



# Product Identification Guide

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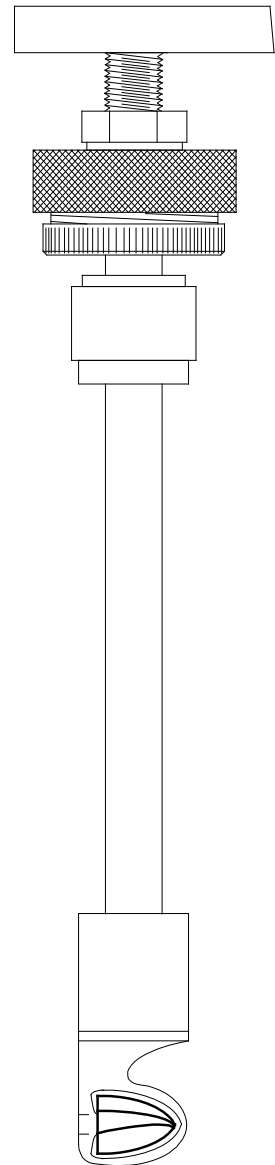
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# BOAT SPEED SENSORS

## Impeller Type – (discontinued)



Impeller Type Speed Sensor. Part No. **117-00-120**

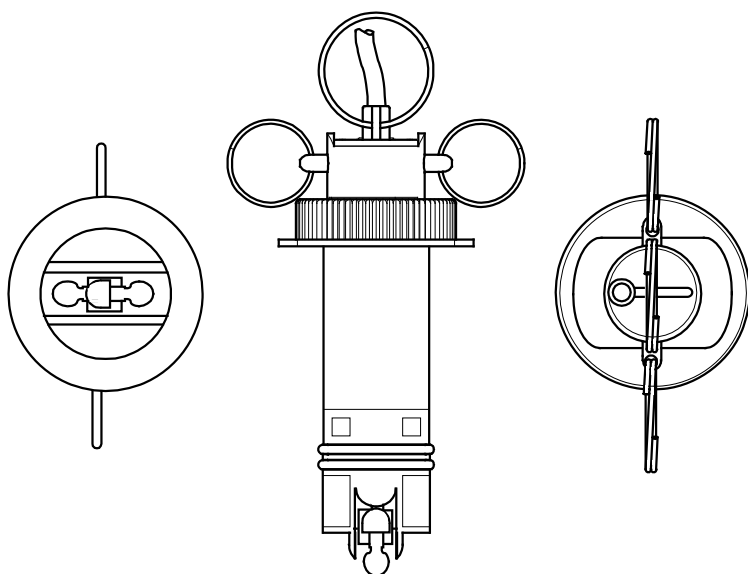


Impeller Type Speed Sensor for use with a Shut-Off-Valve (Part No. **117-00-124**)

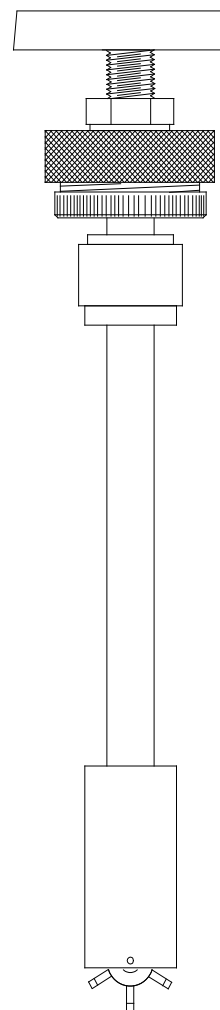
Unit Description	Hull Housing Material/Type	Sensor Body Diameter	Sensor Body Length	Cable Termination	Part Number	Impeller Spares Kit
Speed Sensor, Impeller Type	White Plastic	31 mm	88 mm (excludes top fittings)	Bare Wires	<b>117-00-120</b>	<b>110-10-B21</b>
Speed Sensor, Impeller Type	Bronze	31 mm	88 mm (excludes top fittings)	Bare Wires	<b>117-00-060</b>	<b>110-10-B21</b>
Speed Sensor, Impeller Type for Shut-Off valve Housings	Shut-Off Valve	31 mm	251 mm	Bare Wires	<b>117-00-124</b>	<b>110-10-B21</b>
Impeller Spares Kit (Black)	All	n/a	n/a	n/a	<b>110-10-B21</b>	n/a

Note: items marked in **Red** are discontinued product lines. Please contact B&G Service for a solution

### Paddlewheel Type



Modern Four Blade Paddlewheel Speed Sensor  
(Part No. SEN-SPEED-N, H, or P)



Six Blade Paddlewheel Sensor for use with a Shut-Off-Valve (Part No. 202-00-064)

Unit Description	Sensor Part Number	Hull Housing Material/Type	Sensor Body Diameter	Sensor Length	Cable Termination	Paddlewheel Spares Kit
Network Paddlewheel, low-speed (six blades) old type	610-0A-026	White Plastic	31 mm	105 mm	Network Plug	202-00-129
Hydra/Focus Paddlewheel, low-speed (six blades), old type	202-00-100	White Plastic	31 mm	105 mm	Bare wires	202-00-129
Network Paddlewheel, low-speed (six blades), old type	610-0A-036	Bronze	31 mm	105 mm	Network Plug	202-00-128
Network Paddlewheel, high speed (four blades), old type	610-0A-129	White Plastic	31 mm	105 mm	Network Plug	202-00-161
Network Paddlewheel, high speed (four blades), old type	610-0A-130	Bronze	31 mm	105 mm	Network Plug	202-00-160
Hydra/Focus Paddlewheel, six blades, blue colour	202-00-045	Black Plastic	40 mm	93 mm	Bare Wires	202-00-054
Hornet 4 Paddlewheel, six blades red colour	202-00-036	Black Plastic or Bronze	40 mm	93 mm	Bare Wires	202-00-054
Shut-Off Valve Paddlewheel Sensor	202-00-064	Bronze Shut-Off Valve	31 mm	232 mm	Bare Wires	202-00-129
Network Paddlewheel, four blades	SEN-SPEED-N	Bronze or Black Plastic	31 mm (insert only)	90 mm	Network Plug	SEN-SPRS-SPD
Hydra Paddlewheel, four-blades	SEN-SPEED-H	Bronze or Black Plastic	31 mm (insert only)	90 mm	Bare Wires	SEN-SPRS-SPD
h1000 Speed Sensor, four blades, 3 m cable	SEN-SPEED-P	Bronze or Black Plastic	31 mm (insert only)	90 mm	Bare Wires	SEN-SPRS-SPD

Notes:

- Items marked in **Red** are discontinued product lines. Please contact B&G Service for a solution
- There is no alternative sensor for the 202-00-036 Speed Sensor
- The 202-00-045 can be replaced with SEN-SPD-HP (includes sensor, flapper insert and hull-housing)



Network Six-Blade, Low-Speed Paddlewheel Sensor (Part No. 610-0A-026)



Network Four-Blade, High-Speed Paddlewheel Speed Sensor (Part No. 610-0A-129 discontinued)

