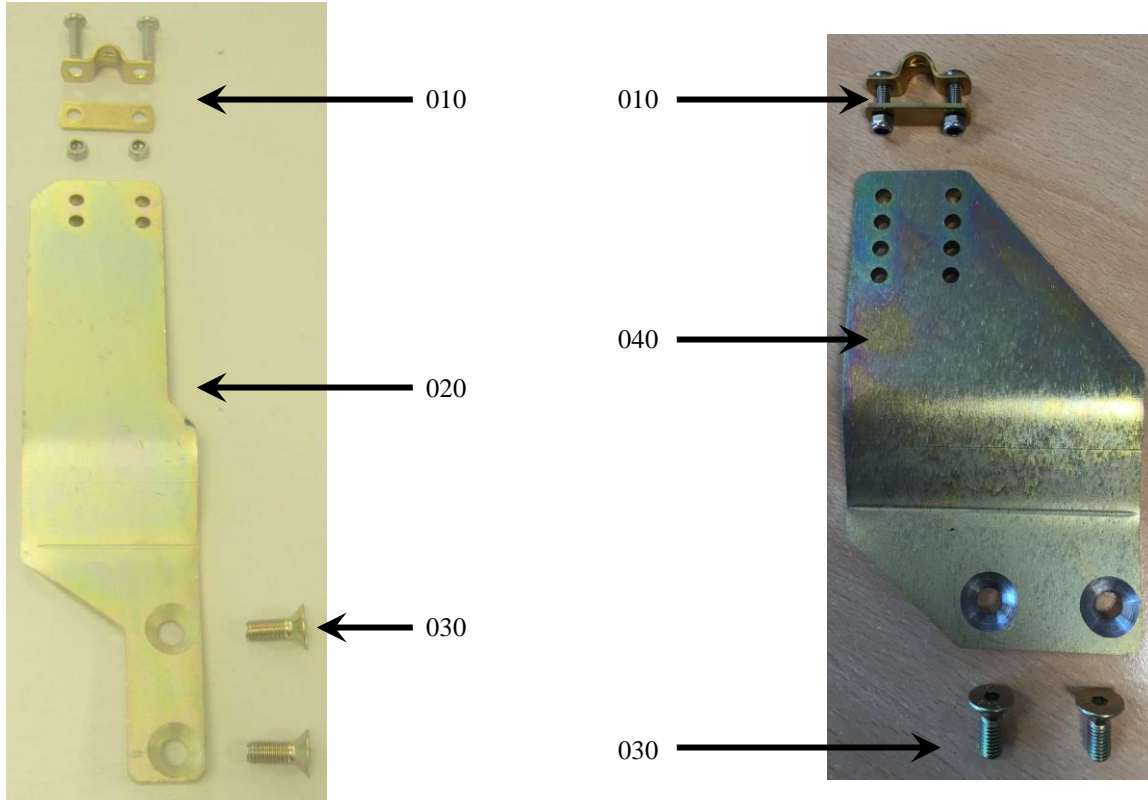
**NOTE: GEARBOX PRICES ARE QUOTED AS NETT PRICES, NO DISCOUNT GIVEN**

**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	

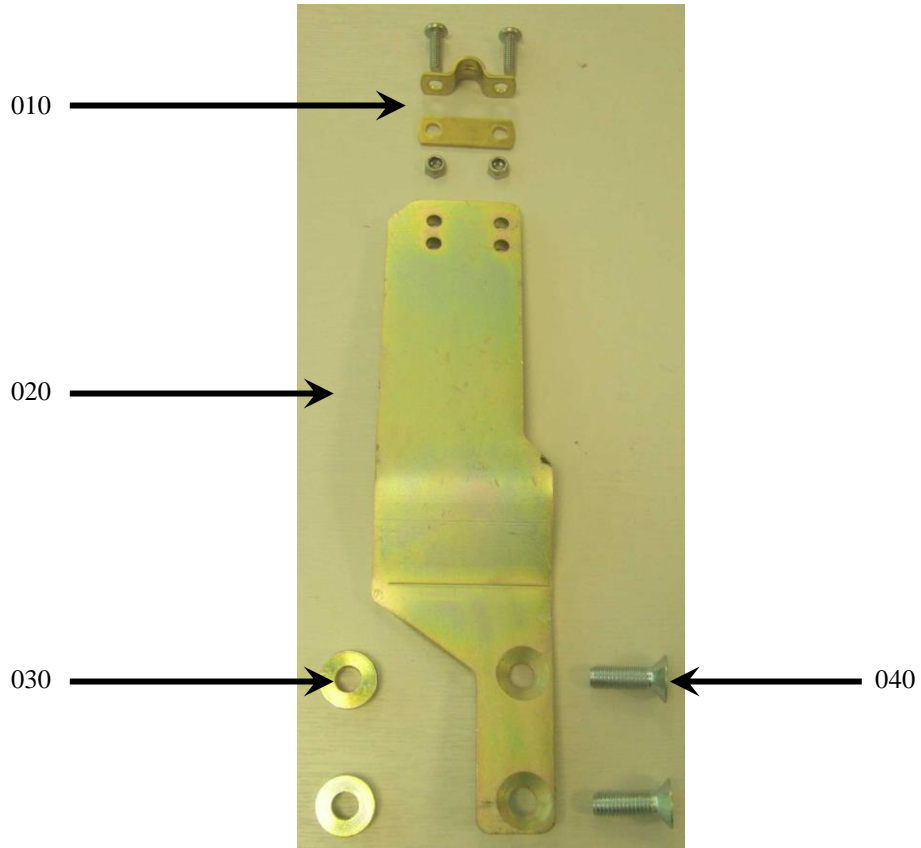
**Gearbox –PRM 80 & 120 Gear control brackets**



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	

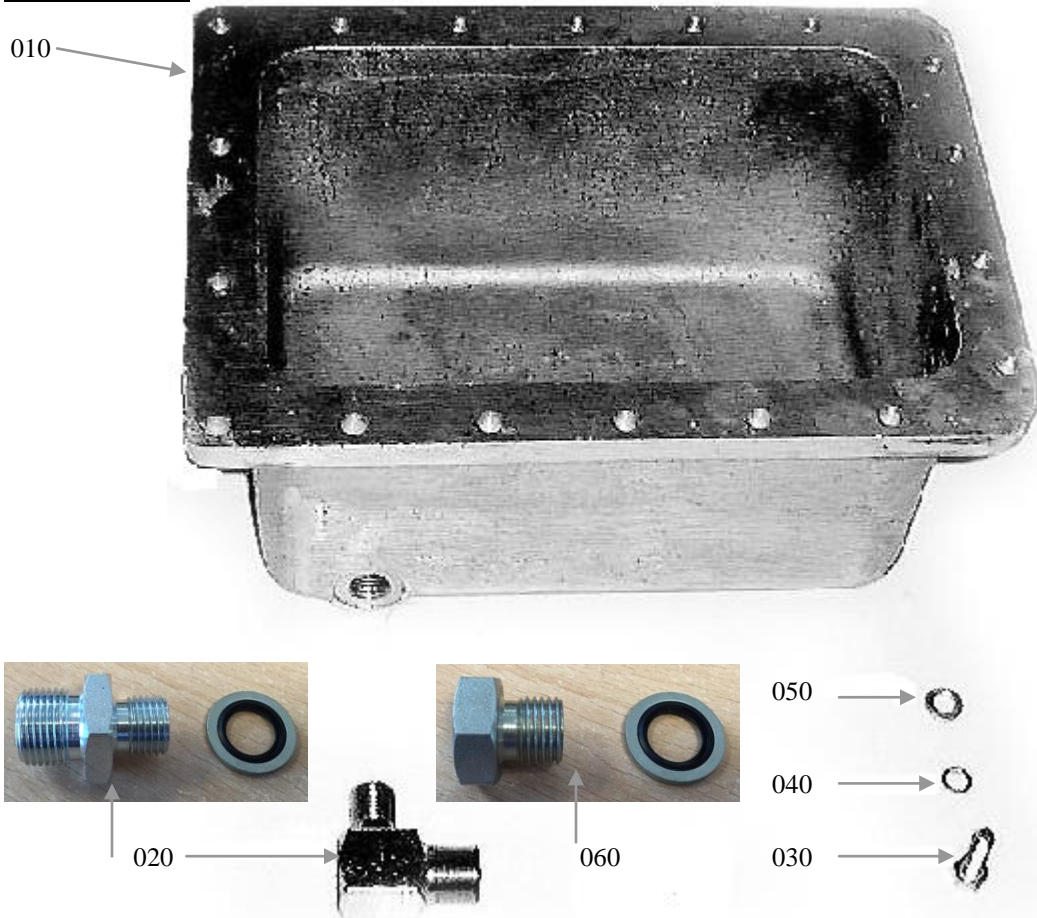


**Gearbox –TMC 60 Gear control bracket**



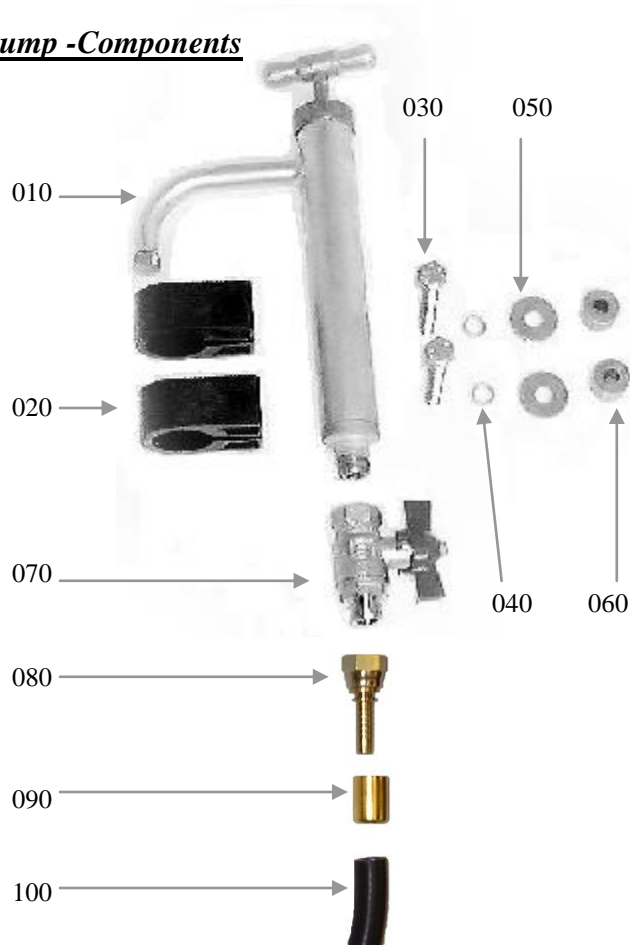
Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-99241/01	Saddle clamp fitting kit	1	
020	202-05129	TMC60 Vertical Morse control bracket	1	
030	201-01204	Spacer 7mm	2	
040	217-02482	M8 x 25mm Countersunk set screw	2	

**Shallow sump**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	210-92130	Beta10 & Beta14 Shallow sump	1	Not shown
	208-06617	Beta16 Shallow sump	1	Not shown
	210-92140	Beta20 Shallow sump	1	
	208-06602	Beta25 Shallow sump	1	Not shown
	212-00082	Sump plug elbow 1/4" BSP x 1/4" BSPT	1	To October 2008
020	212-99385	Sump plug adaptor 1/4" BSP x 3/8" BSP MxM	1	From October 2008
	212-99384	1/4" BSP bonded seal	1	
	030	217-99281	M6 x 20mm set	
040	217-99275	M6 Spring washer	14 18 22	Beta14 & Beta16 Beta20 Beta25
050	217-99276	M6 Flat washer	14 18 22	Beta14 & Beta16 Beta20 Beta25
060	212-07974	Sump bung 1/4" BSP	1	Plug for sump if no pump fitted
	212-99384	1/4" BSP bonded seal	1	
070	219-99369	Tube neutral silicon sealant	1	Not shown
080	210-04311	Sump pump pipe –shallow sump <b>2 cyl</b>	1	Not shown
	210-07073	Sump pump pipe –shallow sump <b>3 cyl</b>		
090	600-00573	Sump gasket, Beta10 / Beta14	1	Not shown
	202-08495	Sump gasket, Beta16		
	600-00572	Sump gasket, Beta20		
	202-08494	Sump gasket, Beta25		

**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	
	212-00793	Pump clamp PCL14	2	From September 2001	
030	217-99304	M8 x 60mm set	2	To September 2001	
	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	
	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	Beta10 / Beta14 Std sump	<b>OBSOLETE</b>
			2	Beta20 Std sump	
			1	Beta10 / Beta14 Shallow sump	
			1	Beta20 Shallow sump	
090	210-00145	Brass ferrule	2		<b>SEE NEXT PAGE</b>
100	218-99387	Sump drain pump hose	0.33	Beta10 / Beta14 Std sump	
			0.35	Beta20 Std sump	
			0.30	Beta10 / Beta14 Shallow sump	
			0.25	Beta20 Shallow sump	
110	212-00083	1/4"BSP x 3/8"BSP hose tail	1	Beta10 / Beta14 Shallow sump	
			1	Beta20 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**

