



V3 Series Illustrated Parts List

Covering: 4 cylinder: Beta75 / Beta90

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Issue 001 March 2012

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

Spare Parts Listing

Heat Exchanger & Keel Cooled Beta 75, & Beta 90

Description		Part No	Qty per Engine
Heat exchange 'O' ring		209-00814	2
Wasting zinc anode		209-61840	1
Exhaust elbow gasket		600-98960	1
Pressure cap (Not USA)		209-80130	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 6PK1250/68385 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	
	Beta90 from Oct'09 (approx 115mm OAL)	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	pump	207-01178	1
	impellor	207-98880	1
	gasket	207-01101	1
	end cover plate	207-01102	1
	end cover plate screw	207-01103	6
	service kit	207-01104	1

Heat Exchanger & Keel Cooled Beta 75, & Beta 90

Description		Part No	Qty per Engine
Tubestack		209-02846	1
Fuel lift pump		600-01466	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
Standard Engine Harness		200-08808	1
Water Temperature Switch (Panel A, ABV & ABVW)		200-01133	1
Water Temperature Sender 5/8UNF (Panel C & B)		200-94360	
Water Temperature Sender 1/8NPT (Panel C & B) – FROM APRIL 2011		200-08248	
Oil Pressure Switch (Panel A, ABV & ABVW)		600-62670	1
Oil Pressure Sender (Panel C & B)		200-94350	

Description		Part No	Qty per Engine
Cylinder head gasket	Beta75 (BV3300)	600-00253	1
	Beta75 (BV3600)	600-07636	
	Beta90 (BV3800)	600-08184	
Top gasket set –(Beta75 BV3300 only)		600-01099	1
Lower gasket set –(Beta75 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		221-06346	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

Pressure cap 209-80130

Thermostat
600-07489
(From Oct'02)
Gasket 600-00582
(From Oct'02)

Alternator
65A Standard
600-00632
Drivebelt
214-94260

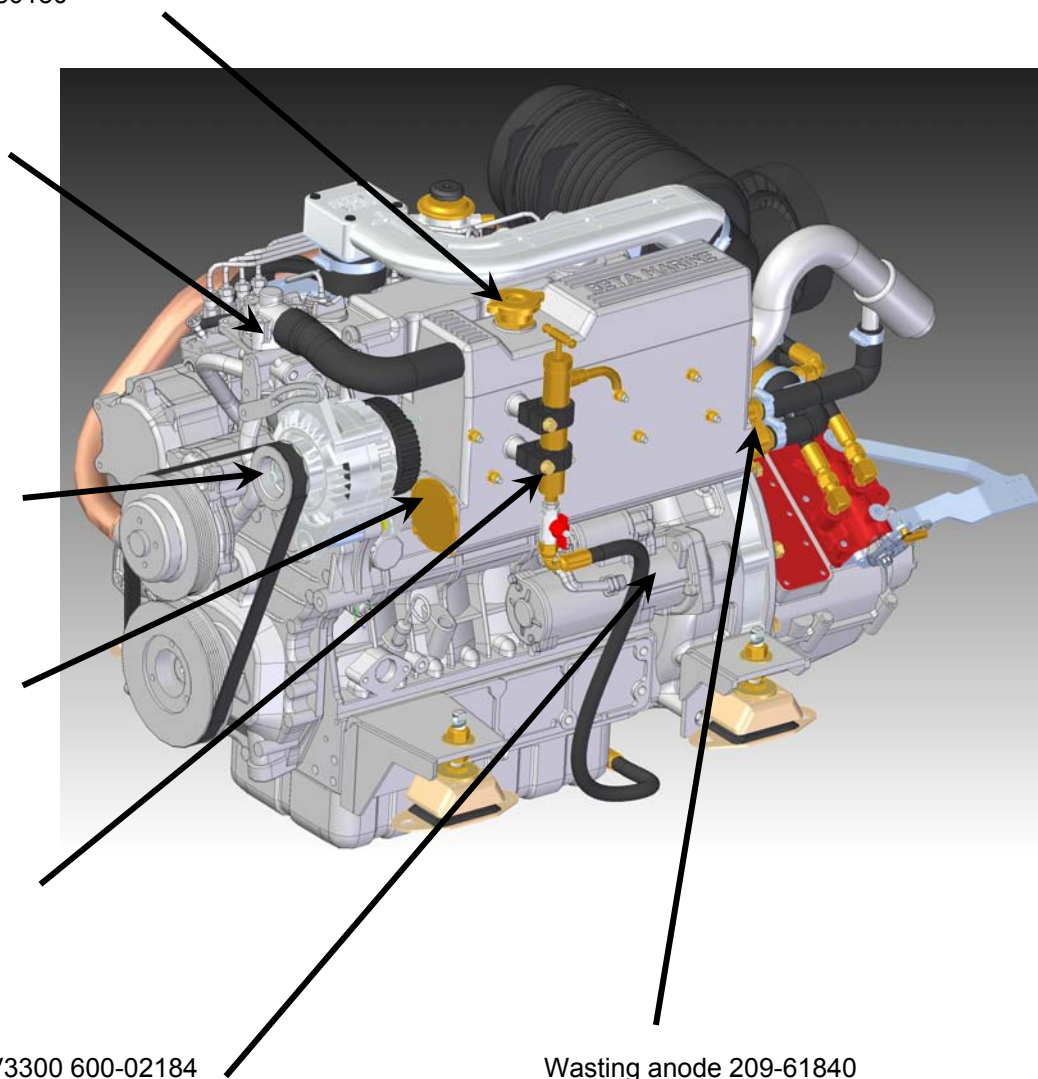
Alternator 95A
200-01167
Drivebelt
214-02142