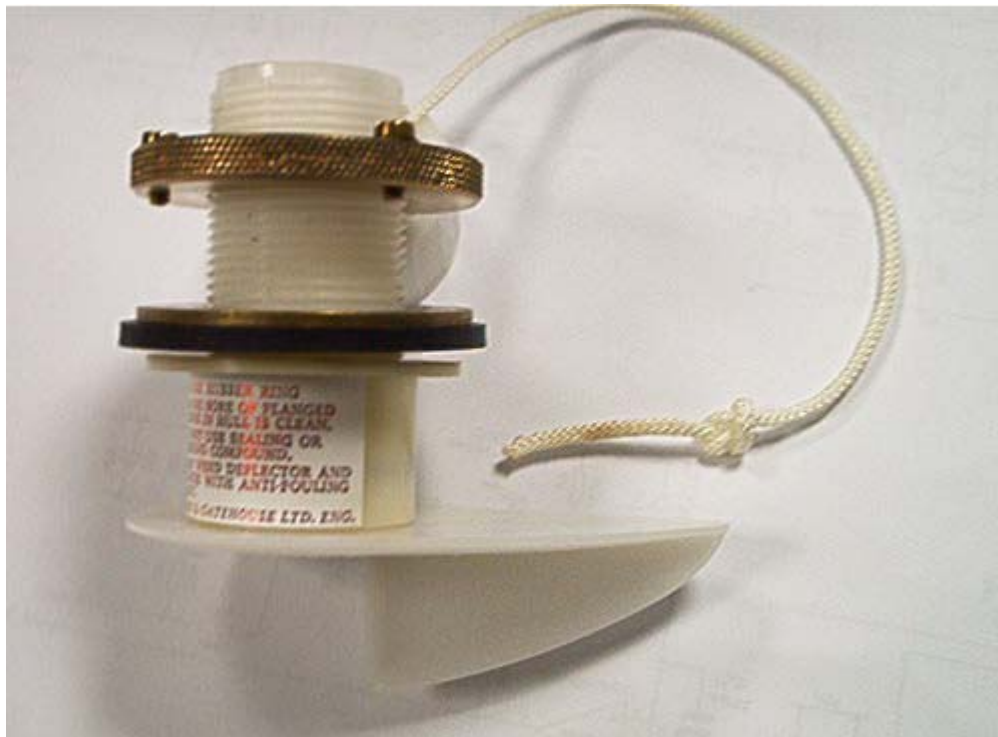


Six-Blade Paddlewheel Speed Sensor – Hornet 4 System (Part No. 202-00-036 discontinued)



Four-Blade Paddlewheel Sensor used on (Part No. SEN-SPEED-N, H, or P)











Hull Housing for an Impeller-Type Speed Sensor (Part No. 117-00-046 discontinued)



The shut-off-valve is used mainly on larger vessels; the insulation packing prevents corrosion caused by electrolytic action on steel-hulled boats. (Part No. Housing – 155-00-025, Insulation Kit -155-30-017).

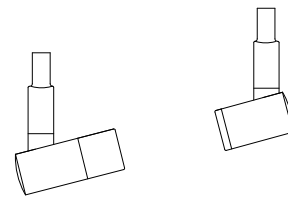
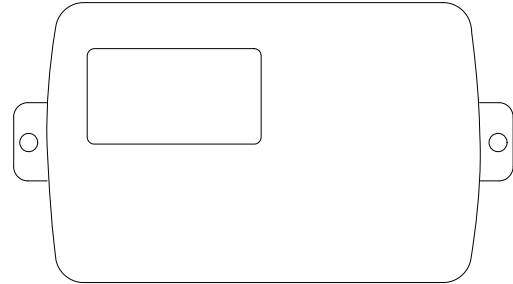
### Paddlewheel Spares Kits

 <p>202-00-128 Low Speed, Bronze Housing, pre-1996 B&amp;G</p>	 <p>202-00-129 Low Speed, Plastic Housing, pre-1996 B&amp;G</p>
 <p>202-00-160 High Speed, Bronze Housing, pre-1996 B&amp;G</p>	 <p>202-00-161 High Speed, Plastic Housing, pre-1996 B&amp;G</p>
 <p>202-00-54 Pre-1996 Airmar Sensors</p>	 <p>SEN-SPRS-SPD Post-1996 Airmar Sensors</p>



### Sonic Speed

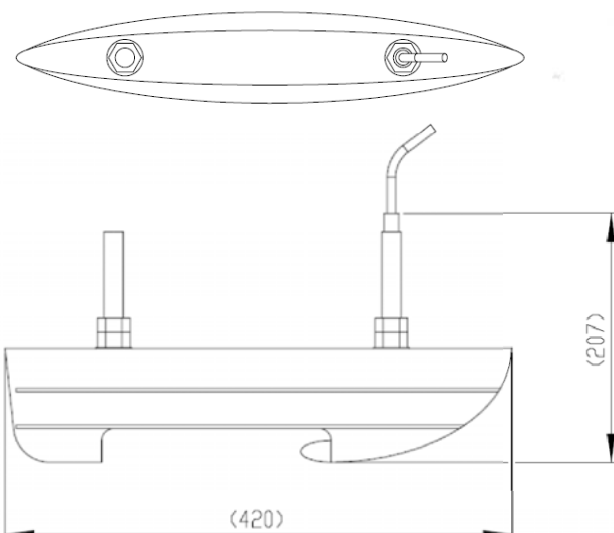
Description: Matched pair of sensors connected to a central processor  
 Date introduced: 1986  
 Date Discontinued: Current system  
 Part Number: 184-00-081



The Sonic Speed Sensor System uses two sensors, positioned fore and aft and the boat's speed is calculated by measuring the time taken for a series of sonic pulses to travel through the water between the two sensors.

### XTL- Microsonic Speed Sensor

Description: Sonic speed sensors mounted in an underwater fin assembly  
 Date Introduced: 1988  
 Date Discontinued: Current system  
 Part Number: 275-00-001/017, 275-00-032/032, 275-00-039, 275-00-045/046  
 dependent on stud length and material type



## Ultrasonic Speed

Description: Used with Hydra and Hercules systems. Boat speed measurement obtained by transmitting ultrasonic pulses into the water, and obtaining echoes from particles suspended in the water.

Date introduced: 2001

Date Discontinued: 2006 (discontinued)

Part Number: BGH071002 Transducer (discontinued)

BGH071003 Junction Box (discontinued)



