

<p>CT118501 (Basic) CT118503 (Electrical) CT118513 (Juganaut) ME5260-2-99-196 (Torque)</p>	 Basic Methane Shutdown System Ex d	 Methane Master Ex d ia	 Methane Master Hawkeye Display Ex d ia LCD	 Methane Master Hawkeye Display Ex d ia LCD (Heater Upgrade + Battery (Rev 3))	 Methane Master With Hybrid Snout Hawkeye Display Ex d ia LCD
Release Date	2007	2013	2016	2020	2023
Features	<ul style="list-style-type: none"> ✓ Character display ✓ Rechargeable IS battery ✓ CAN Bus ✓ Gas sensor with IR technology ✓ ATF Flameproof enclosure ✓ One shot valve (2012) 	<ul style="list-style-type: none"> ✓ Character Display ✓ Rechargeable IS battery (IS Output) ✓ CAN Bus ✓ RapidSense Ex ia CH4 Sensor ✓ Nautitech® 5060 flameproof enclosure ✓ External Pressure Switch (Air Solenoid Feedback) ✓ Faster response time ✓ '60% faster warm-up time 	<ul style="list-style-type: none"> ✓ Easy-to-read LCD Hawkeye Display ✓ Rechargeable IS battery (Rev 2) ✓ CAN Bus ✓ RapidSense Ex ia CH4 Sensor ✓ Nautitech® 5060 flameproof enclosure ✓ External Pressure Switch (Air Solenoid Feedback) ✓ Faster response time ✓ 60% faster warm-up time 	<ul style="list-style-type: none"> ✓ Easy-to-read LCD Hawkeye Display ✓ Rechargeable IS Battery (Rev 3) - with integrated RTC for time stamping, built-in Alternator Protection ✓ Device (APD), and Galvanic Isolation ✓ CAN Bus ✓ RapidSense Ex ia CH4 Sensor ✓ Nautitech® 5060 flameproof enclosure ✓ External Pressure Switch (Air Solenoid Feedback) ✓ Faster Response Time ✓ 60% faster warm-up time ✓ Anti-condensation heating element ✓ Sintered Filter for greater Ingress Protection ✓ Manual and automated Time Telemetry Response for compliance to AS/NZS 2290.3.2018 requirements 	<ul style="list-style-type: none"> ✓ Easy-to-read LCD Hawkeye Display ✓ Rechargeable IS Battery (Rev 3) - with integrated RTC for time stamping, built-in Alternator Protection ✓ Device (APD), and Galvanic Isolation ✓ CAN Bus ✓ RapidSense IS Sensor Head with software upgrade ✓ Nautitech® 5060 flameproof enclosure ✓ External Pressure Switch (Air Solenoid Feedback) ✓ Faster Response Time ✓ 60% faster warm-up time ✓ Anti-condensation heating element ✓ Sintered Filter Kit for increased Ingress Protection ✓ Manual and automated Time Telemetry Response for compliance to AS/NZS 2290.3.2018 requirements ✓ Hybrid Snout resistant to changes in temperature and humidity
Upgrade Recommendation	Recommend upgrade to Ex ia system in Australia	Supported in the field but recommend upgrade to latest version with heater element	Supported in the field but recommend upgrade to latest version with heater element	Supported in the field but recommend upgrade to hybrid snout	Supported in the field
Equipment Applications	Personnel Transporters LHDs Graders Electric Vehicles: Retrievers, Dozers Longwall Relocation Equipment Battery Powered Vehicles Diesel Power Generators				



Nautitech® CH4 System Evolution Matrix

<p>CT118501 (Basic)</p> <p>CT118503 (Electrical)</p> <p>CT118513 (Juganaut)</p> <p>ME5260-2-99-196 (Torque)</p>	 <p>Basic Methane Shutdown System Ex d</p>	 <p>Methane Master Ex d ia</p>	 <p>Methane Master Hawkeye Display Ex d ia LCD</p>	 <p>Methane Master Hawkeye Display Ex d ia LCD (Heater Upgrade + Battery (Rev 3))</p>	 <p>Methane Master With Hybrid Snout Hawkeye Display Ex d ia LCD</p>