O Ring
209-00814

Sump drain pump
210-80490
Clamp 212-00793

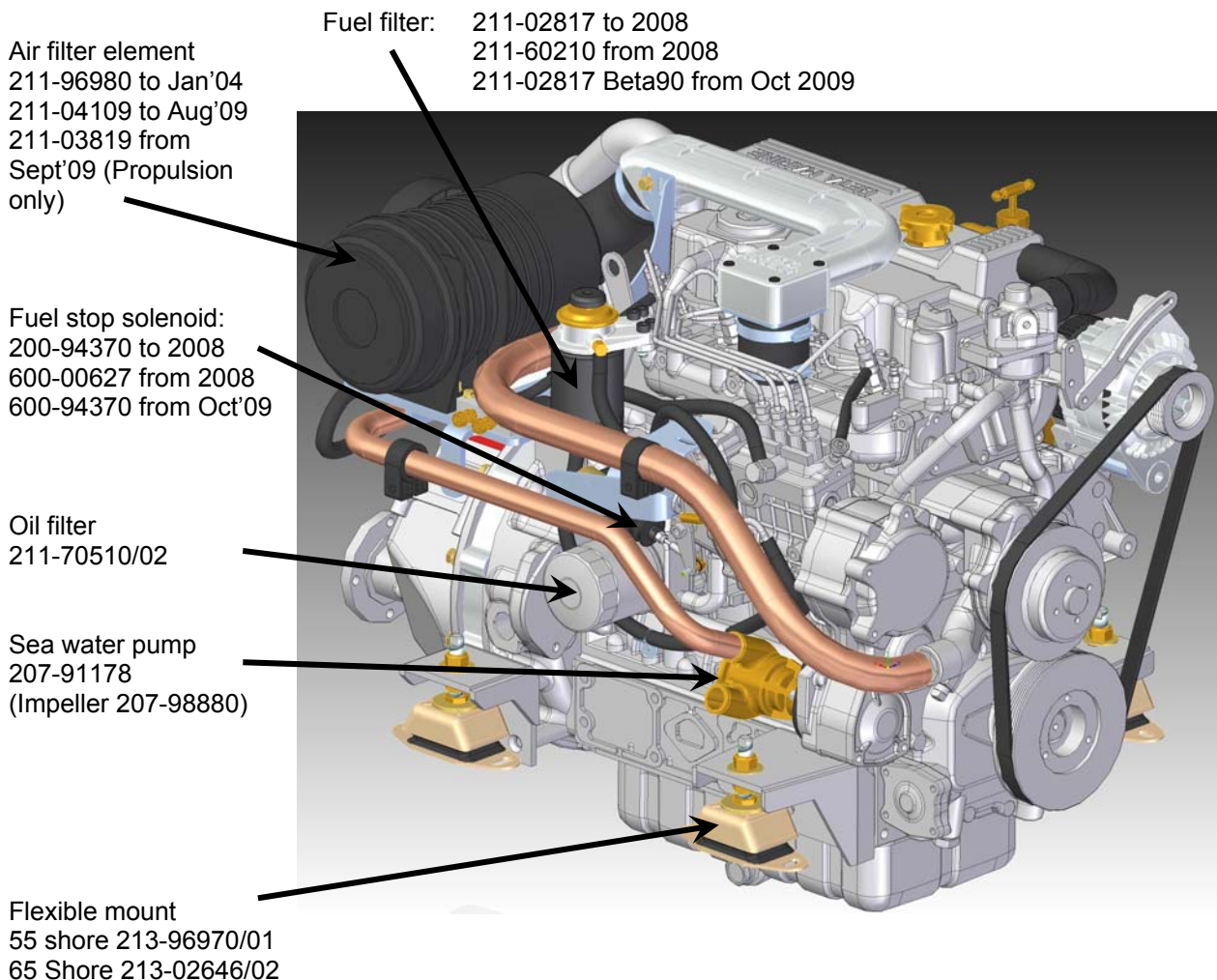
Starter motor: BV3300 600-02184
BV3800 600-06971

Wasting anode 209-61840



V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –STARBOARD VIEW

HEAT EXCHANGER COOLED



V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –PORT VIEW

KEEL COOLED

Pressure cap 209-80130

Thermostat
600-07489
(From Oct'02)
Gasket 600-00582
(From Oct'02)

Alternator 175A 12V
200-05261

(Over-running pulley
212-07495)

Drivebelt
214-05338 to Sept 2011
214-03226 from
Sept 2011

2nd Alternator drive
Pulley: 201-01168

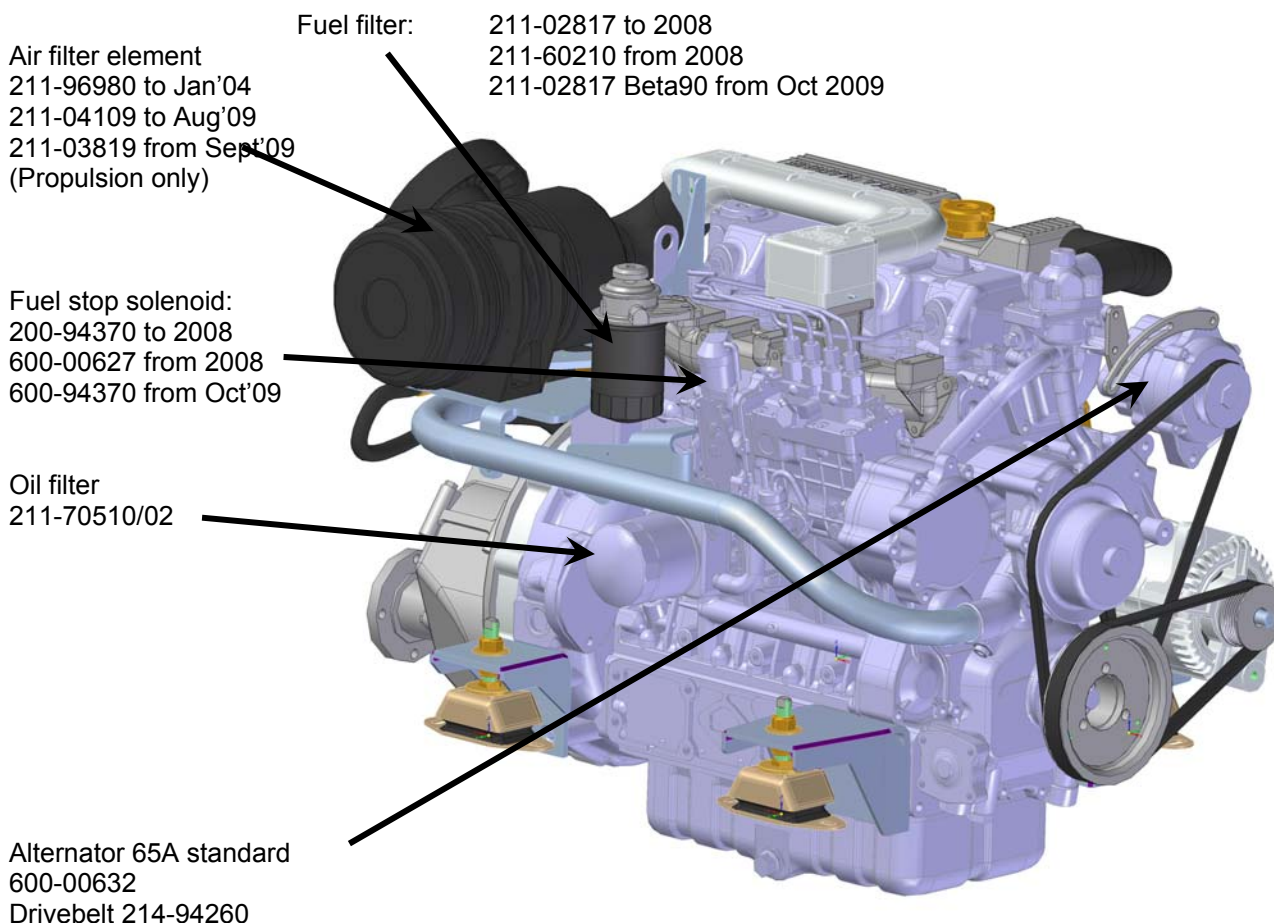
Flexible mount
55 shore 213-96970/01
65 Shore 213-02646/02