BGH071002 Transducer



BGH071003 Junction Box

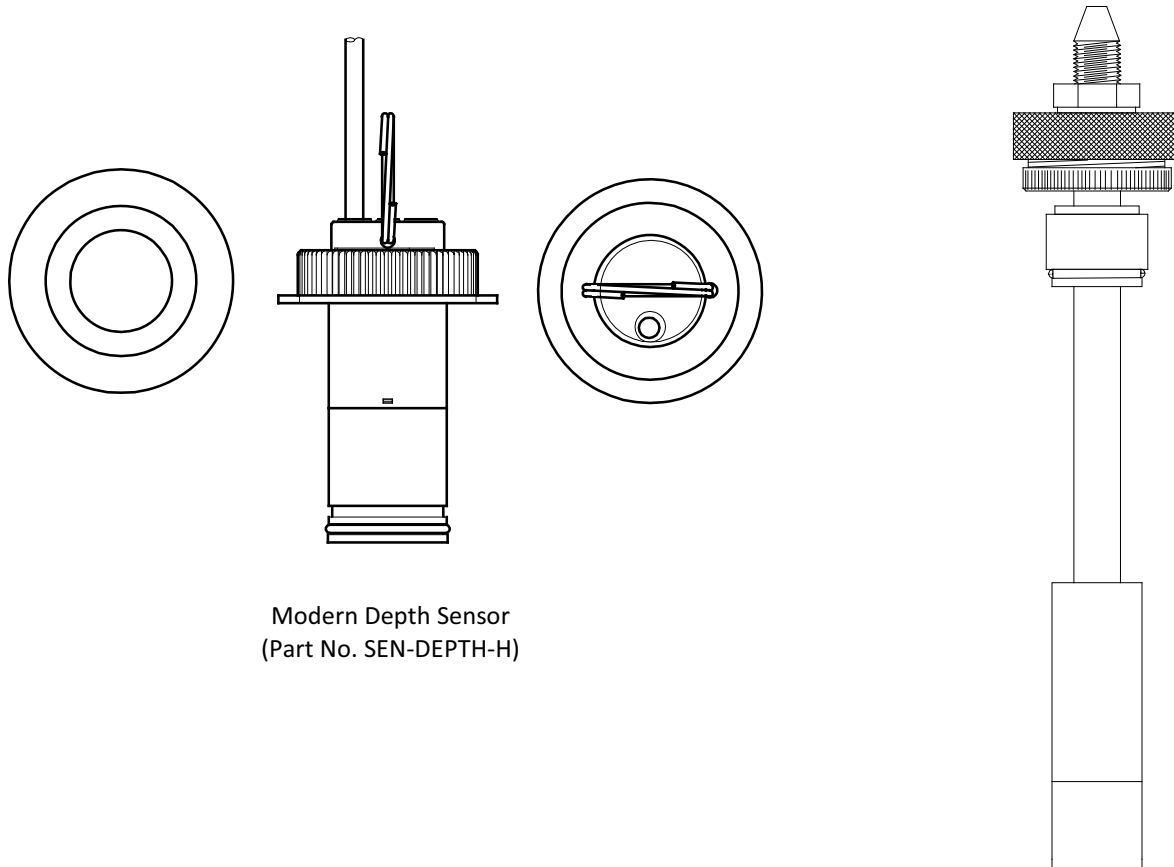
## DEPTH FINDERS

### Hecta

Description: Transistorised echo sounder  
Date Introduced: 1958  
Date Discontinued: 1978 – Superseded in 1979 by the 200 meter range Hecta echo sounder



## DEPTH TRANSDUCERS



Modern Depth Sensor  
(Part No. SEN-DEPTH-H)

Depth Sensor for use with a Shut-Off-Valve  
(Part No. 157-AA-038)

Unit Description	Part Number	Hull Housing Material/Type	Sensor Body Diameter	Sensor Length	Cable Termination	Technical
Hydra/Focus Depth Transducer	401-00-011	White Plastic	31 mm	109 mm	Bare Wires	Passive Coil
Network Depth Transducer	610-0A-027	White Plastic	31 mm	109 mm	Network Plug	Passive Coil
Hydra Transducer, shaved face	401-00-027 <sup>[1]</sup> (use 199-00-018)	Bronze Housing	31 mm	109 mm	Bare Wires	Passive Coil
Hydra/Focus Depth Transducer	199-00-018	Bronze Housing	31 mm	109 mm	Bare Wires	Passive Coil
Network Depth Transducer	610-0A-040	Bronze Housing	31 mm	109 mm	Network Plug	Passive Coil
Hecta/Hydra/Network Long Reach Depth Transducer	199-00-029	Bronze	31 mm	158 mm	Bare Wires	Passive Coil
Hecta Mk 6	111-00-049	Bronze	31 mm	109 mm	Co-ax Connector	Passive Coil
Network Depth Transducer	SEN-DEPTH-N	Black Plastic	41 mm	89 mm	Conexall Connector	Passive Coil
Hydra Depth Transducer	SEN-DEPTH-H	Black Plastic	41 mm	89 mm	Bare Wires	Passive Coil
h1000 Sail Passive Transducer 170 kHz	SEN-DEPTH-P	Black Plastic or Bronze	41 mm	89 mm	Bare Wires	Ceramic only <sup>[2]</sup> Use with SDIE
h1000 Power Active Transducer 235 kHz	SEN-DEPTH-A2	Black Plastic or Bronze	41 mm	89 mm	Bare Wires	NMEA

<sup>[1]</sup> Items marked in **Red** are discontinued product lines. Please contact B&G Service for a solution

<sup>[2]</sup> 3 m cable forms part of a tuned circuit. Do not cut cable to length.

## MASTHEAD UNITS

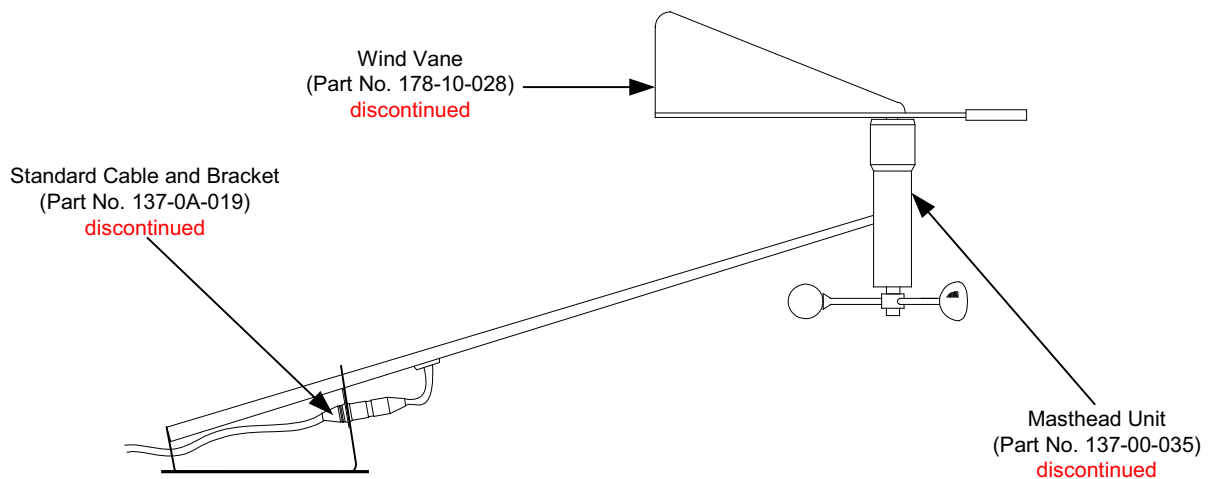
### A-Type Masthead Unit

Description: Used with very old Hornet systems  
 Date Introduced: 1950s  
 Date Discontinued: 1972  
 Part Number: (discontinued)

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### C-Type Masthead Unit

Description: Used with Horsa, Hornet and Hercules 190/290 systems  
 Date Introduced: 1972/73  
 Date Discontinued: 1986/87  
 Part Number: 137-00-035 (discontinued)