Release Date	2007	2013	2016	2020	2023
<p>BASIC System</p> <p>(Key Components)</p> <p>CT118501</p>	<p>CT118530 - Display</p> <p>PL118532 - IR Gas Sensor</p> <p>CT1116402 - 7.2V Battery Pack</p> <p>PL118504 - Charger Module</p> <p>PL118534 - Air Solenoid Valve</p> <p>PL118541 - Flameproof Main Enclosure (White)</p> <p>PL118506 - Flameproof Display Enclosure</p> <p>PL111611 - Magnetic Pencil</p> <p>PL118519 - Calibration Cap</p>	<p>ME5070-2-99-179 - Character Display</p> <p>ME5070-2-19-009 - RapidSense Ex ia CH4 Sensor</p> <p>ME5070-2-99-151 - 7.2V Battery Pack</p> <p>PL118504 - Charger Module</p> <p>PL118534 - Air Solenoid Valve</p> <p>PL118541 - Flameproof Main Enclosure (White)</p> <p>PL111611 - Magnetic Pencil</p> <p>ME5060-2-99-016 - Flameproof Display Enclosure</p> <p>ME5070-2-99-112 - Sensor Assembly</p> <p>ME5070-2-07-017 - Calibration Cap</p> <p>ME5070-0-01-045 - Housing, CH4 Sensor Assembly (Long Snout)</p> <p>ME5070-0-24-001 - CH4 Sensor, Filter Mesh</p>	<p>ME5350-2-99-260 - Hawkeye Display (Basic)</p> <p>ME5070-2-19-009 - RapidSense Ex ia CH4 Sensor</p> <p>ME5070-2-99-151 - 7.2V Battery Pack</p> <p>PL118504 - Charger Module</p> <p>PL118534 - Air Solenoid Valve</p> <p>PL118541 - Flameproof Main Enclosure (White)</p> <p>ME5060-2-99-016 - Flameproof Display Enclosure</p> <p>ME5070-2-99-112 - Sensor Assembly</p> <p>ME5350-2-26-008 - Magnetic Pencil (double magnet)</p> <p>ME5070-2-07-017 - Calibration Cap</p> <p>ME5070-0-01-045 - Housing, CH4 Sensor Assembly (Long Snout)</p> <p>ME5070-0-24-001 - CH4 Sensor, Filter Mesh</p>	<p>ME5350-2-99-260 - Hawkeye Display (Basic)</p> <p>ME5070-2-19-009 - RapidSense Ex ia CH4 Sensor</p> <p>ME5070-2-99-151 - 7.2V Battery Pack (w/RTC)</p> <p>PL118504 - Charger Module</p> <p>PL118534 - Air Solenoid Valve</p> <p>PL118541 - Flameproof Main Enclosure (White)</p> <p>ME5060-2-99-016 - Flameproof Display Enclosure</p> <p>ME5070-2-99-112 - Sensor Assembly</p> <p>ME5350-2-26-008 - Magnetic Pencil (double magnet)</p> <p>ME5070-2-07-017 - Calibration Cap</p> <p>ME5070-0-01-021 - Housing, CH4 Sensor Assembly (Short Snout)</p> <p>ME5070-2-24-004 - CH4 Sintered Filter Kit</p>	<p>ME5350-2-99-260 - Hawkeye Display (Basic)</p> <p>ME5070-2-19-009 - RapidSense Ex ia CH4 Sensor</p> <p>ME5070-2-99-151 - 7.2V Battery Pack (w/RTC)</p> <p>PL118504 - Charger Module</p> <p>PL118534 - Air Solenoid Valve</p> <p>PL118541 - Flameproof Main Enclosure (White)</p> <p>ME5060-2-99-016 - Flameproof Display Enclosure</p> <p>ME5070-2-99-112 - Sensor Assembly</p> <p>ME5350-2-26-008 - Magnetic Pencil (triple magnet)</p> <p>ME5070-2-07-019 - Hybrid Calibration Cap</p> <p>ME5070-2-90-159 - Hybrid Snout</p> <p>ME5070-2-24-005 - Sintered filter for Hybrid Snout</p> <p>SW507001 - Software Upgrade 2.0.2</p>