Starter motor:
BV3300 600-02184
BV3800 600-06971

O Ring 209-00814

V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –STARBOARD VIEW

KEEL COOLED

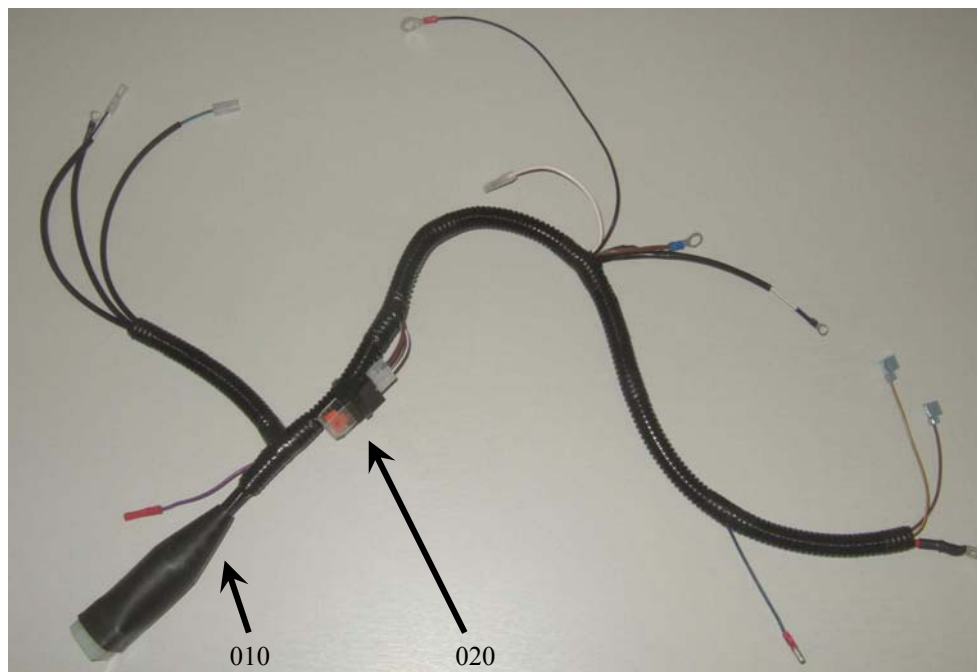


V3 SERIES ILLUSTRATED QUICK REFERENCE PARTS LIST –REAR VIEW
(Note: old 2006 Spec BV3800 heat exchanger cooled shown)

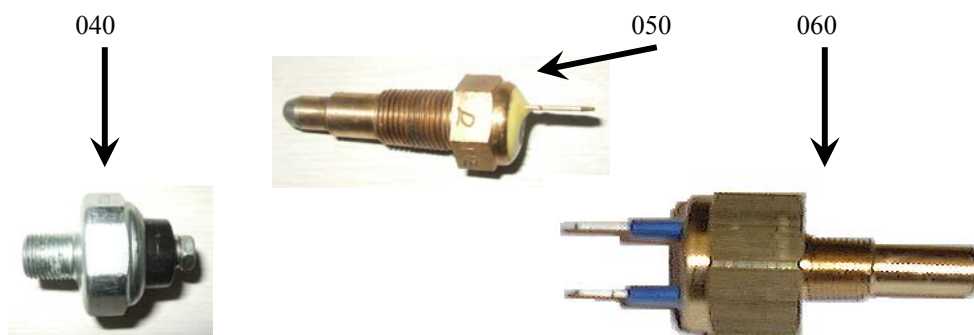


GEARBOX OPTIONS	GEARBOX P/No	DAMPER P/No	MORSE GEAR BRACKET P/No	ADAPTOR PLATE P/No	FLEXIBLE COUPLING	
TM 345 R2	204-06130	206-00090	202-61582	205-00133	212-01248	
TM 345 A R2	204-03053			205-07343/H33		
TM 93 R2	204-07342					
TM 93 A R2	204-08547					
PRM 260 D2	204-80530	206-97010	202-80560	205-80540	212-02699	
PRM 260 D3	204-92230					
PRM 500 D2	254-94830	206-04295		205-97020		
PRM 500 D2.5	254-94834					
PRM 500 D3	254-94832					
ZF 25 H R2	204-98890	206-00090	202-05406	205-00133 & 205-85810	212-02409	
ZF 25 H A R2	204-00743			205-04910 & 205-85810	212-02699	
ZF 45 H R2	204-02360/02			205-04911 & 205-85810	PLEASE ASK	
ZF 63 IV R2	204-07240					

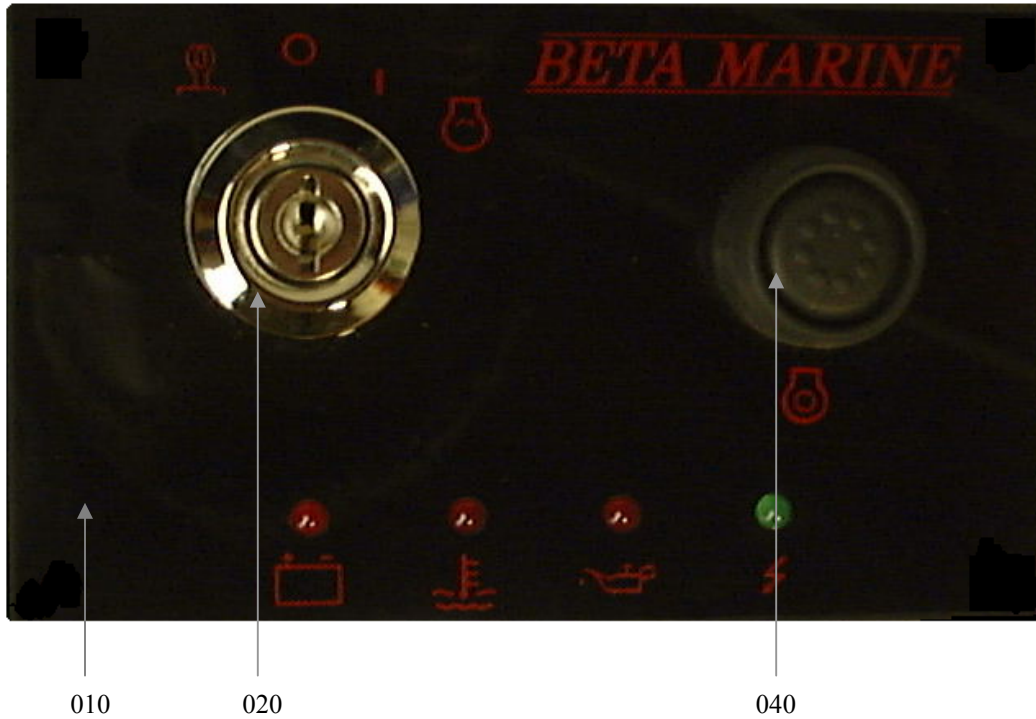
Wiring harness & switches



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	200-57640	Relay (for extension harnesses)	1	Not shown	