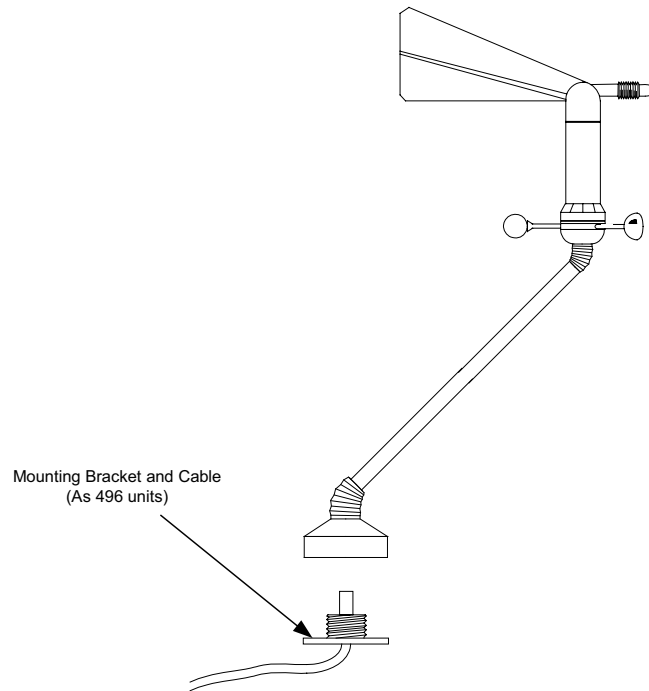
### Mini Masthead Unit

Description: Used with Hercules 190/290 systems  
 Date Introduced: 1984  
 Date Discontinued: 1985  
 Part Number: (discontinued)



## 283 Masthead Unit

Description: Used with Focus and early Network systems  
Date Introduced: 1988  
Date Discontinued: 1996  
Part Number: 283-00-001 (discontinued)

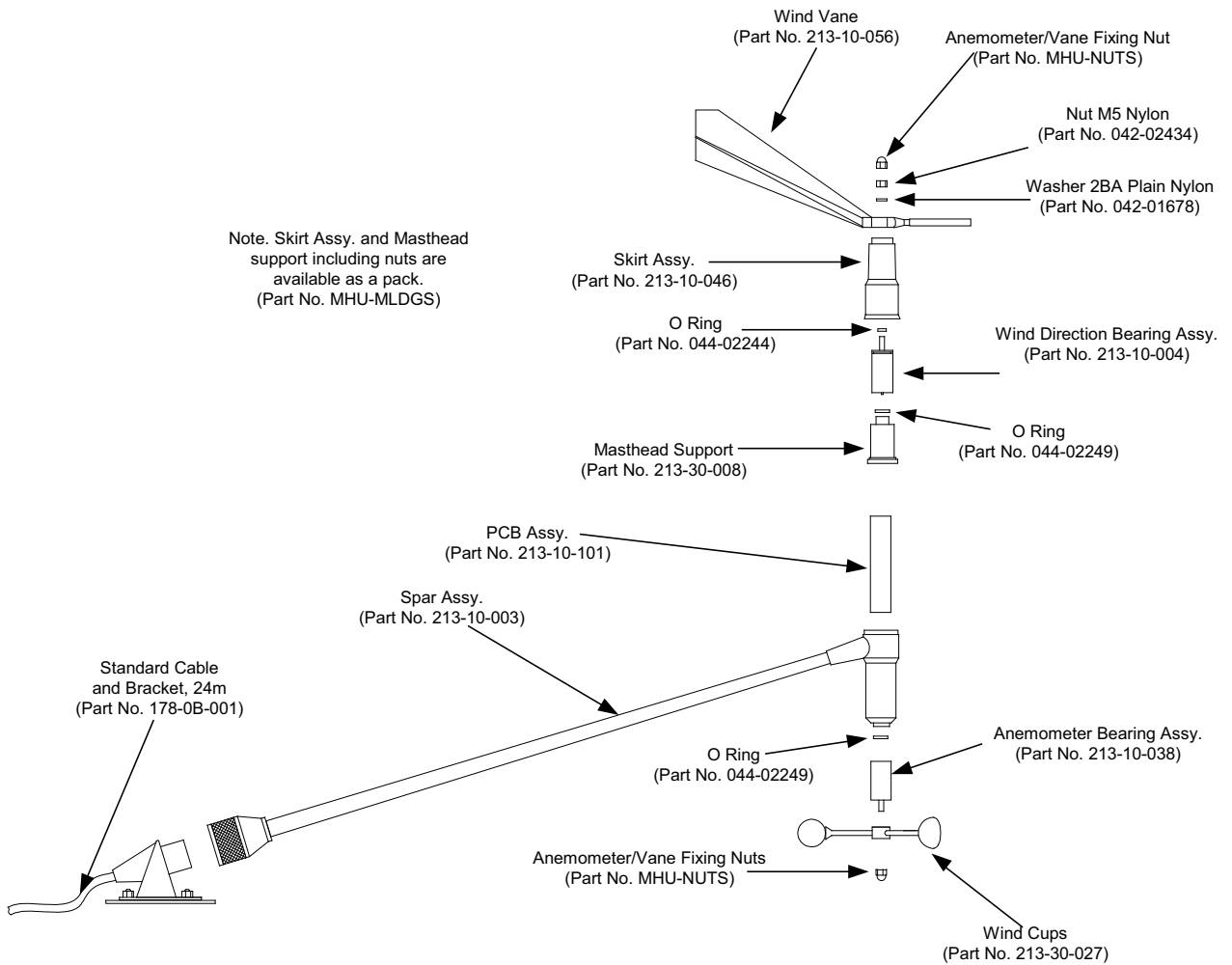


### 213 Masthead Unit

Description: Used with Hercules 390, Hydra and Hercules systems  
 Date introduced: 1985  
 Date Discontinued: Current product  
 Part Number: 213-00-002