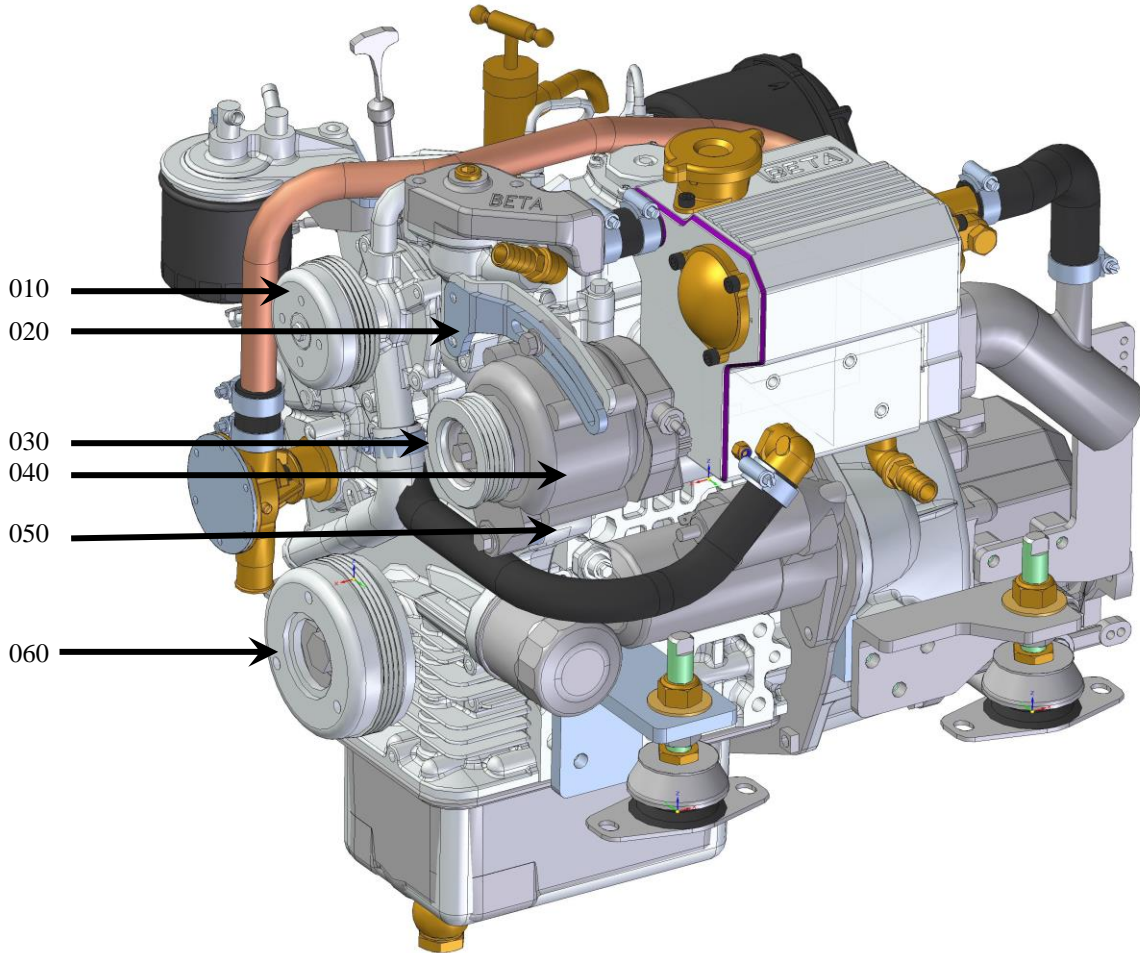


Ref. No.	Part No.	Part Name	Qty	Remarks
010	210-03154	Sump pump pipe 3/8BSP 390mm STR-STR	1	Beta10 / Beta14 <b>STANDARD</b> sump
020	210-05047	Sump pump pipe 3/8BSP 380mm STR-M22 banjo	1	Beta16 <b>STANDARD</b> sump
010	210-03154	Sump pump pipe 3/8BSP 390mm STR-STR	1	Beta20 <b>STANDARD</b> sump
020	210-05047	Sump pump pipe 3/8BSP 380mm STR-M22 banjo	1	Beta25 <b>STANDARD</b> sump
030	210-08317	Sump pump pipe 3/8BSP 290mm 90-STR	1	Beta10 / Beta14 <b>SHALLOW</b> sump
030	210-08317	Sump pump pipe 3/8BSP 290mm 90-STR	1	Beta16 <b>SHALLOW</b> sump
040	210-04311	Sump pump pipe 3/8BSP 330mm 90-STR	1	Beta20 <b>SHALLOW</b> sump
040	210-04311	Sump pump pipe 3/8BSP 330mm 90-STR	1	Beta25 <b>SHALLOW</b> sump

**Please note:**

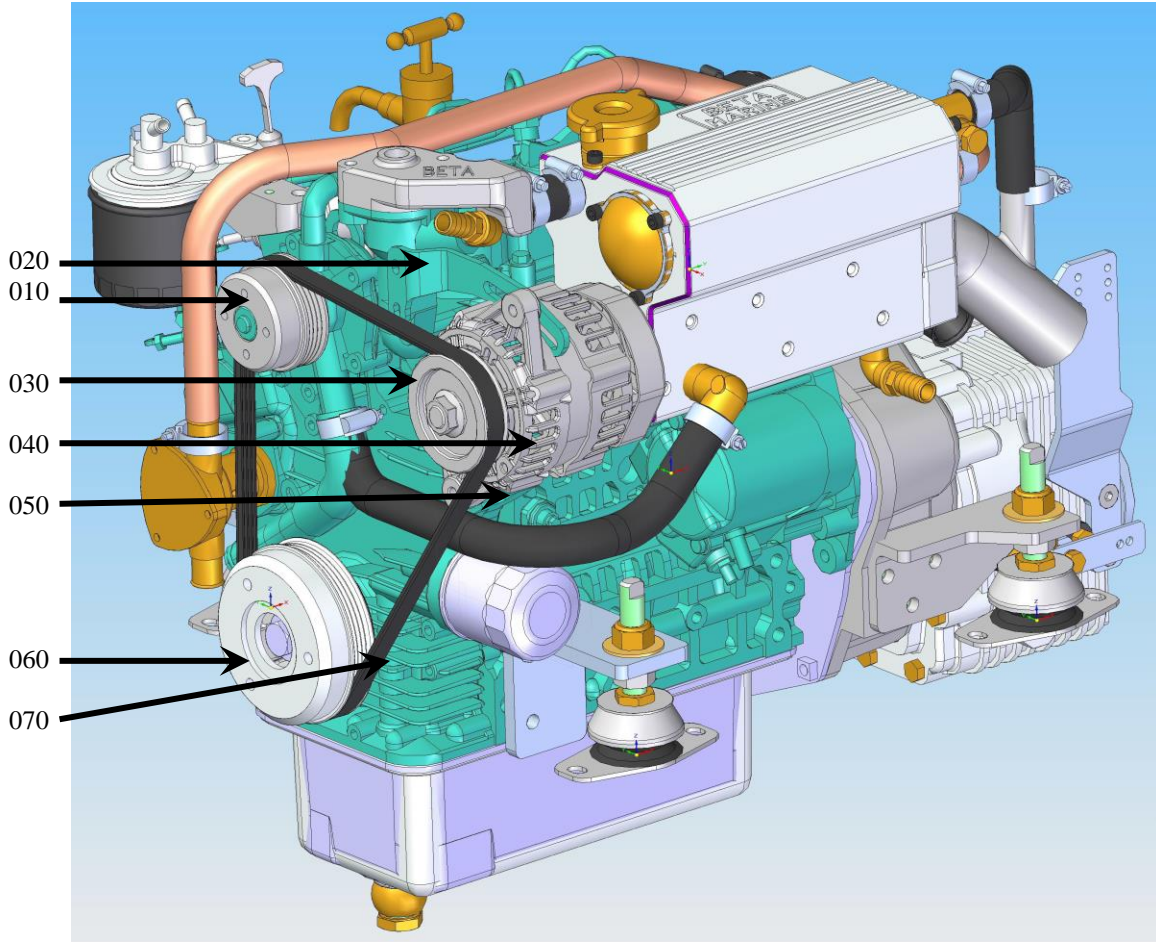
These are complete assemblies with all connections crimped together to suit each particular standard application.

Alternators –12 Volt 40 Amp –from January 2011



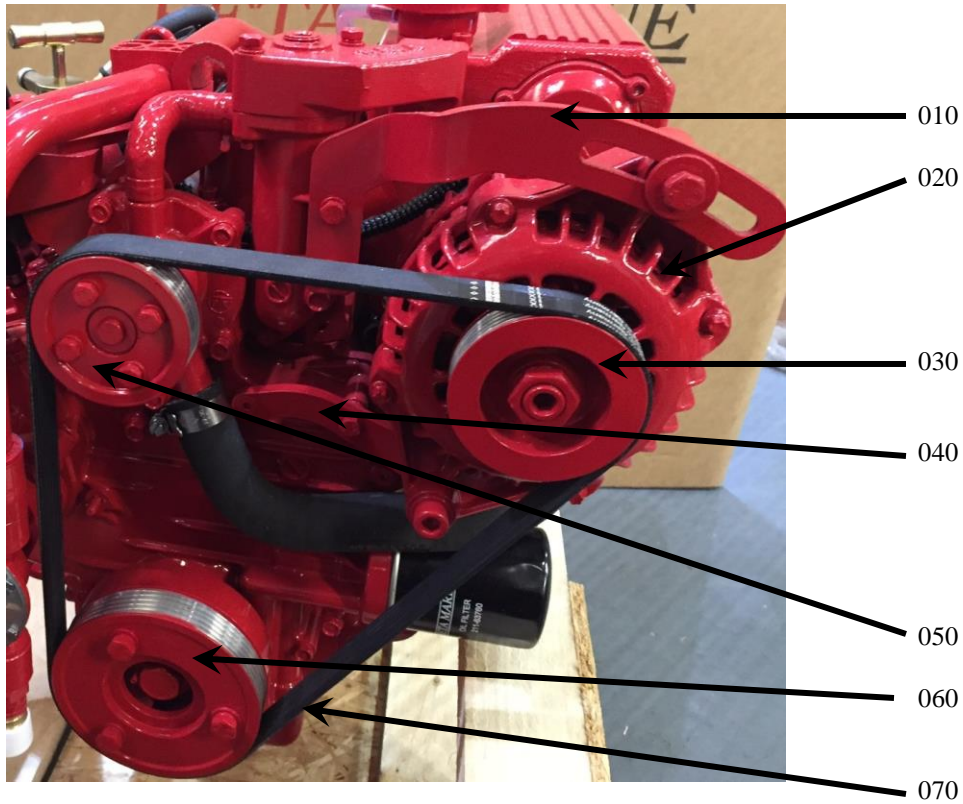
Ref. No.	Part No.	Part Name	Qty	Remarks
010	201-08563	MINI DRIVE PULLEY WATER PUMP 4 GROOVE <b>2011 SPEC</b>	1	
020	202-09022	ALTERNATOR ADJUSTING LINK FOR KUBOTA <b>2011 SPEC</b>	1	
030	201-06149	MINI ALTERNATOR DRIVE PULLEY 4 GROOVE <b>2011 SPEC</b>	1	
040	600-80010	40 Amp 12 volt Denso alternator (2 Pin)	1	
	600-02781	40 Amp 12 volt Denso alternator (3 Pin)	1	
	600-04989	60 Amp 12 volt Denso alternator (3 Pin)	1	Must use 4K drivebelt
050	201-09023	Beta10 / Beta14 / Beta20 DENSO ALTERNATOR SPACER 40 & 60 AMP <b>2011 SPEC</b>	1	
	201-09032	Beta16 / Beta25 DENSO ALTERNATOR SPACER 40 & 60AMP <b>2011 SPEC</b>		
060	201-08564	MINI CRANKSHAFT OVER PULLEY 4 GROOVE Beta10 / Beta14 / Beta16 & Beta20 <b>2011 SPEC</b>	1	
	201-08930	MINI CRANKSHAFT OVER PULLEY 4 GROOVE Beta25 <b>2011 SPEC</b>		
070	212-05074	4PK DRIVEBELT <b>2011 SPEC</b>	1	
080	AK/MINI/K/4K/E01	MINI DRIVEBELT UPGRADE KIT -40A 4K DRIVE Beta10 / Beta14 / Beta20 <b>2011 SPEC</b>	1	Water pump requires modification –check with Beta Marine
	AK/MINI/K/4K/6E01	MINI DRIVEBELT UPGRADE KIT -40A 4K DRIVE Beta16 <b>2011 SPEC</b>		
	AK/MINI/K/4K/9ES01	MINI DRIVEBELT UPGRADE KIT -40A 4K DRIVE Beta25 <b>2011 SPEC</b>		

