

Illustrated Parts List



Genuine Spares

Spare Parts Listing

Heat Exchanger & Keel Cooled Beta 75 & Beta 90 (Naturally Aspirated)

Description		Part No	Qty per Engine
Heat exchange 'O' ring	Standard, all engines	209-00814	2
	3 rd for 2019 spec manifold only	209-11054	1
	Triple O ring kit, 2019 spec only	209-21737	1
Tube adaptor for 3 rd O ring, 2019 spec only		201-10963	1
Wasting zinc anode		209-61840	1
Exhaust elbow gasket (4 bolt)		600-98960	1
Exhaust elbow gasket (6 bolt) Non turbo 2019 spec manifold only		212-20438	1
Pressure cap		209-02323	1
60mm water injection bend elbow (from Oct '02)		202-02951	1
Thermostat –from October 2004		600-07489	1
Thermostat –to September 2004		600-00581	1
Thermostat gasket	(to September 2004)	600-00582	1
	(from October 2004)	600-04360	
Drive plate	SAE10 – PRM260	206-97010	1
	SAE10 – PRM500	206-04295	
	SAE10 – ZF25 / BW71C	206-00090	
Standard Kubota alternator		600-00632	1
Standard alternator Vee-belt – CHECK BEFORE ORDERING		214-94260	1
Iskra 95 Amp (upgraded) alternator (requires poly-vee drive)		200-01167	
95 Amp (upgraded) alternator Vee-belt 6PK CHECK BEFORE ORDERING		214-02142	
Fuel filter , Kubota plunger type	To 2008 (approx 115mm OAL)	211-02817	1
	From 2008 (approx 70mm OAL)	211-60210	
	Beta 90 from Oct'09 (approx 115mm	211-02817	
Oil filter		211-70510/02	1
Air cleaner element	To January 2004	211-96980	1
	To August 2009	211-04109	
	From September 2009	211-03819	
Sump drain pump		210-80061	1
Sump drain pump clamp		212-00793	2
Sea Water pump (Beta Marine type, Gear driven From November 2013)	Pump	207-01178/01	1
	Impeller	207-10709	1
	Cover plate O ring	207-10159	1
	End cover plate screw	207-09483	5

Spare Parts Listing

Heat Exchanger & Keel Cooled Beta 75 & Beta 90 (Naturally Aspirated)

Description		Part No	Qty per Engine
Sea Water pump (Jabsco Gear driven To October 2013)	Pump	207-01178	1
	Impeller (old ITT 207-98880)	207-10709	1
	gasket	207-01101	1
	end cover plate	207-01102	1
	end cover plate screw	207-01103	6
	service kit	207-01104	1
Sea Water pump (Johnson Belt driven)	Pump	207-97104	1
	Impeller	207-02132-KIT	1
	Impeller O ring (part of 207-02132-KIT)	207-10052	1
	Drivebelt	214-00182	1
	Driven pulley	212-97105	1
	Service kit (inc mechanical seal)	207-05268	1
	Rebuild kit (no impeller)	207-08602	1
Tubestack	Std to 2019	209-02846	1
	2019 Spec manifold only	209-10964	
Fuel lift pump		600-01466	1
Gasket, fuel lift pump		600-00065	1
Fuel stop solenoid	Energised to stop – to 2008	200-94370	1
	Energised to run – from 2008	600-00627	
	Energised to stop – from Oct'09	200-94370	
Control Panel standard Key (Silver)	To June 2008	600-00058	a pair
	From June 2008	600-00058/01	
Control Panel Key Switch	To June 2008	600-00057	a pair
	From June 2008	600-00057/01	
Control Panel Stop Button (and heat & start on ABVW)		200-00072	1
Tachometer 0-3000rpm with digital hour counter		200-02373/03	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 – all panels from June 2005		200-04655	1
Relay 12 Volt 40A (28Ra) fitted to rear of panels		200-87020	1
Fuse (Blade) 40 Amp		200-00959	1

Spare Parts Listing

Heat Exchanger & Keel Cooled Beta 75 & Beta 90 (Naturally Aspirated)

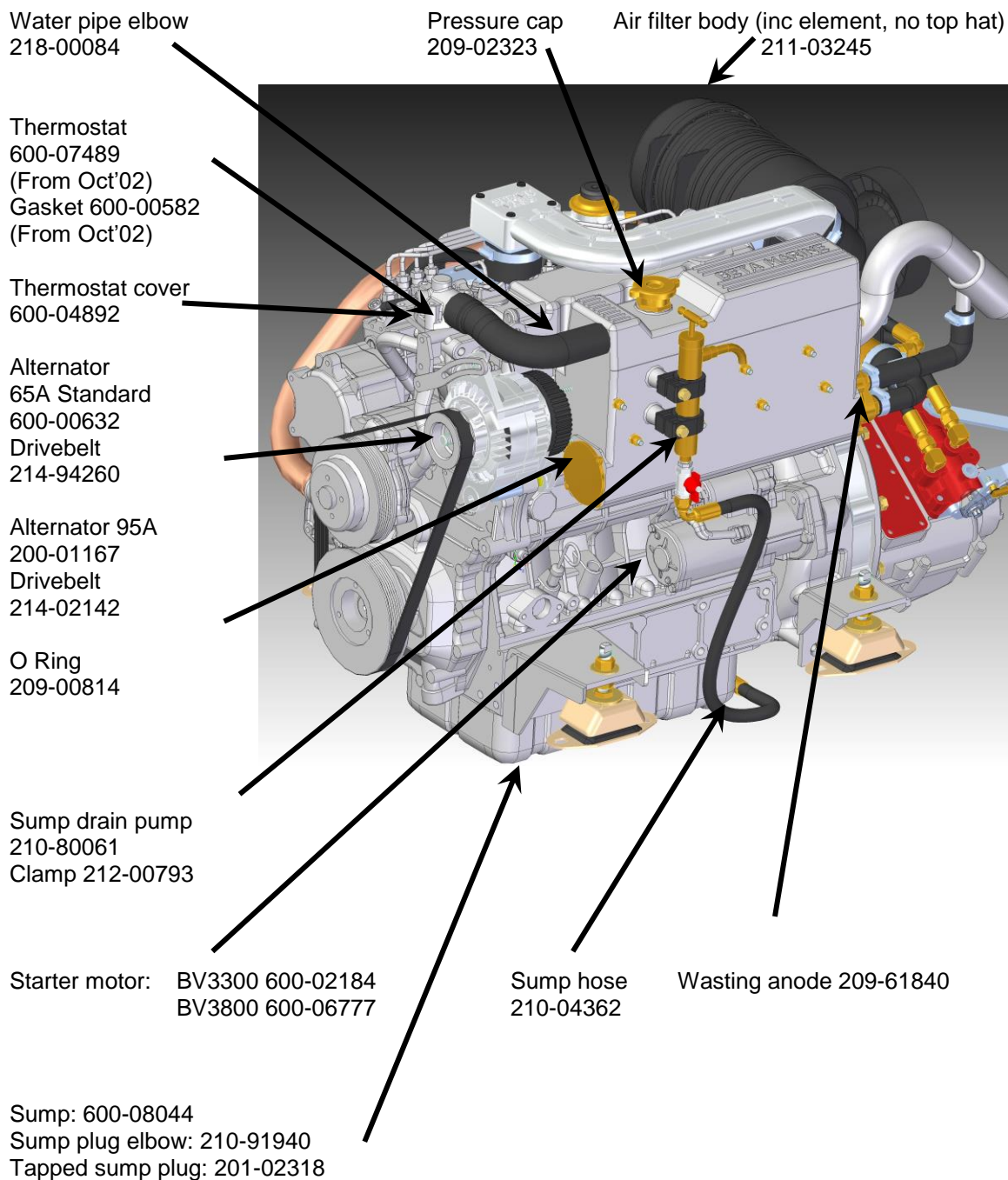
Description		Part No	Qty per Engine
Standard Engine Harness		200-08808	1
Water Temperature Switch (Panel A, ABV & ABVW)		600-62820	1
Water Temperature Sender 5/8UNF (Panel C & B)		200-94360	
Water Temp Sender 1/8 (Panel C & B) – <i>FROM APRIL 2011</i>		200-08248	
Water Temperature Switch (for insulated earth / gensets)		200-08830	
Oil Pressure Switch (Panel A, ABV, ABVW & B)		600-62670	1
Oil Pressure Sender (Panel C)		200-94350	
Oil Pressure Switch (for insulated earth / gensets)		200-61190	
Panel A - standard		AK/2AS/KS01	1
Panel AB with 0-3000rpm tachometer		AK/2ABD/KS31	
Panel ABV with 0-3000rpm tachometer		AK/2ABV/KS31	
Panel ABVW with 0-3000rpm tachometer		AK/2ABVW/KS31	
Panel B – with 0-3000rpm tachometer and gauge		AK/2BT/KS31	
Panel BW – with 0-3000rpm tachometer and gauge		AK/2BTW/KS31	
Panel C – with 0-3000rpm tachometer and three gauges		AK/2CD/KS31	
Panel CW – with 0-3000rpm tachometer and three gauges		AK/2CW/KS31	
Cylinder head gasket	Beta 75 (BV3300)	600-00253	1
	Beta 75 (BV3600)	600-07636	
	Beta 90 (BV3800)	600-08184	
Exhaust manifold gasket (engine to header tank)		600-00269	1
Top gasket set –(Beta 75 BV3300 only)		600-01099	1
Lower gasket set –(Beta 75 BV3300 only)		600-01100	1
Flexible mount –large 55 shore Metalastic type		213-96970/01	4
Flexible mount –large 65 shore Metalastic type		213-02646/02	4
Extended dipstick guide & stick kit (requires bending)		600-96330	1
Rocker cover gasket		600-00257	1
Manuals			
Operators Maintenance Manual		221-20031	1
Workshop Manual– base engine only	Beta 75	600-00759	1
	Beta 90	600-07082	
Spare Parts Manual – base engine only	Beta 75	600-00228	1 Available as a pdf
	Beta 90	600-07083	

Note: the above part numbers are suitable for earth return installations only (where the battery negative cable is connected directly to engine earth /ground). For insulated earth (where battery negative cable is isolated from engine earth /ground) different harnesses, alternators, switches for oil pressure and engine temperature will be required.

