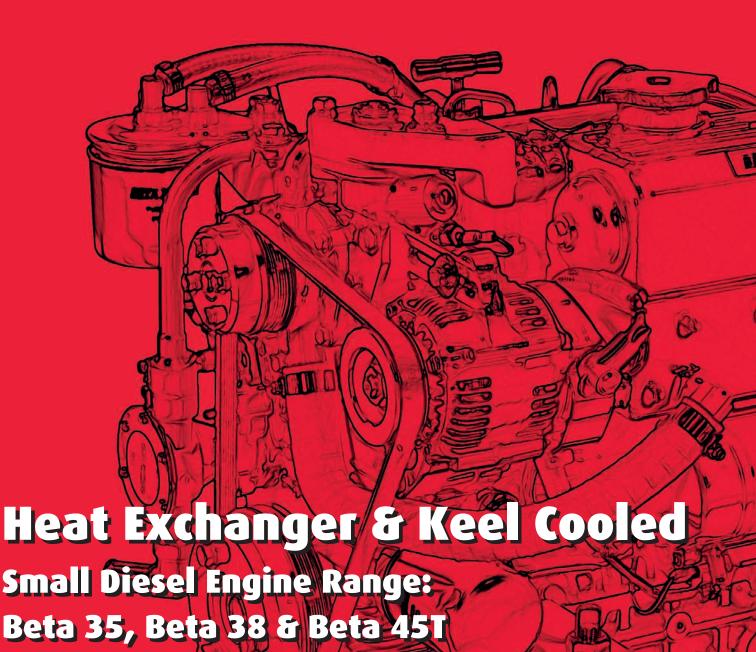
# Illustrated Parts List



**Note:** Prices and specifications are subject to amendment without notice. Information given is subject to our current conditions of tender and sale. **In all cases 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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## Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) Heat Exchanger & Keel Cooled

Description		Part No.	Quantity	
Heat Exchanger 'O' Ring	3 Bolt End Cap	212-07273	2	
neat exchanger of king	Single Bolt End Cap	209-80110	Z	
Sacrificial Zinc Anode		209-61840	1	
Exhaust Gasket		212-09070	1	
Pressure Cap		209-80130	1	
Thermostat		600-72450	1	
Thermostat Gasket		600-80490	1	
	TMC60 - 43-AC-60	206-00895		
Drive Plate	PRM150 Hydraulic	206-07584	1	
	PRM280 Hydraulic	206-02095		
40 Amp alternator	Keel Cooled Standard Alternator	600-02781	1	
40 Amp alternator	V Belt - Check Before Ordering	600-94280/01	l l	
100 Amp second domestic alternator	Keel Cooled Standard Second Alternator	200-05231	1	
100 Amp second domestic alternator	6PK PolyVee Drive Belt - Check Before Ordering	214-02614	l	
	From April 2019 - <b>Not USA</b>	200 10404		
	Also replacement for older 65 Amp alternators	200-10604		
	To April 2019 - <b>Not USA</b>	200-01155		
	V Belt - Check Before Ordering	214-63090/Q		
70 Amp alternator	6PK PolyVee Drive Belt - Check Before Ordering	211 030707 Q	1	
	- From October 2009	214-04618		
	6PK PolyVee Drive Belt - Check Before Ordering - To October 2009	214-00493		
100 Amp alternator	Alternator - From 2003 to June 2011	200-03008	1	
-	Alternator - From June 2011	200-08183		
120 Amp alternator in lieu of standard	6PK PolyVee Drive Belt - Check Before Ordering - From October 2009		1	
'	6PK PolyVee Drive Belt - Check Before Ordering - To October 2009	214-00493		
e Leib	Heat Exchanger Engines	211-60210	1	
Fuel Filter	Keel Cooled Engines	211-02817	1	
	Plastic Air Filter Assembly - From January 2012 - Beta 35 & 38 only	211-08132		
Air Filter Element	Central Wing Nut - From 2010 to January 2012 - Beta 35 & 38 only	211-08133	1	
	3 Clamp Type - To December 2010 - Beta 35 & 38 only	211-61831		
	Beta 45T - From January 2016	211-09179		
Oil Filter Flament	Engine Mounted	211-60390	1	
Oil Filter Element	Remote Mounted	211-70510/02	1	
Sump Drain Pump		210-80061	1	
Sump Drain Pump Clamp		212-00793	2	
	Pump - Beta 35 & 38 only	207-08922	1	
	Impeller Kit	207-09041-KIT	1	
	Sea Water Pump to Engine 'O' Ring	209-08266	1	
	Sea Water Pump End Cover Plate	207-09481	1	
	Sea Water Pump End Cover 'O' Ring	207-09279	1	
Beta Marine Gear Driven Sea Water	Sea Water Pump Shaft Kit	207-09229	1	
Pump - From June 2013	Sea Water Pump Hose Tail	212-99232	1	
	Sea Water Pump Clamp	202-08924/01	1	
	Sea Water Pump Seal Kit	207-09228	1	
	Sea Water Pump Wear Kit	207-09909	1	
	Sea Water Pump Lip Seal 28mm	207-09351	2	
	Sea Water Pump Lip Seal 24mm	205-10361	1	

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## Quick Reference Tables

Description		Part No.	Quantity
	Pump - Beta 35, 38 & 45T	207-61460/01	1
	Impeller Kit	207-09041-KIT	1
	Sea Water Pump to Engine 'O' Ring	212-98238	1
	Sea Water Pump End Cover Plate	207-21760	1
	Sea Water Pump End Cover 'O' Ring	207-09279	1
	Sea Water Pump Shaft Kit	207-11164	1
Beta Marine Gear Driven Side Mounted	Sea Water Pump Hose Tail	212-10329	1
Sea Water Pump - From January 2014	Sea Water Pump Hose Tail - Beta 35 & 38 only	212-99232	<u>.</u> 1
	Sea Water Pump Hose Tail - Beta 45T only	212-09360	<u>.</u> 1
	Sea Water Pump Clamp	202-08924/03	2
	Sea Water Pump Seal Kit	207-11163	1
	Sea Water Pump Wear Kit	207-09909	<u>'</u> 1
	Sea Water Pump Lip Seal 28mm	207-09351	2
	Sea Water Pump Lip Seal 24mm	205-10361	<u>2</u> 1
	Pump - Beta 35 & 38	207-61500/01	1
	Impeller Kit	207-01300701 207-09041-KIT	<u> </u> 
	Sea Water Pump to Engine 'O' Ring	209-08266	1
	Sea Water Pump End Cover Plate	207-05478	<u> </u> 1
Johnson Gear Driven Sea Water Pump -	Sea Water Pump End Cover Plate Bolts	207-05478	
			6
From July 2006 to January 2014	Sea Water Pump End Cover 'O' Ring	207-09279	1
	Sea Water Pump Shaft	207-06520	1
	Sea Water Pump Seal	207-08636	11
	Sea Water pump Service Kit	207-07714	11
	Sea Water Pump Lip Seal	207-06494	11
	Pump - Beta 35 & 38	207-61500	11
	Impeller	207-79630	11
	Sea Water Pump End Cover Plate - Round	207-00507	11
	Sea Water Pump Gasket - Round	207-62600	1
	Sea Water Pump End Cover Plate Screw - Round	207-00062	6
Jabsco Gear Driven Sea Water Pump -	Sea Water Pump Service Kit - Round	207-61470	1
To July 2006	Sea Water Pump End Cover Plate Kit - Triangular,	207-00138/01	1
10 July 2000	includes Plate, 'O' Ring & 3 x Bolts	207 001307 01	'
	Sea Water Pump End Cover 'O' Ring - Triangular	207-04206	1
	Sea Water Pump End Cover Plate Screw - Triangular	207-04207	3
	Sea Water Pump Service Kit - Triangular	AK/MINI/HE/SWPI/001	1
	Sea Water Pump Shaft	207-01060	1
	Sea Water Pump Lip Seal	207-02239	1
Fuel Lift Pump		600-67830	1
Fuel Lift Pump Gasket		600-00065	1
Fuel Stop Solenoid	Energised to Stop	600-79660	1
Cantal Daniel Chandrad Va	From June 2008	600-00058/01	۸:-
Control Panel Standard Key	To June 2008	600-00058	A pair
Control Provides Control	From June 2008	600-00057/01	4
Control Panel Key Switch	To June 2008	600-00057	1
Control Panel Stop Button	Also ABVW, BW & CW Panel Heat & Start	200-00072	1
Tachometer	0-5000 rpm with Digital Hour Counter	200-21242	1
Water Temperature Gauge	For B, BW, C Deluxe & CW Control Panels	200-96200	1
Oil Pressure Gauge	For C Deluxe & CW Control Panels	200-96190	1
Voltmeter	For C Deluxe & CW Control Panels	200-96210	<u>·</u> 1
Green Power On Indicator	Lamp & Retaining Clip (P/N 200-09797)	200-04656	1
Red Warning Indicator	Lamp & Retaining Clip (P/N 200-09797)	200-04657	3 or 4
Alarm Board	ALL Panels - From June 2005	200-04655	1
/ Harri Dould	Fitted to the Rear of Panels	200-87020	<u>'</u>

## Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) Heat Exchanger & Keel Cooled

Description		Part No.	Quantity
40 Amp Fuse Blade		200-00959	1
Standard Engine Harness		200-60973/05	1
Water Temperature Switch	For A, ABV & ABVW Panels	600-62820	
Water Temperature Sender	1/8" BSP For B, BW, C Deluxe & CW Control Panels - From April 2011	200-08248	
Water Temperature Sender	5/8" UNF For B, BW, C Deluxe & CW Control Panels - To April 2011	200-94360	1
Water Temperature Switch	For Insulated Earth Return Engines & Panels	200-08830	
Oil Pressure Switch	For A, ABV, ABVW, B & BW Panels	600-62670	
Pressure Sender For C Deluxe & CW Control Panels Pressure Switch For Insulated Farth Return Engines & Panels		200-94350	1
Pressure Switch For Insulated Earth Return Engines & Panels		200-61190	
Panel A - Key Switch		AK/2AS/KS01	
Panel AB - Key Switch	0-5000 rpm Tachometer with Digital Hour Counter	AK/2ABD/KSO1	
Panel ABV - Key Switch	0-5000 rpm Tachometer with Digital Hour Counter	AK/2ABV/KSOL501	
Panel ABVW - Push Button	0-5000 rpm Tachometer with Digital Hour Counter	AK/2ABVW/KSOL51	
Panel B - Key Switch	0-5000 rpm Tachometer with Digital Hour Counter & Temperature Gauge	AK/2BT/KS051	
Panel BW - Push Button	0-5000 rpm Tachometer with Digital Hour Counter & Temperature Gauge	AK/2BTW/KS001	
Panel C - Key Switch	0-5000 rpm Tachometer with Digital Hour Counter, Temperature, Oil Pressure & Voltage Gauges	AK/2CD/KSOL51	1
Panel CW - Push Button	0-5000 rpm Tachometer with Digital Hour Counter, Temperature, Oil Pressure & Voltage Gauges	AK/2CW/KSOL51	
NMEA 2000 Module	Allows C & CW Panels to Interface with a NMEA 2000 Network	AK/P/2D/i01	
D-Digital - Push Button	Fully Digital Stand Alone or Fully NMEA 2000 Network Compatible Panel	AK/P/2D/KS01	
	Beta 32 (BV1205)	600-00567	
Cylinder Head Gasket	Beta 35	600-00218	1
	Beta 35, 38 & 45T	600-07021	
xhaust Manifold Gasket		600-80330	1
	Beta 32	600-01063	
op Gasket Set	Beta 35	600-00376	1
	Beta 35, 38 & 45T	600-00400	
	Beta 32	600-01064	
ower Gasket Set	Beta 35	600-00377	1
Excludes Sump Gasket	Beta 35, 38 & 45T	600-00206	1
ump Gasket		600-68640	1
'	Trelleborg Metalastic Type	213-93440	A .
lexible Mounts	Type 55 Shore Metalastic Type - <b>USA Engines</b>	213-96970/01	4
xtended Dipstick	Replacement Dipstick Blade	600-96300	1
tocker Cover Gasket		600-68810	1
cocker Cover Oil Filler Cap		600-00579	1
cocker Cover Oil filler Cap 'O' Ring		600-00258	1
uel Leak Off Rail	S5 4 Cylinder	600-00305	1
uel Leak Off Rail to Injector Gasket		600-00537	4
ruel Injector to Cylinder Head Gasket		600-00242	4
Vater Hose	Fresh water pump to thermostat housing	600-00214	1
	Inlet manifold to rocker cover vent - From 2005	600-07180	1
Rocker Cover Air Hose	Rocker cover to atmosphere - To 2005	600-02260	1
Starter Motor		600-00918	1

IPL



#### **Quick Reference Tables**

Manuals		Part No.	Quantity
Operators Maintenance Manual		221-20031	1
Workshop Manual – Base Engine Only		600-00757	1 available as a PDF
	Beta 35 (BV1305)	600-02440	
Spare Parts Manual – Base Engine Only	Beta 38 (BV1305)	600-01161	3 available as a PDF
	Beta 45T (BV1505(T))	600-10746	03 0 1 01

**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.

#### Fuel Filter Identification

Any engine equipped with a square fuel filter assembly with priming button requires a fuel filter with the part number:

211-60210

IPL



#### 211-02817



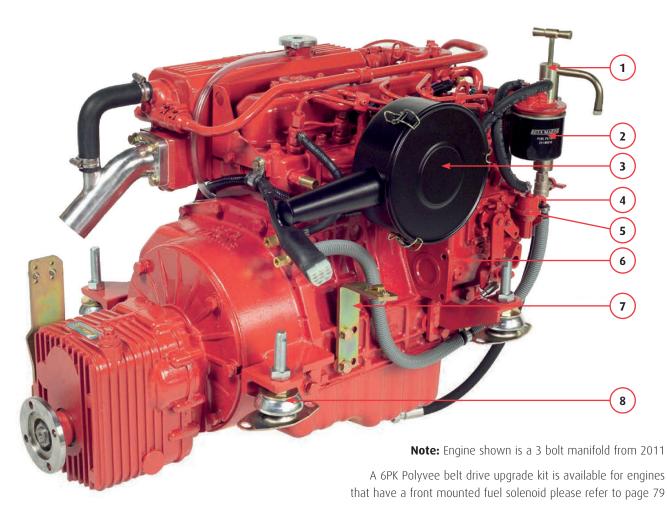








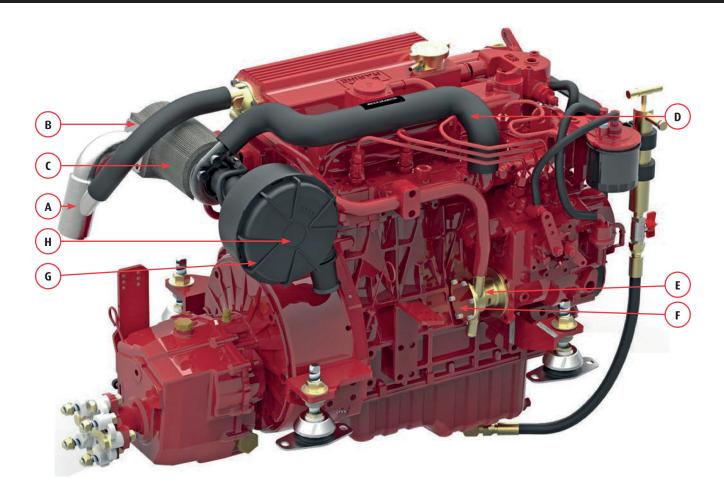
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Ref.	Part No.	Description	Qty	Comments
1	210-80061	Sump drain pump	1	
	212-00793	Sump drain pump clamp	2	
2	211-60210	Fuel filter	1	
	211-08132			Plastic assembly - From 2012
3	211-08133	Air filter element - Not Beta 45T	1	Single wing nut steel assembly - From 2011 to 2012
	211-61831			3 clamp steel assembly - To 2011
4	600-67830	Fuel lift pump	1	
5	600-00065	Fuel lift pump gasket	1	
6	600-79660	Fuel stop solenoid	1	
7	202-01769	Speed control bracket	1	
8	213-93440	Trelleborg type	4	
0	213-96970/01	Type 55 shore Metalastic type	4	USA engines

Ref.	Part No.	Description	Qty	Comments
٨	202-10179	Standard water injection bend	1	Beta 45T only
A	202-10931	High rise water injection bend	1	beta 451 Offiy
В	212-09070	Exhaust gasket	1	Orange type - From May 2011
C	212-10074	Turbo insulation jacket	1	
D	218-10192	Air inlet hose	1	
Е	207-61460/01	Side mounted sea water pump	1	
F	207-09041-KIT	Impeller kit	1	
G	211-09178	Air filter assembly	1	Beta 45T only, includes air filter element
Н	211-09179	Air filter element	1	Beta 45T only

### Beta 45T (T - turbocharged) - From 2016 Starboard View



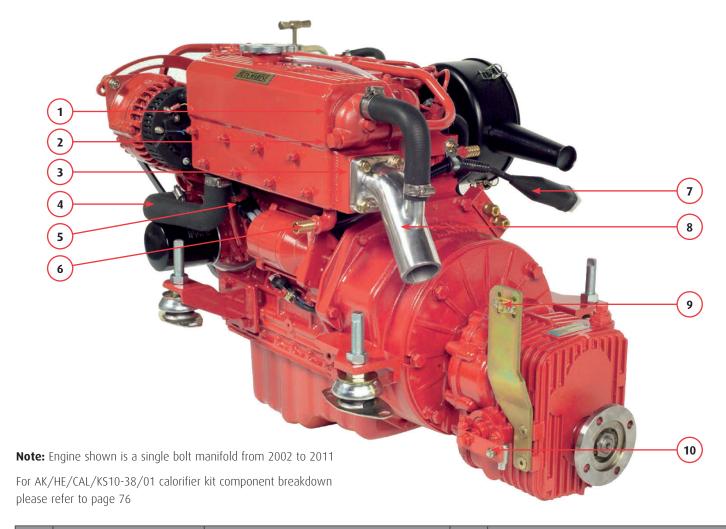
Gearbox Option	Gearbox Part No.	Drive Plate Part No.	Morse Gear Bracket Part No.	Adaptor Plate Part No.	Flexible Coupling Part No.
TMC60 R2	204-91680				
TMC60 R2.5	204-01627	]			
TMC60 R3	204-01192	206-00895			
TMC60A R2	204-07724				
TMC60A R2.5	204-07928		202 05120		
PRM90 D2	204-10396		202-05129 205-60990 2	212-01430	
PRM90 D2.5	204-10642			205-60990	212-01430
PRM125 D2	204-10397	206-91950			
PRM125 D2.5	204-10773				
PRM125 D3	204-11039		202.04100		
PRM150 D2	204-91920	206-07584		584 202-94100	
PRM150 D3	204-91700	200-07364	202-94100		
PRM280 D2	204-10398	206-02095	202-80560	205-72820	212-01248
PRM280 D3	204-10436	200-02095	202-00300	203-72020	212-01240
ZF15MIV R2.13:1	204-00767				
ZF15MIV R2.64:1	204-06107	206-00895	202-61582	205-60990	Contact Beta Marine
ZF15MIV R3:1	204-92200				
TTMC35A R2.3	204-04315	206-01820	N1 / A	NI /A	212-04689
TTMC35A R2.6	204-04315/01	200-01020	N/A	N/A	Z 1Z-U4007