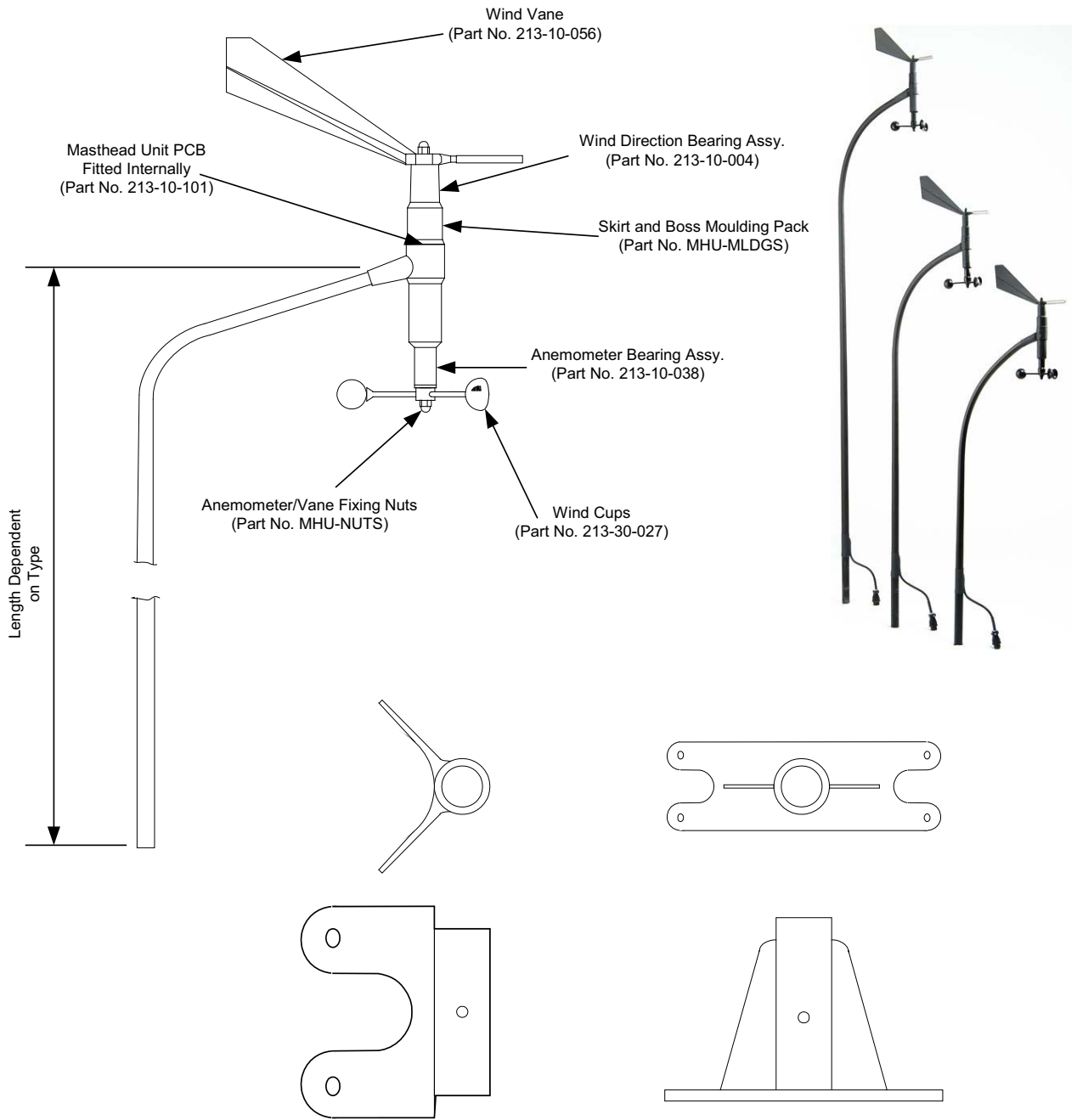


Note. Skirt Assy. and Masthead support including nuts are available as a pack. (Part No. MHU-MLDGS)



### 213 Vertical Masthead Unit

**Description:** Used with Hydra and Hercules systems  
**Date Introduced:** 1999  
**Date Discontinued:** Current product  
**Part Number:** BGH031001 (32"), BGH031002 (42"), BGH031002S (Ocean Spec.\*), BGH031003 (57") & BGH031003S (Ocean Spec.\*)  
 \*Ocean Spec constructed with extra laminate for increased durability

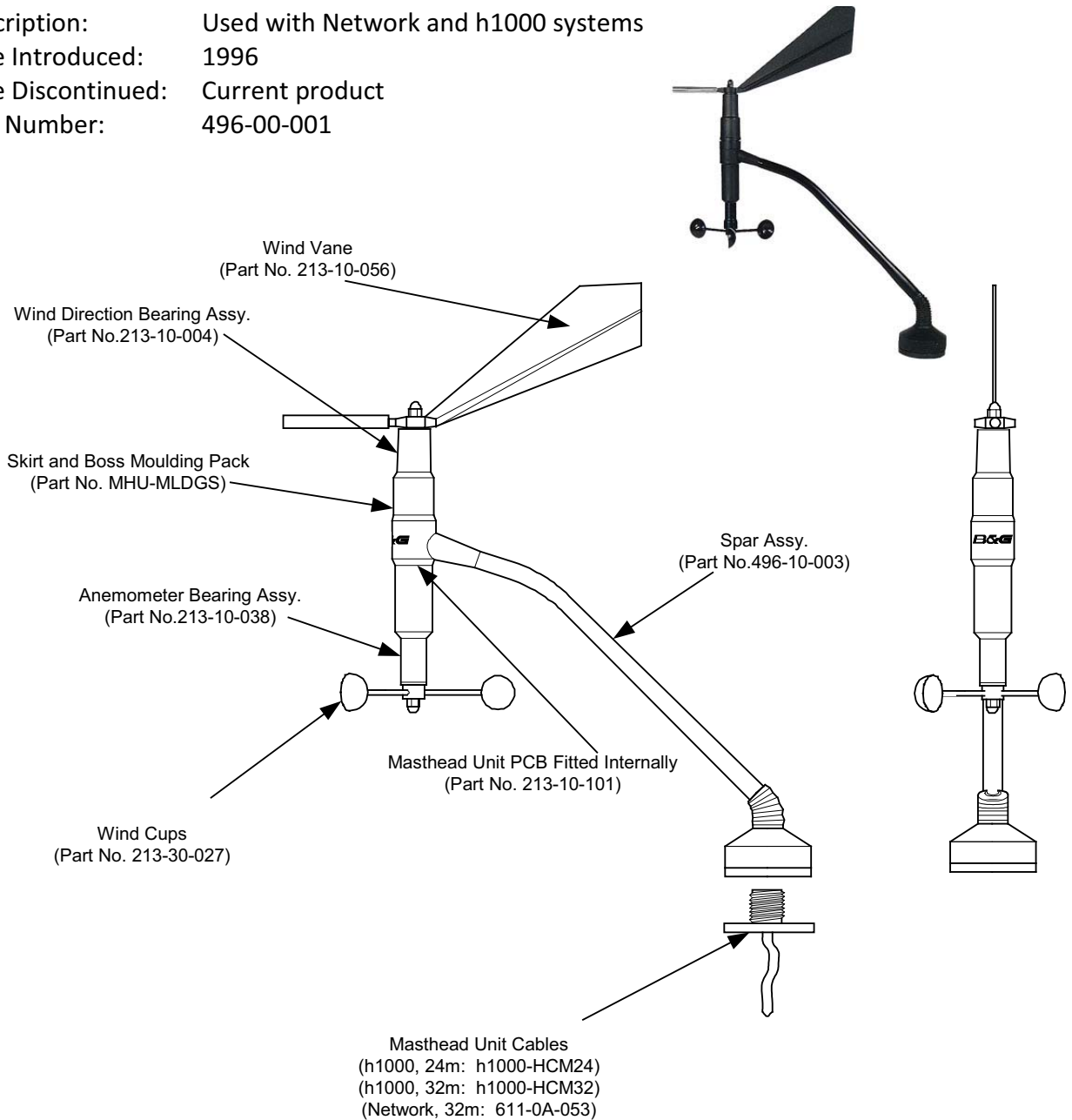


213 Vertical Masthead Unit Face Mounting Bracket (Part No. BGH030009)

213 Vertical Masthead Unit Top Mounting Bracket (Part No. BGH030008)

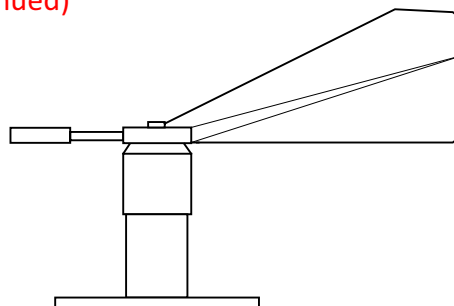
### 496 Masthead Unit

Description: Used with Network and h1000 systems  
 Date Introduced: 1996  
 Date Discontinued: Current product  
 Part Number: 496-00-001



### Type 211 Wind Vane

Description: Primarily used with early B&G industrial systems in conjunction with the 152 Anemometer  
 Date Introduced: 1976  
 Date Discontinued: 1985 (discontinued)



## ANEMOMETERS

### Type 150

Rotation of the Fan blades provides the power to operate the readout display, directional. Specialist use, for measuring wind speed in wind tunnels and so on. (discontinued)