Simple 2A panel –LED type to May 2005



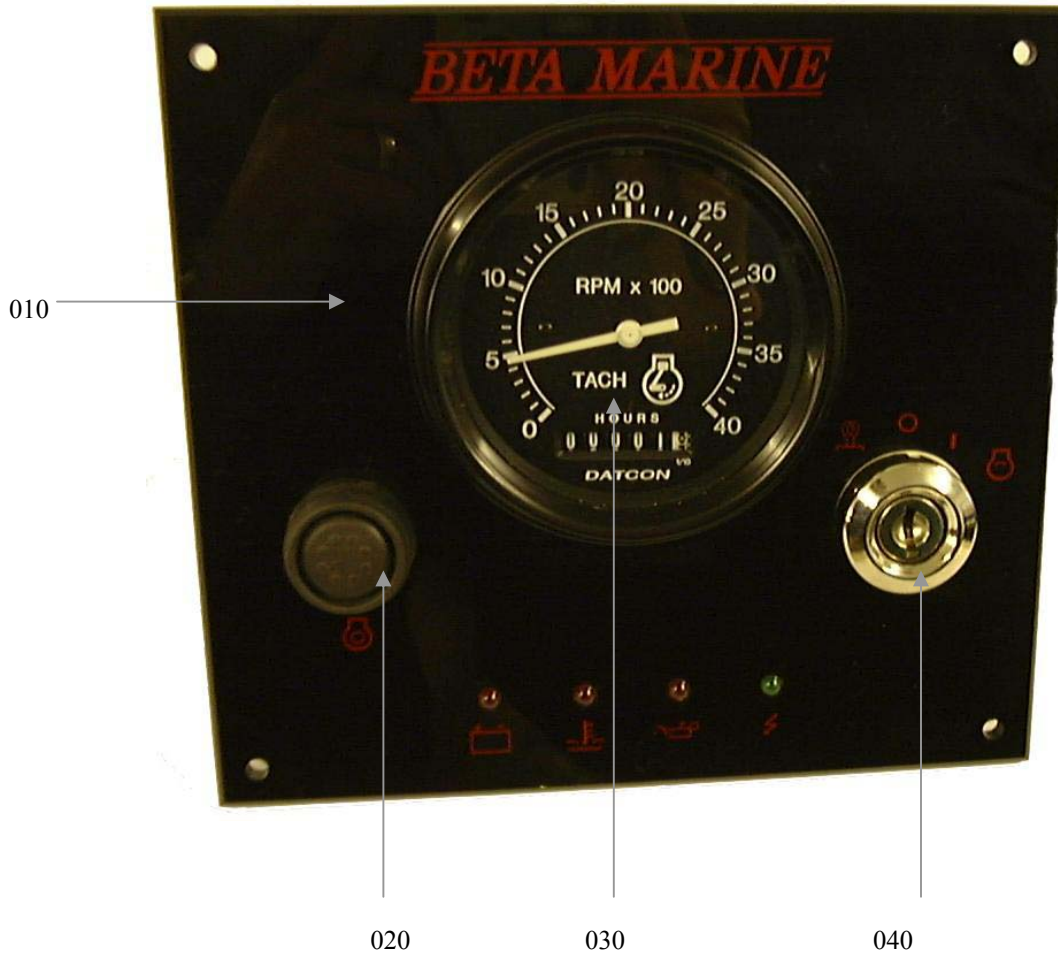
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	N/A	Simple panel (complete with LED pack)	1	No longer available, Use AK/2AS/KS01	N/A
020	600-00057	Kubota keyswitch	1		
030	600-00058	Kubota keys -PAIR	1	Not shown	
040	200-00072	Panel stop button	1		
050	200-01295	LED Pack assembly & buzzer (SEASPEC)	1	Not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



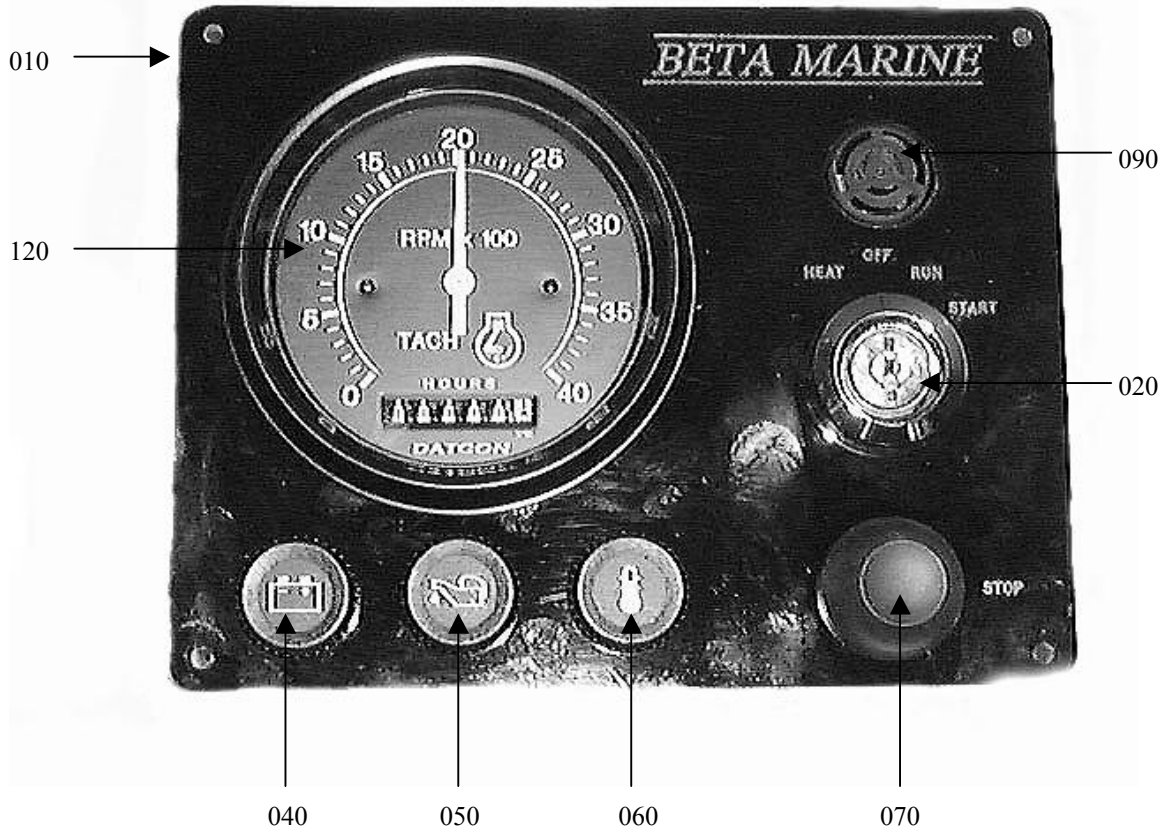
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00853	2AB panel (excludes tachometer –see 030)	1	No longer available, Use AK/2ABD/KS02	N/A
020	200-00072	Panel stop button	1		
030	200-00054	0-4000 RPM tachometer & hourmeter (DATCON)	1	To March 2002	
	200-02373	0-4000 RPM tachometer & hourmeter (VDO)	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 tachometer & 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