## IPL Beta 35 & 38 (non turbo) - To 2011 Port View

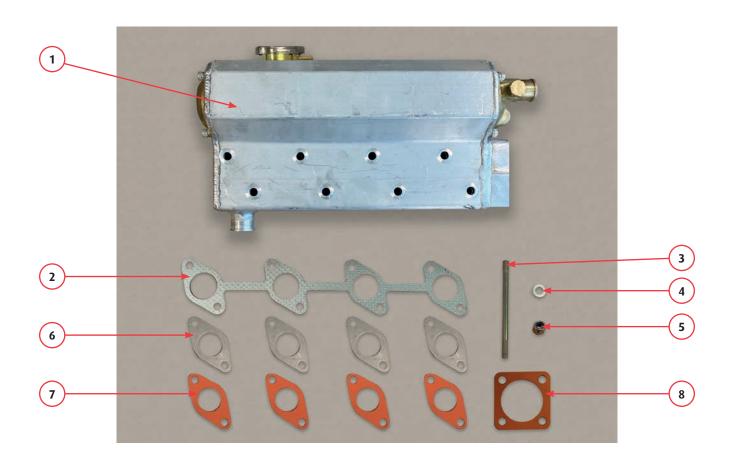


Ref.	Part No.	Description	Qty	Comments
1	212-03194	Fresh water overflow pipe	1	8mm
2	209-80130	Pressure cap	1	
3	600-72450	Thermostat	1	
4	600-80490	Thermostat gasket	1	
5	600-00214	Fresh water pump to thermostat housing pipe	1	
6	207-08922	Con water numb	1	From June 2013 - Not Beta 45T
0	207-61500/01	Sea water pump		To June 2013 - Not Beta 45T
7	207-09041-KIT	Impeller kit	1	
	200-10604		From April 2019 - Not USA	
8	200-01155	70 Amp alternator	1	To April 2019 - Not USA
0	200-08183	120 Amp alternator		From June 2011
	200-03008	100 Amp alternator		From 2003 to June 2011
9	214-04618	6PK PolyVee drive belt		From October 2009
9	214-63090/Q	V - Belt		
10	201-02251	6PK Alternator pulley	1	
11	211-60390	Oil filter element	1	
12	600-00918	Starter motor	1	
13	210-04362	Sump drain pump pipe	1	For shallow sump
13	210-94190	Sump diam pump pipe	'	For standard sump

### Beta 35 & 38 (non turbo) - To 2011 Rear View



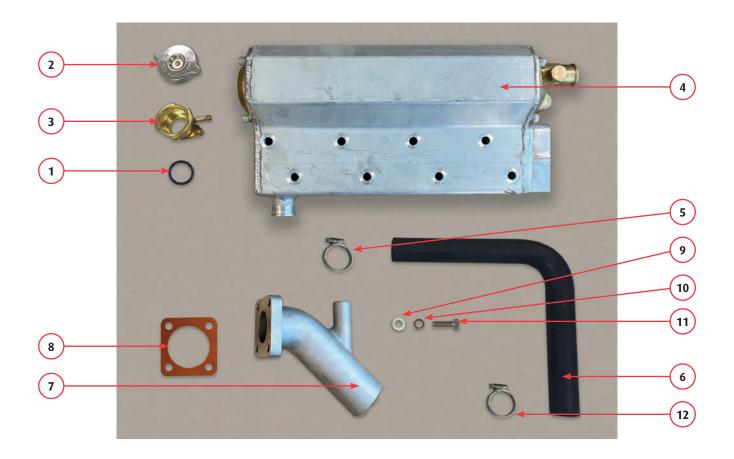
Ref.	Part No.	Description	Qty	Comments
1	212-07273	Heat eychanger 'O' sing	2	3 bolt end cap
'	209-80110	Heat exchanger 'O' ring	_ Z	Single bolt end cap
2	209-61840	Sacrificial zinc anode	1	
3	212-09070	Exhaust gasket	1	Orange type - From May 2011
4	209-92160	Fresh water pipe - heat exchanger	1	Beta 35
4	209-08589	to fresh water pump	'	Beta 38 & 45T
5	200-00959	40 Amp fuse blade	1	
6	AK/HE/CAL/KS10-38/01	Calorifier kit	1	
7	200-60973/05	Engine harness	1	
8	202-02458	Standard water injection bend	1	Not Beta 45T
9	212-99241/01	Saddle clamp fitting kit	1	
10	212-07665	Clevis connector	1	For mechanical gearboxes morse control cables
10	212-99240/01	Ball joint z/p steel cable connector		For hydraulic gearboxes morse control cables



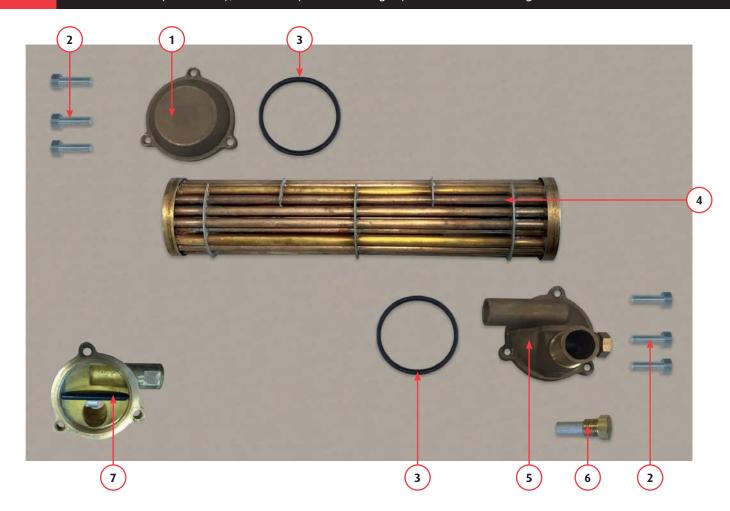
Ref.	Part No.	Description	Qty	Comments
1	AK/S5/4CYL/E01	4 Cyl 3 Bolt Eskimo Manifold Kit includes ref no 6, 7 & 8	1	Beta 35, 38 & 45T - From 2011
2	600-80330	Exhaust manifold gasket	1	
3	201-62110/01	Super 5 manifold stud	8	
4	217-99293	M8 Flat washer	8	
5	217-99296	M8 Nyloc nut	8	
6	202-09168	Exhaust manifold spacer	4	
7	212-08629	Exhaust spacer gasket	4	
8	212-09070	Exhaust bend gasket	1	Orange type - From May 2011



#### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) 3 Bolt Heat Exchanger Manifolds - From 2011



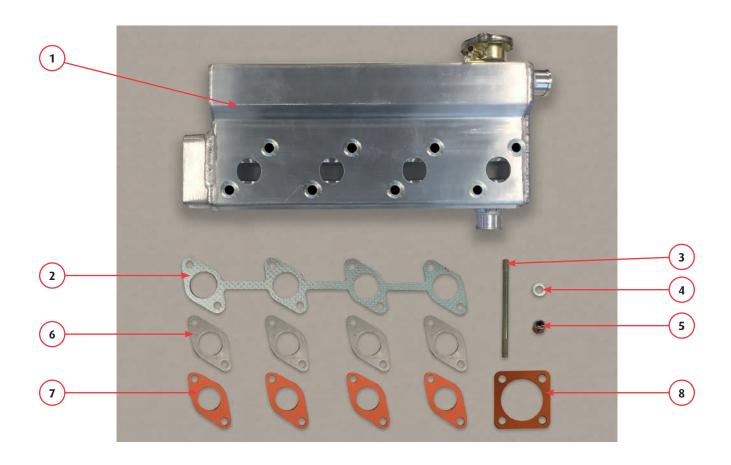
Ref.	Part No.	Description	Qty	Comments
1	209-02167/01	Filler neck '0' ring	1	
2	209-80130	Twin seal pressure cap	1	
3	209-08352	Filler neck assembly	1	
4	AK/S5/4CYL/E01	4 Cyl 3 Bolt Eskimo Manifold Kit includes ref no 1, 2, 3 & 8	1	
5	212-98464	Stainless steel hose clip 22-30mm	1	
6	209-05125/01	25mm ID Rubber elbow	1	From June 2013
0	209-91760	22mm ID Rubber elbow		To June 2013
7	202-02458	2" (50mm) OD Aluminium water injection bend	1	Standard Beta 35 & 38 - From October 2002
	202-10179	2 3/8" (60mm) OD Stainless steel water injection bend		Standard Beta 45T - Not shown
8	212-09070	2" Exhaust gasket	1	Orange type - From May 2011
9	217-99293	M8 Flat washer	4	
10	217-99292	M8 Spring washer	4	
11	217-99299	M8 x 25mm Set bolt	4	
12	212-98464	Stainless steel hose clip 22-30mm	2	



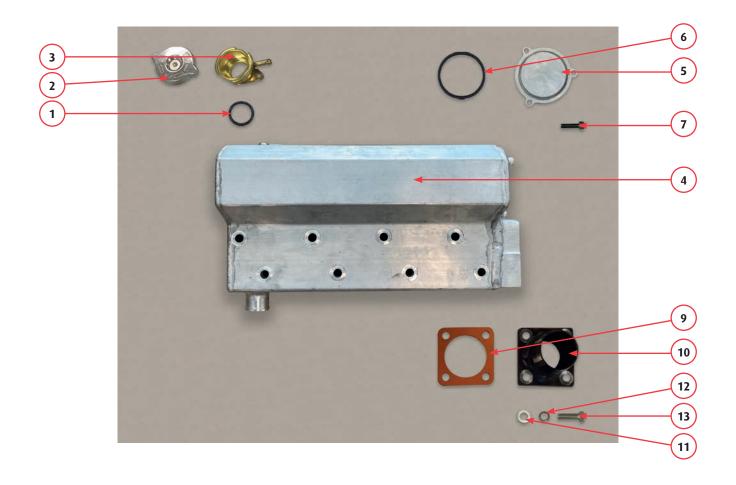
Ref.	Part No.	Description	Qty	Comments
1	208-07272	3 Bolt return end cap	1	
2	217-00190Z	3 Bolt end cap bolt	6	3 for each end cap
3	212-07273	3 Bolt end cap 'O' ring	2	
4	209-08535	3 Bolt end cap tubestack	1	
5	208-07271	3 Bolt 25mm open end cap	1	
6	209-61840	Sacrificial zinc anode	1	
7	212-08730/55	Seal, 55mm OAL to suit ref no 5, 3 bolt 25mm open end cap	1	



#### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) 3 Bolt Keel Cooled Manifolds - From 2011



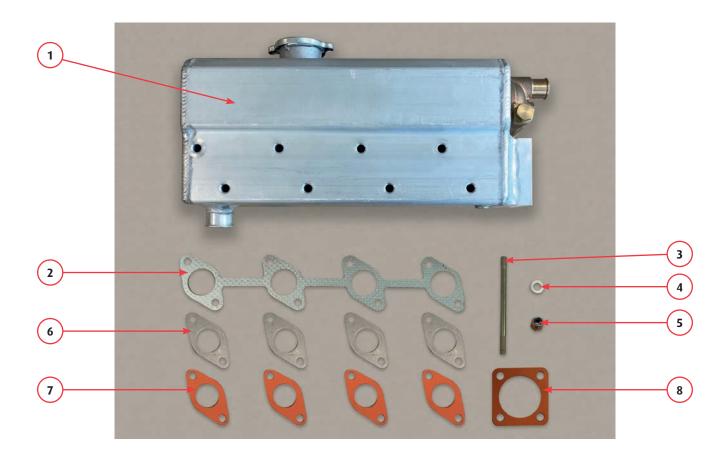
Ref.	Part No.	Description	Qty	Comments
1	AK/S5/4CYLKC/E01	4 Cyl 3 Bolt Eskimo Manifold Kit includes ref no 6, 7 & 8	1	
2	600-80330	Exhaust manifold gasket	1	
3	201-62110/01	Super 5 manifold stud	8	
4	217-99293	M8 Flat washer	8	
5	217-99296	M8 Nyloc nut	8	
6	202-09168	Exhaust manifold spacer	4	
7	212-08627	Exhaust spacer gasket	4	
8	212-09070	2" Exhaust gasket	1	Orange type - From May 2011



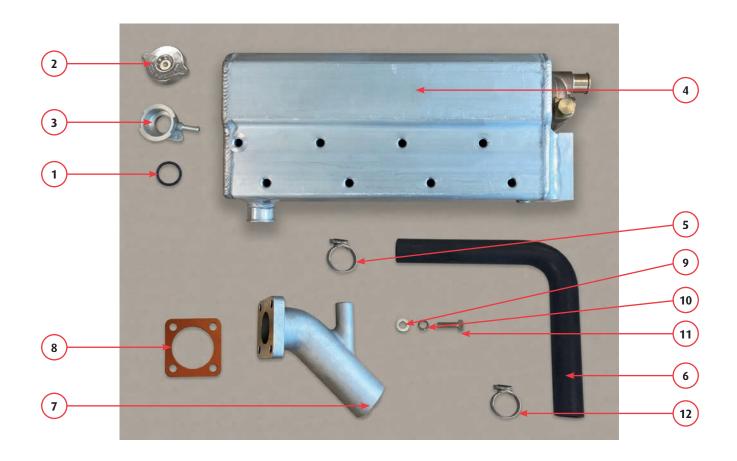
Ref.	Part No.	Description	Qty	Comments
1	209-02167/01	Filler neck '0' ring	1	
2	209-80130	Twin seal pressure cap	1	
3	209-08352	Filler neck assembly	1	
4	AK/S5/4CYLKC/E01	4 Cyl 3 Bolt Eskimo Manifold Kit includes ref no 1, 2, 3 & 9	1	
5	202-08429	3 Bolt keel cooled end cap	1	
6	212-10468	3 Bolt keel cooled end cap 'O' ring	1	
7	217-00190Z	3 Bolt end cap bolt	3	
9	212-09070	2" Exhaust gasket	1	Orange type - From May 2011
10	AK/MINIK/EX/1502	1 1/2" BSP Exhaust flange assembly	1	
11	217-99293	M8 Flat washer	4	
12	217-99292	M8 Spring washer	4	
13	217-99299	M8 x 25mm Set bolt	4	



### Beta 35 & 38 (non turbo) Single Bolt Heat Exchanger Manifolds - To 2011

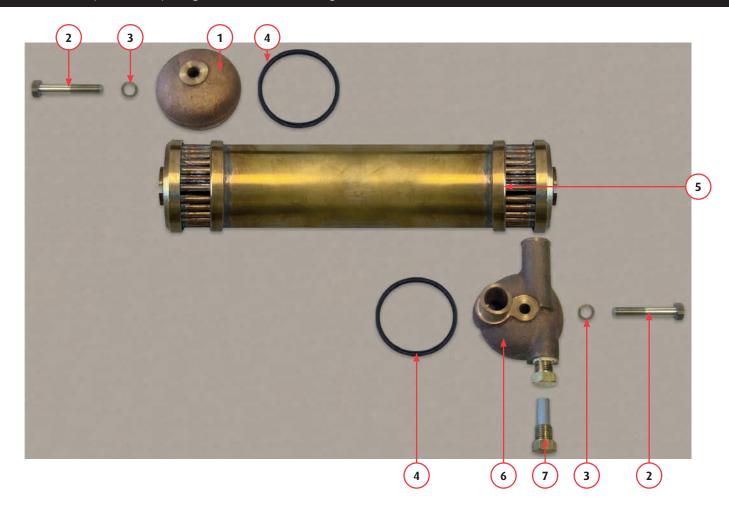


Ref.	Part No.	Description	Qty	Comments
1	209-01924/02	4 Cyl Single Bolt Thermex Manifold Kit includes ref no 6 & 7	1	Discontinued & superseded by AK/S5/4CYL/E01. Contact Beta Marine
2	600-80330	Exhaust manifold gasket	1	
3	201-62110/01	Super 5 manifold stud	8	
4	217-99293	M8 Flat washer	8	
5	217-99296	M8 Nyloc nut	8	
6	202-08618	Exhaust manifold spacer	4	
7	212-08627	Exhaust spacer gasket	4	
8	212-09070	2" Exhaust gasket	1	Orange type - From May 2011

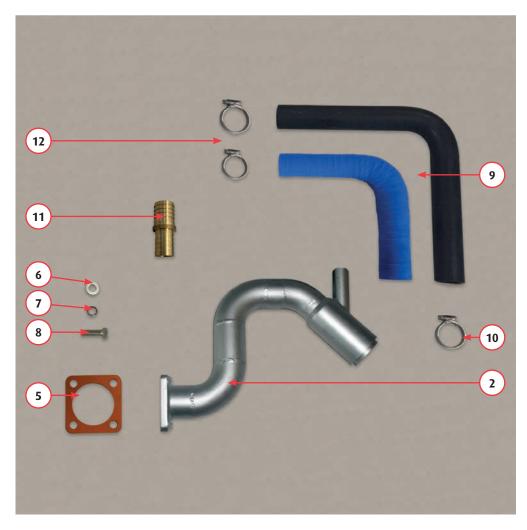


Ref.	Part No.	Description	Qty	Comments
1	209-02167/01	Filler neck 'O' ring	1	
2	209-80130	Twin seal pressure cap	1	
3	209-02167	Filler neck assembly	1	
4	209-01924/02	4 Cyl Single Bolt Thermex Manifold Kit	1	Discontinued & superseded by AK/S5/4CYL/E01. Contact Beta Marine
5	212-98464	Stainless steel hose clip 22-30mm	1	
6	209-91760	22mm ID Rubber elbow	1	
7	202-02458	2" OD Water injection bend	1	Standard aluminium - Not Beta 45T
8	212-09070	2" Exhaust gasket	1	Orange type - From May 2011
9	217-99293	M8 Flat washer	4	
10	217-99292	M8 Spring washer	4	
11	217-99299	M8 x 25mm Set bolt	4	
12	212-98464	Stainless steel hose clip 22-30mm	1	

### Beta 35 & 38 (non turbo) Single Bolt Heat Exchanger Manifolds - To 2011



Ref.	Part No.	Description	Qty	Comments
1	209-80100/01	Single bolt return end cap	1	
2	209-00016	Single bolt end cap bolt	2	1 per end cap
3	209-00017	M8 End cap bonded seal	2	1 per end cap
4	209-80110	Single bolt end cap 'O' ring	2	
5	209-80320	Single bolt end cap tubestack	1	
6	209-80440	Single bolt 22mm open end cap	1	
7	209-61840	Sacrificial zinc anode	1	