If your application is wired as insulated earth return and the engine will not operate correctly, always check starter battery negative is connected to the correct terminal on the isolating solenoid. It should be connected to the terminal which is also used for all the small black wires, **NOT the terminal with the single black wire connected directly to engine ground.**

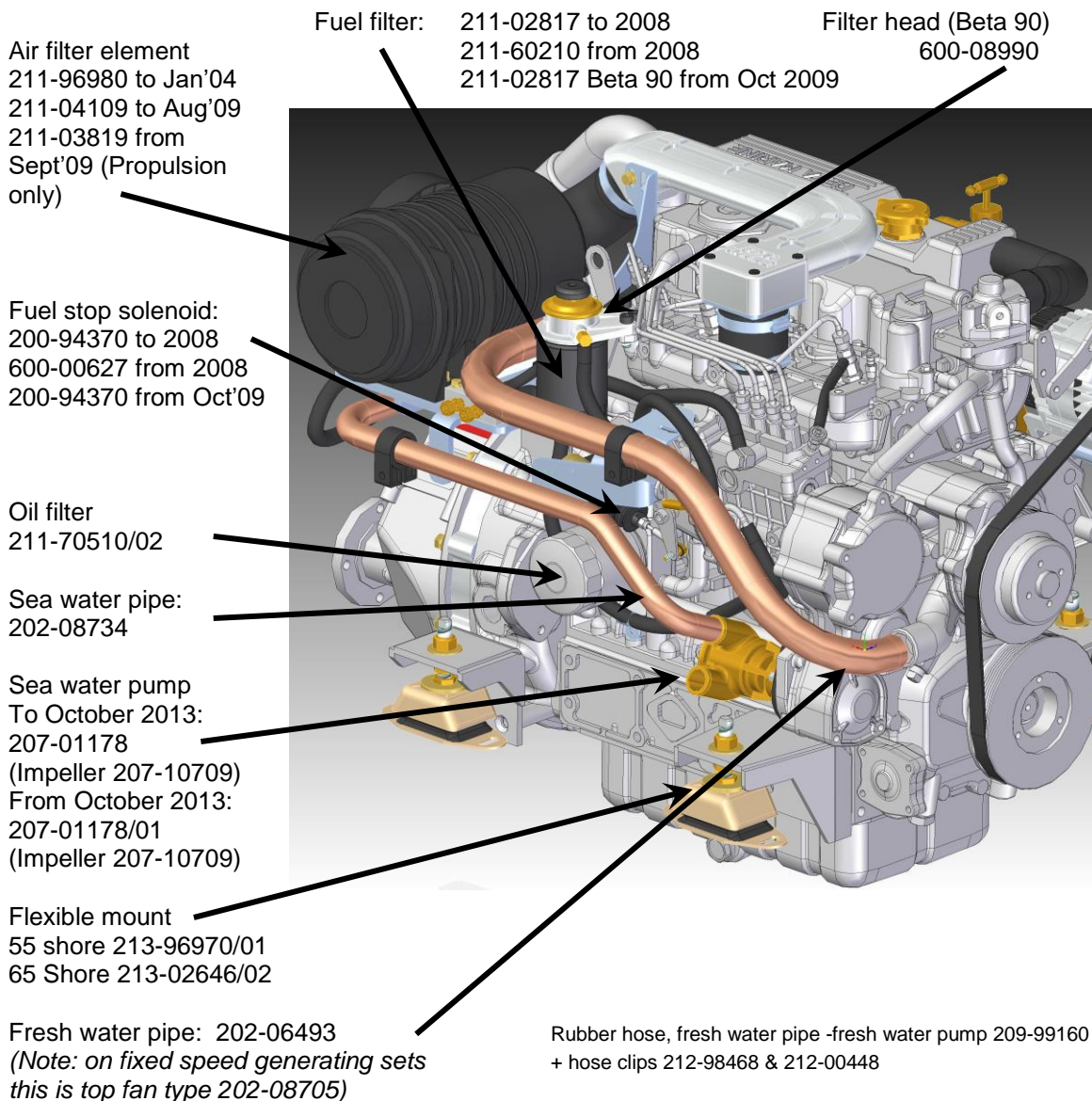
V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –PORT VIEW

HEAT EXCHANGER COOLED



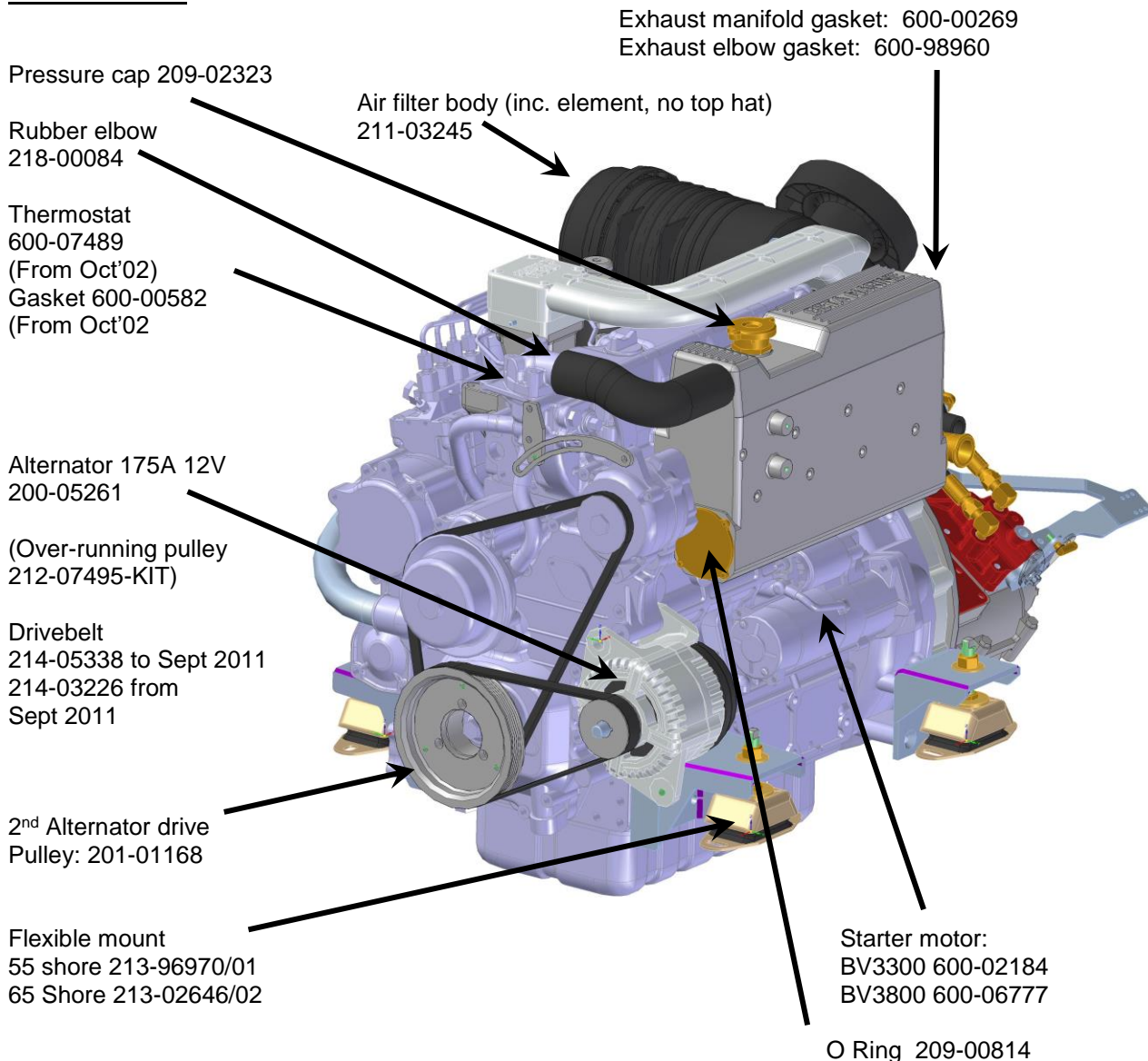
V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –STARBOARD VIEW

HEAT EXCHANGER COOLED



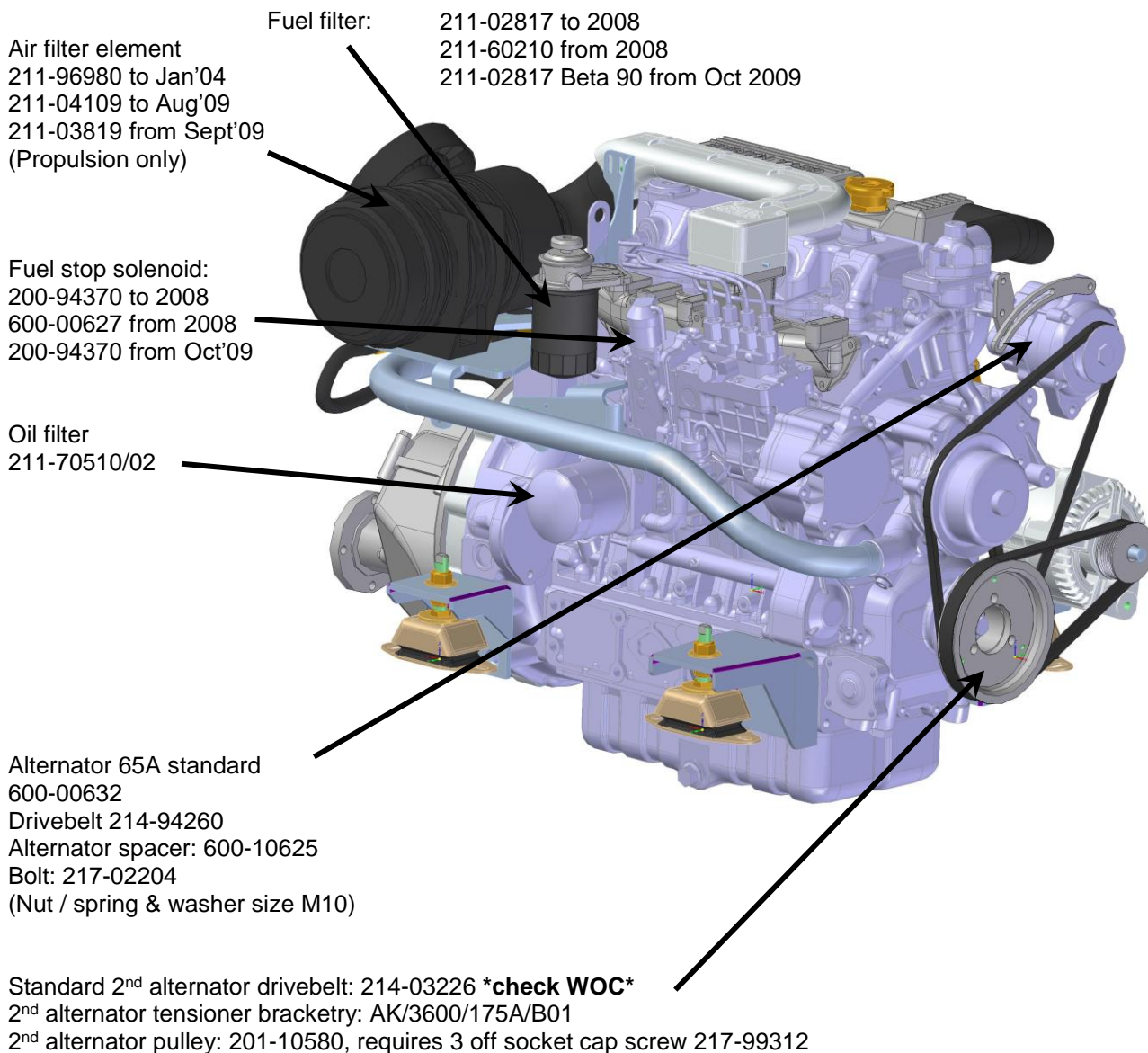
V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –PORT VIEW

KEEL COOLED



V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –STARBOARD VIEW

KEEL COOLED



V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –REAR VIEW (Note: old 2006 Spec BV3800 heat exchanger cooled shown)