***Alternators –12 Volt 75 Amp –from January 2011***



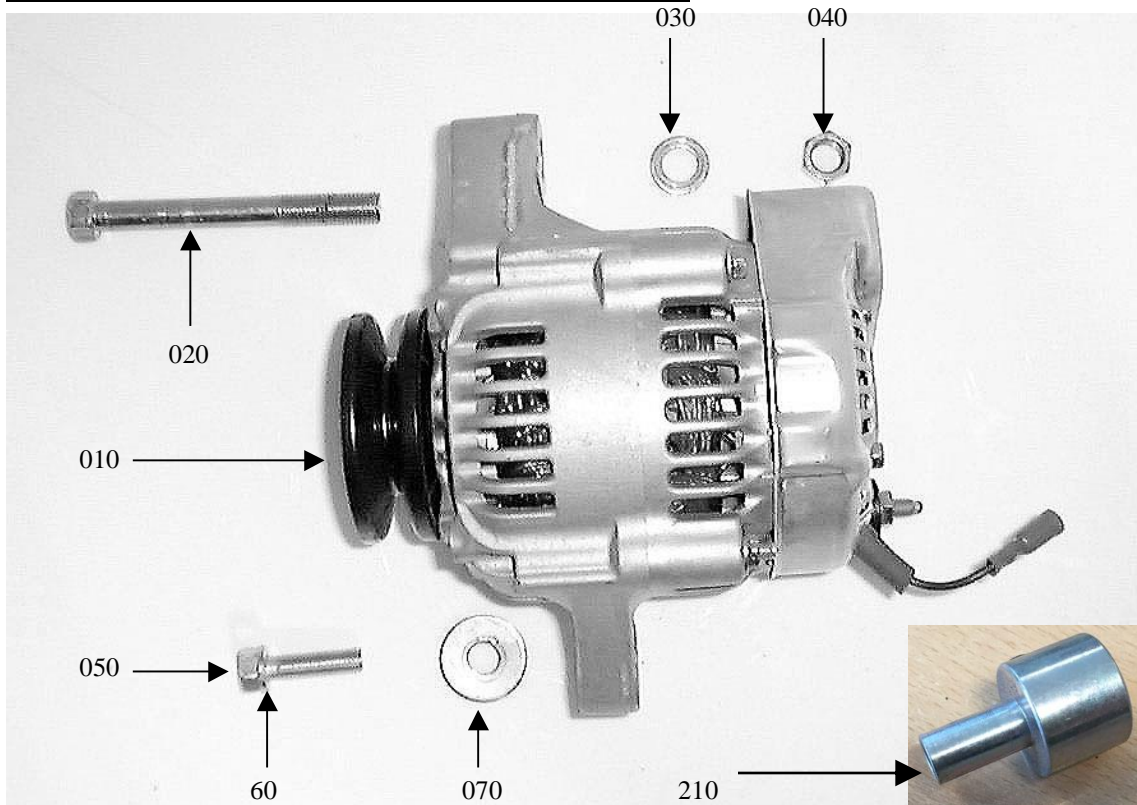
Ref. No.	Part No.	Part Name	Qty	Remarks
010	201-08563	MINI DRIVE PULLEY WATER PUMP 4 GROOVE <b>2011 SPEC</b>	1	
020	202-08565	ALTERNATOR ADJUSTING LINK FOR UPGRADED 75A ALTERNATOR <b>2011 SPEC</b>	1	
030	201-08562	MINI ALTERNATOR DRIVE PULLEY 4 GROOVE FOR UPGRADED 75A ALT <b>2011 SPEC</b>	1	
040	200-07338	14V 75A MINI COMPACT ALTERNATOR	1	Must use 4K drivebelt
050	201-61800	Beta10 / Beta14 / Beta20 ISKRA ALTERNATOR SPACER 75 AMP <b>2011 SPEC</b>	1	FORWARD SPACER
	201-08571A	Beta16 / Beta25 ISKRA ALTERNATOR SPACER 40 & 60 AMP <b>2011 SPEC</b>		
	201-08571B	Beta16 / Beta25 ISKRA ALTERNATOR SPACER 40 & 60AMP <b>2011 SPEC</b>		
060	201-08564	MINI CRANKSHAFT OVER PULLEY 4 GROOVE Beta10 / Beta14 / Beta16 & Beta20 <b>2011 SPEC</b>	1	
	201-08930	MINI CRANKSHAFT OVER PULLEY 4 GROOVE Beta25 <b>2011 SPEC</b>		
070	212-05074	4PK DRIVEBELT <b>2011 SPEC</b>	1	
080	AK/MINI/65APV/E01	MINI DRIVEBELT UPGRADE KIT -75A 4K DRIVE Beta10 / Beta14 / Beta20 <b>2011 SPEC</b>	1	
	AK/MINI/65APV/E601	MINI DRIVEBELT UPGRADE KIT -75A 4K DRIVE Beta16 <b>2011 SPEC</b>		
	AK/MINI/65APV/ES901	MINI DRIVEBELT UPGRADE KIT -75A 4K DRIVE Beta25 <b>2011 SPEC</b>		Water pump requires modification –check with Beta Marine

Alternator –12 Volt 100 Amp –from August 2014



Ref. No.	Part No.	Part Name	Qty	Remarks
010	202-10078	TENSIONER ARM	1	
020	200-05231	100A 12V ALTERNATOR	1	
030	201-10155	ALTERNATOR PULLEY 6 GROOVE	1	
040	202-10077	ALTERNATOR MOUNTING BRACKET	1	
050	201-10076	MINI WATER PUMP PULLEY 6 GROOVE	1	
060	201-10075	MINI CRANK OVER PULLEY 6 GROOVE	1	
070	214-04124	6K DRIVEBELT	1	

***Alternators –12 Volt 40 & 60Amp –to January 2011***



Ref. No.	Part No.	Part Name	Qty	Remarks
010	600-80010	40 Amp 12 volt Denso alternator (2 Pin)	1	
	600-02781	40 Amp 12 volt Denso alternator (3 Pin)	1	
	600-04989	60 Amp 12 volt Denso alternator (3 Pin)	1	<b>No longer available</b>
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
	214-00126	Beta25 40 amp alternator drivebelt, special	1	To suit crank with PTO only
	214-04360	4K poly-vee drivebelt	1	Suits 40 Amp & 4K drive (Not Beta25)
	212-05074	4K poly-vee drivebelt	1	Beta25 only
	214-03235	4K poly-vee drivebelt Suits 65 Amp external fan alternator	1	Not Beta25
	214-04360	4K poly-vee drivebelt	1	Beta16 65 Amp
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
140	217-99276	M6 Flat washer	4	To suit 201-05547
150	201-05548	Mini 4K overpulley 120mm DIA	1	(Not Beta25)
	201-05154	Beta25 4K overpulley 130mm DIA	1	Beta25 Only
160	217-99311	M8 x 25mm socket cap screw	3	To suit 201-05548 & 05154
170	217-99293	M8 Flat washer	3	To suit 201-05548 & 05154
180	600-01481	Crankshaft pulley with PTO facility Beta16	1	Some Beta14 / All Beta16
190	600-05019	Crankshaft pulley with PTO facility Beta25	1	Beta25 Only
200	600-02405	Alternator plug -3 pin coupler	1	For 3 pin Denso alt
210	201-61800	40A alternator spacer (engines with 17mm lug)	1	For older engines only



**Alternator –12 Volt 65 Amp (Beta 10, Beta 14 & Beta 20 Only) to December 2010**



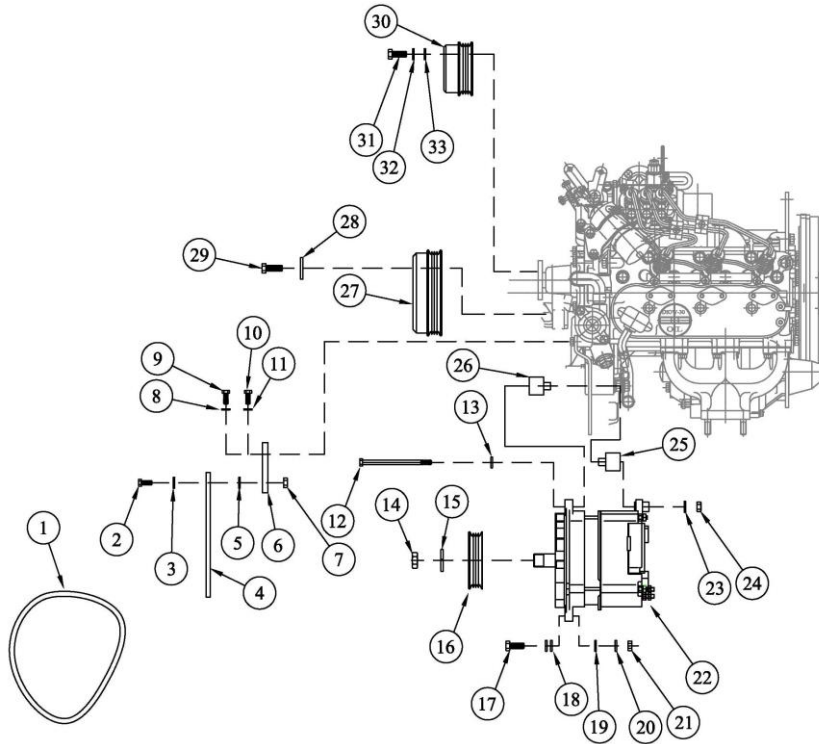
10



020

Ref. No.	Part No.	Part Name	Qty	Remarks
010	200-01155	70 Amp 12 volt alternator (external fan)	1	Excluding 4K pulley
	200-01384	70 Amp 12 volt insulated alternator (external fan)	1	Insulated earth wiring no longer available from Jan 2005
	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 / Beta14 / Beta20 - 65 Amp with poly-vee drive system –spares only	1	Complete upgrade kit including 010 & 020
	AK/MINI/K60APV/201	Beta16 - 60 Amp with poly-vee drive system –spares only		Complete kit including alternator
	AK/MINI/K60APV/301	Beta25 - 60 Amp with poly-vee drive system –spares only		Complete kit including alternator
040	AK/MINI/K/4K/001	Beta10 / Beta14 / Beta20 – Upgrade 4K drive kit to suit 40 Amp alternator	1	Drive system only, no alternator
	AK/MINI/K/4K/601	Beta16 – Upgrade 4K drive kit to suit 40 Amp alternator		Drive system only, no alternator
	AK/MINI/K/4K/901	Beta25 – Upgrade 4K drive kit to suit 40 Amp alternator		Drive system only, no alternator

**Alternator –12V 65A (Beta10, Beta14 & Beta20 Only) From Jan 2003-Dec 2010**

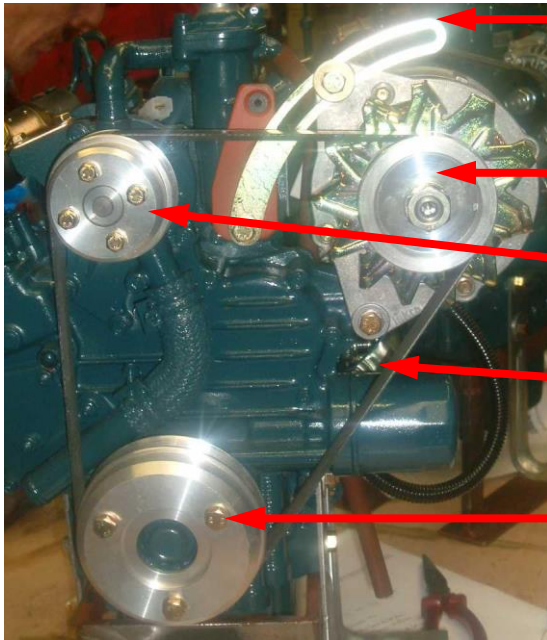


Ref. No.	Part No.	Part Name	Qty	Remarks
1	214-03235	4PK drivebelt to suit 65 Amp alternator	1	
2	217-99300	M8 x 30mm set	1	
3	217-99293	M8 Flat washer	1	
4	202-96260	Alternator tensioning arm	1	
5	217-99293	M8 Flat washer	1	
6	202-05575	Alternator arm link bracket	1	
7	217-99296	M8 Nyloc nut	1	
8	217-99275	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	70 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 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	

## Mini Series alternator upgrade –Iskra 65 Amp 12V (AAK4513)

The following photographs illustrate how to fit the old 65 amp / 70 amp 12 Volt alternator upgrade kit we used to supply to suit the Mini Series engines. **PLEASE NOTE THIS KIT IS NO LONGER AVAILABLE. THESE NOTES ARE SUPPLIED TO HELP SUPPORT SERVICING OF EXISTING ENGINES WITH THIS OPTION ALREADY FACTORY FITTED.** The kit is supplied to suit standard feet, if narrower feet than standard are fitted to your engine, you may require additional parts to allow flexible mount pillar stud to fit through front port foot without fouling on oil pressure switch / sender. There are two different front-end cover plates available for Mini Series engines. These are very similar apart from the thickness of the alternator lower mounting lug. These instructions show fitting to both types of front end cover & the kit of parts are supplied to suit either application if this dimension cannot be quoted at the time of order.

### ENGINE FRONT VIEW:



Alternator adjusting link & bracket

Alternator with 4K driven pulley fitted

Water pump driven 4K pulley  
 (4 off M6 bolts to be fitted with  
 threadlock & tightened to approx  
 10.5Nm)

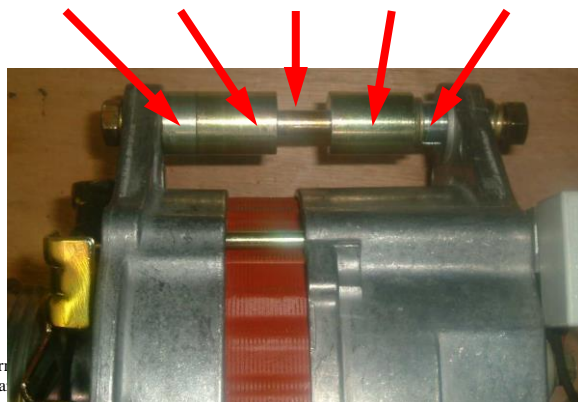
4K drive belt 938mm length

Crankshaft over pulley 4K drive  
 (3 off M8 bolts to be fitted with  
 threadlock & tightened to approx 25Nm)

### ENGINE SIDE VIEW –engine with thin 15mm lug:

M8 x 120mm bolt, fit 1 off flat washer behind bolt head, spacers & alt as below, 1 off spring washer, flat washer & plain nut on threaded end. Spacers as below:

10mm Spacer	23mm Spacer	Engine Lug 15mm thick	24.5mm Spacer	2 off M8 flat washer
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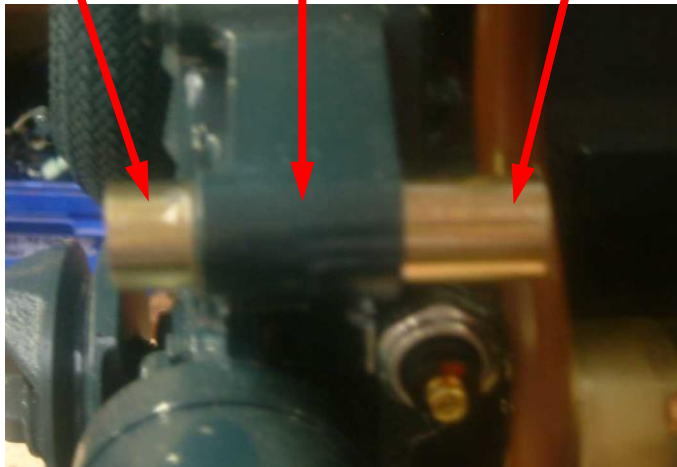
## **Mini Series alternator upgrade –Iskra 65 Amp 12V (AAK4513)**

**PLEASE NOTE THIS KIT IS NO LONGER AVAILABLE, THESE NOTES ARE SUPPLIED TO HELP SUPPORT SERVICING OF EXISTING ENGINES WITH THIS OPTION ALREADY FACTORY FITTED**

*For engines with a ‘thick’ alternator lug (34mm thick):*

The following spacer arrangement should be used for the 34mm thick lug.