Fan Type Anemometer

### Type 152 Anemometer

Primarily used to provide accurate wind speed information, for early B&G Industrial Systems. This unit, in conjunction with the Model 211 Wind Vane, was also used to provide wind information for early B&G marine systems. (discontinued)

# ANEMOMETER: MODEL 152

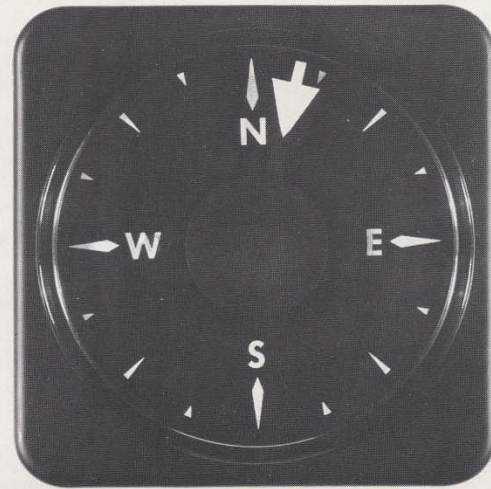
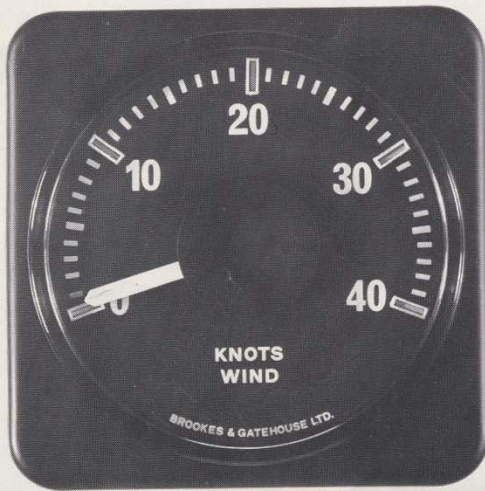
## FOR MARINE OR LAND USE

- HIGH RELIABILITY
- ACCURACY
- ROBUST DESIGN
- LOW INSTALLATION COST
- LOW MAINTENANCE COST

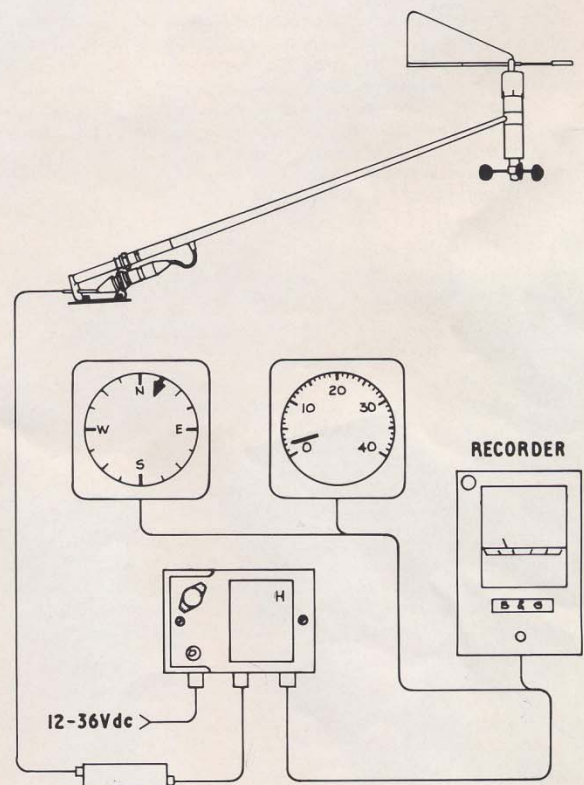


Type 160 - discontinued

## WIND SPEED AND DIRECTION INDICATOR MODEL 160



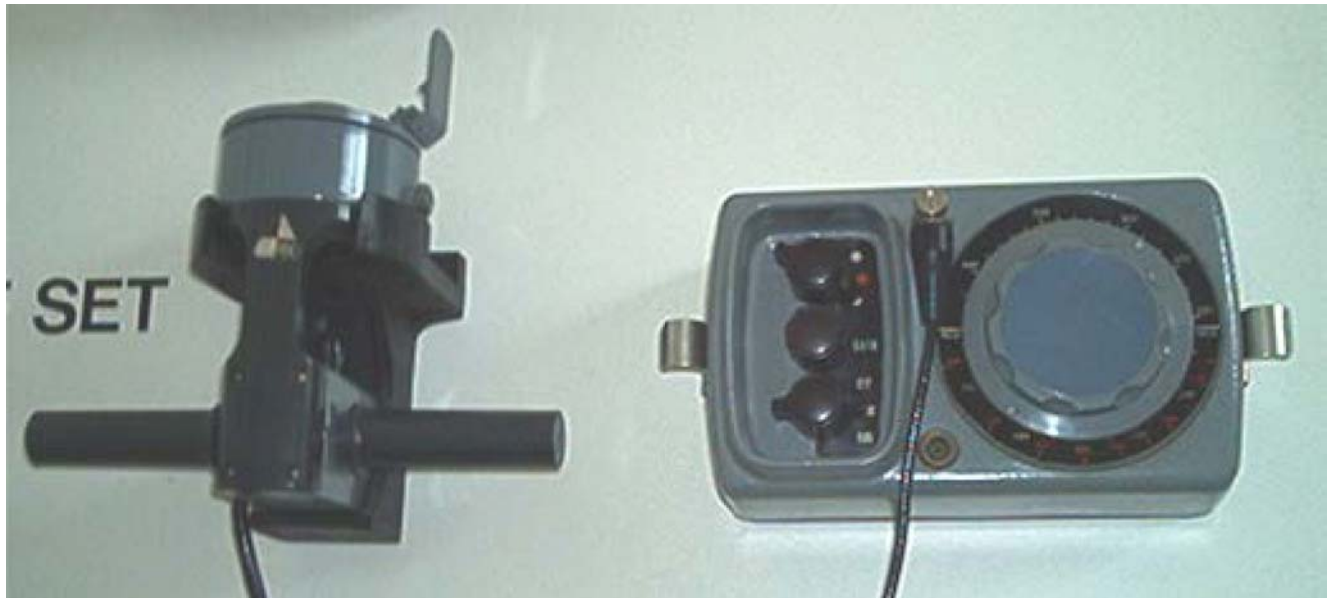
The Model H wind speed and direction indicator is designed and manufactured to the highest standards to meet a wide variety of commercial and industrial applications. It is sealed against moisture and dust and is intended for use at air fields, power stations, hovercraft landing pads, oil rigs, on offshore data collecting buoys and as the controlling sensor for pollution monitoring. It is suitable for any application where accurate wind speed and direction is required. The system comprises a detachable masthead unit, a control unit and the two indicators. All the units are sealed against the ingress of moisture and dust and are corrosion and vibration proof. Reliable operation is obtained at very low wind speeds. The instrument is designed to give a meter read-out or operate pen recorders.