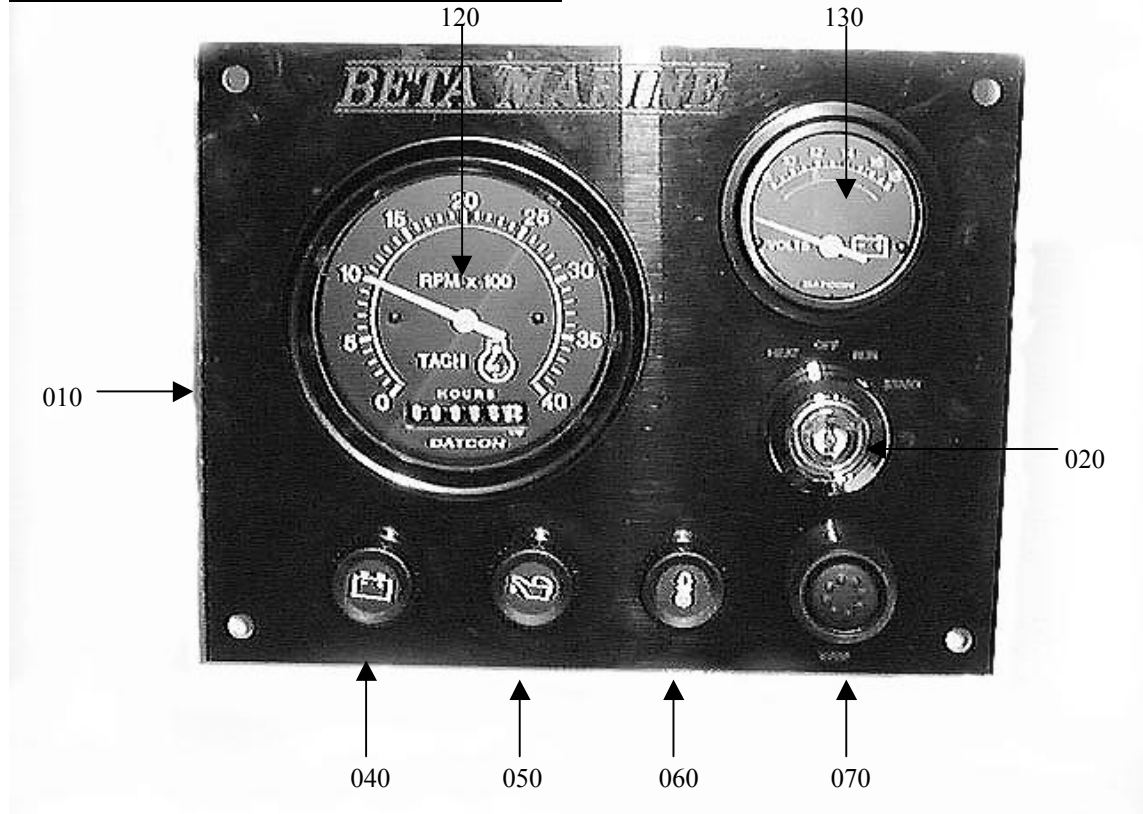
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/2ABV/KS01	2AB'V' panel with 3m loom (complete)	1		
020	600-00057	Kubota keyswitch –suits small key	1	To July 2008	
	600-00057/01	Kubota keyswitch –suits large key	1	From July 2008	
030	600-00058	Kubota keys –PAIR (SMALL)	1	To July 2008	
	600-00058/01	Kubota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

SFIA 2B panel –LAMP type to May 2005



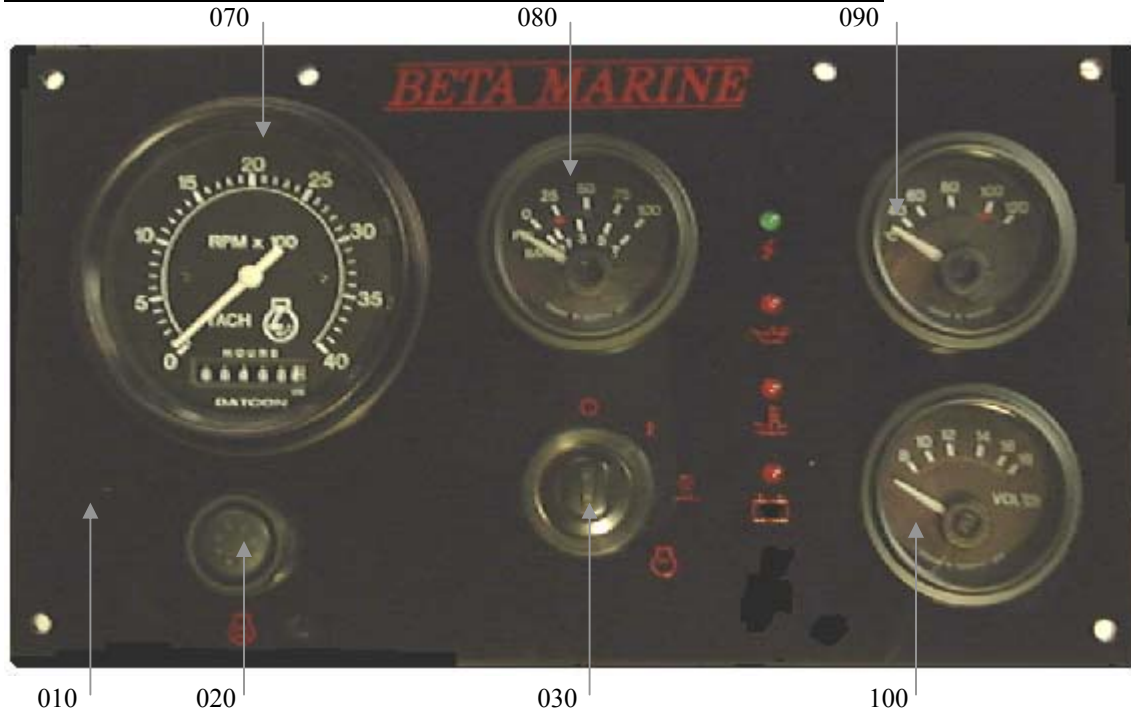
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-05408	SFIA 2B Panel –with temperature gauge From February 2003 (excludes tacho -see 120)	1	No longer available, Use AK/2BT/KS02	N/A
	200-60952	SFIA 2B Panel –with voltmeter To February 2003 (excludes tacho –see 120)	1	No longer available, Use AK/2BT/KS02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