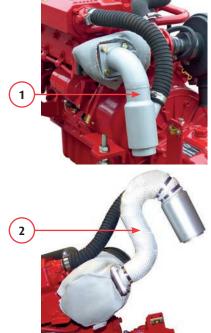




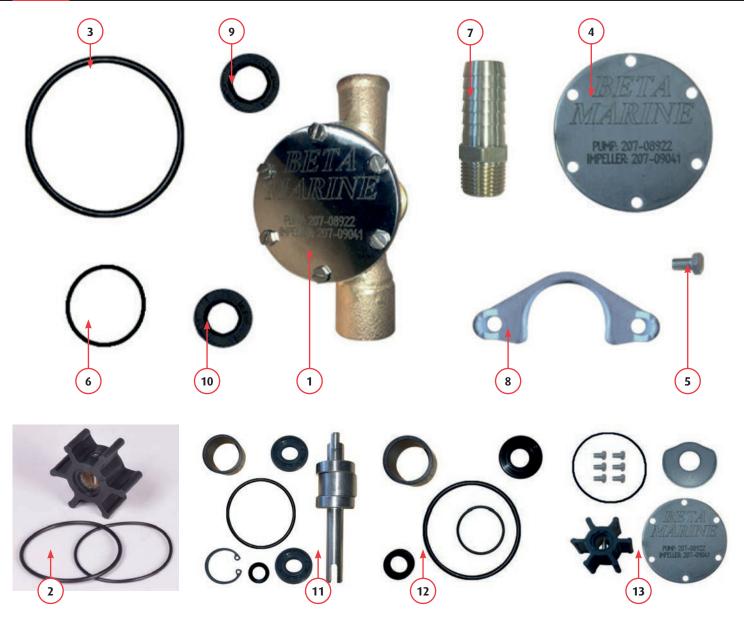
Ref.	Part No.	Description	Qty	Comments
1	202-90610	Stainless steel standard 50mm (2") 0D x 25mm water injection bend		
2	202-92400/22	Stainless steel 150mm (6") High rise x 50mm (2") OD x 25mm water injection bend	1	
3	202-94330/22	Stainless steel 200mm (8") High rise x 50mm (2") OD x 25mm water injection bend		Cross over to starboard
4	202-06504	Stainless steel 140mm (5.5") High rise x 50mm (2") OD x 25mm water injection bend		Volvo cross over to starboard
5	212-09070	Exhaust gasket	1	Orange type - From May 2011
6	217-99293	M8 Flat washer	4	
7	217-99292	M8 Spring washer	4	
8	217-99299	M8 x 25mm Bolt set	4	
	218-03471	Corrugated radiator hose 25mm ID - 0.43m OAL		To suit 25mm manifold - From 2013
9	218-06368	Corrugated radiator hose 22mm ID - 0.43m OAL	1	To suit 22mm manifold - From 2009
	209-98232	16mm x 22mm ID Reducing elbow		To suit 16mm manifold - To 2009
10	212-98464	Stainless steel hose clip 22-30mm	1	
11	212-07575	Brass hose adaptor 22-25mm ID	1	To suit 22mm manifold - From 2009
12	212-98464	Stainless steel hose clip 22-30mm	1	To suit 22mm manifold - From 2009
12	212-98462	Stainless steel hose clip 17-25mm	'	To suit 16mm manifold - To 2009
13	212-00234/01	Glass fibre exhaust lagging 3mm deep x 50mm wide	2m	
14	212-09630	Stainless steel tie 300mm OAL	2	

### Beta 45T (T - turbocharged) Water Injection Bends





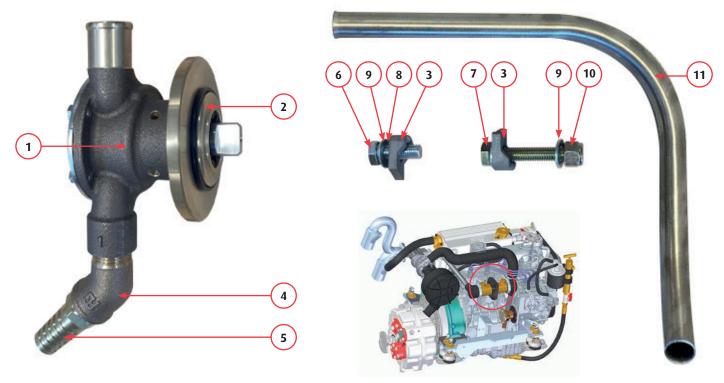
Ref.	Part No.	Description	Qty	Comments
1	202-10179	Stainless steel standard 60mm (2 3/8") 0D x 25mm water injection bend	1	Beta 45T only
2	202-10931	Stainless steel 150mm (6") High rise x 60mm (2 3/8") OD x 25mm water injection bend	ı	beta 451 only
3	212-09070	Exhaust gasket	1	Orange type - From May 2011
4	217-99293	M8 Flat washer	4	
5	217-99292	M8 Spring washer	4	
6	217-99299	M8 x 25mm set	4	
7	218-03471	Corrugated radiator hose 25mm ID - 0.43m OAL	1	
8	212-98464	Stainless steel hose clip 22-30mm	2	
9	212-00234/01	Glass fibre exhaust lagging 3mm deep x 50mm wide	2m	
10	212-09630	Stainless steel tie 300mm OAL	2	



Ref.	Part No.	Description	Qty	Comments
1	207-08922	Beta Marine sea water pump - complete	1	From June 2013 - Not Beta 45T
2	207-09041-KIT	Impeller kit	1	
3	207-09279	Sea water pump end cover 'O' ring	1	
4	207-09481	Sea water pump end cover plate	1	
5	207-09483	Sea water pump end cover plate screw	6	
6	209-08266	Sea water pump to engine '0' ring	1	
7	212-99232	Sea water pump end hose tail	1	1/2" BSPM x 3/4"
8	202-08924/01	Sea water pump clamp	1	
9	207-09351	Sea water pump lip seal	1	28mm
10	205-10361	Sea water pump lip seal		24mm
11	207-09229	Sea water pump shaft kit	1	
12	207-09228	Sea water pump seal kit	1	
13	207-09909	Sea water pump wear kit	1	

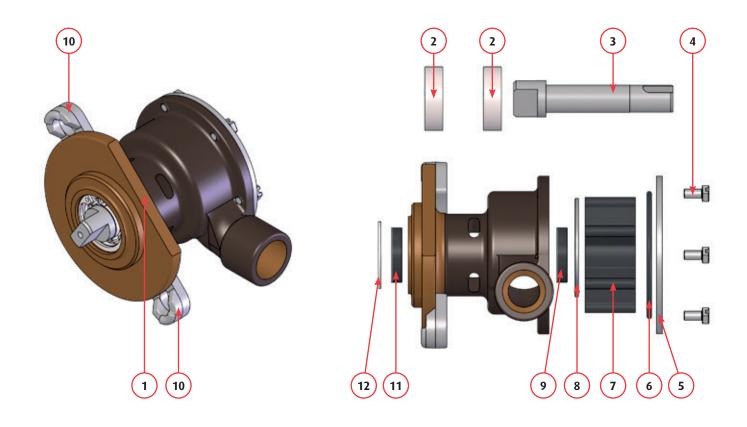


### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) Side Mounted Sea Water Pump - From 2013



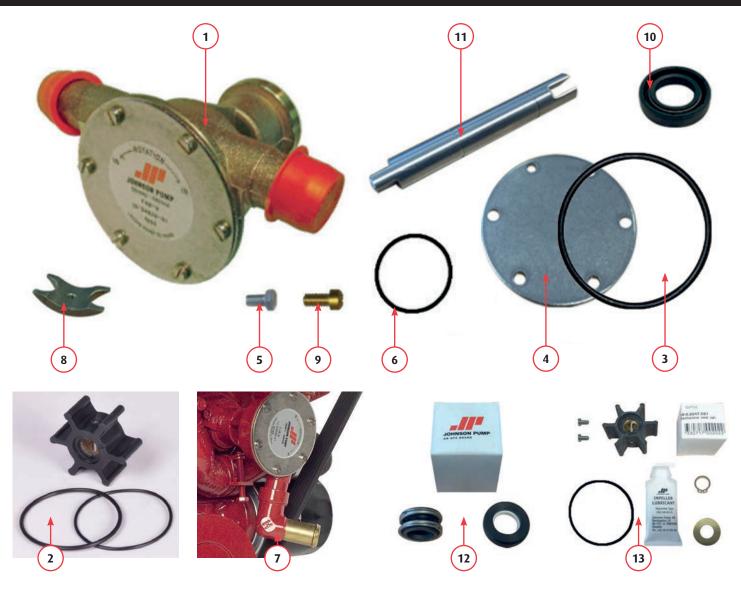
**Note:** Due to the position of the turbocharger the Beta 45T must have the gearbox oil cooler mounted on the starboard side

Ref.	Part No.	Description	Qty	Comments
1	207-61460/01	Beta Marine Sea water pump - complete	1	From June 2013
2	212-98238	Sea water pump to engine '0' ring	1	
3	202-08924/03	Sea water pump clamp	1	2 required
4	212-10329	1/2" BSP Bronze elbow M x F	1	
5	212-99232	1/2" BSP x 3/4" Hose connector	1	Beta 35 & 38
	212-09360	1/2" BSP x 1" Hose connector	'	Beta 45T only
6	217-99299	M8 x 25mm set	1	
7	217-00286	M8 x 45mm set	1	
8	217-99292	M8 Spring washer	1	
9	217-99293	M8 Flat washer	3	
10	217-99296	M8 Nyloc nut	1	
	202-20973	Side mounted sea water pump pipe 22mm	1	Beta 35, 38 & 45T
	209-91760/02	Sea water cooling pipe 22mm silicon hose 0.08m	2	Beta 35, 38 & 45T - Not shown
11	212-98464	Stainless steel hose clip 22-30mm	4	beta 33, 38 d 431 - NOT SHOWH
''	210-04351	Gearbox cooler end cap 22mm 90°		
	212-98464	Stainless steel hose clip 22-30mm	2	Beta 45T only
	212-00117	Stainless steel hose clip 45-60mm		

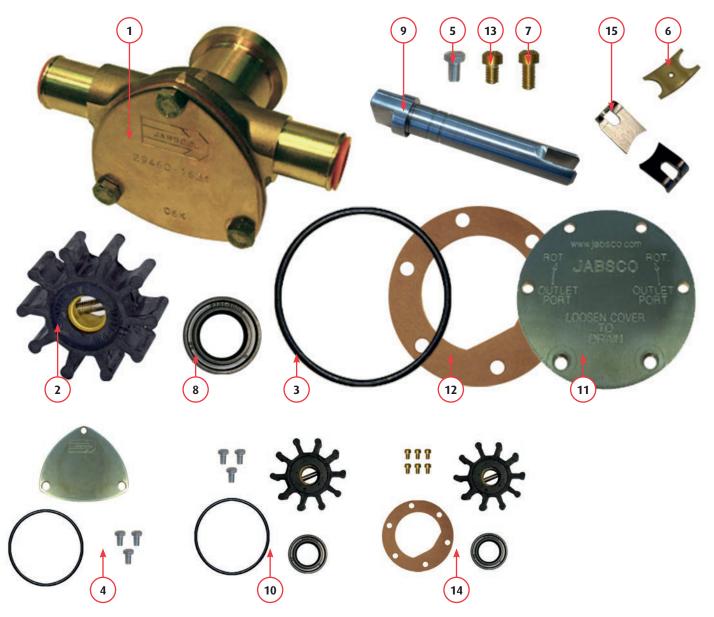


Ref.	Part No.	Description	Qty	Comments
1	207-61460/01	Beta Marine Sea water pump - complete	1	
2	N/A	Sealed bearing	2	N/A - part of shaft kit 207-11164
3	N/A	Pump shaft	1	N/A - part of shaft kit 207-11164
4	207-09483	Sea water pump end cover plate screw	6	
5	207-21760	Sea water pump end cover plate	1	
6	207-09279	Sea water pump end cover O' ring	1	
7	207-09041-KIT	Impeller kit	1	Includes 'O' ring ref no 6
8	N/A	Impeller backing plate	1	N/A - part of wear kit 207-09909
9	N/A	Sea water pump lip seal	1	N/A - part of shaft kit 207-11164
10	202-08924/03	Sea water pump clamp	1	2 required
11	N/A	Sea water pump lip seal	1	N/A - part of shaft kit 207-11164
12	N/A	Circlip	1	N/A - part of shaft kit 207-11164
13	207-11164	Sea water pump shaft kit	1	Includes 2, 3, 9, 11 & 12
14	207-11163	Sea water pump seal kit	1	Includes 6, 9 & 11
15	207-09909	Sea water pump wear kit	1	Includes 4, 5, 6, 7 & 8

### Beta 35 & 38 (non turbo) Johnson Sea Water Pump - From July 2006 to June 2013



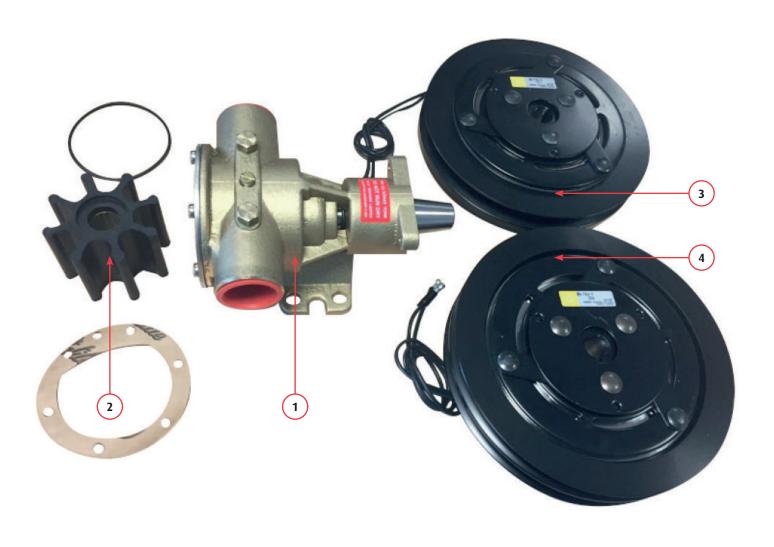
Ref.	Part No.	Description	Qty	Comments
1	207-61500/01	Johnson sea water pump - complete	1	
2	207-09041-KIT	Impeller kit	1	
3	207-09279	Sea water pump end cover 'O' ring	1	
4	207-05478	Sea water pump end cover plate	1	
5	207-05479	Sea water pump end cover plate screw	6	
6	209-08266	Sea water pump to engine 'O' ring	1	
7	212-99238	Sea water pump end hose tail	1	1/2" BSPM x 3/4" 90° elbow
8	207-06152	Sea water pump cam	1	
9	207-07494	Sea water pump cam screw	1	
10	207-06494	Sea water pump lip seal	1	
11	207-06520	Sea water pump shaft	1	
12	207-08636	Sea water pump mechanical seal	1	
13	207-07714	Sea water pump service kit	1	



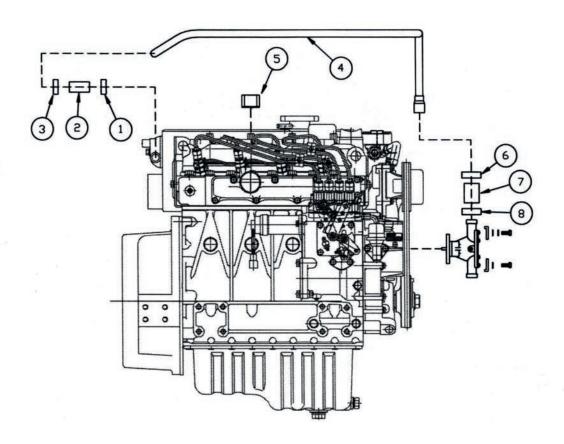
Ref.	Part No.	Description	Qty	Comments	
1	207-61500	Jabsco sea water pump - complete	1	To July 2006	
2	207-79630	Impeller	1		
3	207-04206	Sea water pump end cover 'O' ring	1		
4	207-00138/01	Sea water pump end cover kit	1		
5	207-04207	Sea water pump end cover plate screw	3		
6	207-01134	Sea water pump cam	1	3 screw - From March 2004 to July 2006	
7	207-01322	Sea water pump cam screw	1		
8	207-02239	Sea water pump lip seal	1		
9	207-01060	Sea water pump shaft	1		
10	AK/MINI/HE/SWPI/001	Sea water pump service kit	1		
11	207-00507	Sea water pump end cover plate	1		
12	207-62600	Sea water pump end cover gasket	1	6 screw - To March 2004	
13	207-00062	Sea water pump end cover plate screw	6	o sciew - 10 Marcii 2004	
14	207-61470	Sea water pump service kit	1		
15	202-01382	Sea water pump clamp	1	Pair	



### Johnson 1" 12 Volt Clutched Pump

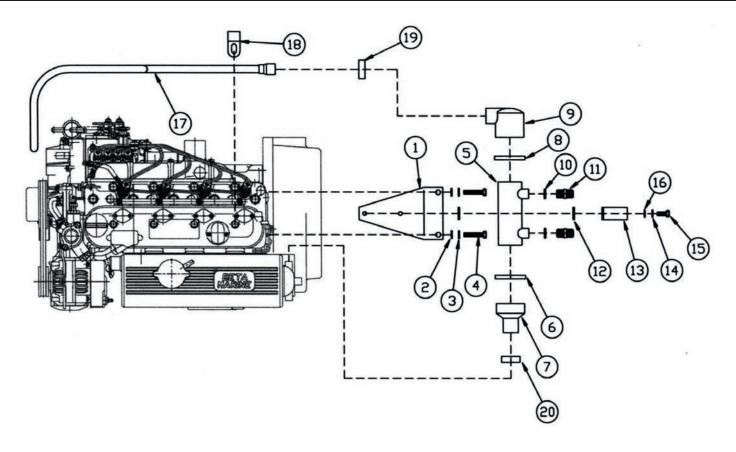


Ref.	Part No.	Description	Qty	Comments
1	207-07685	Sea water pump - complete	1	
2	207-10709	Impeller kit	1	
3	207-09856	Electro magnetic 12v clutch & 1 x SPB pulley	1	
4	207-07685/01	Electro magnetic 12v clutch & 2 x SPB pulley	1	