## DIRECTION FINDERS

### Heron/Homer

Description: Long wave direction finding aerial  
Date Introduced: 1955  
Date Discontinued: 1963 (discontinued)



## COMPASS SENSORS

### *Fluxgate Type*

#### Halcyon 3

Description: Used with Hercules 190 and 290 systems  
Date Introduced: 1981  
Date Discontinued: 1987  
Part Number: (discontinued)



Sensor viewed from the base showing the connector



Sensor viewed from the top showing mounting orientation



### Super Halcyon 3

Description: Used with Hydra/Hercules and 390 systems  
Date Introduced: 1987  
Date Discontinued: 1997  
Part Number: 386-00-009 (discontinued)



Sensor viewed from the base showing the connector



Sensor viewed from the top showing mounting orientation  
(Later models were white in colour)

### Halcyon 2000

Description: Used with Hydra/Hercules systems  
Date Introduced: 1997  
Date Discontinued: Current product  
Part Number: 486-00-009



View of the sensor showing the FastNet connector

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### H1000 Fluxgate Sensor

Description: Used with h1000 systems  
Date Introduced: 2001  
Date Discontinued: 2007  
Part Number: h1000-CSU (discontinued)



View of sensor showing the two FastNet<sup>2</sup> Databus connections at the base



## Halcyon Gyro Stabilised Compass Sensor

Description: Used with the Halcyon Gyro Processor on Hydra/Hercules systems and ACP Mk2 from 2003

Date Introduced: 1999

Date Discontinued: Current product

Part Number: BGH060002



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## Gimballed Rate Compass

Description: Used with the Halcyon Gyro Processor on Hydra/Hercules systems and ACP Mk2. Also used as an NMEA heading source.

Date Introduced: 2008

Date Discontinued: Current product

Part Number: BGH330001



## IMU Sensor

Description: Used with WTP2 systems.  
Date Introduced: 2008  
Date Discontinued: Current product  
Part Number: BGH260000



## RUDDER AND MAST ROTATION SENSORS

### Rotary Rudder Position Sensor

Description: Used with the Helmstar, Hydra, Hercules, Network and h1000 autopilot systems

Date Introduced: 1985

Date Discontinued: Current product

Part Number: RRF-ACP



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### Linear Feedback Sensor

Description: Used with the Hydra 2000, Hercules 2000 and h1000 autopilots (Blue Type 1 and 2 Rams)

Date Introduced: 2003

Date Discontinued: Current product

Part Number: SEN-RUD-LFB (used with Blue Rams)  
SEN-RUD-LFB2 (used with Black Rams)



## HYDRAULIC PILOT DRIVES

### Blue T0 12V Hydraulic Ram

Description: Used with the H1000/H2000/H3000 autopilots  
 Date Introduced: 2003  
 Date Discontinued: 2008 (discontinued)  
 Part Number: RAM-T0-12V



### Blue T1/T2 12V/24V Hydraulic Ram

Description: Used with the H1000/H2000/H3000 autopilots  
 Date Introduced: 1995  
 Date Discontinued: 2008 (discontinued)  
 Part Numbers: RAM-T1-12V  
 RAM-T2-12V  
 RAM-T2-24V



### Blue T3 24V Hydraulic Ram

Description: Used with the H2000/H3000 autopilots  
 Date Introduced: 1995  
 Date Discontinued: -Current Product  
 Part Numbers: RAM-T3-24V



## Black 12V/24V Black Hydraulic Ram

Description: Used with the H2000/H3000 autopilots  
 Date Introduced: 2008  
 Date Discontinued: Current Product  
 Part Numbers: RAM-T1-12V  
 RAM-T2-12V  
 RAM-T2-24V



## Motor Brush Spares Kits

### Part Numbers:

RAM-BRSH-T1  
 RAM-BRSH-T2

#### RAM-T0-12V

Year	Serial number of ram (starting from)	Brush Type	B&G part no.
2003	08670	015405	Special Order
2004	10936 onwards	015220	Special Order

#### RAM-T1-12V

Year	Serial number of ram (starting from)	Brush Type	B&G part no.
1996	00160	015402	RAM-BRSH-T1
2003	08660	015404	Special Order
2003	08883	015405	Special Order
2004	10992	015220	Special Order

#### RAM-T2-12V/24V

Year	Serial number of ram (starting from)	Brush Type	B&G part no.
1996	00195	015402	RAM-BRSH-T1
2003	08759	015404	Special Order
2003	08893	015405	Special Order
2004	11002	015220	Special Order

#### PMP-T3-24V

YEAR	SERIAL NUMBER OF PUMP (STARTING FROM)	BRUSH TYPE	B&G PART NO.
1995	00001	015401	SPECIAL ORDER
2002	08136 ONWARDS	015406	RAM-BRSH-T2