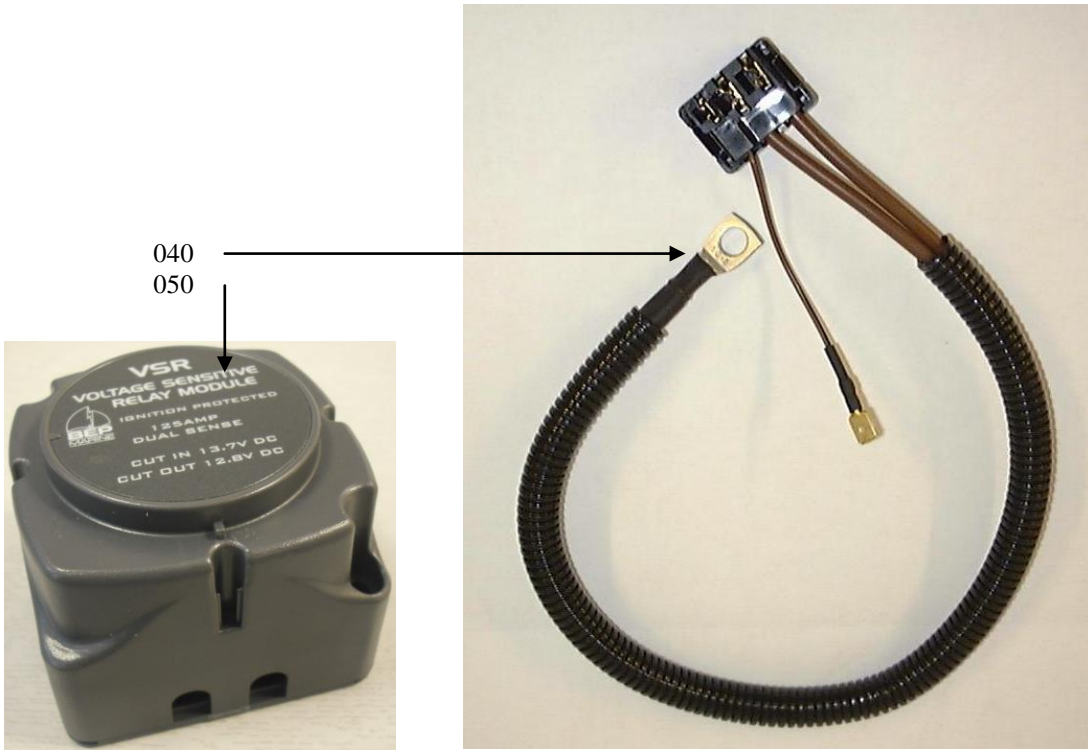
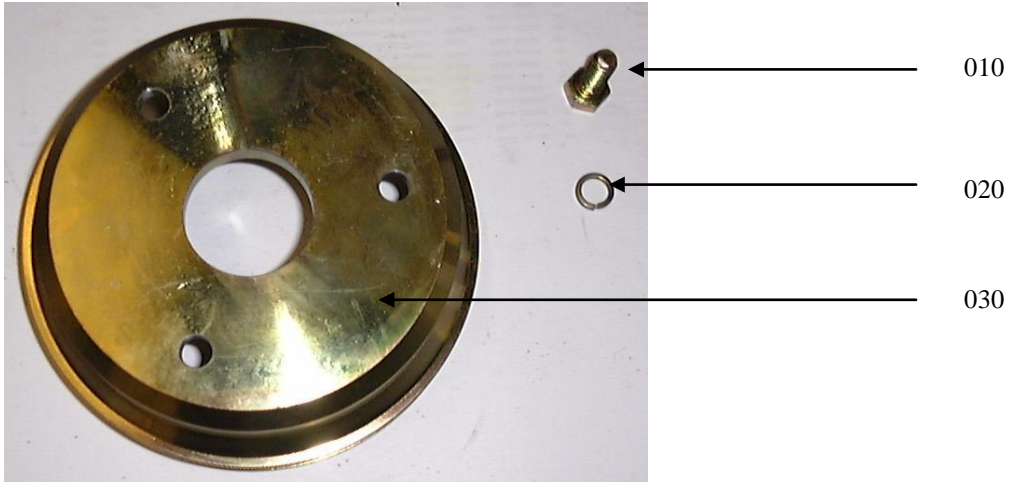
14mm spacer                      34mm thick lug                      25mm spacer



### ***Wiring connections:***

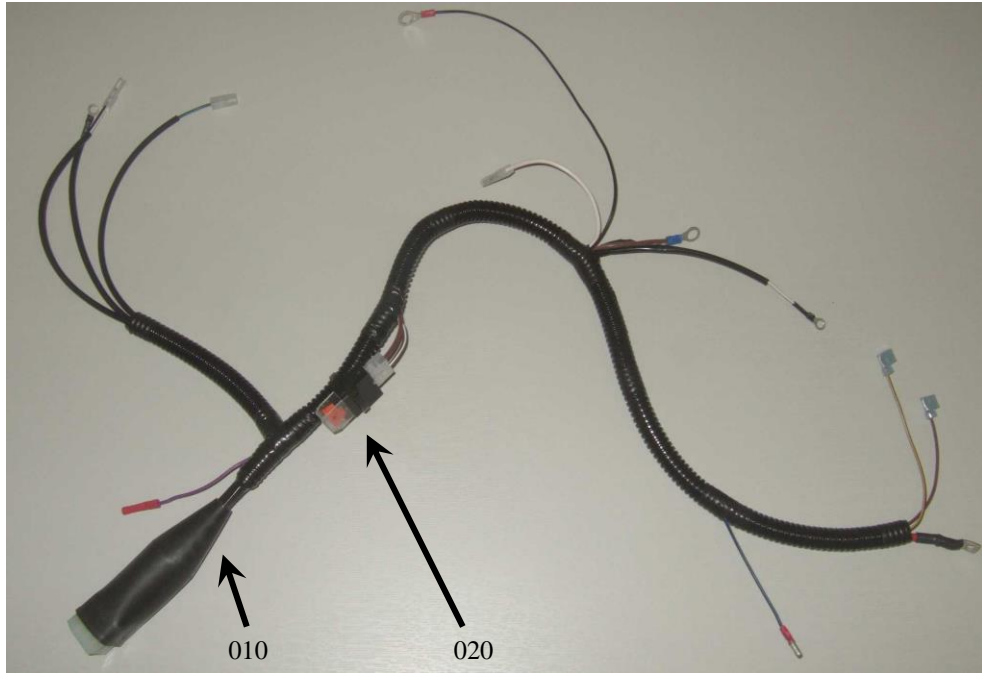
- Connections to be made once alternator is fitted, before fitting drivebelt
- Remove original thick brown from engine harness (from original alternator B+ to starter battery positive. Do not tie this wire back, it could short out on starter & cause a fire
- Push plug in 3 pin sub loom to rear of alternator
- Connect twin thick brown to starter battery positive
- Connect short brown/black tail from rear of subloom plug to engine harness brown/black (this wire is brown yellow in engine harness from Jan 2004)
- If tacho is fitted in engine control panel, connect engine harness black/blue to alternator ‘W’ terminal black/blue tail
- If tacho is fitted this will need to be recalibrated. If Datcon tacho fitted adjust on rear of tacho at tickover so correct tickover speed is shown (850 – 900rpm). If VDO tacho is fitted, adjust using pulse count function, setting to 9.65

**Alternator Accessories–12 Volt 55 & 65 Amp (Beta 10, Beta 14 & Beta 20 Only)**

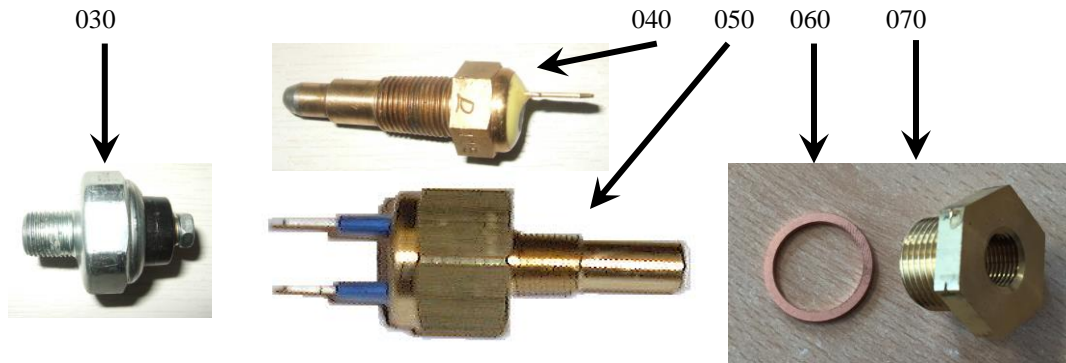


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	201-94660/01	Mini overpulley	1	Obsolete –no longer available Replaced with 4K system –To January 2003	N/A
020	217-99298	M8 x 20mm set	3		
030	217-99292	M8 Spring washer	3		
040	200-01196	65Amp alternator wiring loom	1		
050	200-06366	Voltage sensing split charge relay 12V 125A	1		

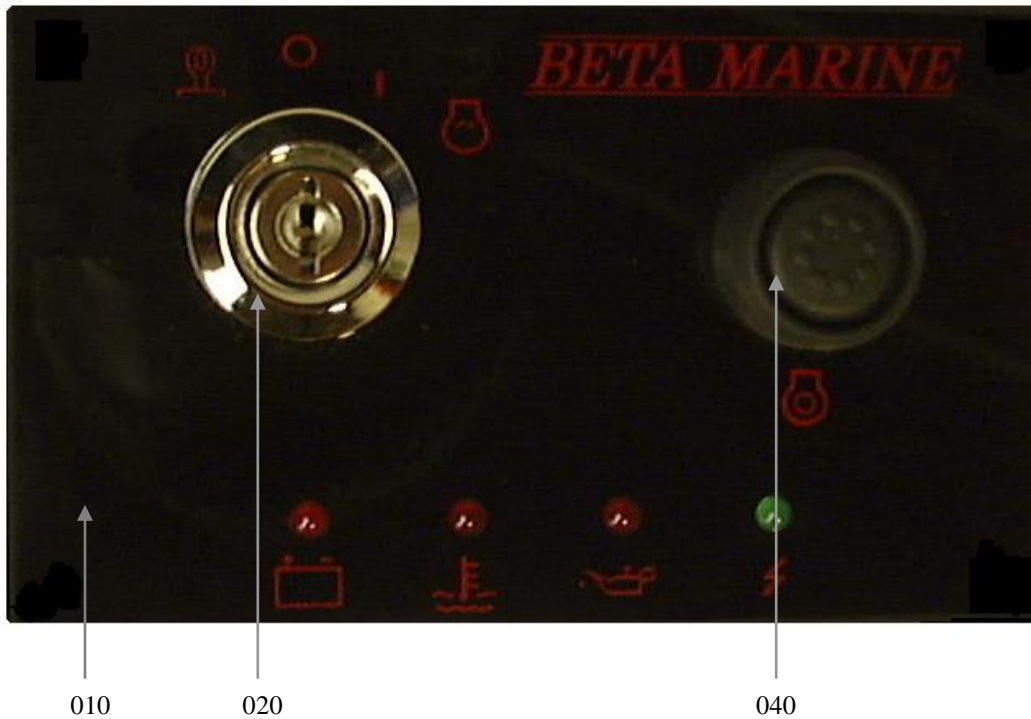
Wiring harness & switches



Ref. No.	Part No.	Part Name	Qty	Remarks
010	200-98380/01	Mini series engine harness (with fuse)	1	Includes fuse 020
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	600-01848	3/8" Copper washer to suit 600-06687 temperature switch adaptor	1	
070	600-06687	3/8BSPT Male x1/8BSP Female adaptor	1	Required if temp sender being fitted into 3/8BSP thread under thermostat housing
080	200-04588/01	1 metre extension harness	1	Not shown
	200-04588/02	2 metre extension harness		
	200-04588/03	3 metre extension harness		
	200-04588/04	4 metre extension harness		
	200-04588/05	5 metre extension harness		
	200-04588/06	6 metre extension harness		
	200-04588/08	8 metre extension harness		
	200-04588/10	10 metre extension harness		
200-04588/15	15 metre extension harness			
090	AK/P/7JM/000	Starter relay kit (for ext. harnesses)	1	To drawing 300-58520



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 – <b>no longer available</b>	
	200-01296	LED Pack assembly & buzzer (DOMESTIC)	1	Not shown – <b>no longer available</b>	
060	200-01288	Panel blank 2A –LED SEASPEC	1	Check availability Does not include 050	Suits 3 red, 1 green LED
	200-01291	Panel blank 2A –LED DOMESTIC	1	Check availability Does not include 050	Suits 4 red, 1 green LED
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					