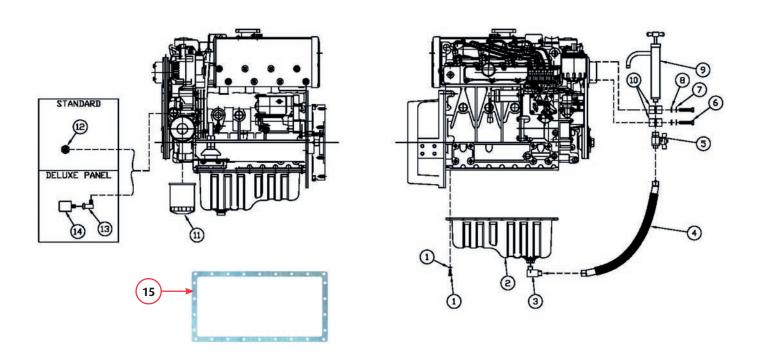


Ref.	Part No.	Description	Qty	Comments
1	212-98464	Stainless steel hose clip 22-30mm	1	From October 2002
'	212-98462	Stainless steel hose clip 17-25mm	'	To October 2002
2	218-99249	7/8" ID (22mm) water hose	0.06m	From October 2002
	218-99390	5/8" ID (15mm) water hose	0.06111	To October 2002
3	212-98464	Stainless steel hose clip 22-30mm	1	To suit 22mm & 25mm manifold - From 2009
	212-98462	Stainless steel hose clip 17-25mm	'	To suit 16mm manifold - To 2009
	209-09203		1	22mm - From June 2013
4	209-80370/22	Sea water cooling pipe		22mm - From October 2002 to June 2013
	209-80370			15mm - To October 2002
5	212-09281	Sea water cooling pipe clamp	1	From June 2013
_ 5	212-99264	Sea water cooling pipe clip	'	15mm & 22mm - To June 2013
6	212-98464	Stainless steel hose clip 22-30mm	1	From October 2002
0	212-98462	Stainless steel hose clip 17-25mm	'	To October 2002
7	218-99249	7/8" ID (22mm) water hose	0.06	From October 2002
_ /	218-99390	5/8" ID (15mm) water hose	0.06m	To October 2002
8	212-98464	Stainless steel hose clip 22-30mm	1	To suit 22mm & 25mm manifold - From 2009
8	212-98462	Stainless steel hose clip 17-25mm	1	To suit 16mm manifold - To 2009

#### Beta 35 & 38 (non turbo) Sea Water System For Hydraulic Gearboxes



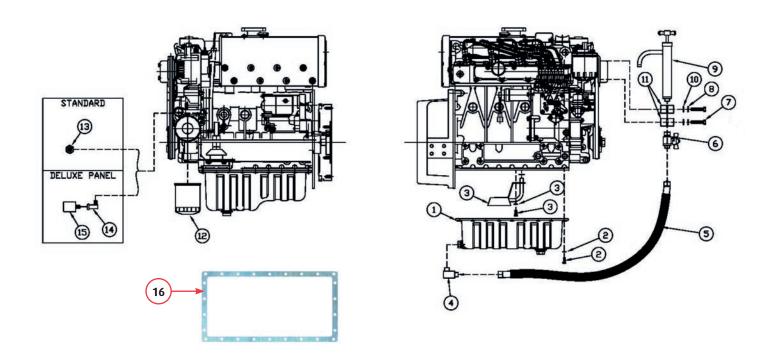
Ref.	Part No.	Description	Qty	Comments
1	202-00173	DC60 Oil cooler bracket	1	
2	217-99321	M10 Flat washer	2	
3	217-99320	M10 Spring washer	2	
4	217-99331	M10 x 50 x 1.25mm Set bolt	2	
5	210-91630	DC60 Gearbox oil cooler	1	Includes ref no 6, 7, 9 & 10
6	212-00117	Stainless steel hose clip 45-60mm	1	
7	202-09177	Gearbox cooler end cap 22mm straight outlet	1	Blue silicon - From 2012
8	212-00117	Stainless steel hose clip 45-60mm	1	
9	210-04351	Gearbox cooler end cap 22mm 90° inlet	1	
10	212-99379	1/2" BSP Copper washer	2	
11	212-99383	1/2" BSP x 3/8" BSP M-M Adaptor	2	
12	212-01544	Rubber strip 3mm H x 25mm W x 80mm L	2	
13	212-06547	Oil cooler clamp	1	
14	217-99292	M8 Spring washer	2	
15	217-99301	M8 x 35mm Set bolt	2	
16	217-99293	M8 Flat washer	2	
17	209-09203	Sea water cooling pipe	1	From June 2013
17	209-00176	sea water cooling pipe	'	To June 2013
18	212-09281	Sea water cooling pipe clamp	1	From June 2013
18	212-99264	Sea water cooling pipe clip	] '	To June 2013
19	212-98464	Stainless steel hose clip 22-30mm	1	
20	212-98464	Stainless steel hose clip 22-30mm	1	



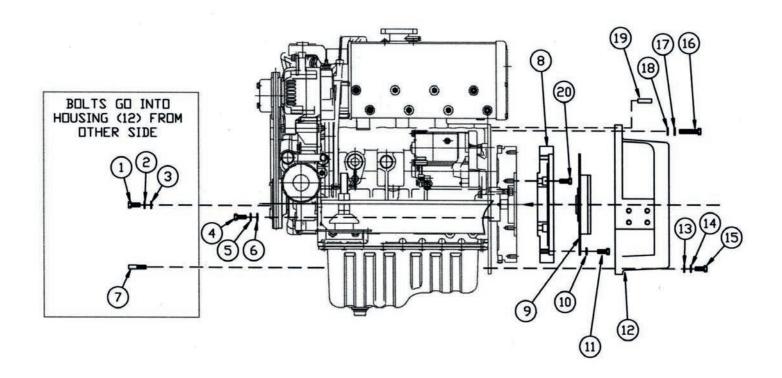
Ref.	Part No.	Description	Qty	Comments
1	600-02675	Sump bolt & washer	26	
2	600-02676	Standard oil sump	1	
3	210-91940	1/4" x 3/8" BSP M-M elbow	1	
4	210-94190	3/8" BSP STR-STR 480mm Sump pump drain pipe	1	
5	210-94530	3/8" BSP Sump drain pump tap	1	
6	217-99303	M8 x 50mm Set bolt	2	
7	217-99292	M8 Spring washer	2	
8	217-99294	M8 Penny washer	2	
9	210-80061	Sump drain pump	1	
10	212-00793	Sump drain pump clamp	2	
11	211-60390	Oil filter	1	
12	600-62670	Oil pressure switch	1	Not C Deluxe or CW panels
13	212-04355	1/8" BSPTM x 1/8" BSPF elbow	1	
14	200-94350	Oil pressure sender	1	For C Deluxe or CW panels
15	600-68640	Sump gasket	1	



### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) Oil System Components



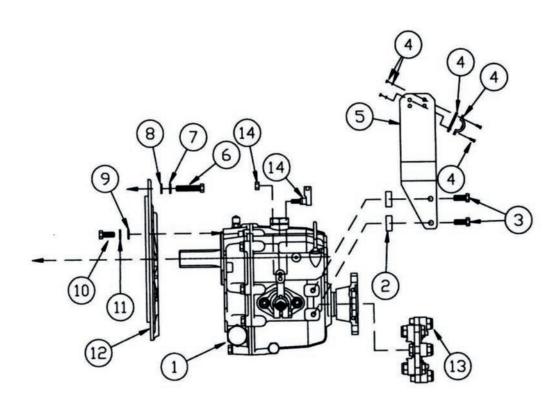
Ref.	Part No.	Description	Qty	Comments
1	AK/S5/5B4/PS1	Shallow sump kit	1	Includes sump, sump gasket, elbow & sump drain pump pipe
2	600-02675	Sump bolt & washer	26	
3	N/A	N/A	N/A	Part of ref no 1
4	210-91940	1/4" x 3/8" BSP M-M elbow	1	
5	210-04362	3/8" BSP STR-STR 760mm Sump pump drain pipe	1	
6	210-94530	3/8" BSP Sump drain pump tap	1	
7	217-99303	M8 x 50mm Set bolt	2	
8	217-99292	M8 Spring washer	2	
9	210-80061	Sump drain pump	1	
10	217-99294	M8 Penny washer	2	
11	212-00793	Sump drain pump clamp	2	
12	211-60390	Oil filter	1	
13	600-62670	Oil pressure switch	1	Not C Deluxe or CW panels
14	212-04355	1/8" BSPTM x 1/8" BSPF elbow	1	
15	200-94350	Oil pressure sender	1	For C Deluxe or CW panels
16	600-68640	Sump gasket	1	



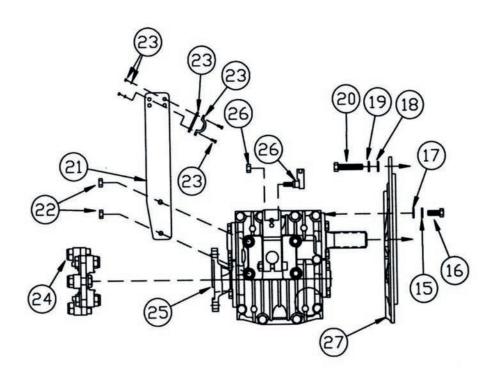
Ref.	Part No.	Description	Qty	Comments
1	217-99301	M8 x 35mm Set bolt	4	
2	217-99292	M8 Spring washer	4	
3	217-99293	M8 Flat washer	4	
4	217-99299	M8 x 25mm Set bolt	2	
5	217-99292	M8 Spring washer	2	
6	217-99293	M8 Flat washer	2	
7	217-00744	Flywheel housing location bolt	1	
8	202-01383/08	Inertia ring SAE 6.5	1	
	206-00895	43-AC-60 Driveplate SAE 6.5		TMC60 - From November 2021
9	207 01050	22 D CO Driven late CAF C F	1	TMC60 - To November 2021
	206-91950	22-B-60 Driveplate SAE 6.5		Hurth & PRM
10	N/A	N/A	N/A	
11	217-99309	M8 x 16mm Socket cap bolt	6	
12	208-85780/04	Flywheel housing	1	
13	217-99293	M8 Flat washer	2	
14	217-99292	M8 Spring washer	2	
15	217-99300	M8 x 30mm Set bolt	2	
16	217-99330	M10 x 40 x 1.25mm Set bolt	2	
17	217-99320	M10 Spring washer	2	
18	217-99321	M10 Flat washer	2	
19	217-99317	M8 x 24mm Dowell	2	
20	217-99309	M8 x 16mm Socket cap bolt	6	



### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) TMC60 Mechanical Gearbox



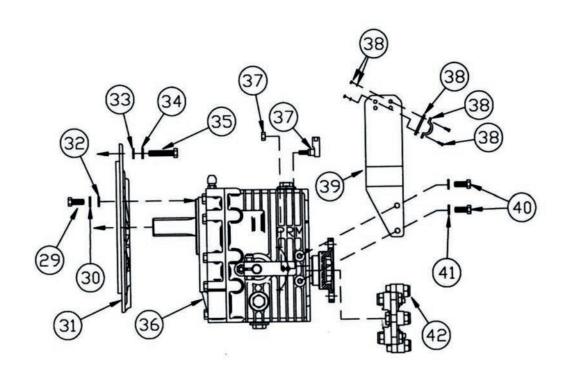
Ref.	Part No.	Description	Qty	Comments
	204-02479	TMC60 R1.5		
	204-91680	TMC60 R2		
1	204-01627	TMC60 R2.5	1	
	204-01192	TMC60 R2.94	ı	
	204-07724	TMC60A R2		Down angle
	204-07928	TMC60A R2.45		Down angle
2	201-01204	Spacer 7mm	2	
3	217-02585	M8 x 25mm Countersunk set bolt	2	
4	212-99241/01	Saddle clamp fitting kit	1	
5	202-05129	Gearbox morse control bracket	1	
6	217-99325	M10 x 25mm Set bolt	6	
7	217-99320	M10 Spring washer	6	
8	217-99321	M10 Flat washer	6	
9	217-99293	M8 Flat washer	6	
10	217-99298	M8 x 20mm Set bolt	2	
10	217-99299	M8 x 25mm Set bolt	4	
11	217-99292	M8 Spring washer	4	
12	205-60990	Adaptor plate	1	
13	212-01430	Flexible coupling	1	
14	212-07665	Clevis connector	1	From October 2015
14	212-99240/01	Ball joint z/p Steel		To October 2015



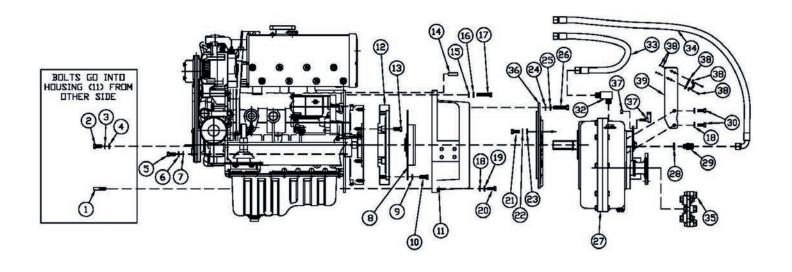
Ref.	Part No.	Description	Qty	Comments
15	217-99292	M8 Spring washer	4	
16	217-99298	M8 x 20mm Set bolt	2	
10	217-99299	M8 x 25mm Set bolt	4	
17	217-99293	M8 Flat washer	6	
18	217-99321	M10 Flat washer	6	
19	217-99320	M10 Spring washer	6	
20	217-99325	M10 x 25mm Set bolt	6	
21	202-61582	Gearbox morse control bracket	1	
22	217-99295	M8 Nut	2	
23	212-99241/01	Saddle clamp fitting kit	1	
24	212-01430	Flexible coupling	1	
25	204-85860	ZF12M R2	NI /A	Hurth HBW R2
25	204-94540	ZF12M R2.63	N/A	Hurth HBW R2.63
26	212-99240/01	Ball joint z/p Steel	1	
27	205-60990	Adaptor plate	1	



#### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) PRM90 & PRM125 Mechanical Gearbox



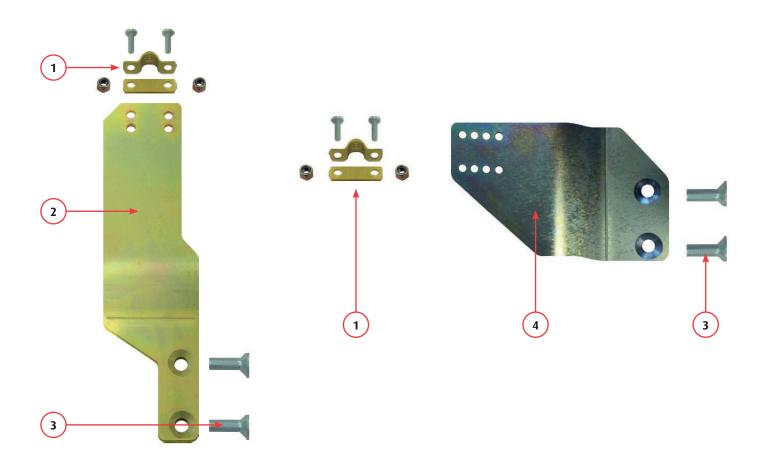
Ref.	Part No.	Description	Qty	Comments
29	217-99298	M8 x 20mm Set bolt	2	
29	217-99299	M8 x 25mm Set bolt	4	
30	217-99292	M8 Spring washer	4	
31	205-60990	Adaptor plate	1	
32	217-99293	M8 Flat washer	6	
33	217-99321	M10 Flat washer	6	
34	217-99320	M10 Spring washer	6	
35	217-99325	M10 x 25mm Set bolt	6	
	204-10396	PRM90 D2	1	Supersedes PRM80 D2, Beta 35 (BV1305) only
	204-10642	PRM90 D2.5		Supersedes PRM80 D2.5, Beta 35 (BV1305) only
36	204-10397	PRM125 D2		Supersedes PRM120 D2
	204-10773	PRM125 D2.5		Supersedes PRM120 D2.5
	204-11039	PRM125 D3		Supersedes PRM120 D3
37	212-07665	Clevis connector	1	From October 2015
37	212-99240/01	Ball joint z/p Steel	1	To October 2015
38	212-99241/01	Saddle clamp fitting kit	1	
39	202-05129	Gearbox morse control bracket	1	
40	217-99298	M8 x 20mm Set bolt	2	
41	217-99292	M8 Spring washer	2	
42	212-01430	Flexible coupling	1	





#### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) PRM150 Hydraulic Gearbox

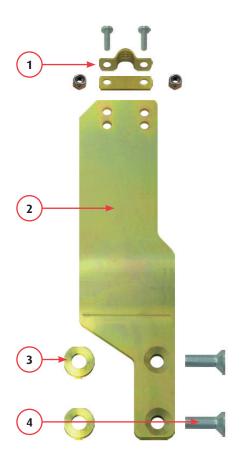
Ref.	Part No.	Description	Qty	Comments
1	217-00744	Flywheel housing location bolt	1	
2	217-99301	M8 x 35mm Set bolt	4	
3	217-99292	M8 Spring washer	4	
4	217-99293	M8 Flat washer	4	
5	217-99299	M8 x 25mm Set bolt	2	
6	217-99292	M8 Spring washer	2	
7	217-99293	M8 Flat washer	2	
0	206-07584	Driveplate SAE 6.5	1	From September 2017
8	206-02094	Driveplate SAE 6.5	1	To September 2017
9	N/A	N/A	N/A	
10	217-99309	M8 x 16mm Socket cap bolt	6	
11	208-85780/04	Flywheel housing	1	
12	202-01383/08	Inertia ring SAE 6.5	1	
13	217-99309	M8 x 16mm Socket cap bolt	6	
14	217-99317	M8 x 24mm Dowell	2	
15	217-99321	M10 Flat washer	2	
16	217-99320	M10 Spring washer	2	
17	217-99330	M10 x 40 x 1.25mm Set bolt	2	
18	217-99293	M8 Flat washer	2	
19	217-99292	M8 Spring washer	2	
20	217-99300	M8 x 30mm Set bolt	2	
21	217-99298	M8 x 20mm Set bolt	2	
21	217-99299	M8 x 25mm Set bolt	4	
22	217-99292	M8 Spring washer	4	
23	217-99293	M8 Flat washer	6	
24	217-99321	M10 Flat washer	6	
25	217-99320	M10 Spring washer	6	
26	217-99325	M10 x 25mm Set bolt	6	
	204-00911	PRM150 D1.5		
27	204-91920	PRM150 D2	1	
	204-91700	PRM150 D3		
28	N/A	N/A	N/A	Now part of ref no 34
29		· ·		
30	217-99301	M8 x 35mm Set bolt	2	
31	217-99292	M8 Spring washer	2	
32	210-91940	1/4" x 3/8" BSP M-M elbow	1	
33	210-94220	3/8" BSP 450mm 90°- ST Sump pump drain pipe	1	
34	210-04948	3/8" BSP 490mm 90°- 1/4" BSP banjo sump pump drain pipe	1	
35	212-01430	Flexible coupling	1	
36	205-60990	Adaptor plate	1	
37	212-99240/01	Ball joint z/p Steel	1	
38	212-99241/01	Saddle clamp fitting kit	1	
39	202-94100	Gearbox morse control bracket	1	