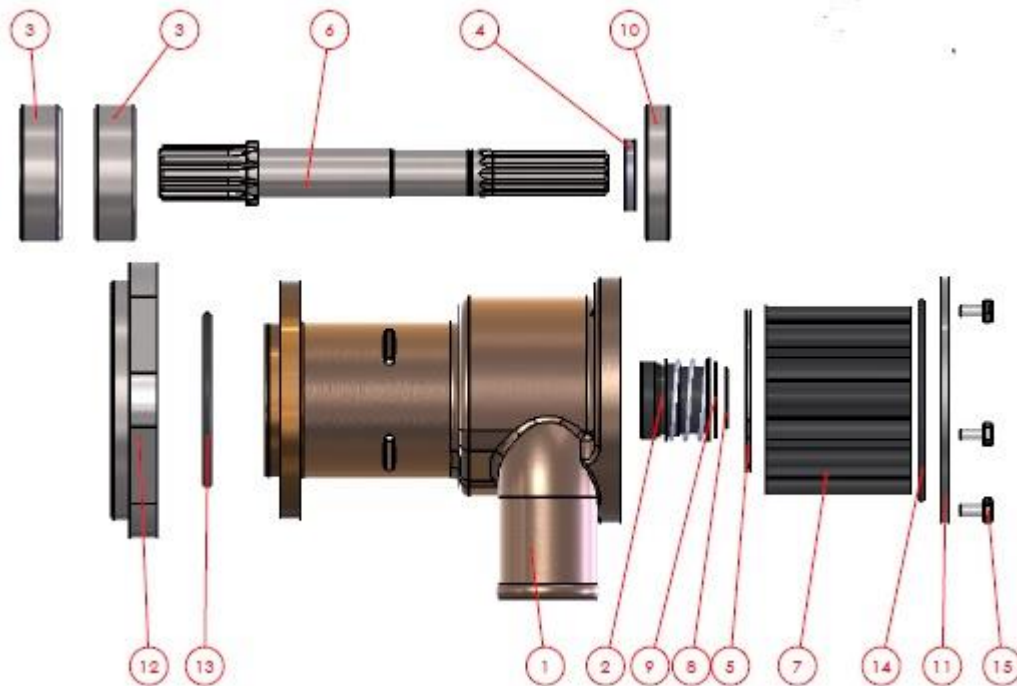
2 in 1 oil cooler: 210-80580
(Suits O ring 209-02006)

Air filter assembly: 202-05791
(Suits element: 211-04109)

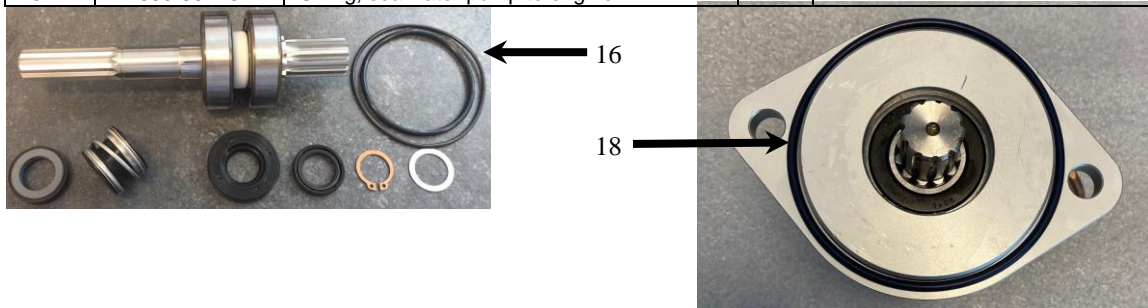


GEARBOX OPTIONS	GEARBOX P/No	DAMPER P/No	MORSE GEAR BRACKET P/No	ADAPTOR PLATE P/No	FLEXIBLE COUPLING
TM 345 R2	204-06130	206-00090	202-08721	205-00133	212-01248
TM 345 A R2	204-03053			205-07343/H33	
TM 93 R2	204-07342				
TM 93 A R2	204-08547				
PRM 280 D2	204-10398	206-97010	202-80560	205-80540	212-02699
PRM 280 D3	204-10436	206-04295		205-97020	
PRM 500 D2	254-94830				
PRM 500 D2.5	254-94834				
PRM 500 D3	254-94832	206-00090	202-05406	205-00133 & 205-85810	212-02409
ZF 25 H R2	204-98890			205-04910 & 205-85810	212-02699
ZF 25 H A R2	204-00743				
ZF 45 H R2	204-02360/02			205-04911 & 205-85810	PLEASE ASK
ZF 63 IV R2	204-07240				

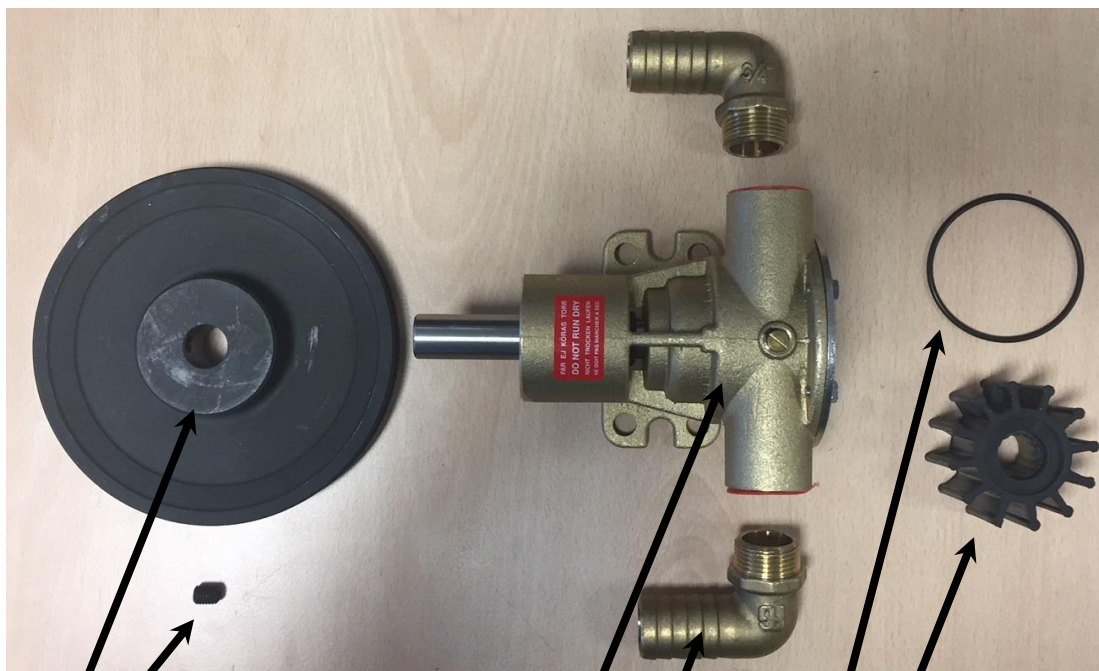
Heat exchange sea water pump Beta 75, Beta 90, Beta 90T, Beta 105T & Beta 115T
RFT type from November 2013, 11 tooth spline



Ref. No.	Part No.	Part Name	Qty	Remarks
01	207-01178/01	Sea water pump -complete	1	Has silver front clamp, item12
02	207-10505	Mechanical Seal 16mm	1	Also part of seal kit 207-10802
03	N/A	Sealed bearing	1	N/A -part of shaft kit 207-21458
04	N/A	Oil seal	1	N/A -part of shaft kit 207-21458
05	207-21032	Wear plate	1	
06	N/A	Shaft	1	N/A -part of shaft kit 207-21458
07	207-10709	Impeller	1	
08	N/A	External circlip	1	N/A -part of shaft kit 207-21458
09	N/A	Thrust washer	1	N/A -part of shaft kit 207-21458
10	N/A	Bearing spacer	1	
11	207-10799	Cover plate	1	
12	N/A	Front clamp	1	Part of item1 207-01178/01
13	N/A	O ring, front clamp	1	Part of item1 207-01178/01
14	207-10159	O ring, cover plate	1	Also part of shaft kit 207-21458
15	207-09483	End cover screw	5	
16	207-21458	Shaft kit to suit 207-0117/01 only	1	Includes 3, 4,6,8,9 & 14
17	207-10802	Seal kit	1	Includes 2, 8,9 & 14
18	600-00246	O ring, sea water pump to engine	1	



207-97104 BELT DRIVEN SEA WATER PUMP SPARES GUIDE



212-97105
PULLEY SPZ SECTION WITH GRUB SCREW

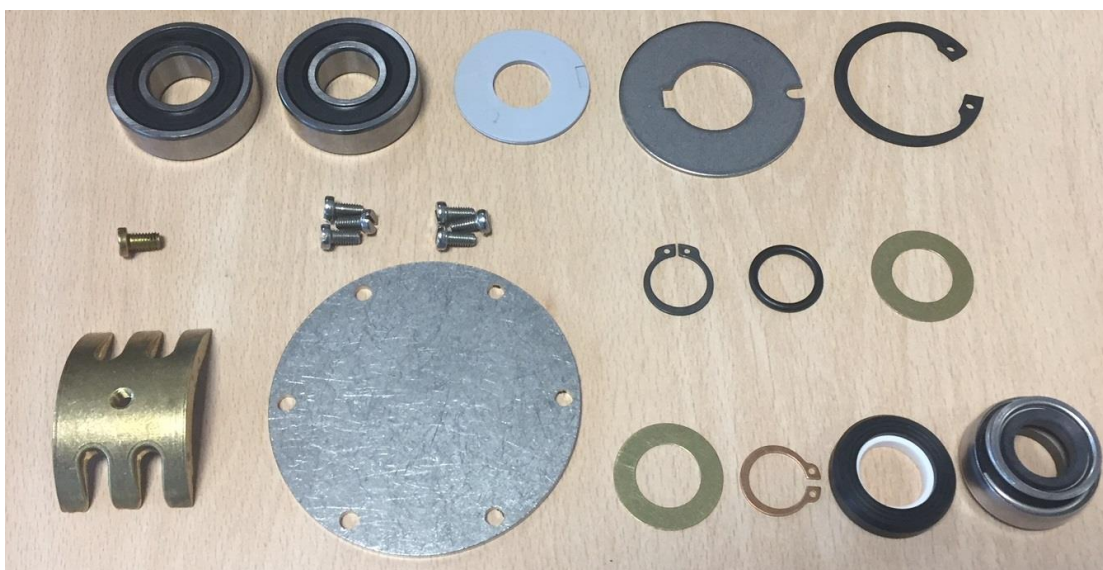
207-97104
BELT DRIVEN SEA WATER PUMP, 3/4BSP

212-99329
3/4BSP x 1" HOSE CONNECTOR ELBOW

207-02132-KIT
IMPELLER KIT TO SUIT BELT DRIVEN SEA WATER PUMP, INCLUDES O RING

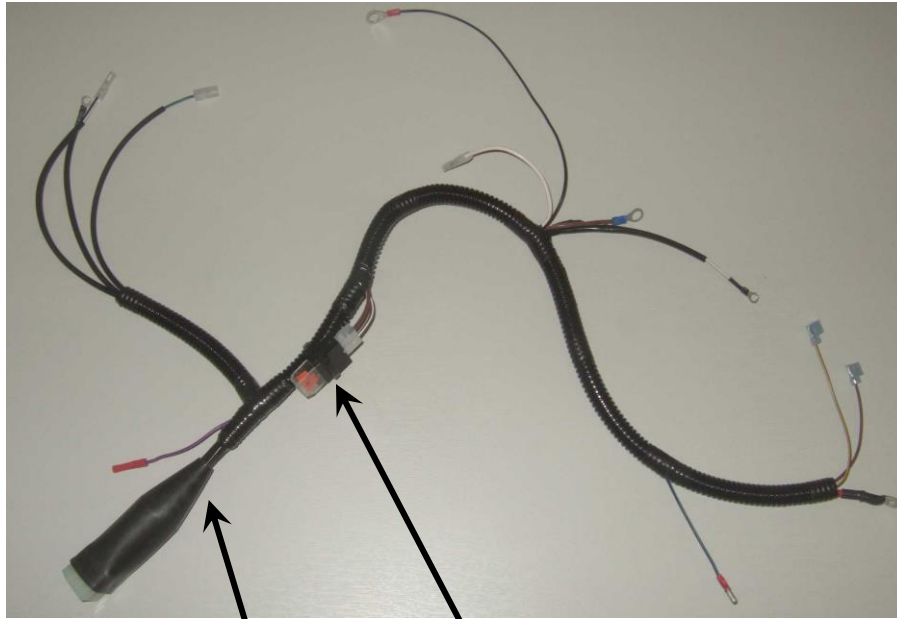
Additional service kit available Beta Ref 207-08602 including:

- 1 off Cam screw
- 1 off (207-06255) Cam
- 1 off Plate
- 1 off (207-06254) Cover plate
- 6 off Screw, cover plate
- 1 off O ring
- 2 off Bearing
- 1 off (207-06253) Wear plate
- 1 off Washer
- 1 off Mechanical seal
- 1 off Circlip
- 1 off Circlip



Complete kit, Beta reference 207-08602

Wiring harness & switches



010

020

Ref. No.	Part No.	Part Name	Qty	Remarks
010	200-08808	V3 Series standard propulsion engine harness with fuse & relay -From Jan'10	1	Includes fuse & relay
020	200-00959	Engine harness fuse (blade type)	1	
030	200-87020	12V 40A 28Ra Relay	1	
040	600-62670	Oil pressure switch (not 2C panel)	1	
050	600-62820	Water temperature switch (not 2C panel)	1	
060	200-01133	Water temperature switch / sender 95°C (Not 2C panel) 1/8BSP	1	
070	212-01480	3/8BSPT Male x1/8BSP Female galvanised adaptor for 200-01133	1	Required if temp sender being fitted into 3/8BSP thread
080	200-04588/01	1 metre extension harness	1	Not shown
090	200-04588/02	2 metre extension harness	1	Not shown
100	200-04588/03	3 metre extension harness	1	Not shown
110	200-04588/04	4 metre extension harness	1	Not shown
120	200-04588/05	5 metre extension harness	1	Not shown
130	200-04588/06	6 metre extension harness	1	Not shown
140	200-04588/08	8 metre extension harness	1	Not shown
150	200-04588/10	10 metre extension harness	1	Not shown
160	200-04588/15	15 metre extension harness	1	Not shown
170	AK/P/7j3/12V3/R00	Relay kit (for extension harnesses)	1	Not shown
180	200-10792/B	Flybridge Y harness	1	Not shown, additionally requires 170

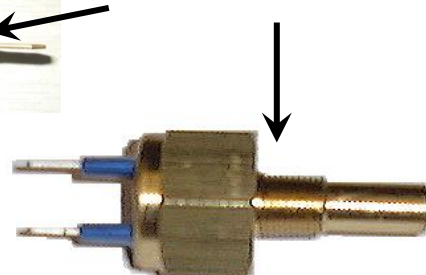
040



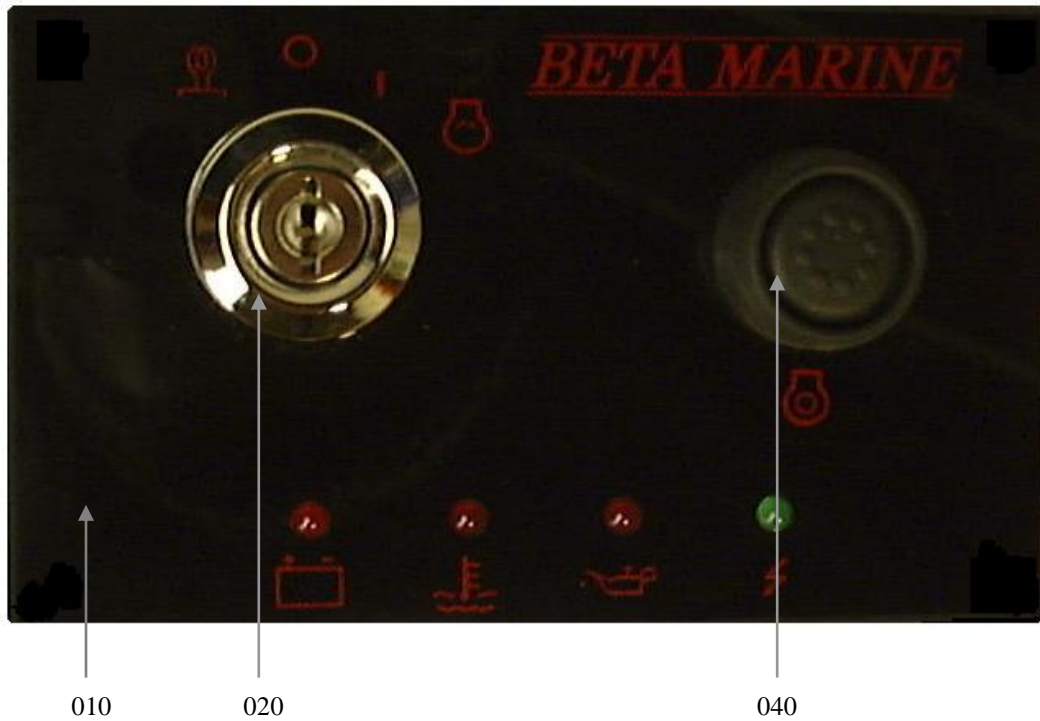
050



060



Simple 2A panel –LED type to May 2005



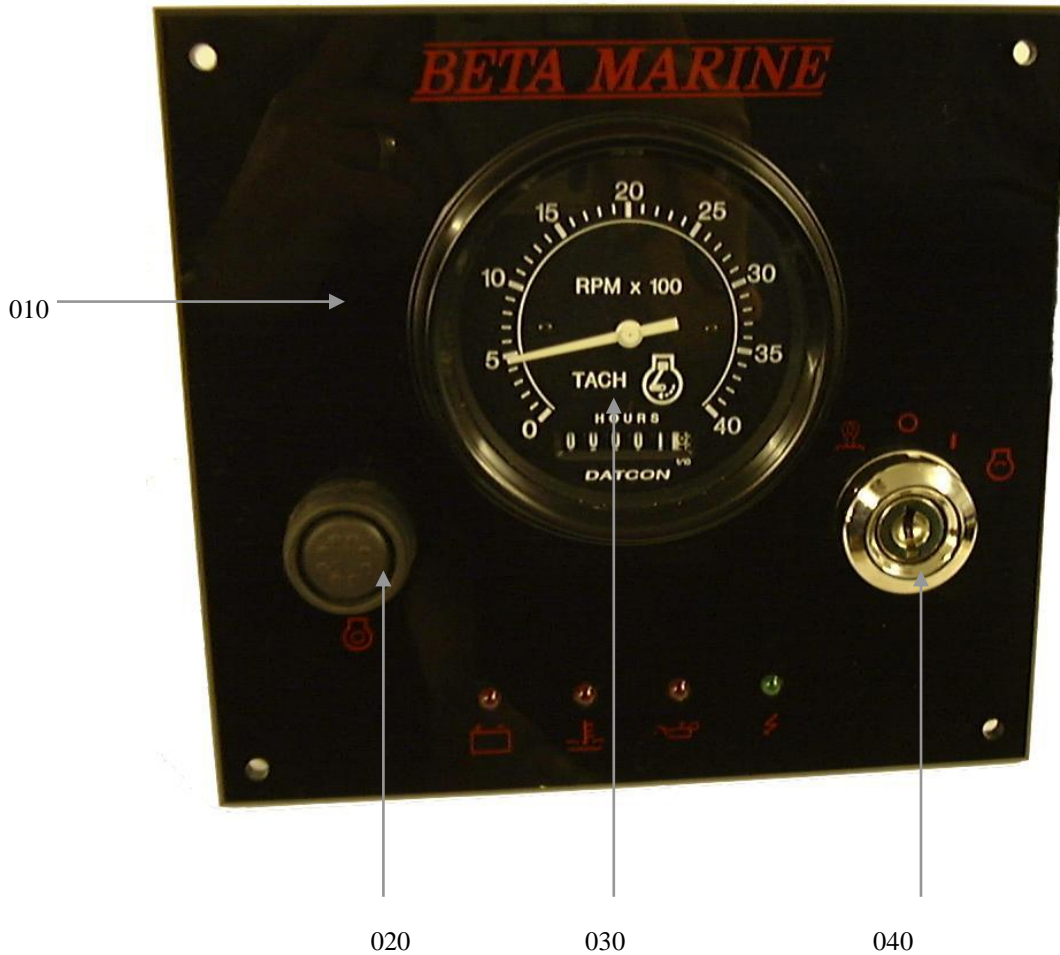
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	N/A	Simple panel (complete with LED pack)	1	No longer available, Use AK/2AS/KS01	N/A
020	600-00057	Kubota keyswitch	1		
030	600-00058	Kubota keys -PAIR	1	Not shown	
040	200-00072	Panel stop button	1		
050	200-01295	LED Pack assembly & buzzer (SEASPEC)	1	Not shown	
	200-01296	LED Pack assembly & buzzer (DOMESTIC)	1	Not shown	
060	200-01288	Panel blank 2A –LED SEASPEC	1	Check availability Does not include 050	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



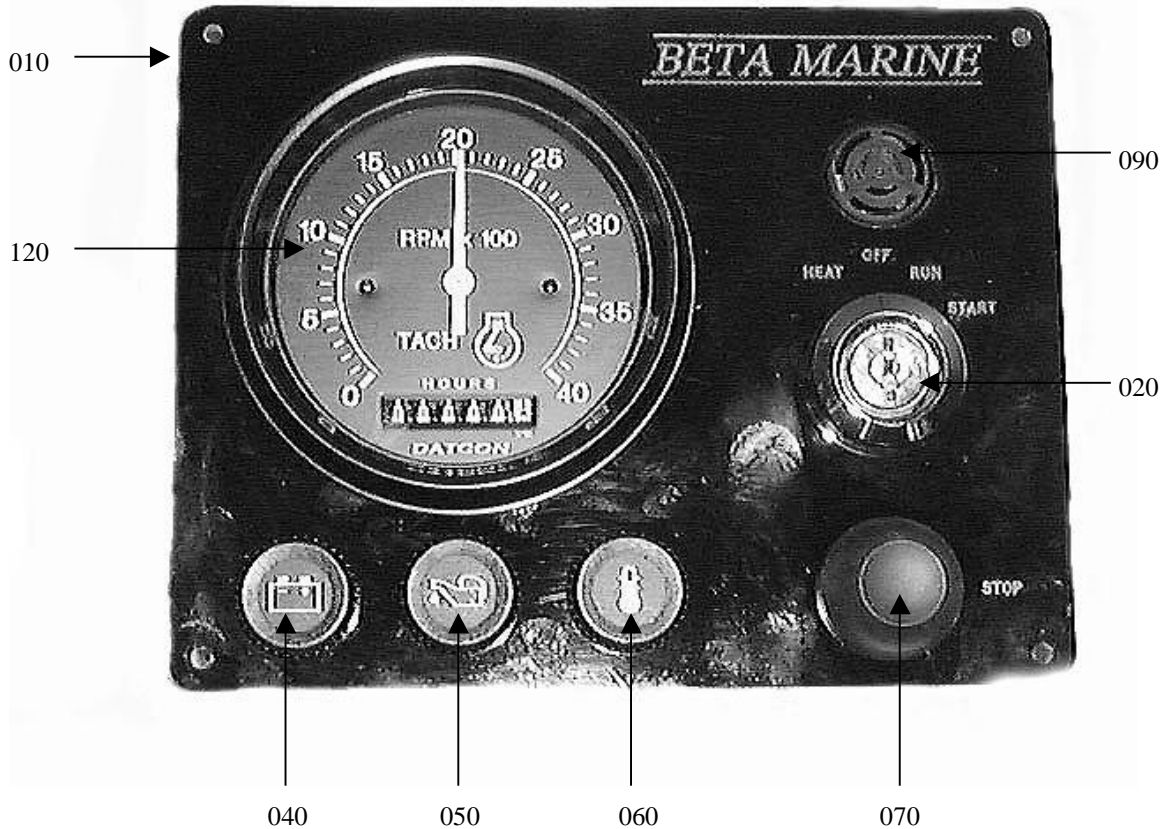
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00853	2AB panel (excludes tachometer –see 030)	1	No longer available, Use AK/2ABD/KS02	N/A
020	200-00072	Panel stop button	1		
030	200-00054	0-4000 RPM tachometer & hourmeter (DATCON)	1	To March 2002	
	200-02373	0-4000 RPM tachometer & hourmeter (VDO)	1	From March 2002, Viewline Jan2010	
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 – Check availability	
	200-01296	LED Pack assembly & buzzer (DOMESTIC)	1	Not shown – Check availability	
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 tach & hourmeter (VDO)	1	From March 2002, Viewline Jan2010	
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, Viewline Jan2010	
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