<p>Electrical System</p> <p>(Variations to BASIC Components)</p> <p>CT118503</p>	<p>CE005040 - Relay Socket</p> <p>CE005039 - Relay SPDT</p> <p>EXCLUDES - PL118534 - Air Solenoid Valve</p>	<p>CE005040 - Relay Socket</p> <p>CE005039 - Relay SPDT</p> <p>EXCLUDES - PL118534 - Air Solenoid Valve</p>	<p>CE005040 - Relay Socket</p> <p>CE005039 - Relay SPDT</p> <p>ME5350-2-99-261 - Hawkeye Display (Electrical)</p> <p>EXCLUDES - PL118534 - Air Solenoid Valve</p>	<p>CE005040 - Relay Socket</p> <p>CE005039 - Relay SPDT</p> <p>ME5350-2-99-261 - Hawkeye Display (Electrical)</p> <p>EXCLUDES - PL118534 - Air Solenoid Valve</p>	<p>CE005040 - Relay Socket</p> <p>CE005039 - Relay SPDT</p> <p>ME5350-2-99-261 - Hawkeye Display (Electrical)</p> <p>EXCLUDES - PL118534 - Air Solenoid Valve</p>
<p>JUG-A-O System</p> <p>(Variations to BASIC Components)</p> <p>CT118513</p>	<p>CT118531 - Juganaut Display</p> <p>PL118514 - Juganaut Charger Modul</p> <p>PL118542 - Flameproof Enclosure (Black)</p> <p>PL118515 - Juganaut Junction Box</p> <p>PL002900 - Scrubber RTD</p> <p>CT118509 - Super Charger RTD</p>	<p>ME5070-2-99-197 - Juganaut Character Display</p> <p>PL118514 - Juganaut Charger Module</p> <p>PL118542 - Flameproof Enclosure (Black)</p> <p>PL118506 - Flameproof Display Enclosure</p> <p>PL118515 - Juganaut Junction Box</p> <p>PL002900 - Scrubber RTD</p> <p>CT118509 - Super Charger RTD</p>	<p>ME5350-2-99-262 - Hawkeye Display (JUG-A-O)</p> <p>PL118514 - Juganaut Charger Module</p> <p>PL118542 - Flameproof Enclosure (Black)</p> <p>ME5070-2-99-461 - Deputy Bypass Junction Box</p> <p>PL002900 - Scrubber RTD</p> <p>CT118509 - Super Charger RTD</p> <p>ME5790-2-99-479 - IS Barrier Array</p>	<p>ME5350-2-99-262 - Hawkeye Display (JUG-A-O)</p> <p>PL118514 - Juganaut Charger Module</p> <p>PL118542 - Flameproof Enclosure (Black)</p> <p>ME5070-2-99-461 - Deputy Bypass Junction Box</p> <p>PL002900 - Scrubber RTD</p> <p>CT118509 - Super Charger RTD</p> <p>ME5790-2-99-479 - IS Barrier Array</p>	<p>ME5350-2-99-262 - Hawkeye Display (JUG-A-O)</p> <p>PL118514 - Juganaut Charger Module</p> <p>PL118542 - Flameproof Enclosure (Black)</p> <p>ME5070-2-99-461 - Deputy Bypass Junction Box</p> <p>PL002900 - Scrubber RTD</p> <p>CT118509 - Super Charger RTD</p> <p>ME5790-2-99-479 - IS Barrier Array</p>
<p>TORQUE System</p> <p>(Variations to BASIC Components)</p> <p>ME5260-2-99-196</p>			<p>ME5350-2-99-263 - Hawkeye Display (Torque)</p> <p>PL118594 - Torque Charger Module</p> <p>ME5070-2-99-462 - Deputy Bypass Junction Box (Torque)</p> <p>ME5260-2-19-018/019/020/021/022 - RTDs</p>	<p>ME5350-2-99-263 - Hawkeye Display (Torque)</p> <p>PL118594 - Torque Charger Module</p> <p>ME5070-2-99-462 - Deputy Bypass Junction Box (Torque)</p> <p>ME5790-2-99-479 - IS Barrier Array</p> <p>ME5260-2-19-018/019/020/021/022 - RTDs</p>	<p>E5350-2-99-263 - Hawkeye Display (Torque)</p> <p>PL118594 - Torque Charger Module</p> <p>ME5070-2-99-462 - Deputy Bypass Junction Box (Torque)</p> <p>ME5790-2-99-479 - IS Barrier Array</p> <p>ME5260-2-19-018/019/020/021/022 - RTDs</p>