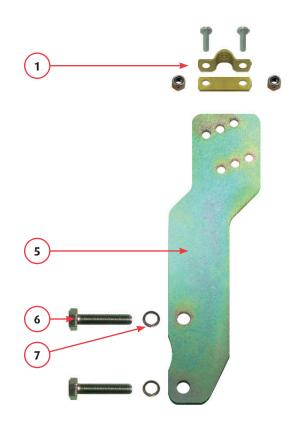


Ref.	Part No.	Description	Qty	Comments
1	212-99241/01	Saddle clamp fitting kit	1	
2	202-05129	PRM vertical morse control bracket	1	
3	217-99315	M8 x 20mm Countersunk set screw	2	
4	202-05208	PRM horizontal morse control bracket	1	

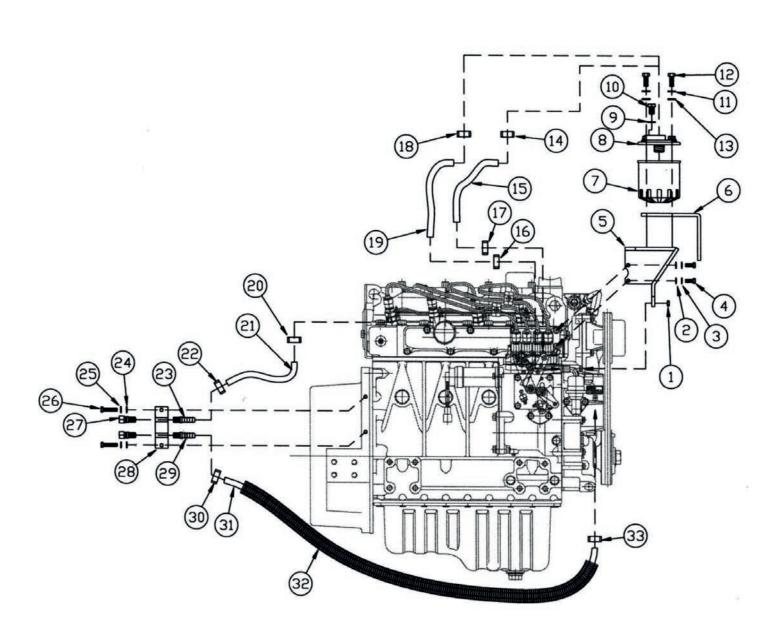


#### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) TMC60 & PRM150 Morse Control Brackets





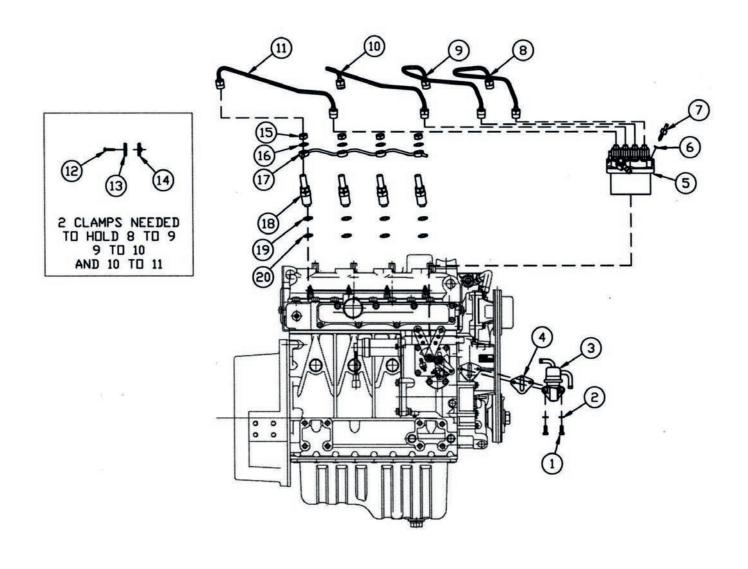
Ref.	Part No.	Description	Qty	Comments
1	212-99241/01	Saddle clamp fitting kit	1	
2	202-05129	TMC60 vertical morse control bracket	1	
3	201-01204	M8 7mm Spacer	2	
4	217-02482	M8 x 25mm Countersunk set screw	2	
5	202-94100	PRM150 vertical morse control bracket	1	
6	217-99301	M8 x 35mm Set bolt	2	
7	217-99292	M8 Spring washer	2	





### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) Fuel System Components

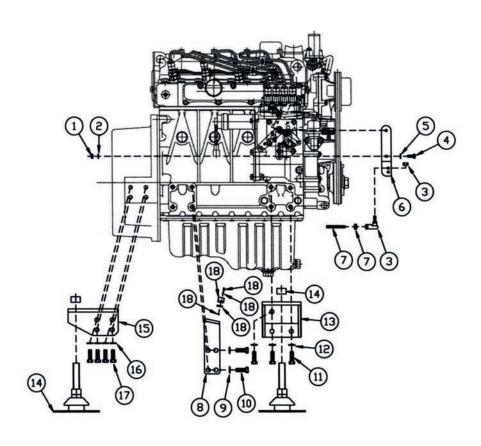
9         N/A         N/A         N/A         Now part of ref no 8           11         217-99292         M8 Spring washer         2           12         217-99298         M8 x 20mm Set bolt         2           13         217-99293         M8 Flat washer         2           14         212-02826         Stainless steel hose clip type 15         1           15         212-02423         8mm bore fuel hose         0.27m         ISO7480 Class A1           16         212-02826         Stainless steel hose clip type 15         1           17         212-02826         Stainless steel hose clip type 15         1           18         212-02826         Stainless steel hose clip type 15         1           19         212-02423         8mm bore fuel hose         0.30m         ISO7480 Class A1           20         212-04627         Stainless steel hose clip type 11         1         1           21         218-02827         5mm bore fuel hose         0.23m         ISO7480 Class A1           22         212-04627         Stainless steel hose clip type 11         1           23         212-03125         1/4" BSPT M x 3/16" Hose tail         1           24         217-99276         M6 Spring washer         2<	Ref.	Part No.	Description	Qty	Comments
3       217-99275       M6 Spring washer       2         4       217-99282       M6 x 25mm Set bolt       2         5       202-62160       Fuel filter bracket       1         6       202-90320       Sump pump bracket       1         7       211-60210       Fuel filter       1         8       600-80290       Fuel filter assembly       1         9       N/A       N/A       N/A         10       N/A       N/A       N/A         11       217-99292       M8 Spring washer       2         12       217-99298       M8 x 20mm Set bolt       2         13       217-99293       M8 Flat washer       2         14       212-02826       Stainless steel hose clip type 15       1         15       212-02826       Stainless steel hose clip type 15       1         16       212-02826       Stainless steel hose clip type 15       1         17       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m ISO7480 Class A1         20       212-04627       Stainless ste	1	217-00052	M6 Nut	1	
4       217-99282       M6 x 25mm Set bolt       2         5       202-62160       Fuel filter bracket       1         6       202-90320       Sump pump bracket       1         7       211-60210       Fuel filter       1         8       600-80290       Fuel filter assembly       1       Complete includes ref no 9 & 10         9       N/A       N/A       N/A       Now part of ref no 8         10       N/A       N/A       N/A       Now part of ref no 8         11       217-99292       M8 Spring washer       2         12       217-99293       M8 x 20mm Set bolt       2         13       217-99293       M8 Flat washer       2         14       212-02826       Stainless steel hose clip type 15       1         15       212-02826       Stainless steel hose clip type 15       1         16       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       ISO7480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         12       218-02826	2	217-99276	M6 Flat washer	2	
5         202-62160         Fuel filter bracket         1           6         202-90320         Sump pump bracket         1           7         211-60210         Fuel filter         1           8         600-80290         Fuel filter assembly         1         Complete includes ref no 9 & 10           9         N/A         N/A         N/A         Now part of ref no 8           11         217-99292         M8 Spring washer         2           12         217-99298         M8 x 20mm Set bolt         2           13         217-99293         M8 Flat washer         2           14         212-02826         Stainless steel hose clip type 15         1           15         212-02423         8mm bore fuel hose         0.27m         ISO7480 Class A1           16         212-02826         Stainless steel hose clip type 15         1         1           17         212-02826         Stainless steel hose clip type 15         1         1           18         212-02826         Stainless steel hose clip type 15         1         1           19         212-0423         8mm bore fuel hose         0.30m         ISO7480 Class A1           20         212-04627         Stainless steel hose clip type 11	3	217-99275	M6 Spring washer	2	
6       202-90320       Sump pump bracket       1         7       211-60210       Fuel filter       1         8       600-80290       Fuel filter assembly       1       Complete includes ref no 9 & 10         9       N/A       N/A       N/A       Now part of ref no 8         10       N/A       N/A       Now part of ref no 8         11       217-99292       M8 Spring washer       2         12       217-99298       M8 x 20mm Set bolt       2         13       217-99293       M8 Flat washer       2         14       212-02826       Stainless steel hose clip type 15       1         15       212-02423       8mm bore fuel hose       0.27m       ISO7480 Class A1         16       212-02826       Stainless steel hose clip type 15       1         17       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       ISO7480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       Smm bore fuel hose       0.23m       ISO7480 Class A1 <td>4</td> <td>217-99282</td> <td>M6 x 25mm Set bolt</td> <td>2</td> <td></td>	4	217-99282	M6 x 25mm Set bolt	2	
7       211-60210       Fuel filter       1         8       600-80290       Fuel filter assembly       1       Complete includes ref no 9 & 10         9       N/A       N/A       N/A       Now part of ref no 8         11       217-99292       M8 Spring washer       2         12       217-99298       M8 x 20mm Set bolt       2         13       217-99293       M8 Flat washer       2         14       212-02826       Stainless steel hose clip type 15       1         15       212-02423       8mm bore fuel hose       0.27m       ISO7480 Class A1         16       212-02826       Stainless steel hose clip type 15       1         17       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       ISO7480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       ISO7480 Class A1         22       212-04627       Stainless steel hose clip type 11       1       1         23       212-03125       1/4" BSPT M	5	202-62160	Fuel filter bracket	1	
8         600-80290         Fuel filter assembly         1         Complete includes ref no 9 & 10           9         N/A         N/A         N/A         Now part of ref no 8           11         217-99292         M8 Spring washer         2           12         217-99298         M8 x 20mm Set bolt         2           13         217-99293         M8 Flat washer         2           14         212-02826         Stainless steel hose clip type 15         1           15         212-02423         8mm bore fuel hose         0.27m         ISO7480 Class A1           16         212-02826         Stainless steel hose clip type 15         1         1           17         212-02826         Stainless steel hose clip type 15         1         1           18         212-02826         Stainless steel hose clip type 15         1         1           19         212-02423         8mm bore fuel hose         0.30m         ISO7480 Class A1           20         212-04627         Stainless steel hose clip type 11         1           21         218-02827         5mm bore fuel hose         0.23m         ISO7480 Class A1           22         212-04627         Stainless steel hose clip type 11         1           23 <td>6</td> <td>202-90320</td> <td>Sump pump bracket</td> <td>1</td> <td></td>	6	202-90320	Sump pump bracket	1	
9         N/A         N/A         N/A         Now part of ref no 8           11         217-99292         M8 Spring washer         2           12         217-99298         M8 x 20mm Set bolt         2           13         217-99293         M8 Flat washer         2           14         212-02826         Stainless steel hose clip type 15         1           15         212-02423         8mm bore fuel hose         0.27m         ISO7480 Class A1           16         212-02826         Stainless steel hose clip type 15         1           17         212-02826         Stainless steel hose clip type 15         1           18         212-02826         Stainless steel hose clip type 15         1           19         212-02423         8mm bore fuel hose         0.30m         ISO7480 Class A1           20         212-04627         Stainless steel hose clip type 11         1         1           21         218-02827         5mm bore fuel hose         0.23m         ISO7480 Class A1           22         212-04627         Stainless steel hose clip type 11         1           23         212-03125         1/4" BSPT M x 3/16" Hose tail         1           24         217-99276         M6 Spring washer         2<	7	211-60210	Fuel filter	1	
N/A   N/A   N/A   N/A   N/A   Now part of ref no 8	8	600-80290	Fuel filter assembly	1	Complete includes ref no 9 & 10
11	9	N1 /A	N. /A	N. /A	No. and of orders 0
12     217-99298     M8 x 20mm Set bolt     2       13     217-99293     M8 Flat washer     2       14     212-02826     Stainless steel hose clip type 15     1       15     212-02423     8mm bore fuel hose     0.27m     IS07480 Class A1       16     212-02826     Stainless steel hose clip type 15     1       17     212-02826     Stainless steel hose clip type 15     1       18     212-02826     Stainless steel hose clip type 15     1       19     212-02423     8mm bore fuel hose     0.30m     IS07480 Class A1       20     212-04627     Stainless steel hose clip type 11     1       21     218-02827     5mm bore fuel hose     0.23m     IS07480 Class A1       22     212-04627     Stainless steel hose clip type 11     1       23     212-03125     1/4" BSPT M x 3/16" Hose tail     1       24     217-99276     M6 Spring washer     2       25     217-99283     M6 x 30mm Set bolt     2       26     217-99283     M6 x 30mm Set bolt     2       27     212-97112     8mm x 1/4" BSPT M x 5/16" Hose tail     2     USA only       28     202-01460     Fuel connection block     1	10	N/A	N/A	N/A	Now part of ref no 8
13       217-99293       M8 Flat washer       2         14       212-02826       Stainless steel hose clip type 15       1         15       212-02423       8mm bore fuel hose       0.27m       ISO7480 Class A1         16       212-02826       Stainless steel hose clip type 15       1         17       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       ISO7480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       ISO7480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2       Not USA         28       202-01460       Fuel connection block       1       USA only	11	217-99292	M8 Spring washer	2	
14       212-02826       Stainless steel hose clip type 15       1         15       212-02423       8mm bore fuel hose       0.27m       IS07480 Class A1         16       212-02826       Stainless steel hose clip type 15       1         17       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       IS07480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       IS07480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M x 5/16" Hose tail       2       Not USA         28       202-01460       Fuel connection block       1	12	217-99298	M8 x 20mm Set bolt	2	
15       212-02423       8mm bore fuel hose       0.27m       ISO7480 Class A1         16       212-02826       Stainless steel hose clip type 15       1         17       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       ISO7480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       ISO7480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2 Not USA         27       212-99253       1/4" BSPT M x 5/16" Hose tail       2 USA only         28       202-01460       Fuel connection block       1	13	217-99293	M8 Flat washer	2	
16       212-02826       Stainless steel hose clip type 15       1         17       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       IS07480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       IS07480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2 Not USA         28       202-01460       Fuel connection block       1	14	212-02826	Stainless steel hose clip type 15	1	
17       212-02826       Stainless steel hose clip type 15       1         18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       IS07480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       IS07480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2       Not USA         27       212-99253       1/4" BSPT M x 5/16" Hose tail       2       USA only         28       202-01460       Fuel connection block       1	15	212-02423	8mm bore fuel hose	0.27m	ISO7480 Class A1
18       212-02826       Stainless steel hose clip type 15       1         19       212-02423       8mm bore fuel hose       0.30m       ISO7480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       ISO7480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2 Not USA         27       212-99253       1/4" BSPT M x 5/16" Hose tail       2 USA only         28       202-01460       Fuel connection block       1	16	212-02826	Stainless steel hose clip type 15	1	
19       212-02423       8mm bore fuel hose       0.30m       IS07480 Class A1         20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       IS07480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2 Not USA         27       212-99253       1/4" BSPT M x 5/16" Hose tail       2 USA only         28       202-01460       Fuel connection block       1	17	212-02826	Stainless steel hose clip type 15	1	
20       212-04627       Stainless steel hose clip type 11       1         21       218-02827       5mm bore fuel hose       0.23m       IS07480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2 Not USA         27       212-99253       1/4" BSPT M x 5/16" Hose tail       2 USA only         28       202-01460       Fuel connection block       1	18	212-02826	Stainless steel hose clip type 15	1	
21       218-02827       5mm bore fuel hose       0.23m       IS07480 Class A1         22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2 Not USA         27       212-99253       1/4" BSPT M x 5/16" Hose tail       2 USA only         28       202-01460       Fuel connection block       1	19	212-02423	8mm bore fuel hose	0.30m	ISO7480 Class A1
22       212-04627       Stainless steel hose clip type 11       1         23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2       Not USA         212-99253       1/4" BSPT M x 5/16" Hose tail       2       USA only         28       202-01460       Fuel connection block       1	20	212-04627	Stainless steel hose clip type 11	1	
23       212-03125       1/4" BSPT M x 3/16" Hose tail       1         24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2       Not USA         212-99253       1/4" BSPT M x 5/16" Hose tail       2       USA only         28       202-01460       Fuel connection block       1	21	218-02827	5mm bore fuel hose	0.23m	ISO7480 Class A1
24       217-99276       M6 Spring washer       2         25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2 Not USA         27       212-99253       1/4" BSPT M x 5/16" Hose tail       2 USA only         28       202-01460       Fuel connection block       1	22	212-04627	Stainless steel hose clip type 11	1	
25       217-99275       M6 Flat washer       2         26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2 Not USA         27       212-99253       1/4" BSPT M x 5/16" Hose tail       2 USA only         28       202-01460       Fuel connection block       1	23	212-03125	1/4" BSPT M x 3/16" Hose tail	1	
26       217-99283       M6 x 30mm Set bolt       2         27       212-97112       8mm x 1/4" BSPT M Stud coupling       2       Not USA         212-99253       1/4" BSPT M x 5/16" Hose tail       2       USA only         28       202-01460       Fuel connection block       1	24	217-99276	M6 Spring washer	2	
27     212-97112     8mm x 1/4" BSPT M Stud coupling     2     Not USA       212-99253     1/4" BSPT M x 5/16" Hose tail     2     USA only       28     202-01460     Fuel connection block     1	25	217-99275	M6 Flat washer	2	
27       212-99253       1/4" BSPT M x 5/16" Hose tail       2       USA only         28       202-01460       Fuel connection block       1	26	217-99283	M6 x 30mm Set bolt	2	
212-99253       1/4" BSPT M x 5/16" Hose tail       2       USA only         28       202-01460       Fuel connection block       1	27	212-97112	8mm x 1/4" BSPT M Stud coupling	2	Not USA
	2/	212-99253	1/4" BSPT M x 5/16" Hose tail	2	USA only
29 212-99253 1/4" BSPT M x 5/16" Hose tail 2	28	202-01460	Fuel connection block	1	
1 /	29	212-99253	1/4" BSPT M x 5/16" Hose tail	2	
30 212-02826 Stainless steel hose clip type 15 1	30	212-02826	Stainless steel hose clip type 15	1	
31 212-02423 8mm bore fuel hose 0.30m ISO7480 Class A1	31	212-02423	8mm bore fuel hose	0.30m	ISO7480 Class A1
32 200-00709 8mm Fuel hose conduit 0.30m	32	200-00709	8mm Fuel hose conduit	0.30m	
33 212-02826 Stainless steel hose clip type 15 1		212-02826	Stainless steel hose clip type 15		