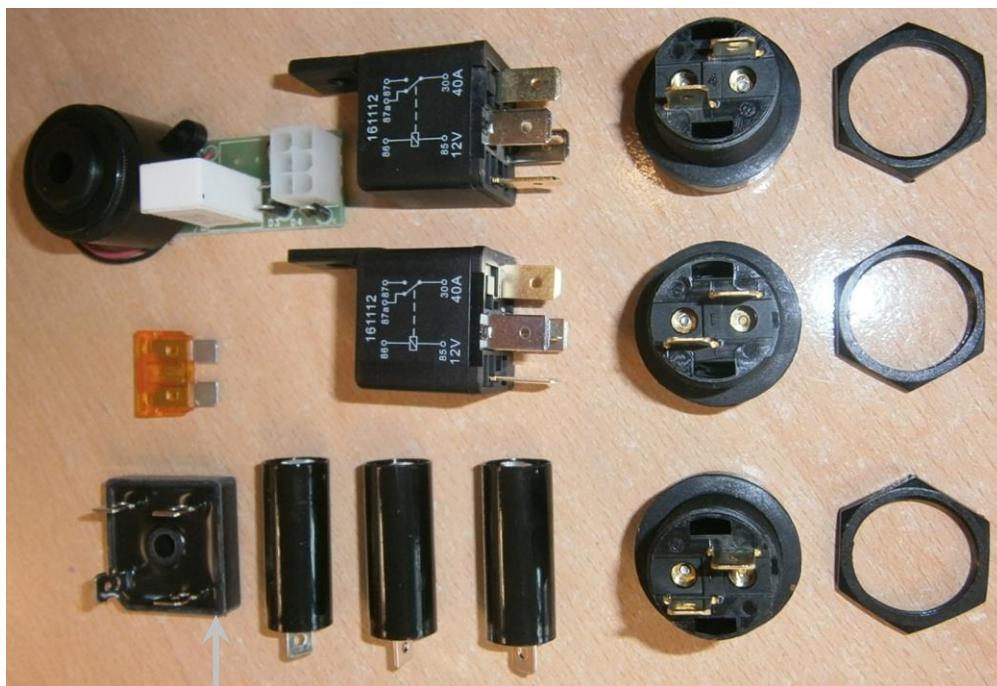
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/2ABV/KS01	2AB'V' panel with 3m loom (complete)	1		
020	600-00057	Kubota keyswitch –suits small key	1	To July 2008	
	600-00057/01	Kubota keyswitch –suits large key	1	From July 2008	
030	600-00058	Kubota keys –PAIR (SMALL)	1	To July 2008	
	600-00058/01	Kubota 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, Viewline Jan2010	
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, Viewline Jan2010	
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	

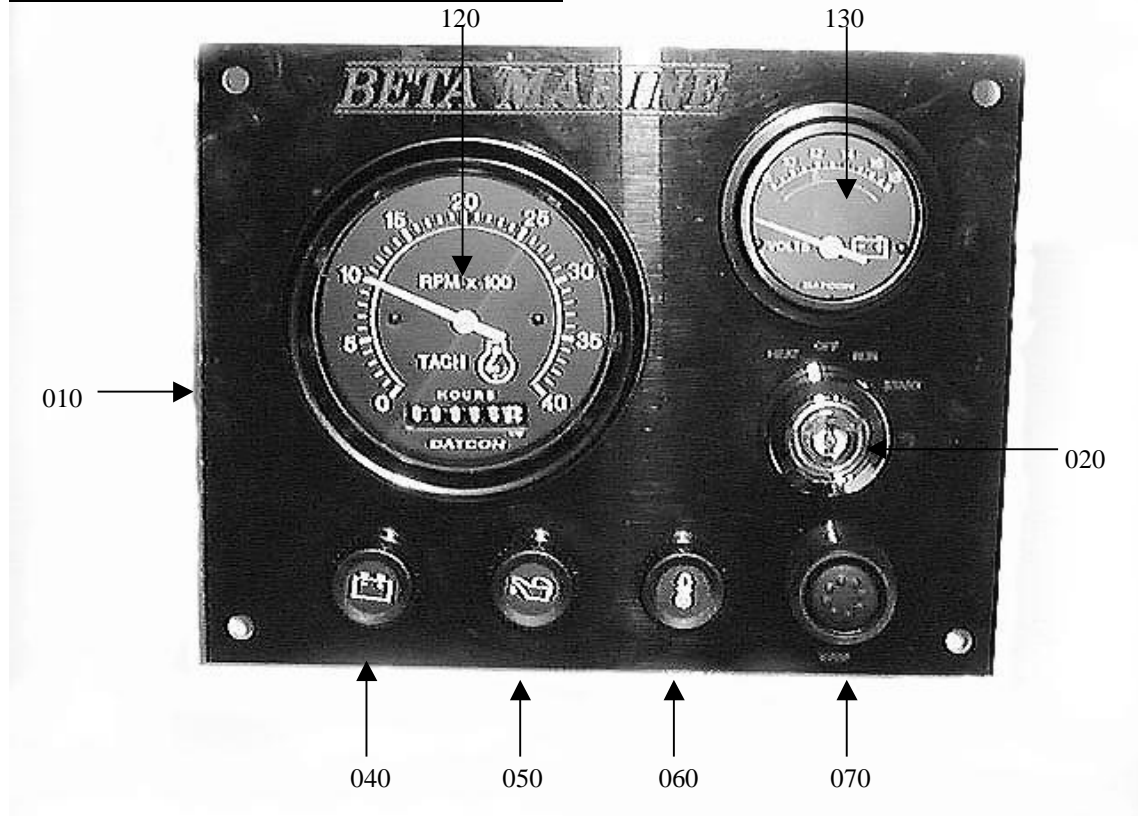
Service kit to suit 2AB'V'W pushbutton control panel



010

Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/2ABVW/RKS01	2AB'V'W panel service kit (complete)	1		

SFIA 2B panel –LAMP type to May 2005



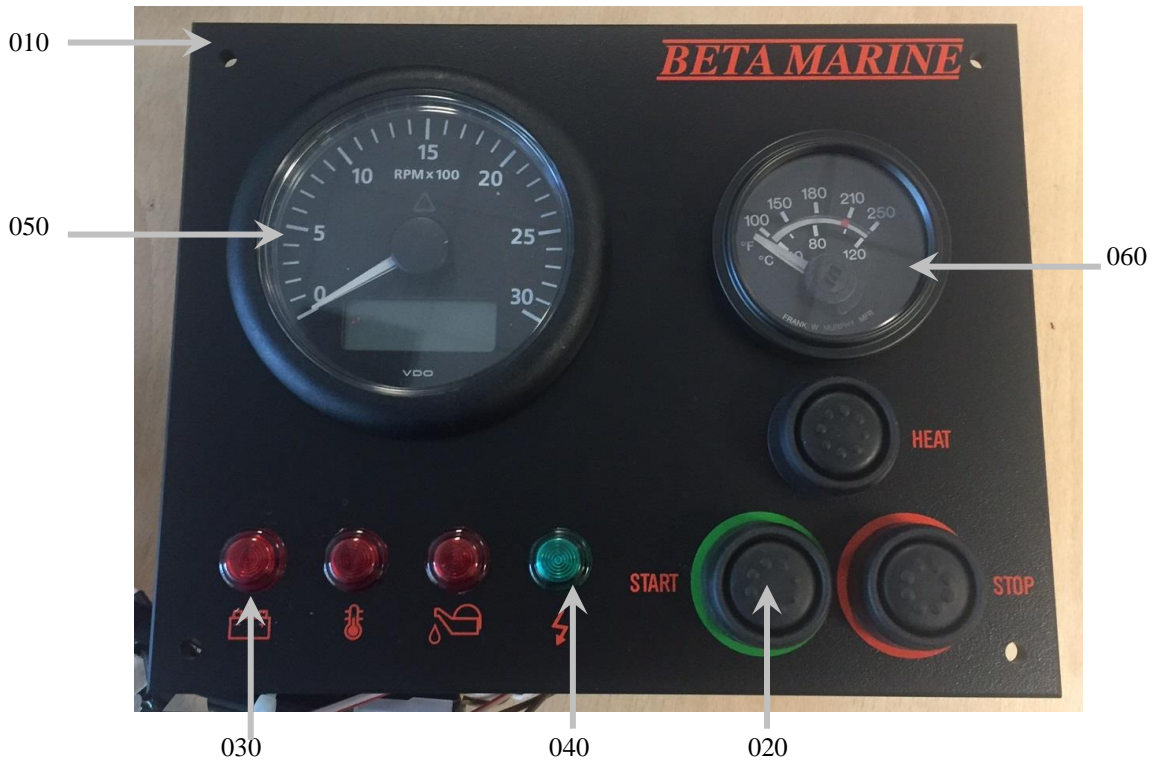
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-05408	SFIA 2B Panel –with temperature gauge From February 2003 (excludes tacho -see 120)	1	No longer available, Use AK/2BT/KS02	N/A
	200-60952	SFIA 2B Panel –with voltmeter To February 2003 (excludes tacho –see 120)	1	No longer available, Use AK/2BT/KS02	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, Viewline Jan2010	
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