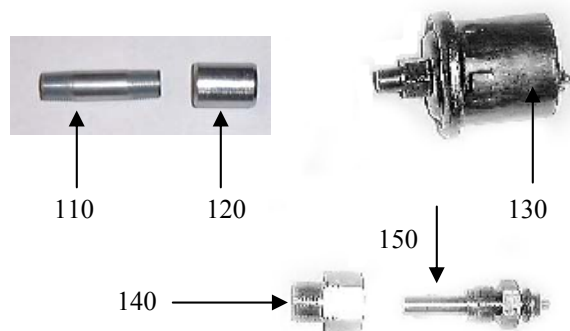


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	AK/2BT/KS02	SFIA 2B Panel –with temperature gauge From May 2005 (complete)	1	With Murphy temp gauge	
020	600-00057	Kubota keyswitch –suits small key	1	To July 2008	
	600-00057/01	Kubota keyswitch –suits large key	1	From July 2008	
030	600-00058	Kubota keys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

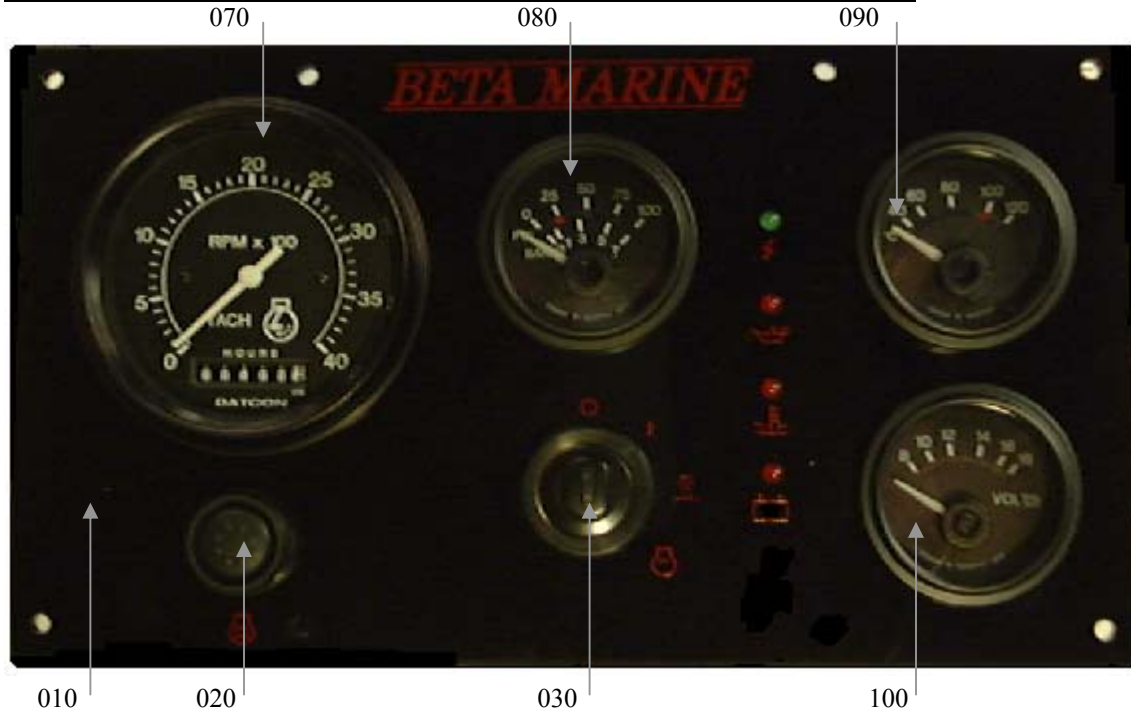
Murphy deluxe 2C panel & senders –Seaspec 4 Lamp-to May 2005



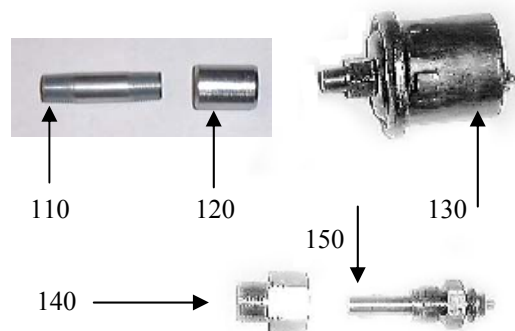
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00854	Murphy 2C deluxe panel –Seaspec 4 Lamp (Excludes gauges & loom –See 070, 080, 090, 100 & 160)	1	No longer available, Use AK/2CD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00073	Murphy panel keyswitch	1		
040	200-98965	Murphy deluxe panel 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



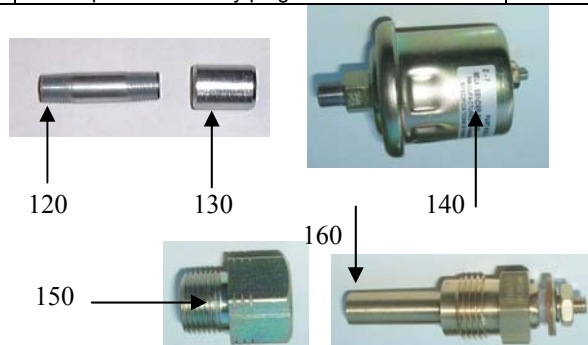
Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00851	Murphy 2C deluxe panel –Domestic 5 Lamp (Excludes gauges & loom –See 070, 080, 090, 100 & 160)	1	No longer available, Use AK/2CD/KS01	N/A
020	200-00072	Panel stop button	1		
030	200-00073	Murphy panel keyswitch	1		
040	200-98965	Murphy deluxe panel 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					



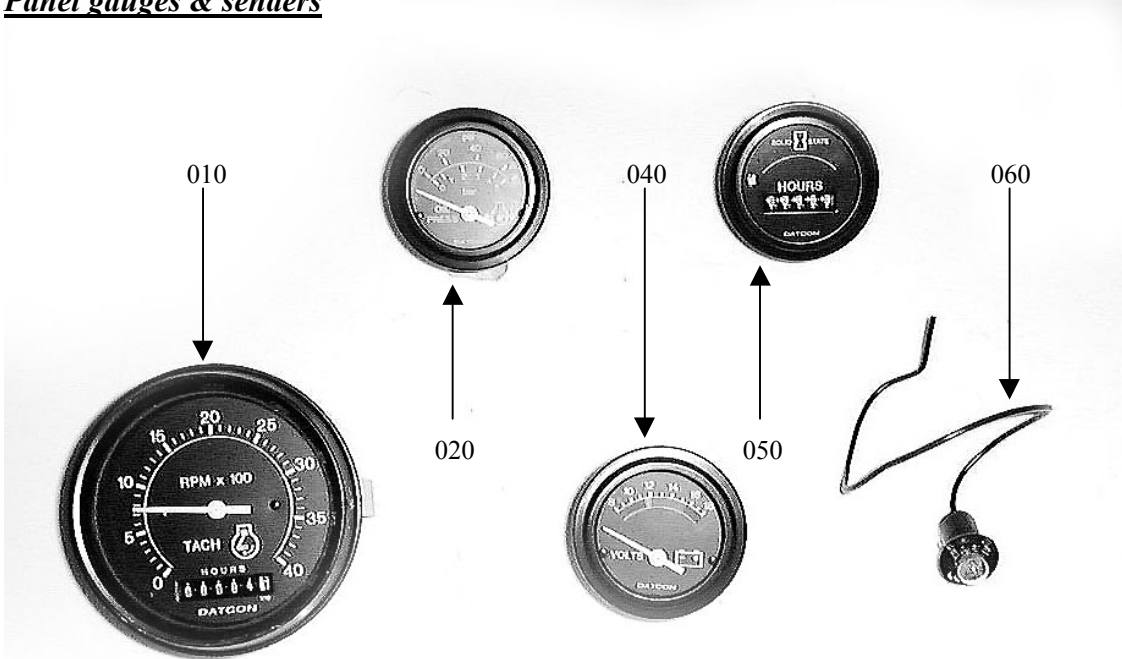
Murphy deluxe 2C panel & senders –Domestic 5 Lamp –from May 2005