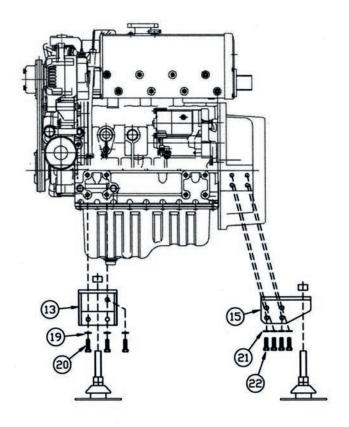




### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) Fuel System Components

Ref.	Part No.	Description	Qty	Comments
1	217-00052	M6 Nut	1	
2	217-99275	M6 Spring washer	2	
3	600-67830	Fuel lift pump	1	
4	600-00065	Fuel lift pump gasket	1	
5	600-00634	Fuel injection pump	1	
6	600-00625	M6 Copper washer	1	
7	600-00536	Fuel return screw	1	
8	600-01216	Injector pipe A (1)	1	
9	600-01217	Injector pipe B (2)	1	
10	600-01218	Injector pipe C (3)	1	
11	600-01219	Injector pipe D (4)	1	
12	600-91803	Fuel clamp screw	3	Includes washer
13	600-91802	Fuel clamp unthreaded	3	
14	600-91801	Fuel clamp threaded	3	
15	600-00622	Fuel leak off injector nut	4	
16	600-00537	Fuel leak off rail gasket	4	
17	600-00305	Fuel leak off rail	1	
18	600-67740	Fuel injector	4	
19	600-00242	Fuel injector to cylinder head gasket	4	
20	600-01042	Fuel injector heat seal	4	Beta 35 (BV1305) only



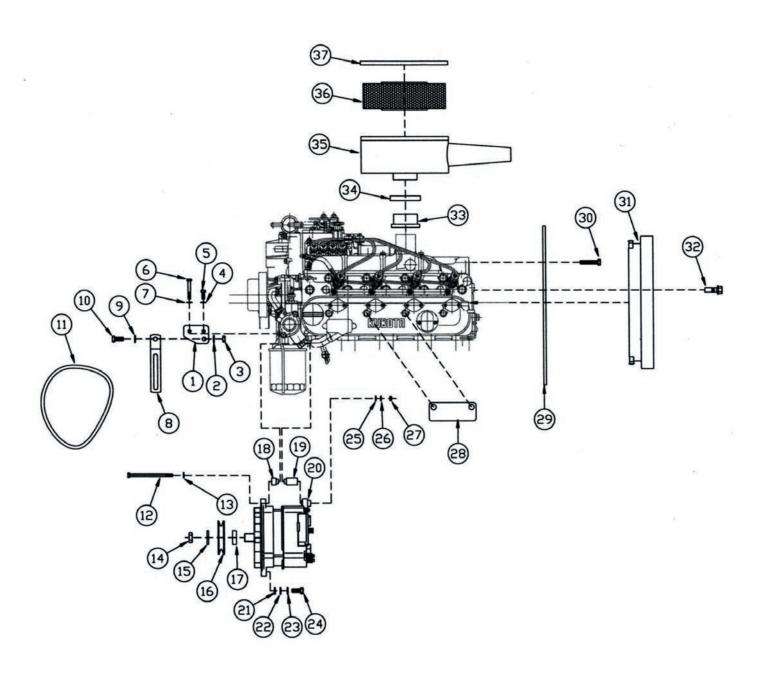




#### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) Speed Control Bracketry & Feet

Ref.	Part No.	Description	Qty	Comments
1	217-99278	M6 Nyloc nut	1	
2	217-99275	M6 Spring washer	1	
3	212-99240/01	Ball joint z/p Steel	1	
4	217-99280	M6 x 16mm Set bolt	1	
5	217-99276	M6 Flat washer	1	
6	202-01722/01	Speed control lever	1	
	212-99990/02			2m in length
7	212-96070/01	Single lever control cable	2	3m in length
	212-99990			4m in length
8	202-01769	Speed control bracket	1	
9	217-99320	M10 Spring washer	2	
10	217-99329	M10 x 25 x 1.25mm Set bolt	2	
11	217-99329	M10 x 25 x 1.25mm Set bolt	3	
12	217-99320	M10 Spring washer	3	
13	202-88590S/05	Front starboard foot	1	
13	202-88590P/05	Front port foot		
14	213-93440	Flexible mount	4	Trelleborg
15	202-88600S	Rear starboard foot	1	
15	202-88600P	Rear port foot	ı	
16	217-99320	M10 Spring washer	4	
17	217-99326	M10 x 30mm Set bolt	4	
18	212-99241/01	Saddle clamp fitting kit	1	
19	217-99320	M10 Spring washer	3	
20	217-99329	M10 x 25 x 1.25mm Set bolt	3	
21	217-99320	M10 Spring washer	4	
22	217-99326	M10 x 30mm Set bolt	4	
23	600-00580	Water drain tap	1	

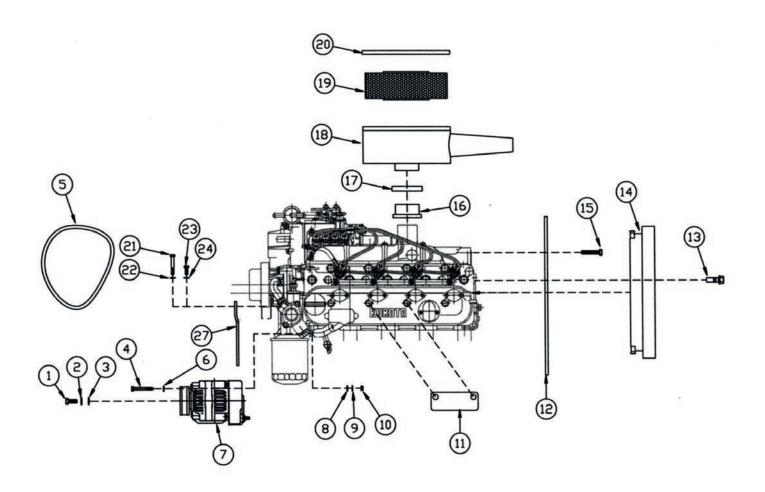






#### Beta 35 & 38 (non turbo), Beta 45T (T - turbocharged) Alternators & Air Intake System - From September 2001

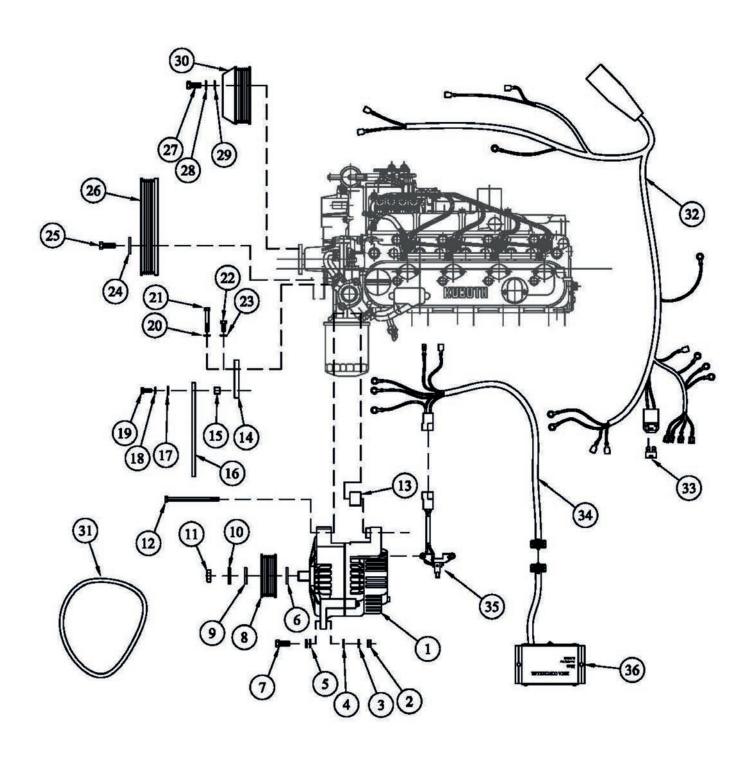
Ref.	Part No.	Description	Qty	Comments
1	202-61400	Alternator arm plate	1	
2	217-99293	M8 Flat washer	1	
3	217-99296	M8 Nyloc nut	1	
4	217-99275	M6 Spring washer	1	
5	217-99280	M6 x 16mm Set bolt	1	
6	217-99287	M6 x 55mm Bolt	1	
7	217-99275	M6 Spring washer	1	
8	212-96260	Alternator arm	1	
9	217-99293	M8 Flat washer	1	
10	217-99298	M8 x 20mm Set bolt	1	
11	Drive belt	For options available	1	Please refer to page 3
12	217-99308	M8 x 130mm Bolt	1	
13	217-99293	M8 Flat washer	1	
14	N/A	N/A	N/A	Now part of alternator
15	I N/A	N/A	I N/A	Now part or alternator
16	200-91720/01	Alternator pulley	1	V drive pulley
10	201-02251	Alternator pulley	ļ !	PolyVee drive pulley
17	200-91745	Spacer	1	
18	201-58920	65/70 Amp short alternator spacer	1	
19	201-58910	65/70 Amp long alternator spacer	1	
20	Alternator	For options available	1	Please refer to page 3
21	217-99294	M8 Penny washer	1	
22	217-99294	M8 Penny washer	1	
23	217-99292	M8 Spring washer	1	
24	217-99299	M8 x 25mm Set bolt	1	
25	217-99293	M8 Flat washer	1	
26	217-99292	M8 Spring washer	1	
27	217-99295	M8 Nut	1	
28	202-97570	Label plate	1	
29	600-00630/4	Flywheel backplate	1	
30	600-02680	Flywheel backplate bolt	8	
31	600-00630	Flywheel	1	
32	600-02100	Flywheel bolt	6	
33	212-99391	Air filter assembly grommet	1	Only for 211-93700
34	212-00118	Stainless steel hose clip 55-70mm	1	
	211-08130			From January 2012
35	211-08131	Air filter assembly	1	Single wingnut - From November 2010 to January 2012 - No longer available
	211-93700	_ / www.meer daserribity		3 Clamp - To November 2010 - No longer available
	211-09178			Beta 45T only - From 2016
	211-08132			From January 2012
3.6	211-08133	Air filter closs set		Single wingnut - From November 2010 to January 2012
36	211-61831	Air filter element	1	3 Clamp - To November 2010
	211-01831	_		-
	211-091/9			Beta 45T only - From 2016





#### Beta 35 & 38 (non turbo) Alternators & Air Intake System - To September 2001

Ref.	Part No.	Description	Qty	Comments
1	217-99299	M8 x 25mm Set bolt	1	
2	217-99293	M8 Flat washer	1	
3	217-99294	M8 Penny washer	1	
4	217-02760	M10 x 100 x 1.25mm Hex bolt	1	
5	600-94280/01	V belt	1	40 Amp alternator
6	217-99321	M10 Flat washer	1	
7	600-02781	40 Amp alternator	1	
8	217-99321	M10 Flat washer	1	
9	217-99320	M10 Spring washer	1	
10	217-99322	M10 Nut	1	
11	202-97570	Label plate	1	
12	600-00630/4	Flywheel backplate	1	
13	600-02100	Flywheel bolt	6	
14	600-00630	Flywheel	1	
15	600-02680	Flywheel backplate bolt	8	
16	212-99391	Air filter rubber grommet	1	
17	212-00118	Stainless steel hose clip 55-70mm	1	
18	211-93700	Air filter assembly	1	To November 2010 - No longer available
19	211-61831	Air filter element	1	To November 2010
20	N/A	Air filter assembly cover	1	No longer available
21	217-99287	M6 x 55mm Bolt	1	
22	217-99275	M6 Spring washer	1	
23	217-99280	M6 x 16mm Set bolt	1	
24	217-99275	M6 Spring washer	1	



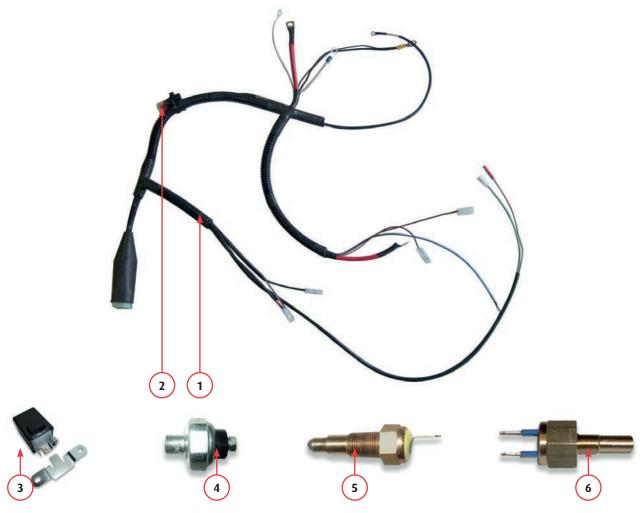


#### Beta 35 & 38 (non turbo) with 100/120 Amp Alternator & Optional Beta Controller - To 2012

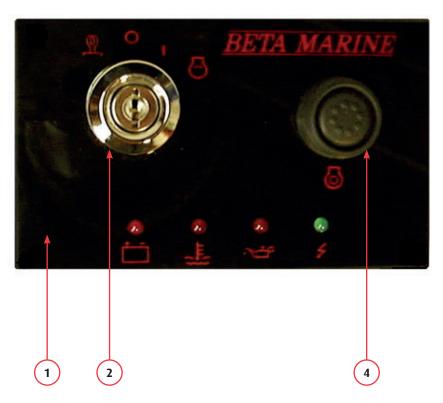
Ref.	Part No.	Description	Qty	Comments
4	200-08183	120 Amp alternator	4	Suits 3 bolt manifold
1	200-03008	100 Amp alternator	1	Suits single bolt manifold
2	217-99295	M8 Nut	1	
3	217-99292	M8 Spring washer	1	
4	217-99293	M8 Flat washer	1	
5	217-99294	M8 Penny washer	1	
6	N/A	N/A	N/A	Part of ref no 1
7	217-99301	M8 x 35mm Set bolt	1	
0	201-22415	6K Alternator driven pulley 60mm diameter	1	120 Amp - From November 2020
8	201-02251	6K Alternator driven pulley 80mm diameter	1	
9				
10	N/A	N/A	N/A	Part of ref no 1
11				
12	217-03178	3/8" UNC x 4 ½" Socket cap bolt	1	
13	201-61801	Alternator spacer	1	
14	202-05437	100 Amp alternator arm spacer bracket	1	
15	201-58920/01	Spacer button	1	Machine down to 10mm OAL
16	202-01086	100 Amp alternator adjusting arm	1	
17	217-99293	M8 Flat washer	1	
18	217-99292	M8 Spring washer	1	
19	217-99299	M8 x 25mm Set bolt	1	
20	217-99275	M6 Spring washer	1	
21	217-99287	M6 x 55mm Bolt	1	
22	217-99280	M6 x 16mm Set bolt	1	
23	217-99275	M6 Spring washer	1	
24	217-99321	M10 Flat washer	3	
25	217-99329	M10 x 35 x 1,25mm Set bolt	3	
2.6	201-22415	120 Amp alternator drive pulley		From November 2020
26	201-02251	70, 100 & 120 Amp alternator drive pulley	1	120 Amp - To November 2020
27	217-99281	M6 x 20mm Set bolt	4	
28	217-99275	M6 Spring washer	4	
29	217-99276	M6 Flat washer	4	
30	201-05433	100 Amp alternator 6 grove water pump overpulley	1	
31	214-04618	100 Amp alternator 6PK polyvee belt	1	
32	200-60973/05	Standard engine harness	1	
33	200-00959	40 Amp Fuse Blade	1	
34	200-02737	Controller wiring loom	1	
35	200-02684	100 Amp alternator brush box	1	For Beta controller only
36	200-02580	Beta controller	1	
N/A	AK/S5H/120A/KS01	6PK Drive belt upgrade kit	1	Please refer to page 79
N/A	AK/S5H/120A/E02	120 Amp alternator & polyvee drive upgrade kit	1	Please refer to page 80

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#### Wiring Harness & Switches



Ref.	Part No.	Description	Qty	Comments
1	200-60973/05	Beta 35, 38 & 45T engine harness	1	Includes fuse & relay - From January 2010
2	200-00959	40 Amp fuse blade	1	
3	200-57640	Relay 12 Volt 70A (33Ra)	1	
4	600-62670	Oil pressure switch	1	Not C Deluxe & CW panel
5	600-62820	Water temperature switch	1	From March 2007, Not C Deluxe & CW panel
6	200-01133	Water temperature sender switch 95°C 1/8" BSP	1	To March 2007, Not C Deluxe & CW panel
7	212-01480	3/8" BSPT Male x 1/8" BSP Female galvanised adaptor for 200-01133	1	Required if temperature sender is being fitted into 3/8" BSP thread
8	200-04588/01	1 metre extension harness	1	Not shown
9	200-04588/02	2 metre extension harness	1	Not shown
10	200-04588/03	3 metre extension harness	1	Not shown
11	200-04588/04	4 metre extension harness	1	Not shown
12	200-04588/05	5 metre extension harness	1	Not shown
13	200-04588/06	6 metre extension harness	1	Not shown
14	200-04588/08	8 metre extension harness	1	Not shown
15	200-04588/10	10 metre extension harness	1	Not shown
16	200-04588/15	15 metre extension harness	1	Not shown
17	AK/P/7j5/R002	Relay kit (for extension harnesses)	1	Not shown
18	200-10792/B	Flybridge Y harness	1	Not shown, additionally requires ref no 17



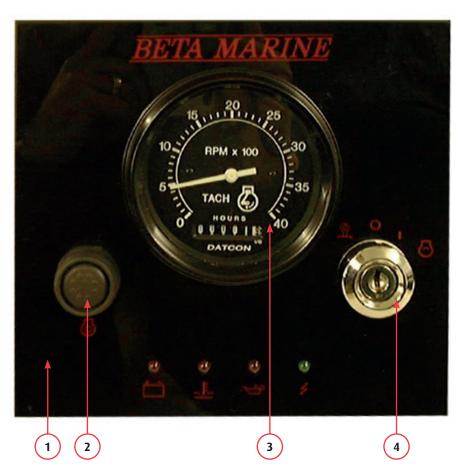
Ref.	Part No.	Description	Qty	Comments
1	N/A	Simple panel (complete with LED pack)	1	No Longer Available - use AK/2AS/KS01
2	600-00057	Kubota key switch - suits small key	1	To August 2008
3	600-00058	Kubota keys (small - pair)	1	To August 2008
4	200-00072	Panel stop button	1	
5	200-01295	LED Pack assembly & buzzer	1	SEASPEC Not shown
)	200-01296	LED Pack assembly & buzzer	I	DOMESTIC Not shown
6	200-01288	A Panel LED type blank - suits 3 red & 1 green LED indicators	1	SEASPEC Facia only – check for availability
В	200-01291	A Panel LED type blank - suits 4 red & 1 green LED indicators	'	DOMESTIC Facia only – check for availability
7	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
8	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
9	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73