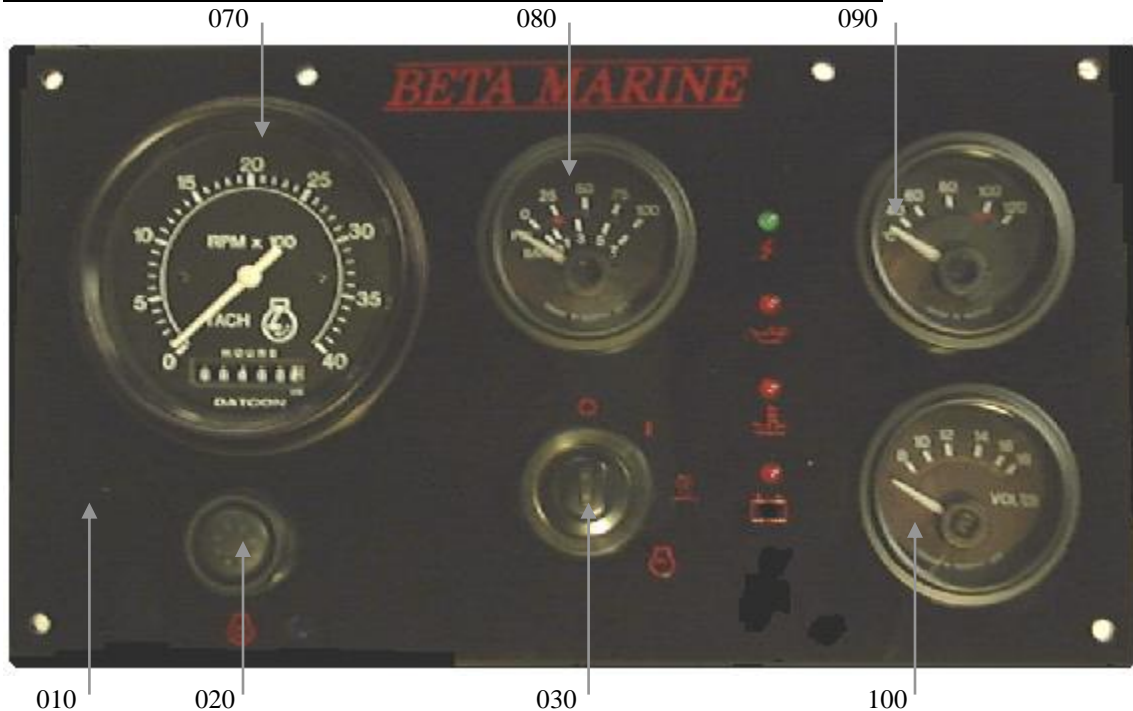
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/2BT/KS02	SFIA 2B Panel –with temperature gauge From May 2005 (complete)	1	With Murphy temp gauge	
020	600-00057	Kubota keyswitch –suits small key	1	To July 2008	
	600-00057/01	Kubota keyswitch –suits large key	1	From July 2008	
030	600-00058	Kubota keys –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 (VDO)	1	From March 2002, Viewline Jan2010	
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					

2BW pushbutton control panel –LAMP type from May 2005

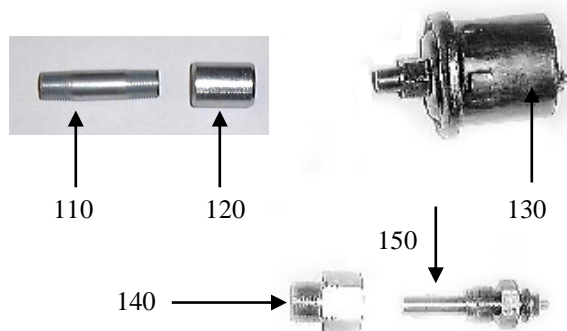


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/2BTW/KS01	2BW panel with 3m loom (complete)	1		
020	200-00072	Panel stop / start / heat button	3		
030	200-04657	Red 12V warning lamp & retaining clip	3		
040	200-04656	Green 12V power on lamp & retaining clip	1		
050	200-02373/03	0-3000 RPM tachometer (VDO)	1	Viewline from Jan2010	
060	200-96200	Murphy water temperature gauge	1		
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	
140	AK/2ABVW/RKS01	2AB'V'W panel service kit (complete)	1	See page 20	

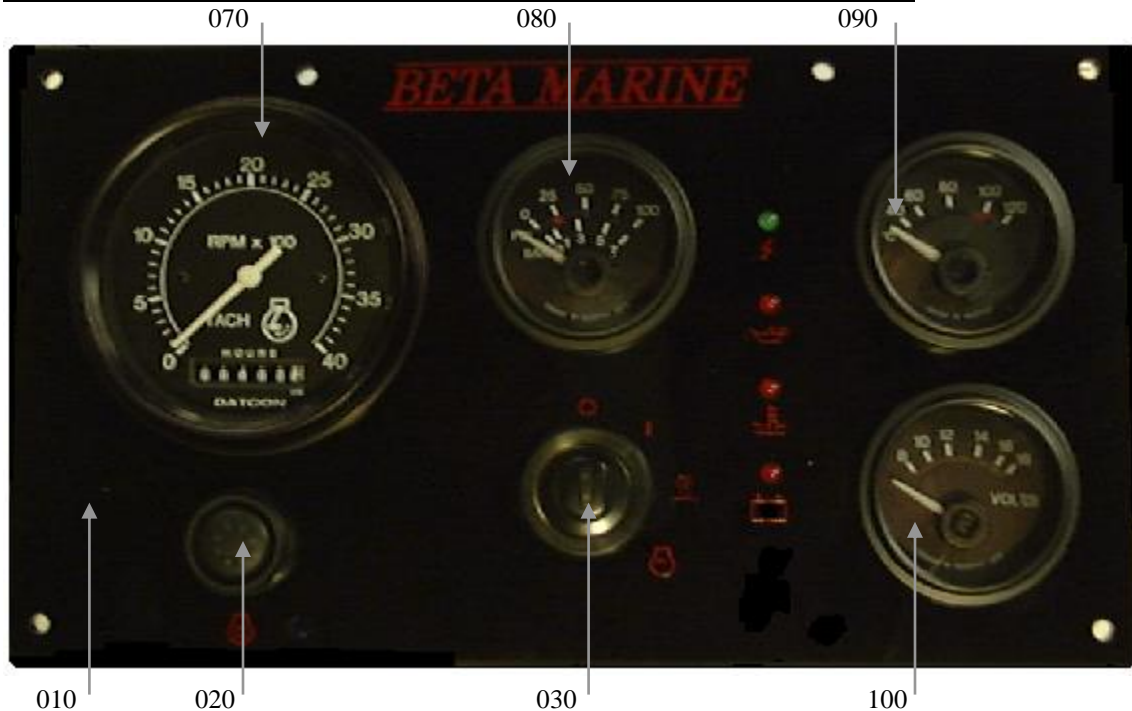
Murphy deluxe 2C panel & senders –Seaspec 4 Lamp-to May 2005



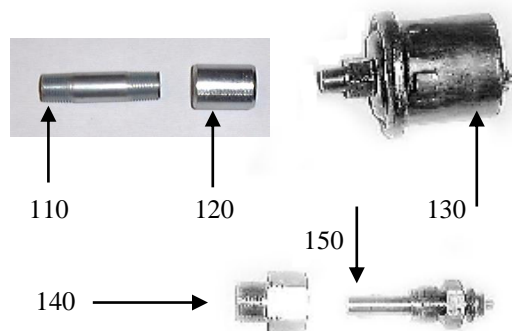
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00854	Murphy 2C deluxe panel –Seaspec 4 Lamp (Excludes gauges & loom –See 070, 080, 090, 100 & 160)	1	No longer available, Use AK/2CD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00073	Murphy panel keyswitch	1		
040	200-98965	Murphy deluxe panel single key	2	Not shown	
050	200-01295	LED Pack assembly & buzzer –Seaspec 4 Lamp	1	Not shown – Check availability	
060	200-01290	Murphy deluxe panel blank (Seaspec 4 Lamp)	1	Excludes LED pack	
070	200-00054	0-4000 RPM tachometer	1	To March 2002	
	200-02373	0-4000 RPM tachometer (VDO)	1	From March 2002, Viewline Jan2010	
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



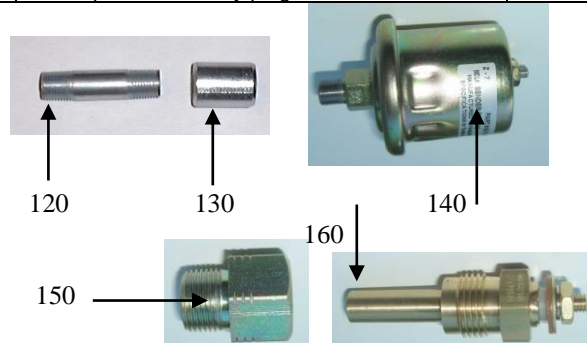
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00851	Murphy 2C deluxe panel –Domestic 5 Lamp (Excludes gauges & loom –See 070, 080, 090, 100 & 160)	1	No longer available, Use AK/2CD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00073	Murphy panel keyswitch	1		
040	200-98965	Murphy deluxe panel single key	2	Not shown	
050	200-01296	LED Pack assembly & buzzer –Domestic 5 Lamp	1	Not shown – Check availability	
060	200-01293	Murphy deluxe panel blank (Domestic 5 Lamp)	1	Excludes LED pack	
070	200-00054	0-4000 RPM tachometer	1	To March 2002	
	200-02373	0-4000 RPM tachometer (VDO)	1	From March 2002, Viewline Jan2010	
080	200-96190	Murphy oil pressure gauge	1		
090	200-96200	Murphy water temperature gauge	1		
100	200-96210	Murphy voltmeter gauge	1		
110	212-99397	1/8"BSP Galvanised barrel	1		
120	212-99396	1/8"BSP Galvanised socket	1		
130	200-94350	Murphy pressure sender	1		
140	200-91980	Water temperature sender adaptor	1		
150	200-94360	Murphy temperature sender	1		
160	200-93830	Murphy deluxe 3m connecting loom	1	Not shown	
170	200-00046	11 Way socket to suit female type spade	1	Not shown	
180	200-00181	Female spade for 11 way plug	11	Not shown	
190					



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



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/2CD/KS01	Murphy 2C deluxe panel –Domestic 5 Lamp (Complete, less 3m interconnection cable 170)	1		
020	200-00072	Panel stop button	1		
030	600-00057	Kubota keyswitch –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	
080	200-02373	0-4000 RPM tach & hourmeter (VDO)	1	From March 2002, Viewline Jan2010	
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	