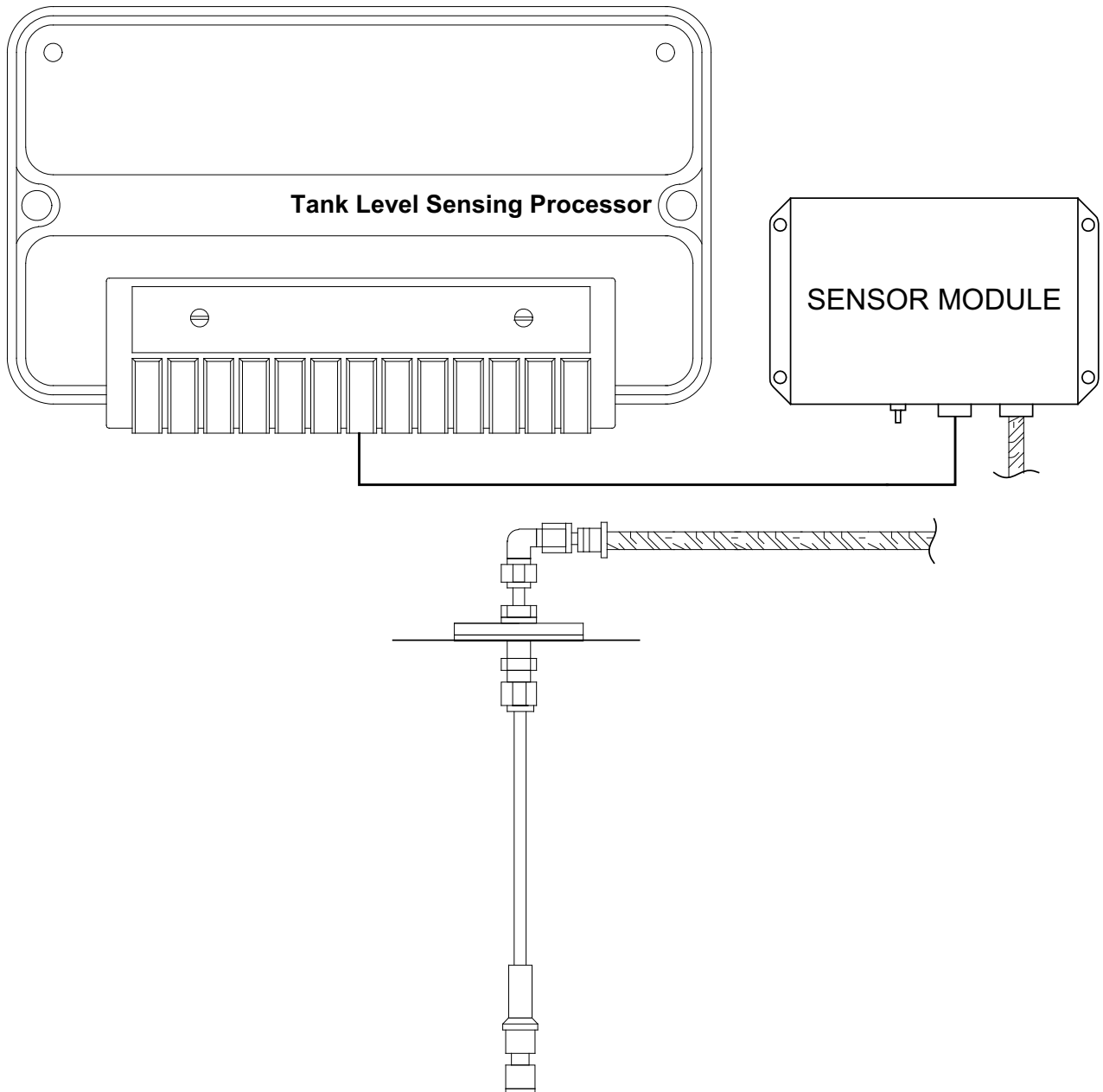
#### RAM-T4-24V

YEAR	SERIAL NUMBER OF PUMP (STARTING FROM)	BRUSH IDENTIFIER	B&G PART NO.
1995	00001	015401	SPECIAL ORDER
2002	09685 ONWARDS	015406	RAM-BRSH-T2

Note: Two sets of brushes are required for the T4 drive.

## TANK CONTENTS/LEVEL SENSING SYSTEM

Description: Used with the Hydra/Hercules Main Processor  
Date Introduced: 2002  
Date Discontinued: 2005 (**discontinued**)  
Part Number: BGH090001 (aluminium), BGH090002 (brass) or BGH090003 (stainless steel)



Additional Sensor Modules and fittings Part No. **BGH091001 (aluminium)**,  
**BGH091002 (brass)** or **BGH091003 (stainless steel)**



## LOADCELL SENSORS

Description: Used with the Hydra 2000 and Hercules 2000 systems

Date Introduced: 2000

Date Discontinued: Current product

Part Number: Standard Loadcell Part Numbers

BGH041001 - 12.7 mm (1/2")

BGH041001 - 16 mm (5/8")

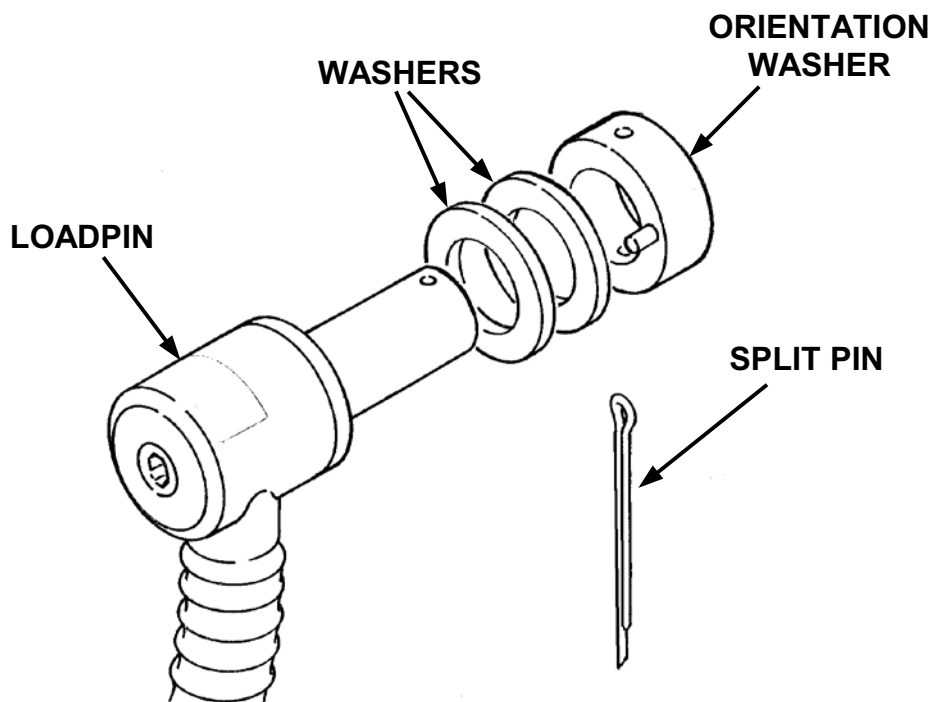
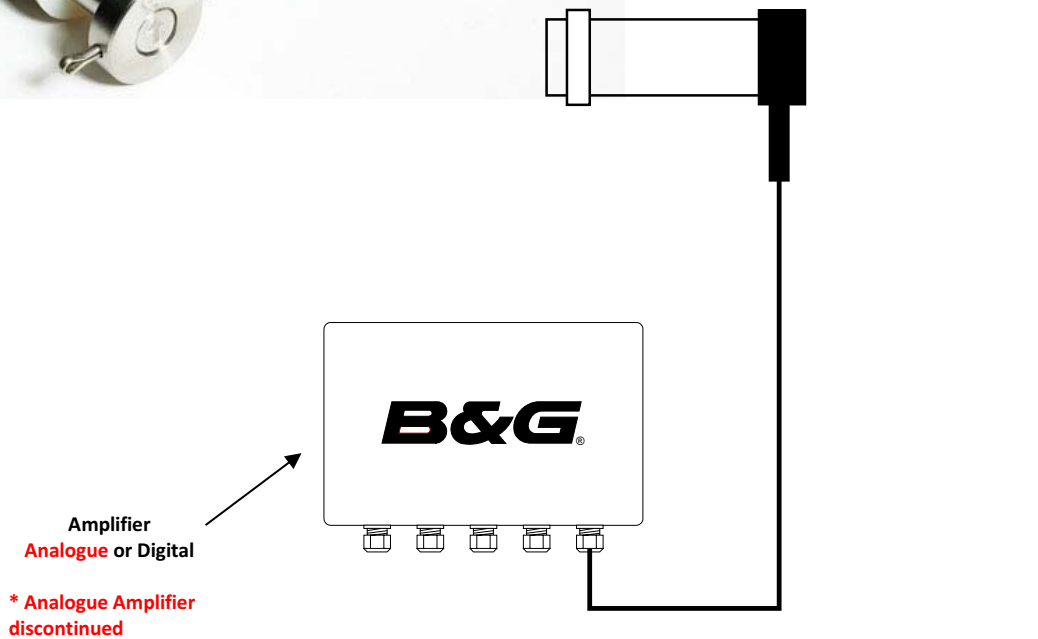
BGH041003 - 19 mm (3/4")

BGH041004 - 23 mm (7/8")

BGH041005 - 25.4 mm (1")

BGH041006 - 28.5 mm (1 1/8")

BGH041007 - 32 mm (1 1/4")



## METEOROLOGICAL SENSORS

### Sea Temperature Sensor

Description: Used with Hydra and Hercules Systems  
Date Introduced: 1988  
Date Discontinued: Current product  
Part Number: 224-00-065



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### Air Temperature Sensor

Description: Used with Hydra and Hercules Systems  
Date Introduced: 1988  
Date Discontinued: Current product  
Part Number: 224-00-066



### Barometric Pressure Sensor

Description: Used with Hydra and Hercules Systems  
Date Introduced: 1988  
Date Discontinued: Current product  
Part Number: 690-00-007



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### Heel/Trim Sensor

Description: Used with Hydra and Hercules Systems  
Date Introduced: 1988  
Date Discontinued: Current product  
Part Number: 690-00-004