#### A Panel – LAMP Type from May 2005



Ref.	Part No.	Description	Qty	Comments
1	AK/2AS/KS01	A panel with 3m loom	1	Complete
2	600-00057	Kubota key switch - suits small key	1	To August 2008
	600-00057/01	Kubota key switch - suits large key		From August 2008
2	600-00058	Kubota keys (small - pair)	1	To August 2008
	600-00058/01	Kubota keys (large - pair)	'	From August 2008
4	200-00072	Panel stop button	1	
5	200-04657	Red 12V warning lamp & retaining clip	3	
6	200-04656	Green 12V power on lamp & retaining clip	1	
7	N/A	A Panel LAMP type blank	1	Facia only – check for availability
8	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
9	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
10	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73
11	200-04655	Alarm board with buzzer	1	Not shown, refer to page 73

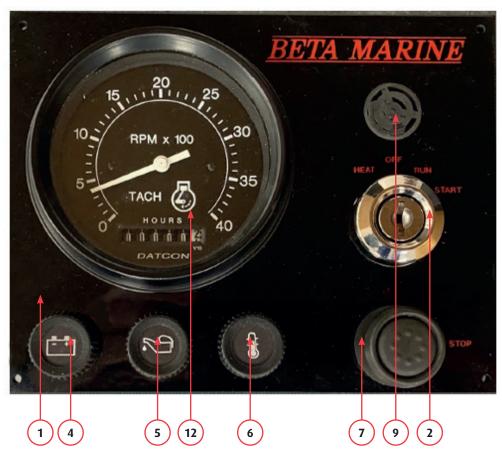


Ref.	Part No.	Description	Qty	Comments
1	200-00853	AB panel (excl. tachometer – ref no 3)	1	No Longer Available - use AK/2ABD/KSNT01
2	200-00072	Panel stop button	1	
3	200-02373	0-4000 rpm tachometer & hourmeter	1	VDO From March 2002 to May 2005 - No Longer Available
	200-00054	0-4000 rpm tachometer & hourmeter		DATCON To March 2002 - No Longer Available
4	600-00057	Kubota key switch - suits small key	1	To August 2008
5	600-00058	Kubota keys (small - pair)	1	Not shown, refer to page 73
6	200-01295	LED Pack assembly & buzzer	1	SEASPEC Not shown – check for availability
0	200-01296	LED Pack assembly & buzzer	I	DOMESTIC Not shown – check for availability
7	200-01289	AB Panel blank	1	SEASPEC Facia only – check for availability
_ ′	200-01292	AB Panel blank	I	DOMESTIC Facia only – check for availability
8	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
9	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
10	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73

#### AB Panel – LAMP Type from May 2005



Ref.	Part No.	Description	Qty	Comments
1	AK/2ABD/KSO1	AB panel with 3m loom	1	Complete
'	AK/2ABD/KSNT01	AB panel with 3m loom		No tachometer
2	200-00072	Panel stop button	1	
	200-21242	0-5000 rpm tachometer with digital hour counter		OCEANLINK From November 2021
3	200-02373	0-4000 rpm tachometer with digital hour counter	1	VIEWLINE From January 2010 to November 2021
	200-02373	0-4000 rpm tachometer with hourmeter		OCEANLINE From 2002 to January 2010 - No Longer Available
1	600-00057	Kubota key switch - suits small key	1	To August 2008
4	600-00057/01	Kubota key switch - suits large key	I	From August 2008
5	600-00058	Kubota keys (small - pair)	1	To August 2008
)	600-00058/01	Kubota keys (large - pair)	I	From August 2008
6	200-04657	Red 12V warning lamp & retaining clip	4	
7	200-04656	Green 12V power on lamp & retaining clip	1	
8	N/A	AB Panel blank	1	Facia only – check for availability
9	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
10	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
11	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73
12	200-04655	Alarm board with buzzer	1	Not shown, refer to page 73
13	200-87020	12V 28Ra 40Amp relay	1	Not shown, refer to page 73



Ref.	Part No.	Description	Qty	Comments
1	200-89421	ABV panel (excl. tachometer - ref no 12)	1	No Longer Available - use AK/2ABV/KSNT01
2	600-00057	Kubota key switch - suits small key	1	
3	600-00058	Kubota keys (small - pair)	1	Not shown, refer to page 73
4	200-00059	Warning lamp battery	1	No Longer Available
5	200-00060	Warning lamp oil	1	No Longer Available
6	200-00061	Warning lamp water	1	No Longer Available
7	200-00072	Panel stop button	1	
8	200-97490	12V bulb	3	Not shown
9	200-99433	12V DC buzzer	1	
10	200-98980	Panel diode pack	1	Not shown, refer to page 73
11	200-00042	ABV Panel blank	1	Facia only – check for availability
12	200-02373	0-4000 rpm tachometer & hourmeter	1	OCEANLINE From 2002 to January 2010 - No Longer Available
	200-00054	0-4000 rpm tachometer & hourmeter		DATCON To March 2002 - No Longer Available
13	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
14	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
15	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73



#### ABV Panel – LAMP Type from May 2005



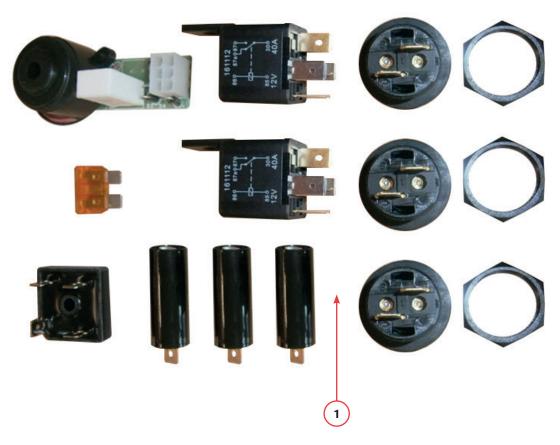
Ref.	Part No.	Description	Qty	Comments
1	AK/2ABV/KSOL501	ABV panel with 3m loom	1	Complete
	AK/2ABV/KSNT01	ABV panel with 3m loom		No tachometer
2	600-00057	Kubota key switch - suits small key	1	To July 2008
	600-00057/01	Kubota key switch - suits large key		From July 2008
3	600-00058	Kubota keys (small - pair)	1	To July 2008
	600-00058/01	Kubota keys (large - pair)	Į į	From July 2008
4	200-04657	Red 12V warning lamp & retaining clip	3	
5	200-04656	Green 12V power on lamp & retaining clip	1	
6	200-00072	Panel stop button	1	
	200-21242	0-5000 rpm tachometer with digital hour counter		OCEANLINK From June 2021
7	200-02373	0-4000 rpm tachometer with digital hour counter	1	VIEWLINE From January 2010 to June 2021
,	200-02373	0-4000 rpm tachometer & hourmeter	'	OCEANLINE From 2002 to January 2010 - No Longer Available
8	N/A	ABV Panel blank	1	Facia only – check for availability
9	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
10	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
11	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73
12	200-04655	Alarm board with buzzer	1	Not shown, refer to page 73



Ref.	Part No.	Description	Qty	Comments
1	AK/2ABVW/KSOL51	ABVW panel with 3m loom	1	Complete
	AK/2ABVW/KSNT01	ABVW panel with 3m loom	'	No tachometer
2	200-00072	Panel stop/start/heat button	3	
3	200-04657	Red 12V warning lamp & retaining clip	3	
4	200-04656	Green 12V power on lamp & retaining clip	1	
	200-21242	0-5000 rpm tachometer with digital hour counter		OCEANLINK From November 2021
5	200-02373 0-4000 rpm tachometer with digital	0-4000 rpm tachometer with digital hour counter	1	VIEWLINE From January 2010 to November 2021
	200-02373	0-4000 rpm tachometer & hourmeter		OCEANLINE From 2002 to January 2010 - No Longer Available
6	N/A	ABVW Panel blank	1	Facia only – check for availability
7	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
8	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
9	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73
10	200-04655	Alarm board with buzzer	1	Not shown, refer to page 73
11	200-87020	12V 28Ra 40Amp relay	2	Not shown, refer to page 73
12	200-03466	Pektron diode	1	Not shown, refer to page 73
13	200-02618	Diode bridge	1	Not shown, refer to page 73



#### Service Kit to Suit ABVW Push Button Control Panels



Ref.	Part No.	Description	Qty	Comments
1	AK/2ABVW/RKS01	ABVW panel service kit	1	



Ref.	Part No.	Description	Qty	Comments
1	200-05408	B Panel with temperature gauge (excl. tachometer - ref no 12)	1	From February 2003 - No Longer Available use AK/2BT/KSNT0
	200-60952	B Panel with voltmeter (excl. tachometer - ref no 12)		To February 2003
2	600-00057	Kubota key switch - suits small key	1	To July 2008
3	600-00058	Kubota keys (small - pair)	1	To July 2008
4	200-00059	Warning lamp battery	1	No Longer Available
5	200-00060	Warning lamp oil	1	No Longer Available
6	200-00061	Warning lamp water	1	No Longer Available
7	200-00072	Panel stop button	1	
8	200-97490	12V bulb	3	Not shown
9	200-99433	12V DC buzzer	1	Not shown, refer to page 73
10	200-98980	Panel diode pack	1	Not shown, refer to page 73
11	200-00043	B Panel blank	1	Facia only – check for availability
12	200-02373	0-4000 rpm tachometer & hourmeter	1	OCEANLINE From 2002 to January 2010 - No Longer Available
	200-00054	0-4000 rpm tachometer & hourmeter		DATCON To March 2002 - No Longer Available
13	200-91400	Water temperature gauge	1	From February 2003
13	200-91390	Voltmeter gauge		To February 2003
14	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
15	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
16	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73

#### B Panel – LAMP Type from May 2005

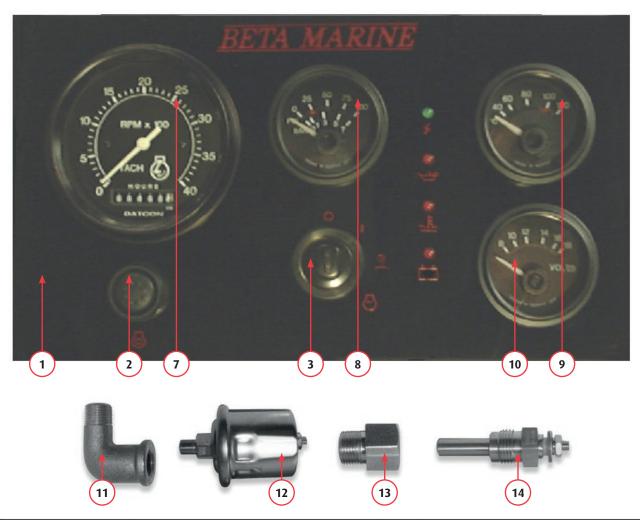


Ref.	Part No.	Description	Qty	Comments
1	AK/2BT/KS051	B Panel with temperature gauge & 3m loom	1	Complete - From May 2005
'	AK/2BT/KSNT01	B Panel with temperature gauge & 3m loom	I	No tachometer - From June 2021
2	600-00057	Kubota key switch - suits small key	1	To July 2008
4	600-00057/01	Kubota key switch - suits large key	'	From July 2008
3	600-00058	Kubota keys (small - pair)	1	To July 2008
3	600-00058/01	Kubota keys (large - pair)		From July 2008
4	200-04657	Red 12V warning lamp & retaining clip	3	
5	200-04656	Green 12V power on lamp & retaining clip	1	
6	200-00072	Panel stop button	1	
	200-21242	0-5000 rpm tachometer with digital hour counter		OCEANLINK From July 2021
7	200-02373	0-4000 rpm tachometer with digital hour counter	1	VIEWLINE From January 2010 to July 2021
/	200-02373	0-4000 rpm tachometer & hourmeter		OCEANLINE From 2002 to January 2010 - No Longer Available
8	200-96200	Water temperature gauge	1	
9	N/A	B Panel blank	1	Facia only – check for availability
10	200-04655	Alarm board with buzzer	1	Not shown, refer to page 73
11	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
12	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
13	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73



Ref.	Part No.	Description	Qty	Comments
1	AK/2BTW/KS001	BW Panel with temperature gauge & 3m loom	1	Complete
'	AK/2BTW/NT/KS31	BW Panel with temperature gauge & 3m loom	] '	No tachometer
2	200-00072	Panel stop/start/heat button	3	
3	200-04657	Red 12V warning lamp & retaining clip	3	
4	200-04656	Green 12V power on lamp & retaining clip	1	
	200-21242	0-5000 rpm tachometer with digital hour counter		OCEANLINK From December 2021
5	200-02373	0-4000 rpm tachometer with digital hour counter	1	VIEWLINE From January 2010 to December 2021
	200-02373	0-4000 rpm tachometer & hourmeter		OCEANLINE From 2002 to January 2010 - No Longer Available
6	200-96200	Water temperature gauge	1	
7	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
8	200-00048	Large shroud for 11 way plug	1	Not shown, refer to page 73
9	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73
10	200-04655	Alarm board with buzzer	1	Not shown, refer to page 73
11	200-87020	12V 28Ra 40Amp relay	2	Not shown, refer to page 73
12	200-03466	Pektron diode	1	Not shown, refer to page 73
13	200-02618	Diode bridge	1	Not shown, refer to page 73
14	AK/2ABVW/RKS01	ABVW panel service kit	1	Not shown, refer to page 61

### Deluxe C Panel – SeaSpec 4 LAMP Type to May 2005



Ref.	Part No.	Description	Qty	Comments
1	200-00854	C Deluxe Panel - SeaSpec 4 Lamp (Excl. gauges & loom see ref no 7, 8, 9, 10 & 16)	1	No Longer Available - use AK/2CD/KSNT01 (No tachometer)
2	200-00072	Panel stop button	1	
3	200-00073	Murphy key switch	1	
4	200-98965	Murphy keys (pair)	1	Not shown, refer to page 73
5	200-01295	LED Pack assembly & buzzer - SeaSpec 4 Lamp	1	Not shown – Check for availability
6	200-01290	C Deluxe panel blank (SeaSpec 4 Lamp)	1	Facia only – Check for availability
7	200-02373	0-4000 rpm tachometer & hourmeter	1	OCEANLINE From March 2002 to May 2005 - No Longer Available
	200-00054	0-4000 rpm tachometer & hourmeter		DATCON To March 2002 - No Longer Available
8	200-96190	Oil pressure gauge	1	
9	200-96200	Water temperature gauge	1	
10	200-96210	Voltmeter gauge	1	
11	212-04355	1/8" BSP male x female elbow	1	
12	200-94350	Oil pressure sender	1	
13	200-91980	Water temperature sender adaptor	1	Alternatively you can use 1/8" sender
14	200-94360	Water temperature sender	1	200-08248 & adaptor 212-01480
15	200-93830	Murphy deluxe 3m connecting loom	1	Not shown
16	200-00046	11 Way socket to suit female type spade	1	Not shown, refer to page 73
17	200-00181	Female spade for 11 way plug	11	Not shown, refer to page 73



Ref.	Part No.	Description	Qty	Comments
1	200-00851	C Deluxe Panel – SeaSpec 5 Lamp (Excl. gauges & loom - ref no 7, 8, 9, 10 & 16)	1	No Longer Available - use AK/2CD/KSNT01 (No tachometer)
2	200-00072	Panel stop button	1	
3	200-00073	Murphy key switch	1	
4	200-98965	Murphy keys (pair)	1	Not shown, refer to page 73
5	200-01296	LED Pack assembly & buzzer (SeaSpec 5 Lamp)	1	Not shown – check for availability
6	200-01293	C Deluxe panel blank (SeaSpec 5 Lamp)	1	Facia only – check for availability
7	200-02373	0-4000 rpm tachometer & hourmeter	1	OCEANLINE From March 2002 to May 2005 - No Longer Available
	200-00054	0-4000 rpm tachometer & hourmeter		DATCON To March 2002 - No Longer Available
8	200-96190	Oil pressure gauge	1	
9	200-96200	Water temperature gauge	1	
10	200-96210	Voltmeter gauge	1	
11	212-04355	1/8" BSP male x female elbow	1	
12	200-94350	Oil pressure sender	1	
13	200-91980	Water temperature sender adaptor	1	Alternatively you can use 1/8" sender
14	200-94360	Water temperature sender	1	200-08248 & adaptor 212-01480
15	200-93830	Murphy deluxe 3m connecting loom	1	Not shown
16	200-00046	11 Way socket to suit female type spade	1	Not shown, refer to page 73
17	200-00181	Female spade for 11 way plug	11	Not shown, refer to page 73

#### Deluxe C Panel – SeaSpec 5 LAMP Type from May 2005

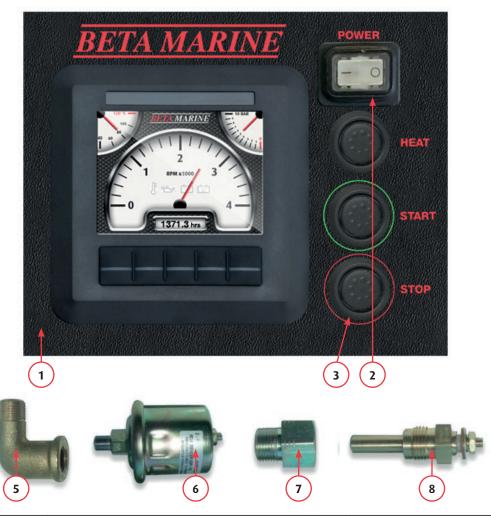


Ref.	Part No.	Description	Qty	Comments
-1	AK/2CD/KSOL51	C Deluxe Panel - Domestic 5 Lamp	1	3m extension harness not included - see ref no 17
<u>'</u>	AK/2CD/KSNT01	C Deluxe Panel - Domestic 5 Lamp (No tachometer)	'	3m extension harness not included - see ref no 17
2	200-00072	Panel stop button	1	
3	600-00057	Kubota key switch - suits small key	1	To July 2008
)	600-00057/01	Kubota key switch - suits large key	] '	From July 2008
4	600-00058	Kubota keys (small - pair)	1	To July 2008
4	600-00058/01	Kubota keys (large - pair)	] '	From July 2008
5	200-04657	Red 12V warning lamp & retaining clip	4	
6	200-04656	Green 12V power on lamp & retaining clip	1	
7	N/A	C Deluxe panel blank (Domestic 5 Lamp)	1	Facia only – check for availability
	200-21242	0-5000 rpm tachometer with digital hour counter		OCEANLINK From June 2021
8	200-02373	0-4000 rpm tachometer with digital hour counter	] 1	VIEWLINE From January 2010 to June 2021
	200-02373	0-4000 rpm tachometer & hourmeter		OCEANLINE From 2002 to January 2010 - No Longer Available
9	200-96190	Oil pressure gauge	1	
10	200-96200	Water temperature gauge	1	
11	200-96210	Voltmeter gauge	1	
12	212-04355	1/8" BSP male x female elbow	1	
13	200-94350	Oil pressure sender	1	
14	200-91980	Water temperature sender adaptor	1	Alternatively you can use 1/8" sender
15	200-94360	Water temperature sender	1	200-08248 & adaptor 212-01480
16	200-04588/03	3m extension harness	1	Not shown
17	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
18	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73
19	200-04583/5W	Domestic charge load resistor	1	Fits on rear of domestic charge lamp