2CW Push button control panel -sea spec 4 lamp, from May 2005



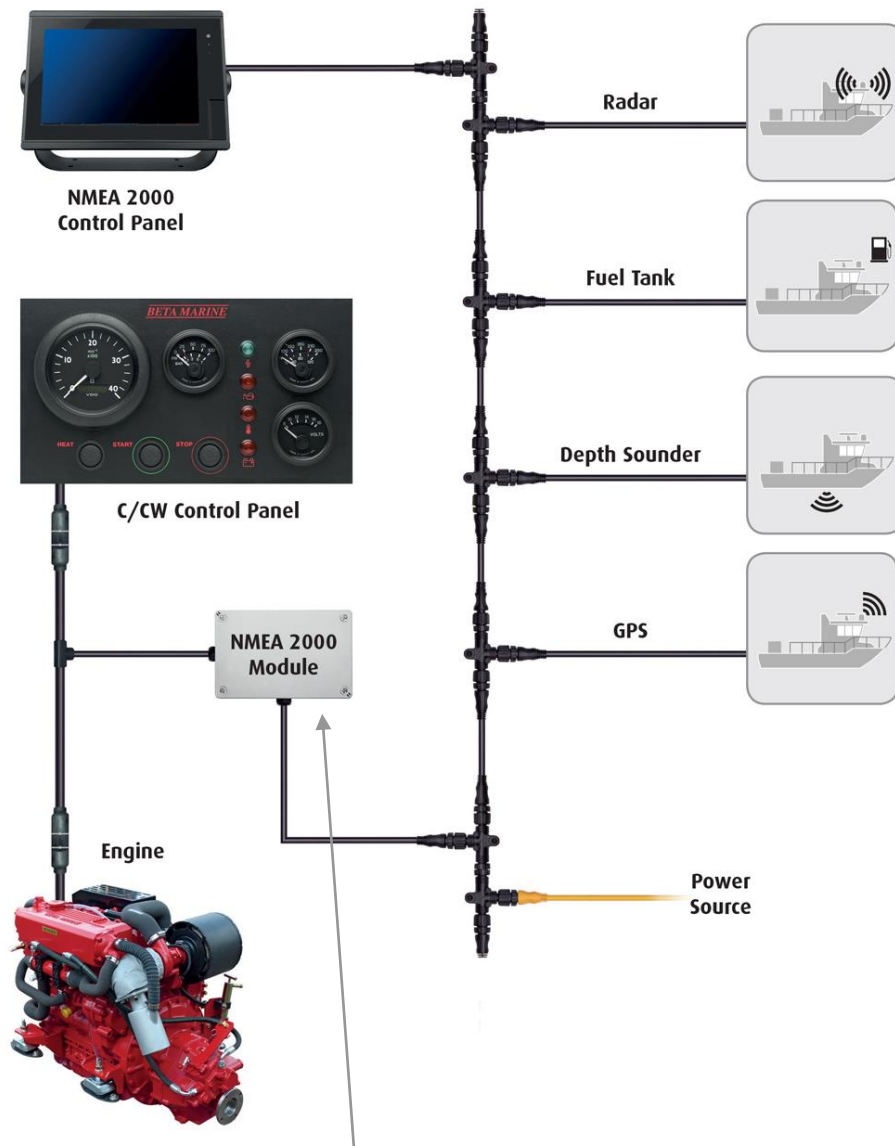
Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/2CW/KS01	2CW Push button control panel	1	Complete, less 3m connection cable 140
020	200-00072	Panel stop button	3	
030	200-04657	Red 12V warning lamp & retaining clip	3	
040	200-04656	Green 12V power on lamp & retaining clip	1	
050	200-01293P	2CW panel blank	1	
060	200-02373/03	0-3000 RPM tach & hourmeter (VDO)	1	From March 2002, Viewline Jan2010
070	200-96190	Murphy oil pressure gauge	1	
080	200-96200	Murphy water temperature gauge	1	
090	200-96210	Murphy voltmeter gauge	1	
100	212-04355	1/8"BSP MxF elbow	1	
110	200-94350	Murphy pressure sender	1	
120	200-91980	Water temperature sender adaptor	1	For spares you can use 1/8 sender 200-08248 & adaptor 212-01480
130	200-94360	Murphy temperature sender	1	
140	200-04588/03	3m extension harness	1	Not shown
150	200-00639	11 Way plug to suit male type spade	1	Not shown
160	200-00047	Male spade for 11 way plug	11	Not shown
170	200-10135	Diode pack to suit 2CW panel from Dec 2015	1	Not shown

2D Digital control panel



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/P/2D/KS01	2D Push button digital control panel	1	Complete, less 3m connection cable & senders -see below
020	200-09347	Illuminated rocker switch	1	
030	200-00072	Panel stop / start / heat button	3	
040	200-04588/03	3m extension harness	1	
050	212-04355	1/8"BSP MxF elbow	1	
060	200-94350	Murphy pressure sender	1	
070	200-91980	Water temperature sender adaptor	1	For spares you can use 1/8 sender 200-08248 & adaptor 212-01480
080	200-94360	Murphy temperature sender	1	

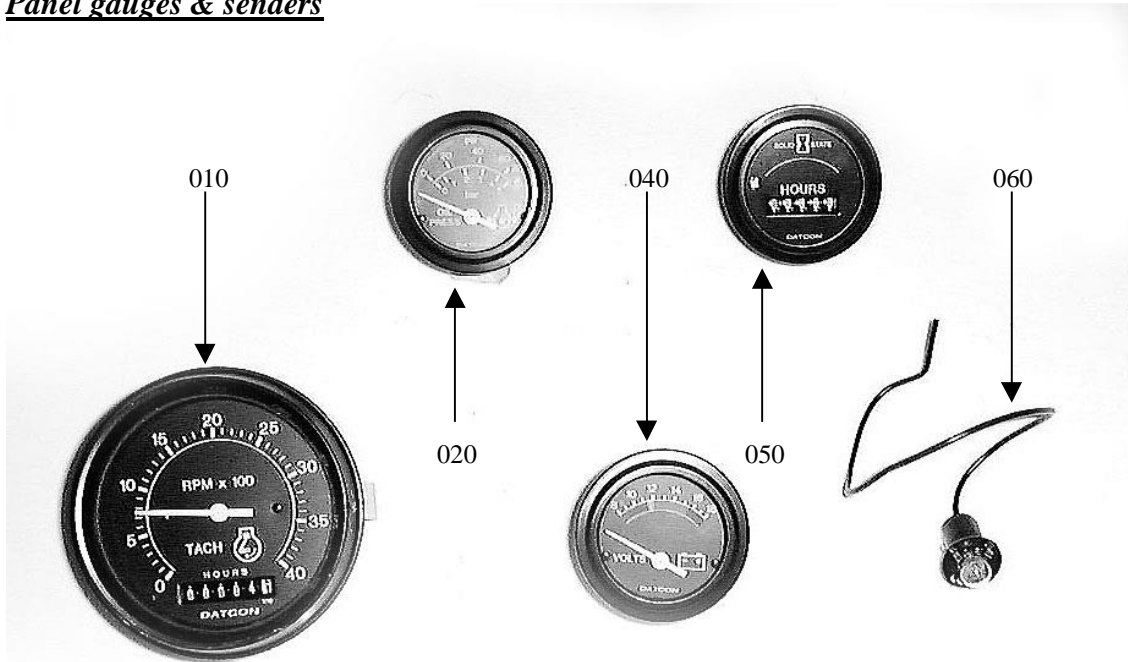
NMEA2000 Digital interface -for installations with deluxe control panel



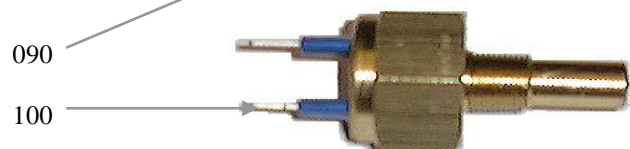
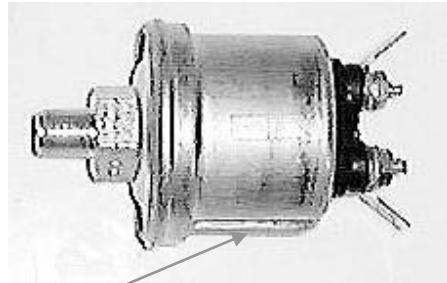
010

Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/P/2D/i01	NMEA2000 Add on for use with 2C panels TO DWG 200-10898	1	

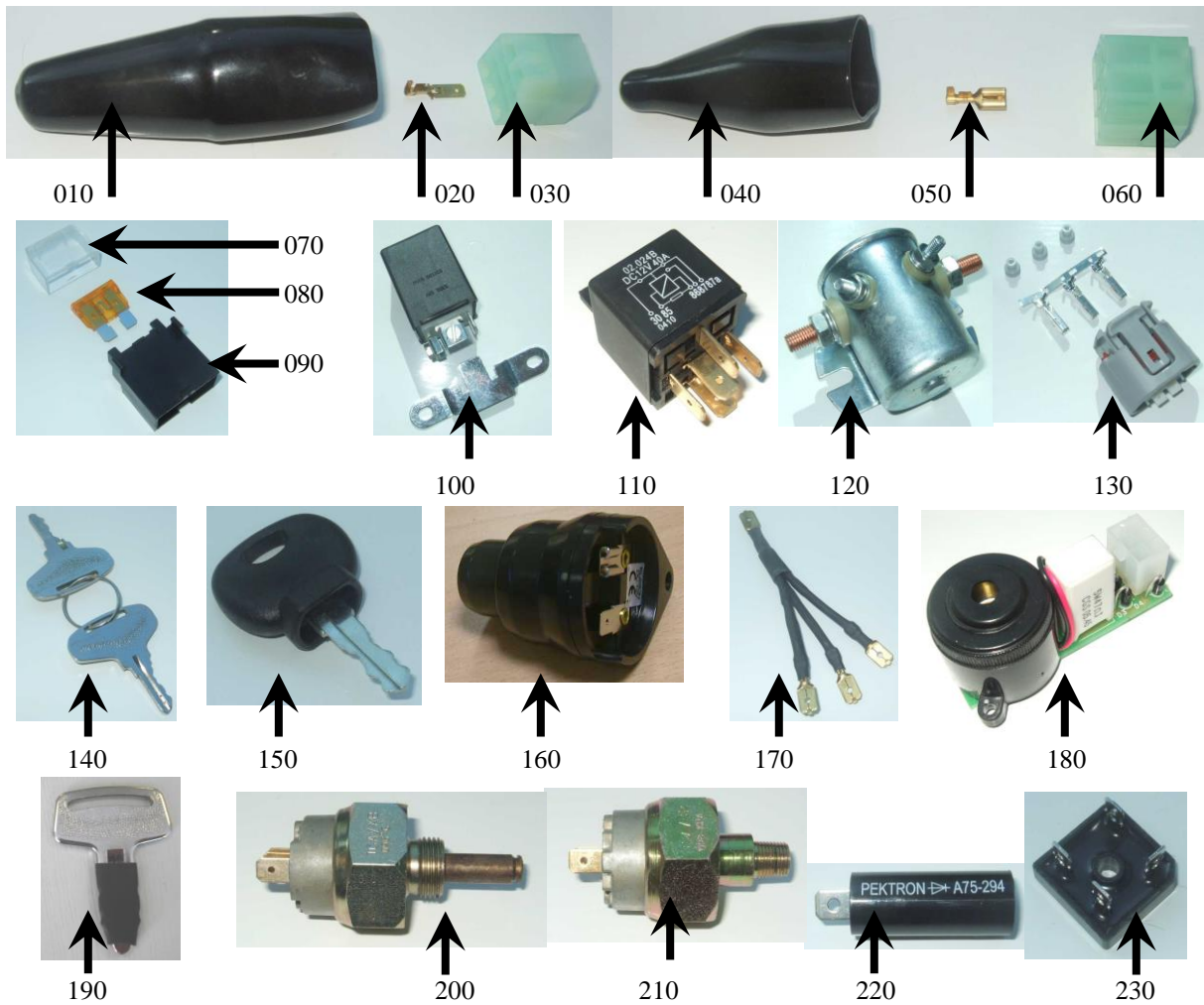
Panel gauges & senders



Ref. No.	Part No.	Part Name	Qty	Remarks
010	200-00054	0-4000 RPM tachometer (Datcon)	1	To March 2002
	200-02373	0-4000 RPM tachometer (VDO)	1	From March 2002, Viewline Jan2010
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	200-04805	Bulb, red for 12V VDO tachometer	2	Not shown
120	200-96220	Datcon tachometer bulb 12V	1	Not shown
130	200-07664	8 Pin connector –for Viewline gauges	1	Not shown –comes with gauge

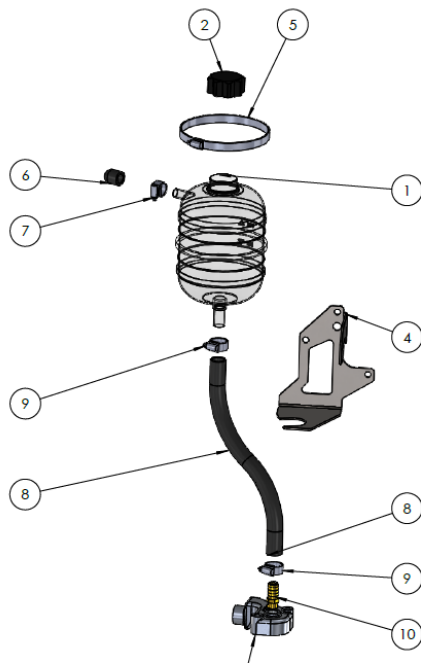


Various electrical & panel parts and components



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



ITEM NO.	PartNo	DESCRIPTION	QTY.
1	209-03065	EXPANSION TANK	1
2	209-03066	EXPANSION TANK CAP	1
4	202-21375	WATER BOTTLE BKT	1
5	262-04015	JUBILEE CLIP S/S 120mm - 140mm	1
6	212-07011	SILICON BUNG FOR EXPANSION TANK	1
7	212-06818	S/S JUBILEE 13-20MM SIZE 20	1
8	218-99247	3/4" (19mm) CAR HEATER HOSE	1
9	212-98464	S/S JUBILEE 22-30mm SIZE 30	2
10	210-03297	3/8BSPT x 3/4 HOSE TAIL GT17/19K	1