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	



Panel gauges & senders

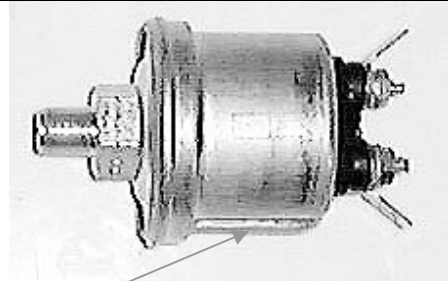


Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00054	0-4000 RPM tacho & hourmeter (Datcon)	1	To March 2002	
	200-02373	0-4000 RPM tacho & hourmeter (VDO)	1	From March 2002, Viewline Jan2010	
020	200-08011	Oil pressure gauge –VDO Viewline	1	Not shown	
	200-91380	Oil pressure gauge –Datcon	1		
030	200-07981	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 tacho	2	Not shown	
120	200-96220	Datcon tacho bulb 12V	1	Not shown	
130	200-07664	8 Pin connector –for Viewline gauges	1	Not shown – comes with gauge	



70

080

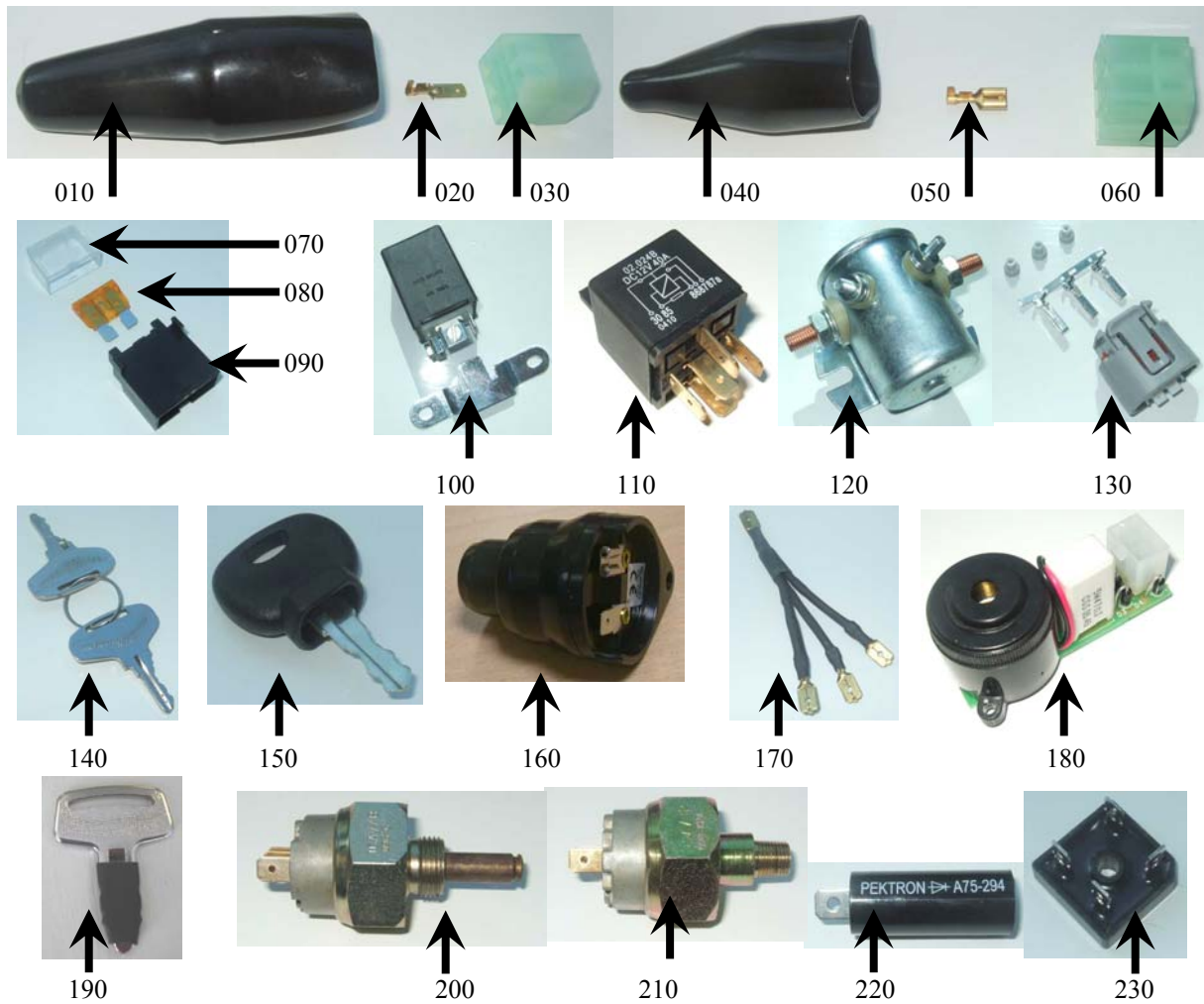


090

100

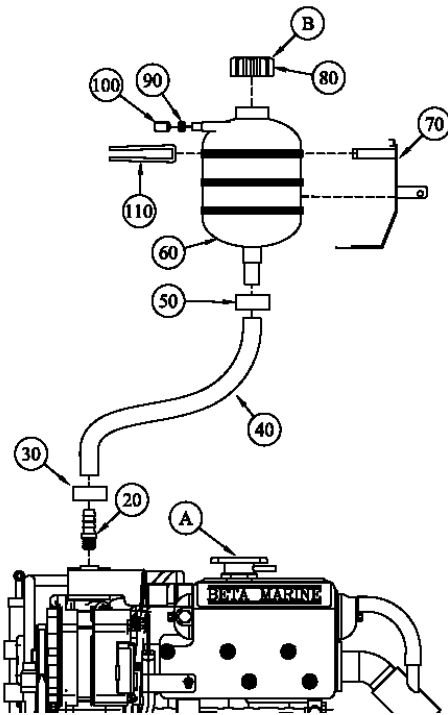


Various electrical & panel parts and components



Ref. No.	Part No.	Part Name	Qty	Remarks	
010	200-00048	Large shroud for 11 way plug	1	On panel connection	
020	200-00047	Male spade for 11 way plug	11	On panel connection	
030	200-00639	11 Way plug to suit male type spade	1	On panel connection	
040	200-00638	Small shroud for 11 way socket	1	On engine harness	
050	200-00181	Female spade for 11 way socket	11	On engine harness	
060	200-00046	11 Way socket to suit female type spade	1	On engine harness	
070	200-01426	Plastic clear fuse cover	1	On engine harness	
080	200-00959	Fuse, blade type 40 Amp	1	On engine harness	
090	200-00640	Fuse holder, blade type for 40 Amp	1	On engine harness	
100	200-57640	12V 33Ra 70Amp relay	1	For extended looms	
110	200-87020	12V 28Ra 40Amp relay	1	On rear of panel	
120	200-89950/01	12V heavy duty relay	1	For insulated earth	
130	600-02405	Kubota alternator 3 pin coupler	1	For 3 pin Denso alt	
140	600-00058	Kubota keys –PAIR, 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		
(This kit consists of all items listed individually below)					
020	210-03297	3/8BSPT-3/4" Hose connector	1		
030	212-98464	Stainless steel hose clip 22-30mm	1		
040	218-99247	3/4" Bore water hose –from Sept 2010	1.5m		
050	212-98464	Stainless steel hose clip 22-30mm	1		
060	209-03065	Expansion tank	1		
070	209-03067	Expansion tank mounting bracket	1		