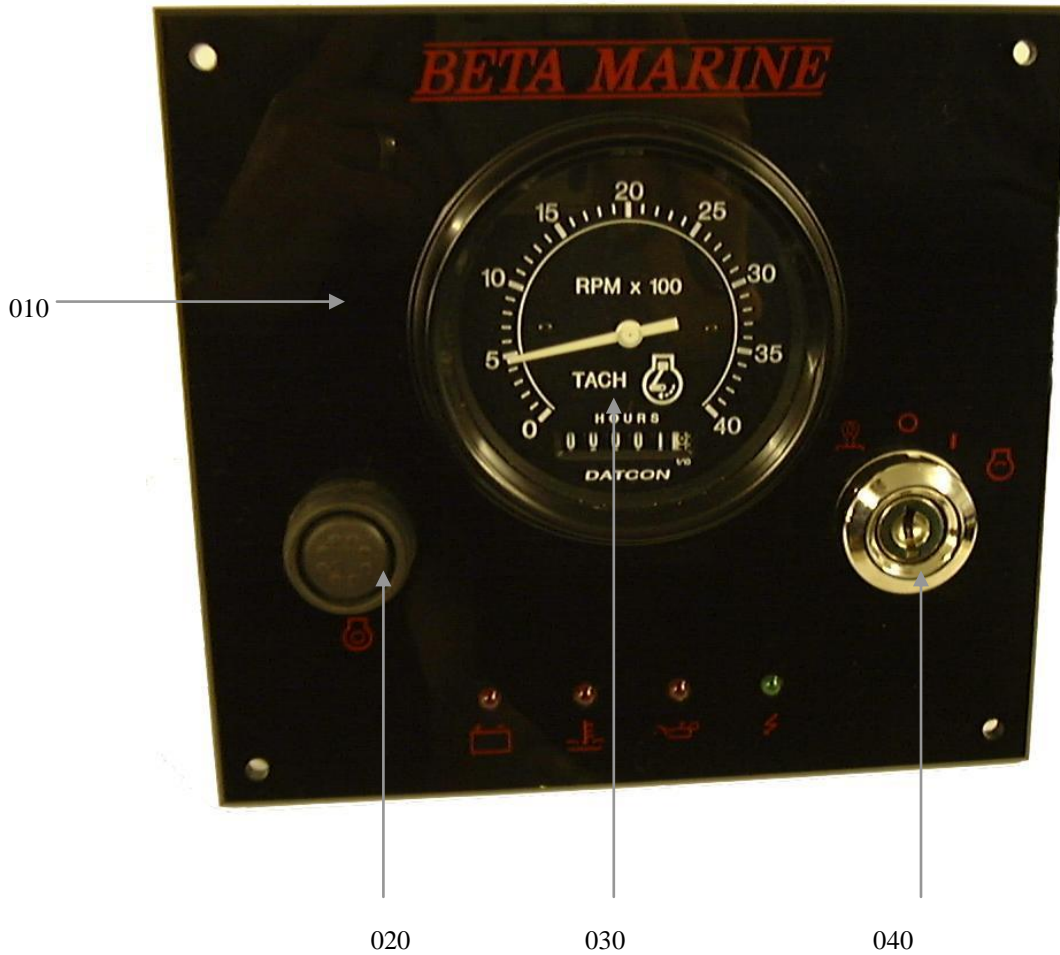
Simple 2A panel –LAMP type from May 2005



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2AS/KS01	Simple panel with 3m loom (complete)	1	
020	600-00057	Kubota keyswitch –suits small key	1	To August 2008
	600-00057/01	Kubota keyswitch –suits large key	1	From August 2008
030	600-00058	Kubota keys –PAIR (SMALL)	1	To August 2008
	600-00058/01	Kubota keys –PAIR (LARGE)	1	From August 2008
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



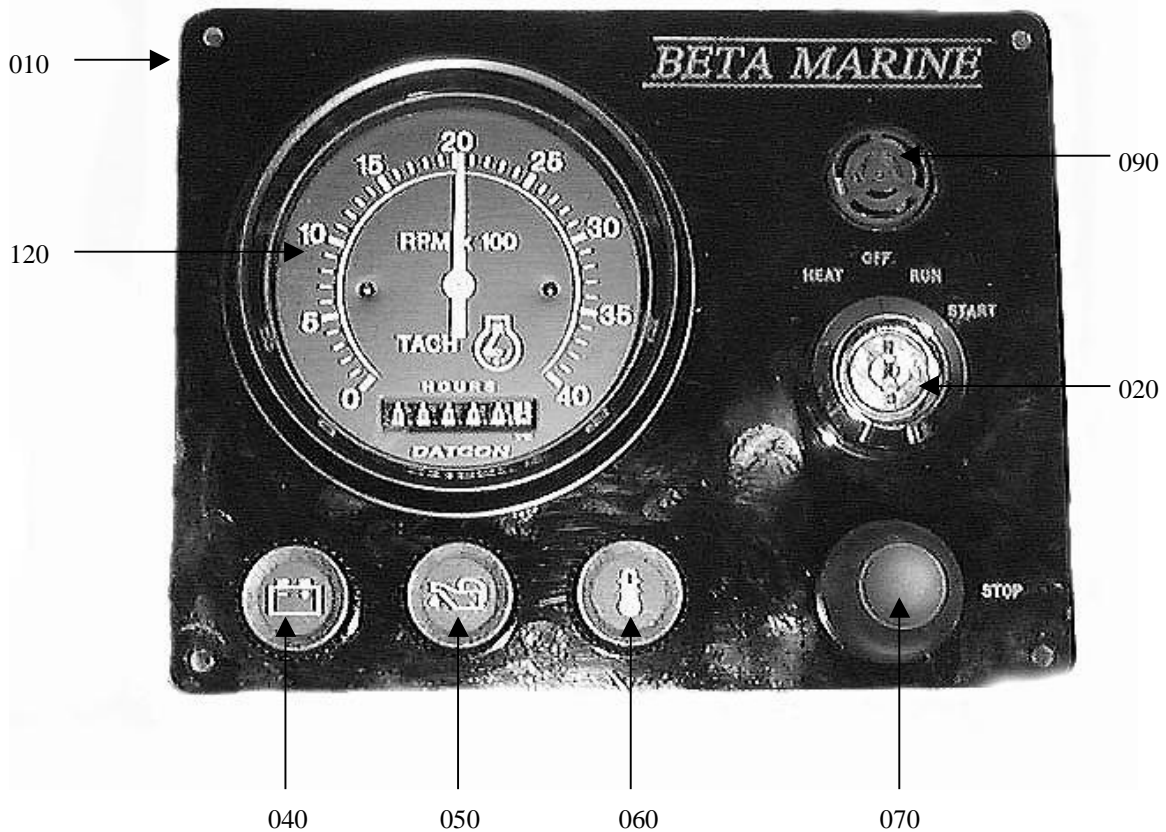
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00853	2AB panel (excludes tacho –see 030)	1	No longer available, Use AK/2ABD/KS02	N/A
020	200-00072	Panel stop button	1		
030	200-00054	0-4000 RPM tacho & hourmeter (DATCON)	1	To March 2002	
	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002, <b>Viewline Jan2010</b>	
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 – <b>no longer available</b>	
	200-01296	LED Pack assembly & buzzer (DOMESTIC)	1	Not shown – <b>no longer available</b>	
070	200-01289	Panel blank 2AB (SEASPEC)	1	Check availability, Does not include 050	
	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/KS02	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, <b>Viewline Jan2010</b>
040	600-00057	Kubota keyswitch –suits small key	1	To August 2008
	600-00057/01	Kubota keyswitch –suits large key	1	From August 2008
050	600-00058	Kubota keys –PAIR (SMALL)	1	To August 2008
	600-00058/01	Kubota keys –PAIR (LARGE)	1	From August 2008
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	
	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002, <b>Viewline Jan2010</b>	
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 –suits small key	1	To July 2008
	600-00057/01	Kubota keyswitch –suits large key	1	From July 2008
030	600-00058	Kubota keys –PAIR (SMALL)	1	To July 2008
	600-00058/01	Kubota keys –PAIR (LARGE)	1	From July 2008
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, <b>Viewline Jan2010</b>
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				

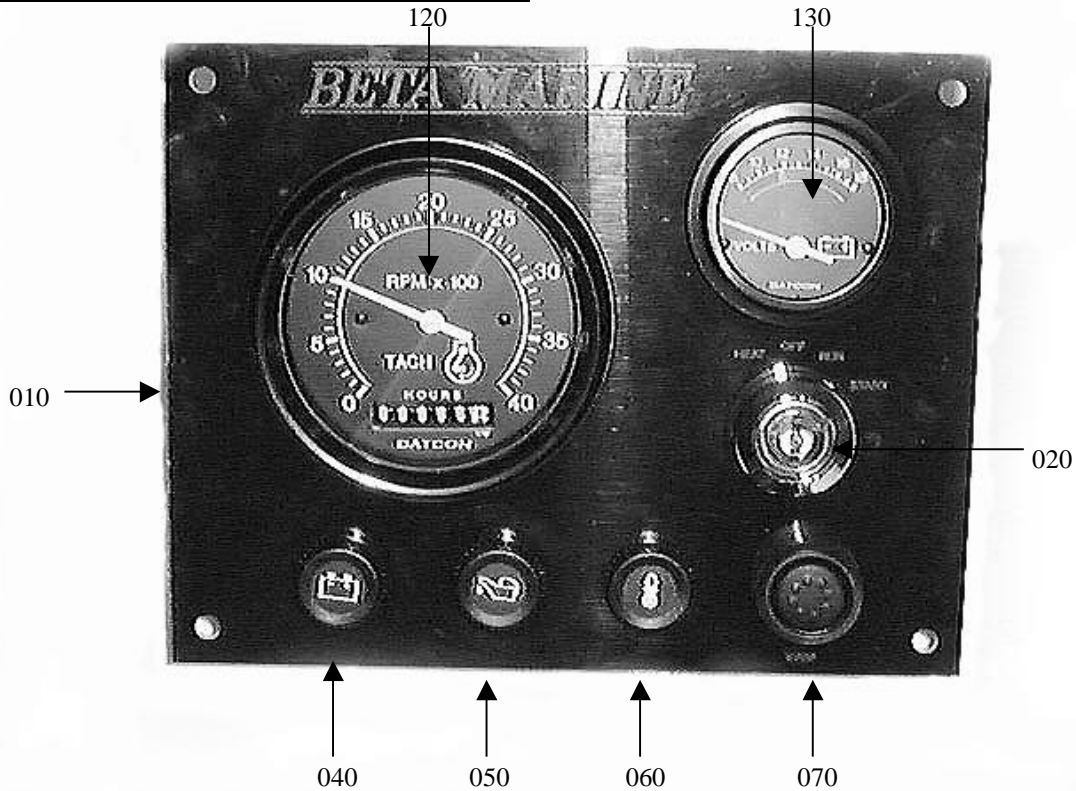
***2AB'V'W pushbutton control panel –LAMP type from May 2005***



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, <b>Viewline Jan2010</b>	
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/KS02	N/A
	200-60952	SFIA 2B Panel –with voltmeter To February 2003 (excludes tacho –see 120)	1	No longer available, Use AK/2BT/KS02	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	
	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002, <b>Viewline Jan2010</b>	
130	200-91400	Water temperature gauge (from February 2003)	1	From February 2003	
	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	

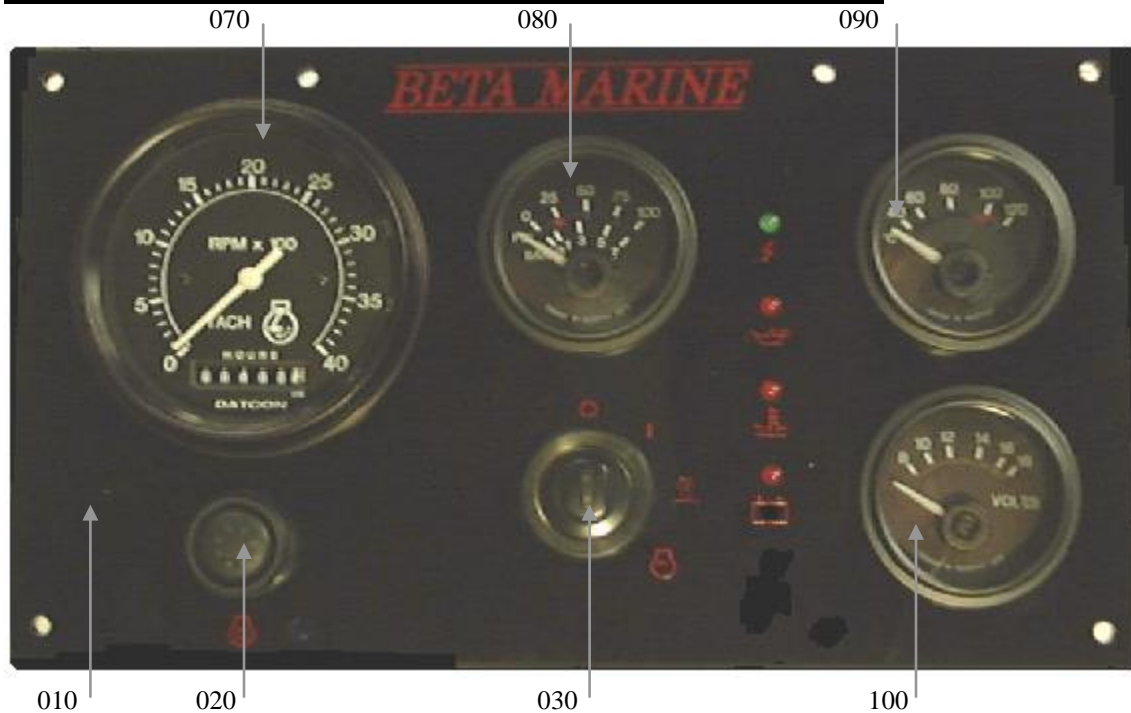
***SFIA 2B panel –LAMP type from May 2005***