WHEN FILLING, FILL THE STANDARD FILLING POINT ON THE ENGINE FIRST AND REPLACE CAP. THEN FILL THROUGH THE EXPANSION BOTTLE

THE ENGINE FILLING CAP MUST BE STANDARD CAP P/N 209-80130 (PRESSURE 13PSI)

Ref. No.	Part No.	Part Name	Qty	Remarks
KIT	AK/SML/EXP/002	Expansion tank kit, complete	1	
(This kit consists of all items listed individually below)				
001	209-03065	Expansion tank	1	
002	209-03066	Expansion tank lid	1	
004	202-21375	Expansion tank mounting bracket	1	
005	262-04015	Stainless steel hose clip 120-140mm	1	
006	212-07011	Hose cap blanking bung	1	
007	212-06818	Stainless steel hose clip 13-20mm	1	
008	218-99247	3/4" Bore water hose	1m	
009	212-98464	Stainless steel hose clip 22-30mm	1	
010	210-03297	3/8BSPT x 3/4" hose tail	1	



Cleaning the heat exchanger tube stack and replacing wasting zinc anode on V3 Series -Pre2018 spec

1. The wasting zinc anode should be replaced every year. This can be more frequent depending on the environment the set is in. The anode is attached to the bolt inserted in the forward end cap of the heat exchanger. See fig. 2n.
2. 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 8 end cap retaining bolts using a 5mm Hex Key (four each end of the tube stack). Remove the 'O' rings and pull out tube stack. Clean tube stack and end caps.
7. Re-assemble using new 'O' rings. Do not over tighten end cap bolts and make sure the tube stack is the right way round -see aligning marks Fig 2o.
8. Make sure rear end-cap is refitted in the same orientation as originally to ensure sea water flows correctly through the tubestack and not straight out of the exhaust. See fig 2p
9. Re-fill engine with water/anti-freeze solution and run engine up to temperature to check for leaks.

Aligning marks

Fig 2o

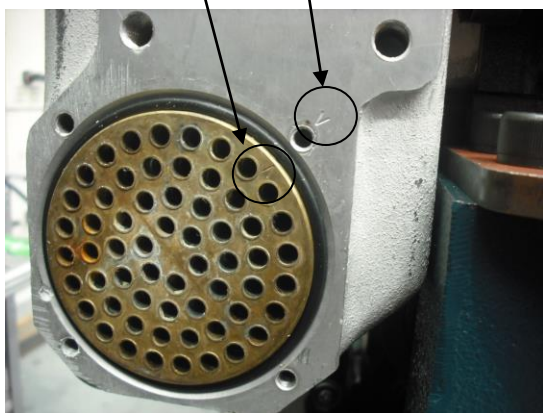


Fig 2p Rear end-cap orientation

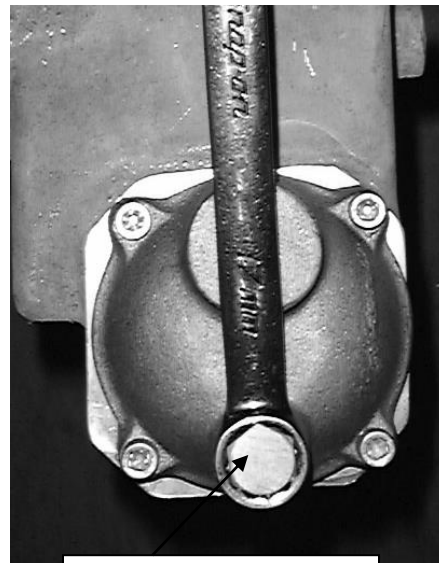
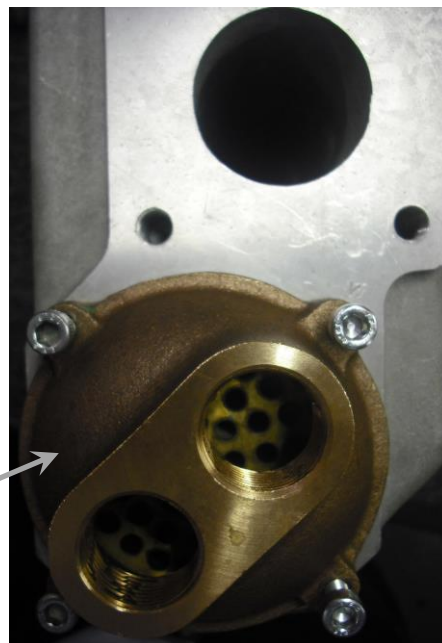


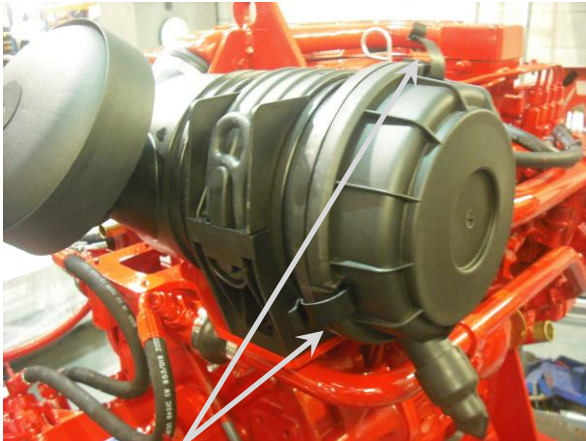
Fig 2n Wasting anode

Part numbers:

**209-00814 O RING V3 SERIES HEAT EXCHANGER
TUBESTACK**

209-61840 ZINC WASTING ANODE

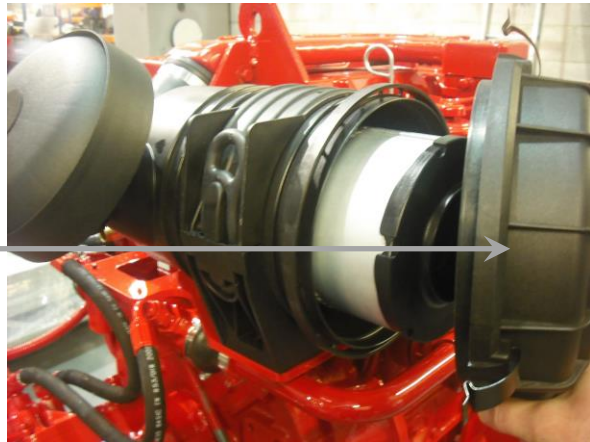
Checking and replacing the low level air filter element on V3 Series propulsion engines from September 2009



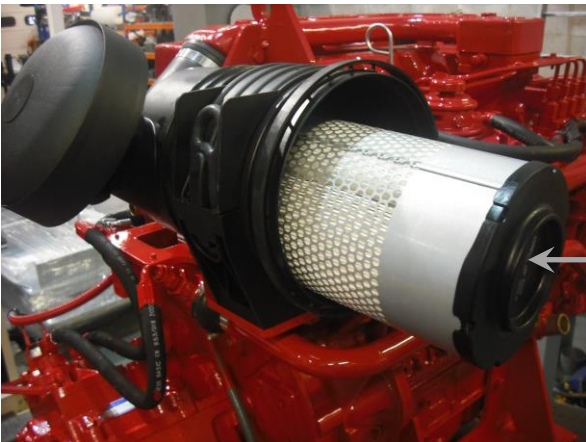
1. Release the three spring clips

2. Remove air filter housing end-cap

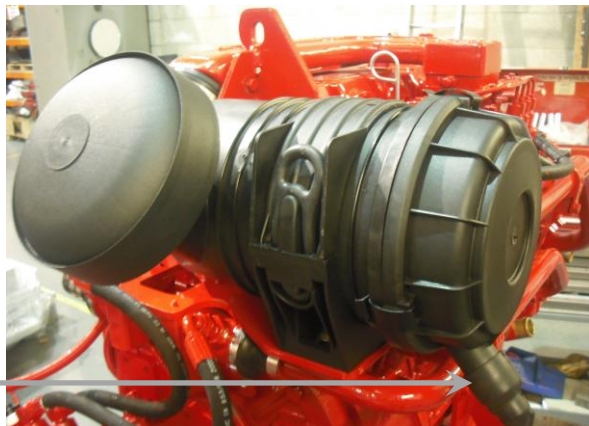
The variable sped engines are fitted with a low level air intake filter which should be checked every season (or every 250 hours if sooner) and changed every two years or sooner if badly clogged. Note if upon inspection it is noticed this element is badly clogged you should check more often.



3. Remove air filter element to inspect or replace



4. Rear end-cap orientation, with dump valve pointing down



Part numbers:

211-03819 V3 SERIES VARIABLE SPEED AIR FILTER ELEMENT

***PLEASE NOTE THE TOP MOUNTED AIR FILTER FITTED TO EARLIER MODELS
AND FIXED SPEED ENGINES HAS A DIFFERENT PART NUMBER***

Installation Kits



010 ↑



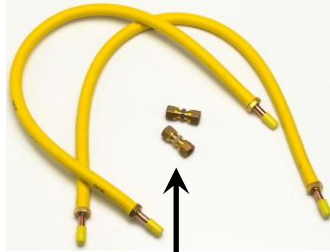
020 ↑



030 ↑



040 ↑



050 ↑



060 ↑



070 ↑



080 ↑



090 ↑



100 ↑



110 ↑



120 ↑

Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/MID/HE/6e/001	WATER INLET KIT -1 1/4" ID	1	
020	AK/B75/HE/6B/001	60mm WATER COOLED EXHAUST KIT -V3 NON TURBO	1	
	AK/B115/HE/6B/001	90mm WATER COOLED EXHAUST KIT -V3 TURBO ENGINES		
030	AK/B75/HE/6C/001	60mm PLASTIC WATERLOCK KIT -V3 NON TURBO	1	
	AK/B115/HE/6C/001	90mm PLASTIC WATERLOCK KIT -V3 TURBO ENGINES		
040	212-00466	ANTI-SYPHON WITH VENT	1	
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/SML/6l/H01	FUEL / WATER SEPARATOR HEAT EXCHANGER COOLED (8mm HOSE TAILS)	1	NOT SHOWN
	AK/SML/6l/001	FUEL / WATER SEPARATOR KEEL COOLED (8mm COMPRESSION)		
080	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)		
090	AK/MID/3h/001	REMOTE OIL FILTER KIT -Beta 75, Beta 90, Beta 105 & Beta 115	1	
	AK/B70/3h/001	REMOTE OIL FILTER KIT, BULKHEAD MOUNT -Beta 70		
	AK/B85/3h/001	REMOTE OIL FILTER KIT, BULKHEAD MOUNT -Beta 85		
100	AK/SML/5a/002	SINGLE LEVER CONTROL	1	
110	212-96070/01	SINGLE LEVER CONTROL CABLE 3m	1	
120	200-96160/V3/1.5	BATTERY LEADS 1.5m, 35mm 1 BLACK & 1 RED (V3 ONLY)	1	

Notes...

Notes...

Notes...

BETA MARINE

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

Ref: IPL-221-10914 REV-07 - 0420

Genuine Spares