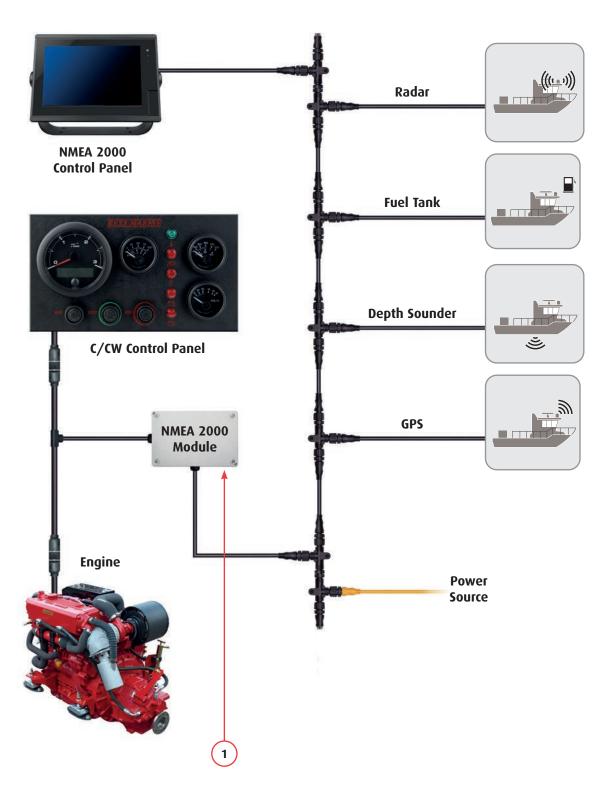


Ref.	Part No.	Description	Qty	Comments
1	AK/2CW/KSOL31	CW Panel – Domestic 5 Lamp		3m extension harness not included - see ref no 14
	AK/2CW/KSNT01	CW Panel – Domestic 5 Lamp (No tachometer)	] '	3m extension harness not included - see ref no 14
2	200-00072	Panel stop/start/heat button	3	
3	200-04657	Red 12V warning lamp & retaining clip	3 or 4	
4	200-04656	Green 12V power on lamp & retaining clip	1	
5	200-01293P	CW panel blank - Domestic 5 Lamp	1	Facia only – check for availability
	200-21242	0-5000 rpm tachometer with digital hour counter		OCEANLINK From June 2021
6	200-02373	0-4000 rpm tachometer with digital hour counter	1	VIEWLINE From January 2010 to June 2021
	200-02373	0-4000 rpm tachometer & hourmeter		VDO From 2002 to January 2010 - No Longer Available
7	200-96190	Oil pressure gauge	1	
8	200-96200	Water temperature gauge	1	
9	200-96210	Voltmeter gauge	1	
10	212-04355	1/8" BSP male x female elbow	1	
11	200-94350	Oil pressure sender	1	
12	200-91980	Water temperature sender adaptor	1	Alternatively you can use 1/8" sender 200-08248 & adaptor 212-01480
13	200-94360	Water temperature sender	1	
14	200-04588/03	3m extension harness	1	Not shown
15	200-00639	11 Way plug to suit male type spade	1	Not shown, refer to page 73
16	200-00047	Male spade for 11 way plug	11	Not shown, refer to page 73
17	200-10135	Diode pack to suit CW panel from December 2015	1	Not shown, refer to page 73

#### Digital D Panel



Ref.	Part No.	Description	Qty	Comments
1	AK/P/2D/KS01	D-Digital Panel	1	Requires 3m extension harness and senders - see ref no 4, 5, 6, 7 & 8
2	200-09347	Illuminated rocker switch	1	
3	200-00072	Panel stop/start/heat button	3	
4	200-04588/03	3m extension harness	1	Not shown
5	212-99397	1/8" BSP male x female elbow	1	
6	200-94350	Oil pressure sender	1	
7	200-91980	Water temperature sender adaptor	1	Alternatively you can use 1/8" sender
8	200-94360	Water temperature sender	1	200-08248 & adaptor 212-01480



Ref.	Part No.	Description	Qty	Comments
1	AK/P/2D/i01	NMEA 2000 Module for use with C Deluxe & CW panels	1	

#### Panel Gauges and Senders



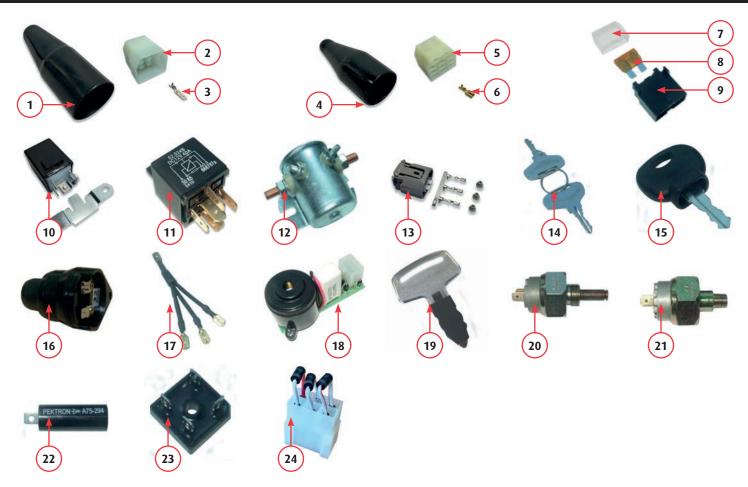
Ref.	Part No.	Description	Qty	Comments
1	200-21242	0-5000 rpm tachometer with digital hour counter	1	OCEANLINK From June 2021
	200-02373	0-4000 rpm tachometer with digital hour counter	1	VIEWLINE From January 2010 to June 2021
	200-02373	0-4000 rpm tachometer & hourmeter	1	OCEANLINE From 2002 to January 2010 - No Longer Available
	200-00054	0-4000 rpm tachometer & hourmeter	1	DATCON To March 2002 - No Longer Available
2	200-08011	Oil pressure gauge	1	VDO VIEWLINE
	200-91380	Oil pressure gauge	1	DATCON
3	200-07981	Water temperature gauge	1	VDO VIEWLINE
3	200-91390	Water temperature gauge	1	DATCON
4	200-07980	Voltmeter gauge	1	VDO VIEWLINE
4	200-91400	Voltmeter gauge	1	DATCON
5	200-90000	Hourmeter gauge	1	FOZMULA
6	200-01392	Gauge bulb 12V	1	DATCON
7	212-99397	1/8" BSP male x female elbow	1	
8	212-01480	3/8" BSPT M x 1/8" F adaptor tail	1	
9	200-62680	0-5 Bar switch/sender	1	
10	200-01133	Water temperature switch/sender 95°C	1	
11	200-04805	Red tachometer 12v bulb	2	VDO Not shown
12	200-96220	Tachometer bulb 12V	1	DATCON Not shown
13	200-07664	8 Pin gauge connector	1	VIEWLINE Not shown



Ref.	Part No.	Description	Qty	Comments
1	200-22729	12 Pin connector	1	For OCEANLINK gauges
2	200-07664	8 Pin connector	1	For VIEWLINE gauges
3	200-08875	Calibration wiring harness	1	For VIEWLINE tachometers
4	200-07664-OL	8 Pin connector	1	To suit OCEANLINE replacement
5	200-10381	OCEANLINE conversion harness	1	To suit VIEWLINE panel
6	200-10091B	Replacement 52mm bezel	1	For VIEWLINE gauges
7	200-10090B	Replacement 85mm bezel	1	For VIEWLINE tachometers

# **BETA MARINE**

# **Control Panel Components**



Ref.	Part No.	Description	Qty	Comments
1	200-00048	Large shroud for 11 way plug	1	On panel connection
2	200-00639	11 Way plug to suit male type spade	1	On panel connection
3	200-00047	Male spade for 11 way plug	11	On panel connection
4	200-00638	Small shroud for 11 way socket	1	On engine harness
5	200-00046	11 Way socket to suit female type spade	1	On engine harness
6	200-00181	Female spade for 11 way socket	11	On engine harness
7	200-01426	Plastic clear fuse cover	1	On engine harness
8	200-00959	40 Amp fuse blade	1	On engine harness
9	200-00640	Fuse holder for 40 Amp fuse blade	1	On engine harness
10	200-57640	12V 33Ra 70 Amp relay	1	For extended looms
11	200-87020	12V 28Ra 40 Amp relay	1	On rear of panel
12	200-89950/01	12V heavy duty relay	1	For insulated earth
13	600-02405	Kubota alternator 3 pin coupler	1	For 3 pin Denso alternator
14	600-00058	Kubota keys (small pair)	1	To July 2008
15	200-98965	Murphy keys (pair)	1	To May 2005
16	200-99433	12V buzzer	1	B panel To May 2005
17	200-98980	Panel diode pack	1	ABV To May 2005
18	200-04655	Alarm board with buzzer	1	Standard From May 2005
19	600-00058/01	Kubota keys (large pair)	1	From July 2008
20	200-02069	Water temperature switch 096C 3/8" BSP	1	Generating set standard
21	200-61190	Oil pressure switch 98kPa 1/8" BSP	1	Generating set standard
22	200-03466	Pektron diode	1	Push button panels
23	200-02618	Diode bridge	1	Push button panels
24	200-10135	Diode pack	1	CW panel From December 2015
25	200-04623	14 Core panel cable	/m	Not shown



Ref.	Part No.	Description	Qty	Comments
KIT	AK/SML/EXP/001	Expansion tank kit, complete	1	No Longer Available
1	209-03065	Expansion tank	1	
2	209-03066	Expansion tank lid	1	
3	202-21375	Expansion tank mounting bracket	1	No Longer Available
4	202-21375	Expansion tank holding band	1	No Longer Available
5	212-07011	Hose cap blanking bung	1	
6	212-07009	No 22 Stainless steel hose clip	1	
7	218-99247	3/4" Bore water hose	1m	
8	212-98464	Stainless steel hose clip 22-30mm	1	
9	212-99233	3/8" BSPT 5/8" hose tail	1	



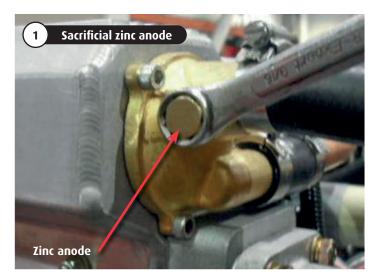
Ref.	Part No.	Description	Qty	Comments
KIT	AK/SML/EXP/002	Expansion tank kit, complete	1	
1	209-03065	Expansion tank	1	
2	209-03066	Expansion tank lid	1	
3	202-21375	Expansion tank mounting bracket	1	
4	262-04015	Stainless steel hose clip 120-140mm	1	
5	212-07011	Hose cap blanking bung	1	
6	212-06818	Stainless steel hose clip 13-20mm	1	
7	218-99247	3/4" Bore water hose	1m	
8	212-98464	Stainless steel hose clip 22-30mm	1	
9	210-03297	3/8" BSPT x 3/4" hose tail	1	

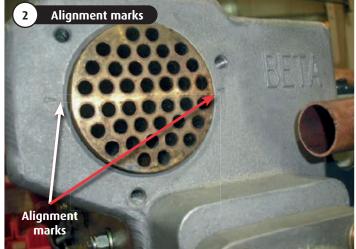


#### Replacing Sacrificial Anode & Cleaning Heat Exchanger Tubestack on S5 Series Engines - From 2011

- The sacrificial zinc anode should be replaced every year.
   This can be more frequent depending on the environment the engine is in. The anode is attached to the bolt inserted in the rear end cap of the heat exchanger. Please refer to image 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 and make sure the tube stack is the right way round. Please refer to image 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.





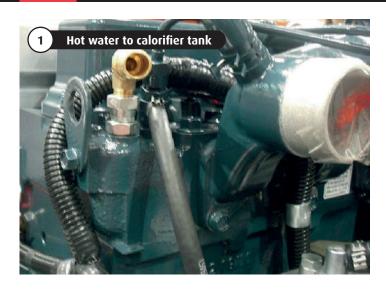
Part No.	Description	Qty
212-07273	S5 heat exchanger 'O' ring	2
209-61840	Sacrificial zinc anode	1
217-00190Z	M6 x 16mm socket cap screw	6



This is a universal calorifier kit suiting engines from 10 to 62hp. Not all supplied parts may be required for your upgrade, but the instructions are however relevant for this engine family.

**IPL** 

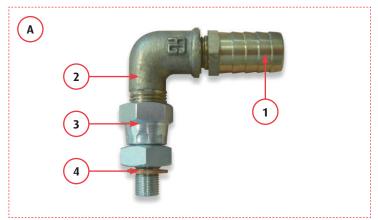
### Beta 35, 38 & 45T Calorifier Kit



- 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.



- 1. Remove bung from underside of heat exchanger tank with 8mm hex key.
- 2. Fit 3/8" BSP male x female elbow.
- 3. Fit 3/8'' BSP x 5/8'' hose connector.





Ref.	Part No.	Description	Qty	Comments
Kit	AK/HE/CAL/KS10-38/01	Calorifier kit and sub components	1	Includes parts A & B
1	212-00904	5/8" hose connector	1	
2	212-04356	1/8" BSP male x female elbow	1	
3	210-07357	1/8" BSP male swivel adaptor	1	
4	212-06565	Cooper flat washer	1	
5	212-99233	3/8" BSP x 5/8" hose connector	1	
6	212-99237	3/8" BSP male x female elbow	1	

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

# **BETA MARINE**

### **Installation Kits**



Ref.	Part No.	Description	Qty	Comments
1	AK/SML/HE/6e/001	Water Inlet Kit - 3/4" ID	1	Beta 35 & 38
'	AK/SML/HE/6e/S301	Water Inlet Kit - 1" ID	ı	Beta 45T
2	AK/SML/HE/6b/001	Water cooled exhaust kit 50mm	1	Beta 35 & 38
	AK/MID/60/001	Water cooled exhaust kit 60mm		Beta 45T
3	AK/SML/HE/6c/001	Plastic waterlock kit 50mm	1	Beta 35 & 38 - including 4x hose clips
3	212-05045	Plastic waterlock kit 60mm		Beta 45T - including 4x hose clips
4	212-00466	Anti-Siphon kit with vent	1	
5	AK/SML/6g/001	Flexible fuel pipes 24" OAL ISO7840	1	
6	AK/SML/6k/001	Fuel delivery kit	1	
0	AK/SML/6k/001	Fuel leak off kit	1	
7	AK/SML/6l/H01	Fuel/water separator kit	1	Heat exchanger cooled 8mm hose tails
	AK/SML/6l/001	Fuer/ water separator kit		Keel cooled 8mm compression
8	AK/6H/HE/KS01	Electric fuel lift kit 12v	1	Supplied with connections for both heat exchanger and keel cooled engines
9	AK/SML/3h/001	Remote oil filter kit	1	Beta 35, 38 & 45T
10	AK/SML/5a/002	Single lever control	1	
11	212-96070/01	Single lever control cables 3m	1	
12	200-96160	Battery leads 1.5m, 35mm (x1 black & x1 red)	1	Beta 35, 38 & 45T

# Heat Exchanger Cooled



# **Keel Cooled**



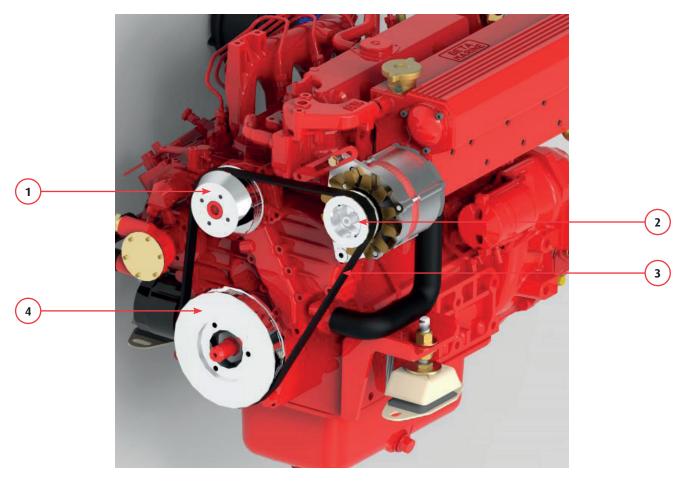




Ref.	Part No.	Description	Qty	Comments
1	AK/SML/6l/H01	Fuel/water separator - heat exchanger cooled	1	8mm hose tails
	AK/SML/6l/001	Fuel/water separator - keel cooled		8mm compression
2	212-02632	Seal kit for separator	1	
3	212-02631	Filter for separator	1	



### Beta 35 & 38 (non turbo) 6K Polyvee 1st Alternator Drive Upgrade Kit - From 2011



This upgrade kit supplied to suit the Beta 35 and Beta 38 engines from 2011. The **alternator drive upgrade** kit is supplied to suit engines originally built to a standard specification, further modification to the engine may be required whilst fitting. This is the responsibility of the installer and not Beta Marine.

**Note:** Upgrade kit available including three pulleys and drive belt is available for the Beta 35 and Beta 38 engines. Please select from the options below.

Ref.	Part No.	Description	Qty	Comments
1	201-05433	Water pump pulley	1	6 groove
2	201-22415	Alternator pulley	1	6 groove
3	214-04618	6K Polyvee belt	1	
4	201-22258	Drive pulley	1	6 groove
Kit	AK/S5H/120A/KS01	6K polyvee drive upgrade kit	1	



This upgrade kit is supplied to suit the latest Beta 35, 38 and 45T engines with 3 bolt style heat exchange manifolds supplied from 2011. This **alternator upgrade** kit is supplied to suit engines originally built to a standard specification, further modification to the engine may be required whilst fitting. This is the responsibility of the installer and not Beta Marine.

Tachometers will require recalibration due to drive ratio change to approx 15.2 pulse.

**Note:** Set screws to be fitted with thread lock, shims supplied to aid alternator pulley alignment whilst fitting, it is important this is checked to give correct pulley alignment. Kit also includes higher rated B+ battery cable connection to fit between this high output alternator and the starter motor which replaces the original.

Ref.	Part No.	Description	Qty	Comments
1	201-05433	Water pump pulley	1	6 groove
2	201-22258	Drive belt pulley	1	6 groove
3	214-04618	Drive belt	1	
4	201-22415	Alternator pulley	1	6 groove
5	200-08183	120 Amp 12v alternator	1	
6	200-04654	Higher rated alternator to battery B+ cable	1	Not shown
Kit	AK/S5H/120A/E02	120 Amp alternator upgrade kit	1	



Notes...



Notes...

Beta Marine Limited, Davy Way, Waterwells, Quedgeley, Gloucester, GL2 2AD. UK. Tel: +44 (0)1452 723492 Fax: +44 (0)1452 883742 Email: sales@betamarine.co.uk Website: www.betamarine.co.uk

Ref: IPL-221-10912 REV-16 - 1221

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