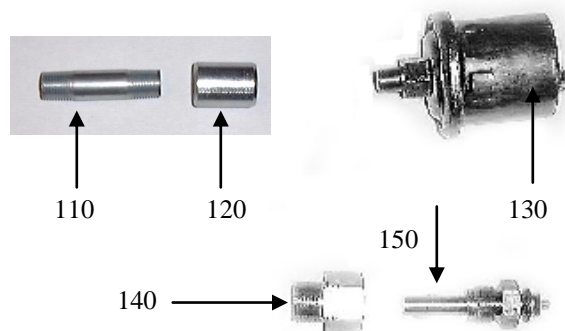
Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2BT/KS02	SFIA 2B Panel –with temperature gauge From May 2005 (complete)	1	With Murphy temp gauge
020	600-00057	Kubota keyswitch –suits small key	1	To July 2008
	600-00057/01	Kubota keyswitch –suits large key	1	From July 2008
030	600-00058	Kubota keys –PAIR (SMALL)	1	To July 2008
	600-00058/01	Kubota keys –PAIR (LARGE)	1	From July 2008
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, <b>Viewline Jan2010</b>
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				



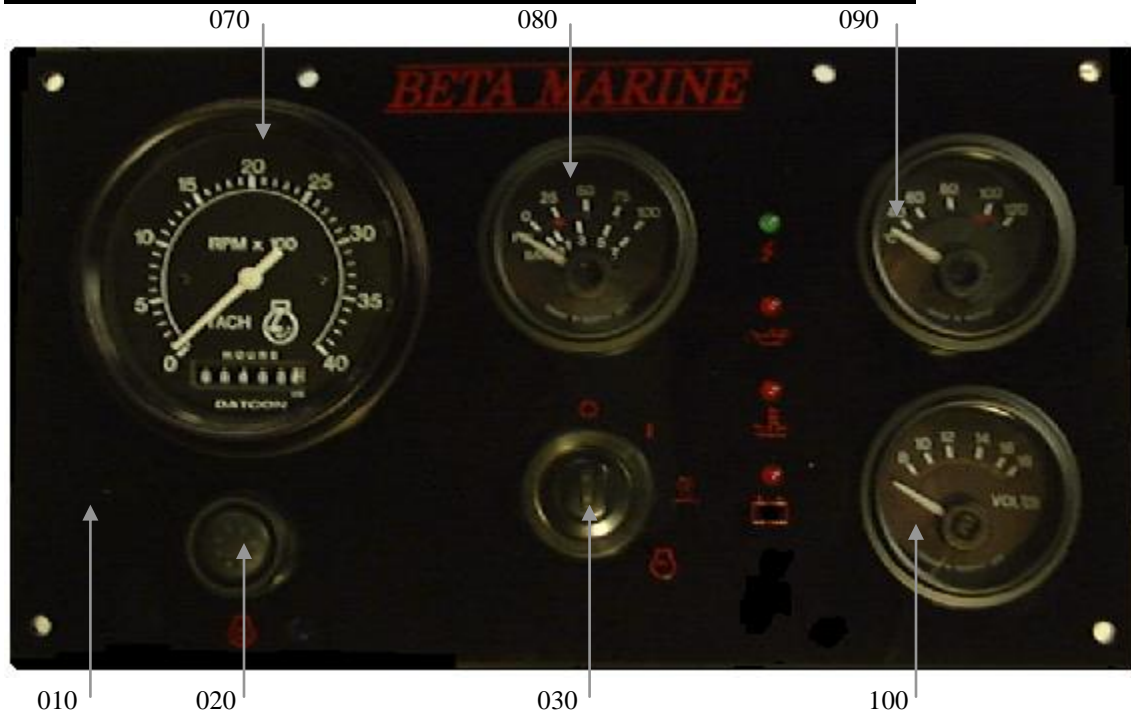
***Murphy deluxe 2C panel & senders –Seaspec 4 Lamp-to May 2005***



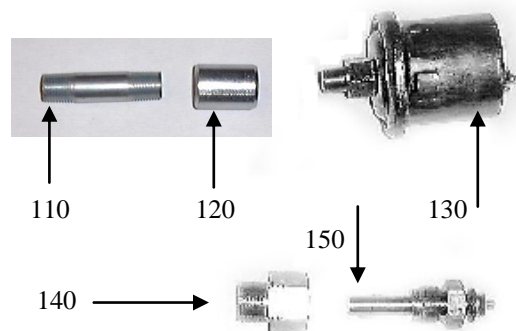
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00854	Murphy 2C deluxe panel –Seaspec 4 Lamp (Excludes gauges & loom –See 070, 080, 090, 100 & 160)	1	No longer available, Use AK/2CD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00073	Murphy panel keyswitch	1		
040	200-98965	Murphy deluxe panel single key	2	Not shown	
050	200-01295	LED Pack assembly & buzzer –Seaspec 4 Lamp	1	Not shown – <b>no longer available</b>	
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	
	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002, <b>Viewline Jan2010</b>	
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***



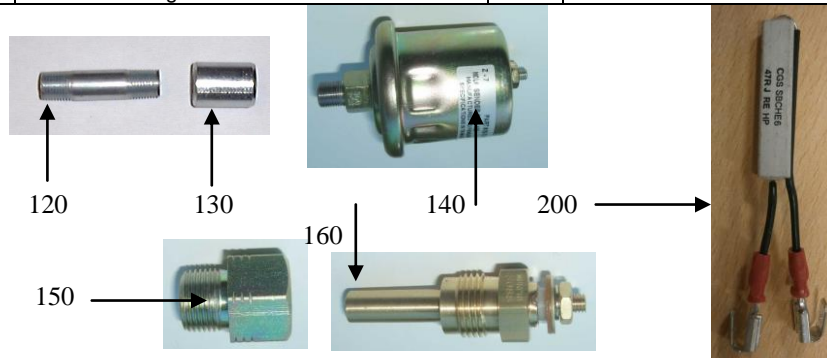
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00851	Murphy 2C deluxe panel –Domestic 5 Lamp (Excludes gauges & loom –See 070, 080, 090, 100 & 160)	1	No longer available, Use AK/2CD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00073	Murphy panel keyswitch	1		
040	200-98965	Murphy deluxe panel single key	2	Not shown	
050	200-01296	LED Pack assembly & buzzer –Domestic 5 Lamp	1	Not shown – <b>no longer available</b>	
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	
	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002, <b>Viewline Jan2010</b>	
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					



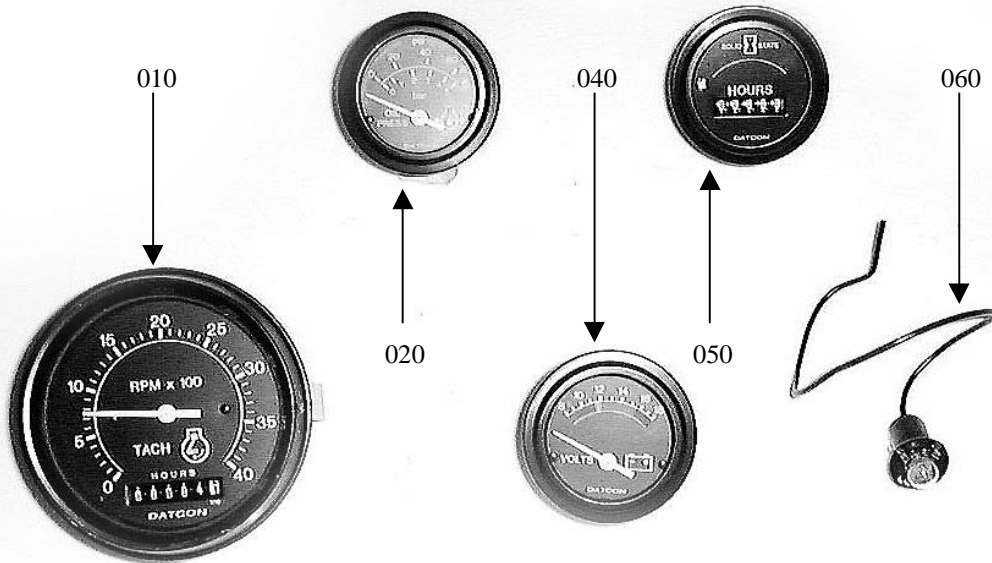
**Murphy deluxe 2C panel & senders –Domestic 5 Lamp –from May 2005**



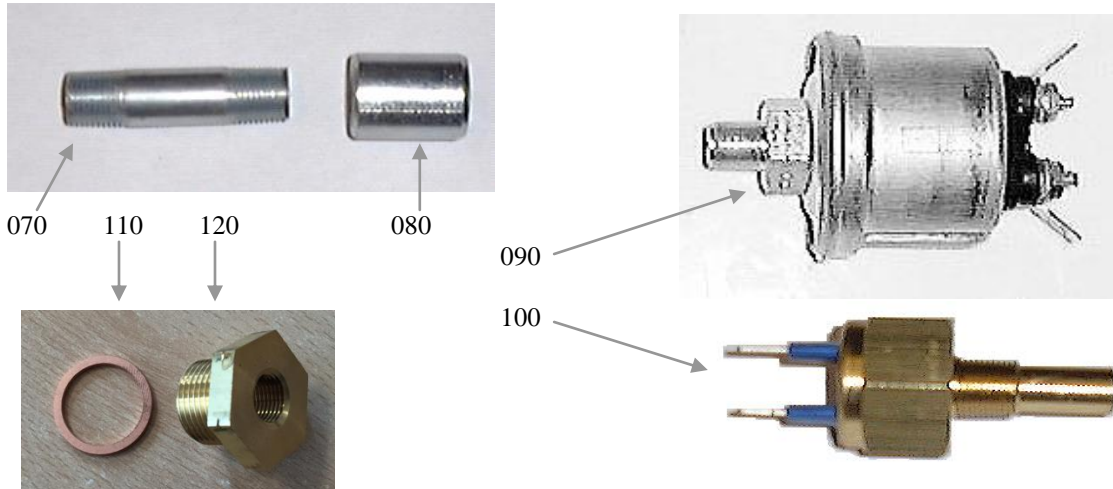
Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2CD/KS01	Murphy 2C deluxe panel –Domestic 5 Lamp	1	Complete, less 3m connection cable 170
020	200-00072	Panel stop button	1	
030	600-00057	Kubota keyswitch –suits small key	1	To July 2008
	600-00057/01	Kubota keyswitch –suits large key	1	From July 2008
040	600-00058	Kubota keys –PAIR (SMALL)	1	To July 2008
	600-00058/01	Kubota keys –PAIR (LARGE)	1	From July 2008
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, use 200-05445
080	200-02373	0-4000 RPM tachometer (VDO)	1	From March 2002, <b>Viewline Jan2010</b>
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
200	200-04583/5W	Domestic charge load resistor	1	Fits on rear of domestic charge lamp