080	209-03066	Expansion tank lid	1		
090	212-07009	No 22 Stainless steel hose clip	1		
100	212-07011	Hose cap blanking bung	1		
110	209-03068	Expansion tank holding band	1		



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

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

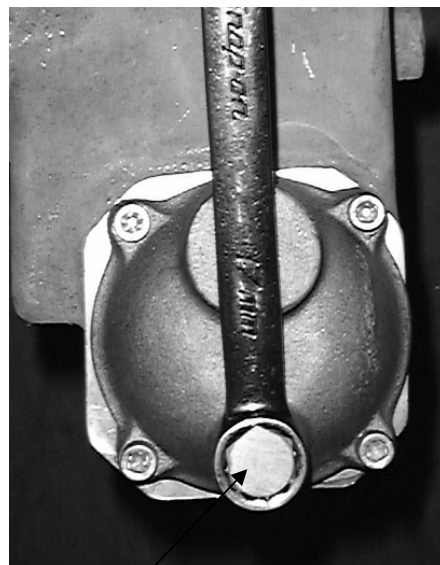
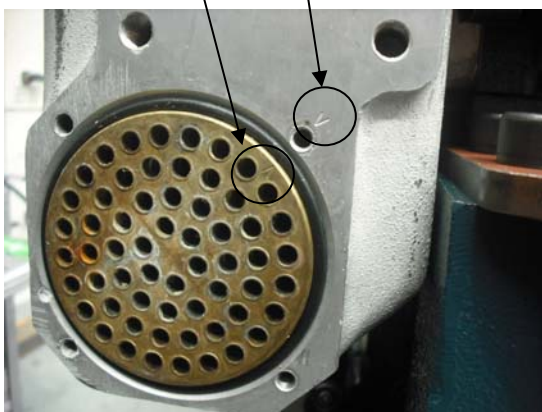


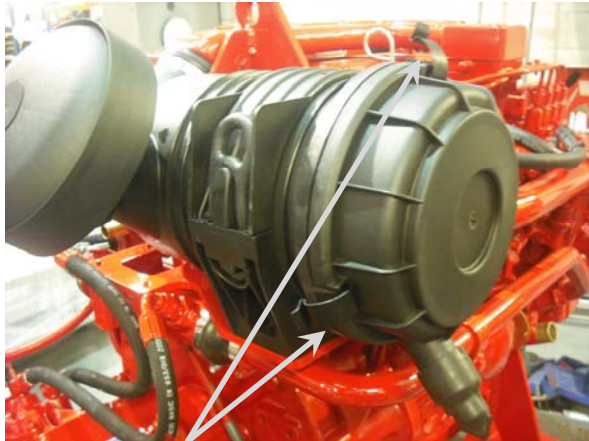
Fig 2n Wasting anode

Fig 2p Rear end-cap orientation



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

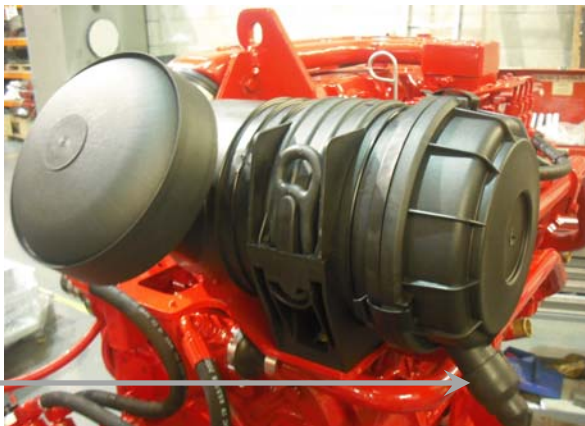
The variable speed engines are fitted with a low level air intake filter which should be checked every season (or every 250 hours if sooner) and changed every two years or sooner if badly clogged. Note if upon inspection it is noticed this element is badly clogged you should check more often.



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 ↑



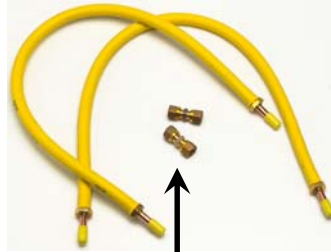
020 ↑



030 ↑



040 ↑



050 ↑



060 ↑



070 ↑



080 ↑



090 ↑



100 ↑



110 ↑



120 ↑

Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/SML/HE/6e/001	WATER INLET KIT -BALL VALVE FROM MAR04 3/4" ID	1	NOT SHOWN
	AK/SML/HE/6e/0S1	WATER INLET KIT -SPECIAL CLEAR PLASTIC TYPE 3/4"		
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 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		
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/SML/3h/001	REMOTE OIL FILTER BULKHEAD MOUNT -MINI & 05 SERIES	1	
100	AK/SML/5a/002	SINGLE LEVER CONTROL	1	
110	212-96070/01	SINGLE LEVER CONTROL CABLE 3m	1	
120	200-96160	BATTERY LEADS 1m, 25mm 1 BLACK & 1 RED -UP TO Beta60 ONLY	1	

Short Voyage Spares Kits



Ref. No.	Part No.	Part Name	Qty	Remarks
010	AK/3300H/18/002	Beta75 / 90 H/E SHORT VOYAGE SPARES KIT (KUB 1st ALT)	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.**

SPARES & REPLACEMENT PARTS

These items are available from

BETA MARINE

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

Telephone: 01452 723492 Int. Tel: 44 1452 723492
Fax: 01452 729916
Internet: www.betamarine.co.uk
Spares email: spares@betamarine.co.uk