<p>Engine Management System (C9)</p> <p>ON ENGINE KIT</p>	<p>CT500130 - Injectors</p> <p>CT500131 - Heui Pump</p> <p>CT500114 - Air Switch (5-7mA)</p> <p>CT500105 - Air Switch ON/OFF</p> <p>CT500104 - Speed Sensor</p> <p>CT500115/116 - Temperature Sensors (Intake/Coolant)</p> <p>CT5001-11-01-01 - Boost Pressure Sensor</p> <p>CT5001-12-01-02 - Fuel Pressure Sensor</p> <p>CT5001-13-01-02 - Oil Pressure Sensor</p> <p>CT5001-24-02-03 - Injection Pressure Sensor</p>	<p>CT500130 - Injectors</p> <p>CT500131 - Heui Pump</p> <p>CT500114 - Air Switch (5-7mA)</p> <p>CT500105 - Air Switch ON/OFF</p> <p>CT500104 - Speed Sensor</p> <p>CT500115/116 - Temperature Sensors (Intake/Coolant)</p> <p>CT5001-11-01-01 - Boost Pressure Sensor</p> <p>CT5001-12-01-02 - Fuel Pressure Sensor</p> <p>CT5001-13-01-02 - Oil Pressure Sensor</p> <p>CT5001-24-02-03 - Injection Pressure Sensor</p>	<p>CT500130 - Injectors</p> <p>CT500131 - Heui Pump</p> <p>CT500114 - Air Switch (5-7mA)</p> <p>CT500105 - Air Switch ON/OFF</p> <p>CT500104 - Speed Sensor</p> <p>CT500115/116 - Temperature Sensors (Intake/Coolant)</p> <p>CT5001-11-01-01 - Boost Pressure Sensor</p> <p>CT5001-12-01-02 - Fuel Pressure Sensor</p> <p>CT5001-13-01-02 - Oil Pressure Sensor</p> <p>CT5001-24-02-03 - Injection Pressure Sensor</p>	<p>CT500130 - Injectors</p> <p>CT500131 - Heui Pump</p> <p>CT500114 - Air Switch (5-7mA)</p> <p>CT500105 - Air Switch ON/OFF</p> <p>CT500104 - Speed Sensor</p> <p>CT500115/116 - Temperature Sensors (Intake/Coolant)</p> <p>CT5001-11-01-01 - Boost Pressure Sensor</p> <p>CT5001-12-01-02 - Fuel Pressure Sensor</p> <p>CT5001-13-01-02 - Oil Pressure Sensor</p> <p>CT5001-24-02-03 - Injection Pressure Sensor</p>	<p>CT500130 - Injectors</p> <p>CT500131 - Heui Pump</p> <p>CT500114 - Air Switch (5-7mA)</p> <p>CT500105 - Air Switch ON/OFF</p> <p>CT500104 - Speed Sensor</p> <p>CT500115/116 - Temperature Sensors (Intake/Coolant)</p> <p>CT5001-11-01-01 - Boost Pressure Sensor</p> <p>CT5001-12-01-02 - Fuel Pressure Sensor</p> <p>CT5001-13-01-02 - Oil Pressure Sensor</p> <p>CT5001-24-02-03 - Injection Pressure Sensor</p>
<p>OFF ENGINE KIT</p>	<p>CT118534 - Display (C9)</p> <p>PL118532 - IR Gas Sensor</p> <p>CT1116403 - 12V IS Battery</p> <p>CT500142-DL-02 - PMU</p> <p>CT500126-02 - ECU</p> <p>CT500516 - IS Power Supply</p> <p>CT500516 - IS Power Supply</p> <p>Type 5002 - CAN Guages</p> <p>ME5230-2-99-061 - Large Enclosure</p>	<p>CT118534 - Display (C9)</p> <p>ME5070-2-99-153 - 12V IS Battery</p> <p>CT500142-DL-02 - PMU</p> <p>CT500126-02 - ECU</p> <p>CT500516 - IS Power Supply</p> <p>Type 5002 - CAN Guages</p> <p>ME5230-2-99-061 - Large Enclosure</p>	<p>ME5350-2-99-266 - Hawkeye Display (C9)</p> <p>ME5070-2-99-153 - 12V IS Battery</p> <p>CT500142-DL-02 - PMU</p> <p>CT500126-02 - ECU</p> <p>CT500516 - IS Power Supply</p> <p>Type 5002 - CAN Guages</p> <p>ME5230-2-99-061 - Large Enclosure</p>	<p>ME5350-2-99-266 - Hawkeye Display (C9)</p> <p>ME5070-2-99-153 - 12V IS Battery</p> <p>CT500142-DL-02 - PMU</p> <p>CT500126-02 - ECU</p> <p>CT500516 - IS Power Supply</p> <p>Type 5002 - CAN Guages</p> <p>ME5230-2-99-061 - Large Enclosure</p>	<p>ME5350-2-99-266 - Hawkeye Display (C9)</p> <p>ME5070-2-99-153 - 12V IS Battery</p> <p>CT500142-DL-02 - PMU</p> <p>CT500126-02 - ECU</p> <p>CT500516 - IS Power Supply</p> <p>Type 5002 - CAN Guages</p> <p>ME5230-2-99-061 - Large Enclosure</p>