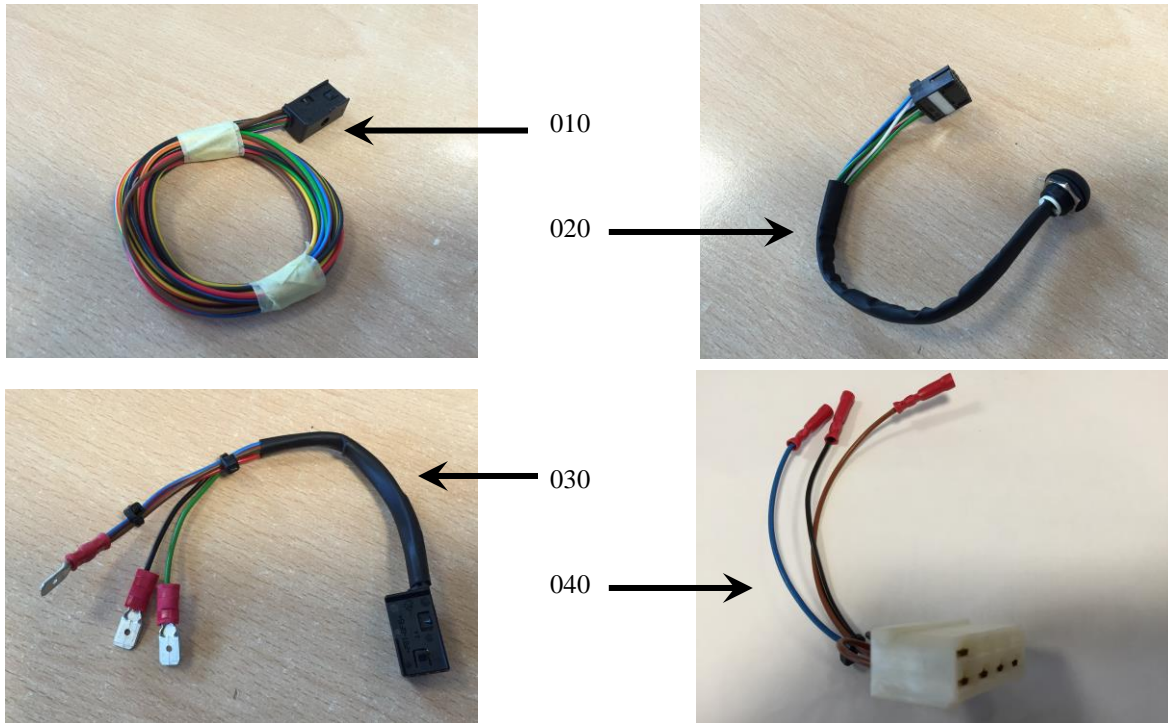
**Panel gauges & senders**



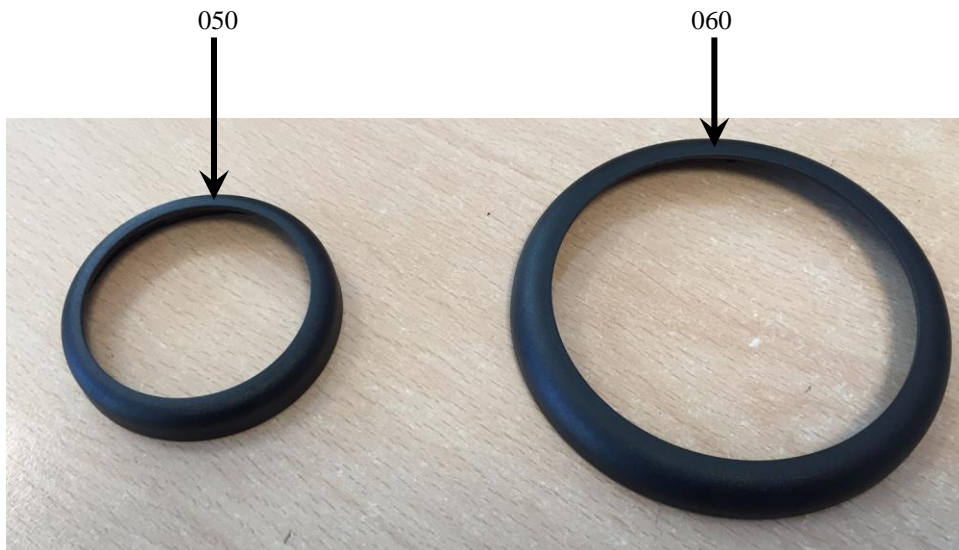
Ref. No.	Part No.	Part Name	Qty	Remarks
010	200-00054	0-4000 RPM tacho & hourmeter (Datcon)	1	To March 2002
	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002, <b>Viewline Jan2010</b>
020	200-08011	Oil pressure gauge –VDO Viewline	1	Not shown
	200-91380	Oil pressure gauge –Datcon	1	
030	200-07981	Water temperature gauge –VDO Viewline	1	Not shown
	200-91390	Water temperature gauge –Datcon	1	Not shown
040	200-07980	Voltmeter gauge –VDO Viewline	1	Not shown
	200-91400	Voltmeter gauge –Datcon	1	
050	200-90000	Hourmeter gauge	1	
060	200-01392	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	
110	600-01848	3/8" Copper washer to suit 600-06687	1	Required if temp sender being fitted into 3/8BSP thread under thermostat housing
120	600-06687	3/8BSPT Male x1/8BSP Female adaptor	1	
130	200-04805	Bulb, red for 12V VDO tacho	2	Not shown
140	200-96220	Datcon tacho bulb 12V	1	Not shown
	200-04805	Bulb to suit VDO OceanLine tacho	2	*Not suitable for ViewLine*



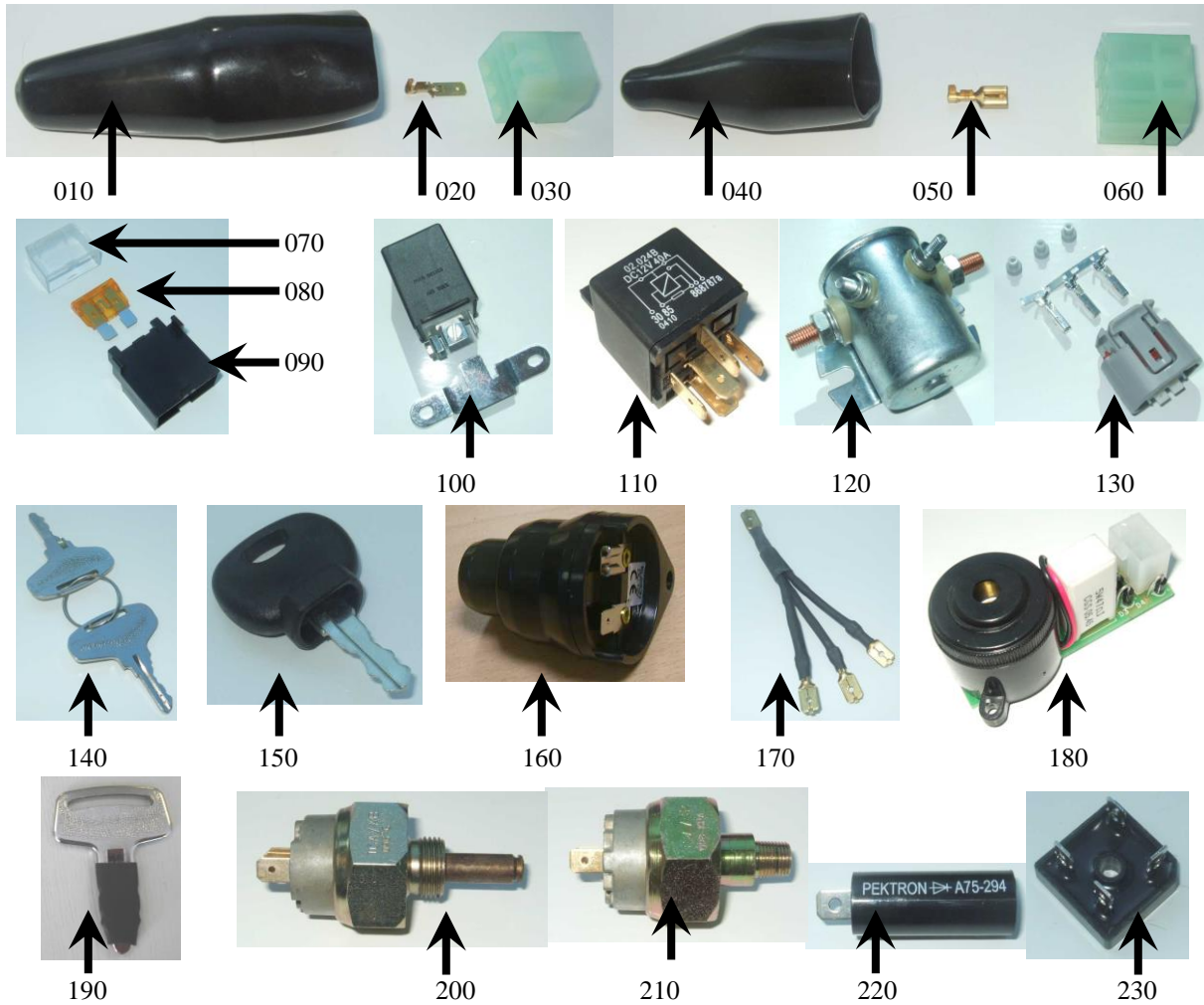
VDO Gauge accessories



Ref. No.	Part No.	Part Name	Qty	Remarks
010	200-07664	8 PIN CONNECTOR -FOR VIEWLINE GAUGES	1	
020	200-08875	VDO VIEWLINE TACHO CALIBRATION WIRING HARNESS	1	
030	200-07664-OL	8 PIN CONNECTOR, TO SUIT OCEANLINE REPLACEMENT	1	
040	200-10381	OCEANLINE CONVERSION HARNESS TO SUIT VIEWLINE PANEL	1	
050	200-10091B	BLACK BEZEL FOR 52mm VIEWLINE GAUGE	1	
060	200-10090B	BLACK BEZEL FOR 85mm VIEWLINE TACHO	1	

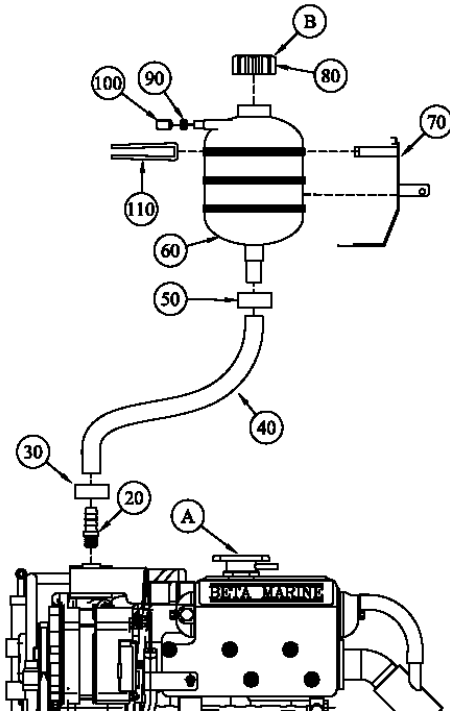


***Various electrical & panel parts and components***



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, SMALL	1	Standard to mid 2008	
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	600-00058/01	Kubota keys –PAIR, LARGE	1	From mid 2008	
200	200-02069	Water temperature switch 096C 3/8BSP	1	Genset standard	
210	200-61190	Oil pressure switch 98kPa 1/8BSP	1	Genset standard	
220	200-03466	Pektron diode	1	Push button panels	
230	200-02618	Diode bridge	1	Push button panels	
240	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
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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)

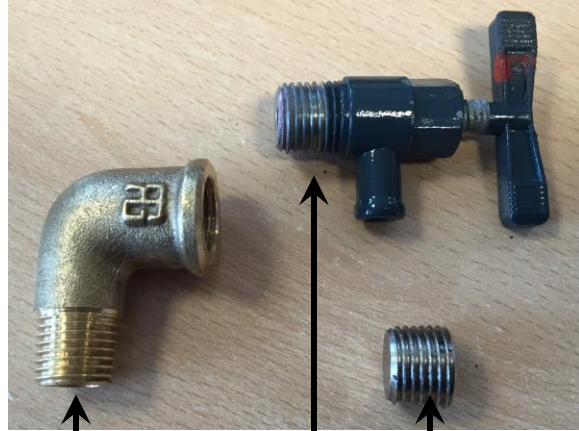
Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/SML/EXP/001	Expansion tank kit, complete	1	
<b>(This kit consists of all items listed individually below)</b>				
020	212-99233	3/8BSPT-5/8" Hose connector	1	
030	212-98462	Stainless steel hose clip 17-25mm	1	
040	218-99390	5/8" Bore water hose –from March 2015	1.5m	
050	212-98462	Stainless steel hose clip 17-25mm	1	
060	209-03065	Expansion tank	1	
070	209-03067	Expansion tank mounting bracket	1	
080	209-03066	Expansion tank lid	1	
090	212-07009	No 22 Stainless steel hose clip	1	
100	212-07011	Hose cap blanking bung	1	
110	209-03068	Expansion tank holding band	1	



**Water drain components –all engines**



010



020

030

040

Ref. No.	Part No.	Part Name	Qty	Remarks
010	212-03194	Overflow pipe, 8mm I/D	1	
020	212-04356	Drain tap elbow 1/4BSP MxF	1	
030	600-00580	Water drain tap, 1/4" BSP	1	
040	212-99399	Water drain plug, 1/4" BSP	1	



## **Standard fitting of calorifier connections / hot water take off**

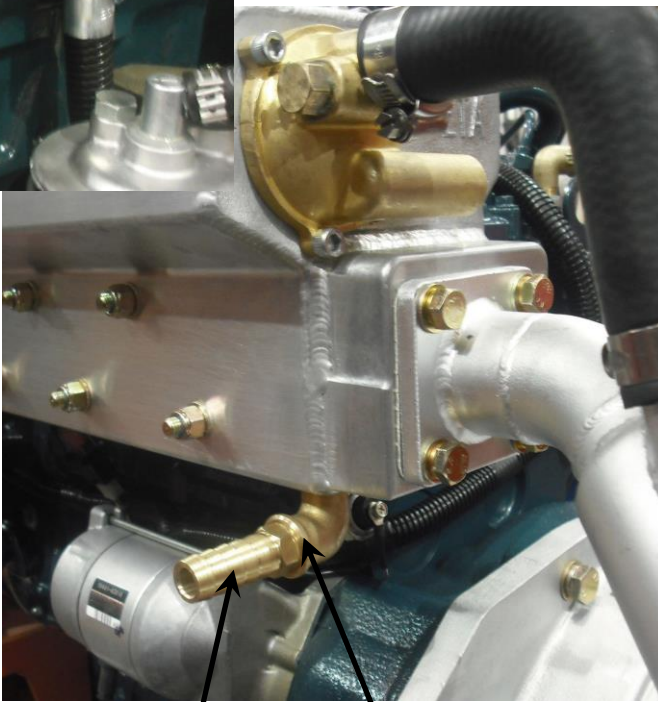
### **Super Mini Series-Heat exchanger cooled engine from December 2010**

#### **Hot water to calorifier tank**



1. Remove 1/8" BSP bung from cylinder head, behind last injector at rear starboard side of engine.

2. Fit 1/8" BSP Male swivel adaptor with the supplied copper washer. Into this, fit the elbow and 5/8" hose connector.



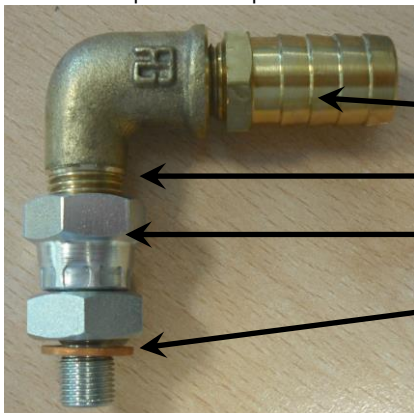
#### **Cool water from calorifier tank**

3. Remove bung from underside of heat exchanger tank with 8mm hex key.

4. Fit 3/8" BSP Male x Female elbow

5. Fit 3/8" BSP x 5/8 hose connector

**Note:** All fittings to be sealed with PTFE tape or pipe sealant to prevent water leaks when engine is at operating temperature and pressure.



**Part Numbers:** 212-99233    212-99237

212-00904

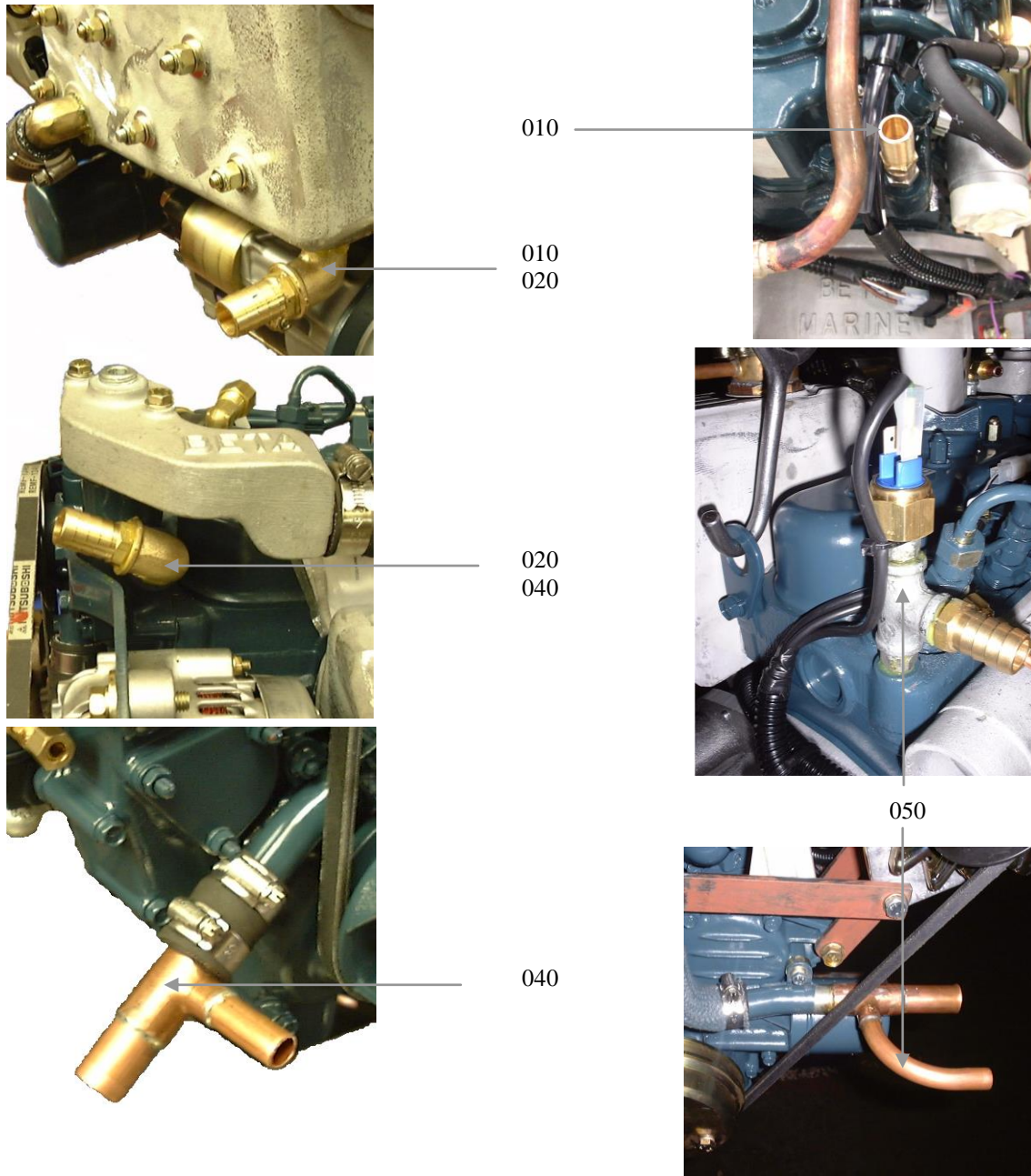
212-04356

212-07357

212-06565

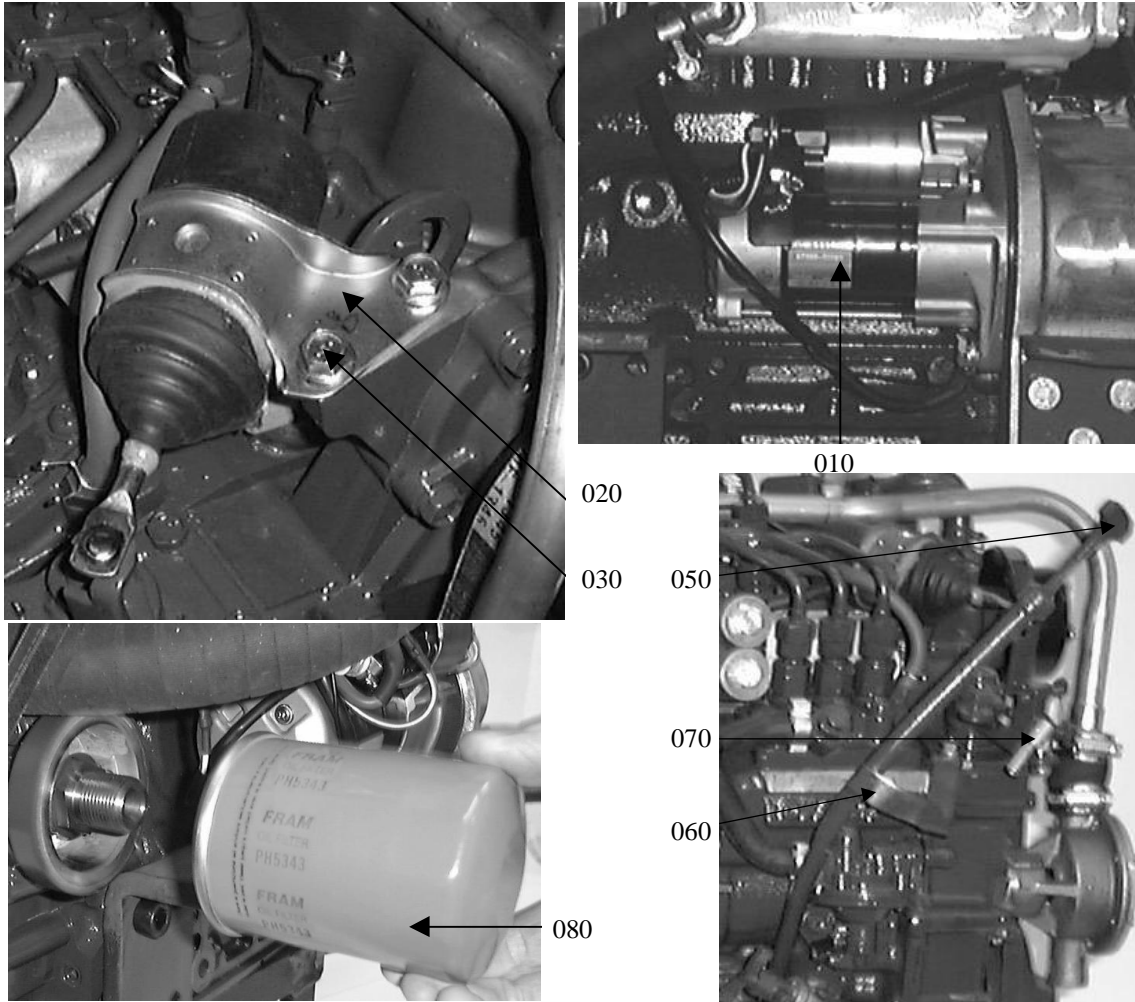
**COMPLETE KIT: AK/HE/CAL/003**

***Calorifier connections / hot water take off –Keel cooled & Heat Exchange pre Dec2010***



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***



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	600-00063	Beta10, Beta14 & Beta16 Starter motor	1		
	600-00064	Beta20 Starter motor			
	600-05147	Beta25 Starter motor			
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 <b>Beta10/14 &amp; 20</b>	1	Not shown	
	AK/MINI/12/601	Extension shaft kit, 32mm dia <b>Beta16 only</b>			
	AK/MINI/12/901	Extension shaft kit, 32mm dia <b>Beta25 only</b>			
120	217-99292	M8 spring washer	3	Not shown, for 201-61640	
130	217-99302	M8 x 40mm set	3	Not shown, for 201-61640	
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	

## Installation Kits



010 ↑



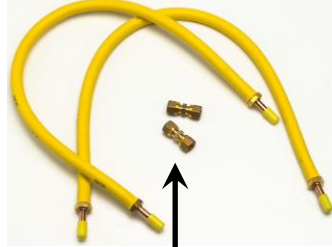
020 ↑



030 ↑



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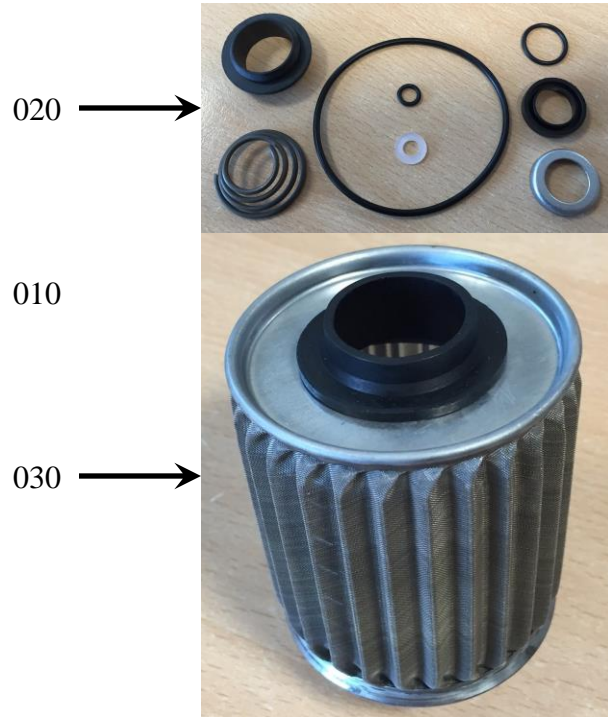
100 ↑



110 ↑

Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/SML/HE/6e/001	WATER INLET KIT -BALL VALVE FROM MAR04 3/4" ID	1	
	AK/SML/HE/6e/0S1	WATER INLET KIT -SPECIAL CLEAR PLASTIC TYPE 3/4"		NOT SHOWN
020	AK/SML/HE/6b/001	2" WATER COOLED EXHAUST KIT	1	
030	AK/SML/HE/6c/001	2" PLASTIC WATERLOCK (& 4 OFF HOSE CLIPS)	1	
040	212-00466	ANTI-SYPHON WITH VENTILATION HOSE	1	
	212-00466/01	ANTI-SYPHON WITH PRESSURE VALVE (NO VENTILATION HOSE REQUIRED)	1	NOT SHOWN
050	AK/SML/6g/001	FLEXIBLE FUEL PIPES 24" OAL ISO7840	1	
060	AK/SML/6k/001	FUEL DELIVERY KIT	1	
	AK/SML/6k/001	FUEL LEAK OFF KIT	1	
070	AK/6H/HE/001	ELECTRIC FUEL LIFT PUMP (HEAT EXCHANGER COOLED 8mm HOSE TAILS)	1	
	AK/6H/KC/001	ELECTRIC FUEL LIFT PUMP (KEEL COOLED 8mm COMPRESSION)		
070	212-99254	1/8"BSPT MALE x 8mm HOSE TAIL	2	
	212-97117	1/8"BSPT MALE STUD x 8mm COMPRESSION		
080	AK/SML/3h/001	REMOTE OIL FILTER BULKHEAD MOUNT -MINI & 05 SERIES	1	
090	AK/SML/5a/002	SINGLE LEVER CONTROL	1	
100	212-96070/01	SINGLE LEVER CONTROL CABLE 3m	1	
110	200-96160	BATTERY LEADS 1m, 25mm 1 BLACK & 1 RED -UP TO Beta60 ONLY	1	

**Fuel / water separator**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/SML/6I/H01	FUEL / WATER SEPARATOR HEAT EXCHANGER COOLED (8mm HOSE TAILS)	1	NOT SHOWN
	AK/SML/6I/001	FUEL / WATER SEPARATOR KEEL COOLED (8mm COMPRESSION)		
020	212-02632	Seal kit for separator	1	
030	212-02631	Filter for separator	1	

**Short Voyage Spares Kits**



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/MINI/HE/18/E02	SHORT VOYAGE SPARES KIT (4K ALT) H/E (2011 SPEC 3 BOLT MANIFOLD FROM MARCH 2011)	1	

**PLEASE NOTE: THERE ARE TOO MANY COMBINATIONS OF SPARES KIT TO LIST,  
PLEASE ADVISE BETA MARINE OF YOUR ENGINES WOC (K) NUMBER OR SERIAL  
NUMBER AND WE SHALL ADVISE.  
PRICE OF THIS KIT WILL BE THE SAME AS ILLUSTRATED ABOVE.**

## **Cleaning the heat exchanger tube stack and replacing wasting zinc anode on 2011 Super Mini & Super5 Series engines**

1. The wasting zinc anode should be replaced every year. This can be more frequent depending on the environment the vessel is in. The anode is attached to the bolt inserted in the rear end cap of the heat exchanger. See fig. 1.
2. Using a 9/16" spanner, unscrew the bolt and replace the complete unit with a new one.
3. Check for leaks.
4. It is possible for fine sea weed and other debris to get past the inlet filter and into the tube stack. This requires removal of the tube stack for cleaning.
5. Drain off coolant into a bucket.
6. Unscrew the 6 end cap retaining bolts using a 5mm Hex Key (three each end of the tube stack). Remove the 'O' rings and slide out the tube stack. Clean tube stack and end caps.
7. Re-assemble using new 'O' rings, Beta Marine part number 212-07273. Do not over tighten end cap bolts



**Fig 1 Wasting anode**

and make sure the tube stack is the right way round -see aligning marks Fig 2. This is to ensure sea water flows correctly through the tubestack and not straight out of the exhaust, allowing sea water to flow from the lower twenty tubes to the front endcap where it then returns through the upper twenty tubes, past the wasting anode and into the exhaust system.

8. Re-fill engine with water/anti-freeze solution and run engine up to temperature to check for leaks.



**Fig 2 Aligning marks**

### **Part numbers:**

**2 OFF 212-07273 O RING HEAT EXCHANGER TUBESTACK**

**1 OFF 209-61840 ZINC WASTING ANODE**

**6 OFF 217-00190Z M6 x 16mm SOCKET CAP SCREW**

