DUAL FUEL CAP ISOLATION SYSTEM

The Muirhead™ Dual Fuel Cap Isolation system is the latest in the range of Smart Protection Systems available. The Dual Fuel Cap Isolation System ensures operator and machine safety on site. The system is designed to prevent accidents associated with refuelling.

This includes preventing the operator from driving off with the CBC still connected preventing any potential damage to fuel bay infrastructure and environmental damage associated with a major fuel spill.

The Muirhead™ Dual Fuel Cap Isolation system features ensure the ignition won’t start unless the fuel cap and park brake are on, substantially minimising the risks associated with refuelling.

In addition, the system will also trigger an alarm to alert the driver if the fuel cap is removed while the engine is running. In this instance the engine isn’t disabled, however it is if the operator applies the park brake while running the engine when the fuel cap is removed it will disable the engine immediately.

In instances where a machine has two or “dual” fuel caps, the system will ensure the engine won’t start until both fuel caps are securely on.

The Muirhead™ Dual Fuel Cap Isolation System is the foolproof option for safely refuelling on site, every time, without fail.
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AUXILIARY WARNING AND CONTROLS

AIR CLEANER RESTRICTION WARNING SYSTEM

Damage to engines due to extremely dusty conditions or poor air filter maintenance can cause premature engine failure and reduce machine availability.

The Muirhead™ Air Cleaner Restriction Warning system can help prevent this by monitoring the air filter restriction caused by blocked filters.

The Muirhead™ Air Cleaner Restriction Warning system has a red LED pilot lamp and alert sonar. This alerts the operator that the air cleaner needs cleaning or replacing.

Part No: 2756
AIR FILTER RESTRICTION WARNING KIT

Part No: 3555
AIR FILTER RESTRICTION PANEL ONLY

Part No: 2388
VACUUM SWITCH (SET TO 25" OF WATER) 6.2KPA 1/8 NPT FEMALE THREAD

Part No: 1244
ADAPTOR NIPPLE 1/8 NPT MALE TO MALE THREAD
AUTO THROTTLE CONTROLLER WITH PTO (PART NO. 3813)
The automatic throttle control system with PTO is a unique product that incorporates the following features:

THROTTLE CONTROL FUNCTION
This system, when activated, will raise the RPM to a pre-set point and isolate the foot throttle pedal.

OPERATOR CONTROL
This system incorporates a toggle switch to activate the system and provides a visual warning when the system is operational.

PTO CONTROL FUNCTION
This system, when activated, engages the PTO at either idle or pre-set RPM levels.

FULLY PROGRAMMABLE
This system is fully programmable via PowerMaster software and a notebook computer. This system also has a potentiometer located inside the control unit that will set the desired RPM when the system is activated.

SAFETY CONTROL
Neutral and park brake interlocks are incorporated in this system so that the automatic throttle and PTO will only operate when neutral is selected and the park brake is applied.

When the system is activated the throttle pedal is isolated and cannot override the automatic setting.

If the system is de-activated by the safety interlocks (neutral or park brake) the system will not activate again until it is reset.

Reset requires the park brake to be applied, neutral gear to be selected and the system switch to be turned off.
The Muirhead™ Daylight Running Lights system operates off the ignition circuit of a vehicle. Option One automatically switches the vehicle’s headlights on when the ignition is switched on. With Option Two, the vehicle’s headlights can only be operated when the ignition is on. This increases safety, on or off road.

Part No: 3438
DAYTIME RUNNING HEADLIGHT CONTROL SYSTEM 12V

Part No: 10549
DAYTIME RUNNING HEADLIGHT CONTROL SYSTEM 24V
AUXILIARY WARNING AND CONTROLS

ELECTRONIC BRAKE APPLICATION DEVICE

The Electronic Brake Application Device is designed to interface into machine OEM's brake circuits and apply the brakes proportionally. The device can be activated by RCT controller monitoring, vehicle or engine speed, engine fault, etc.

Part No: 11322
ELECTRONIC BRAKE APPLICATION DEVICE KIT INCLUDES 11918

Part No: 11614
BRAKE APPLICATION DEVICE T/S DOZERS

Part No: 11918
KIT LOOM SET T/S 11322 PART A AND PART B

AUXILIARY WARNING AND CONTROLS

ELECTRONIC HOIST CONTROLLER

This product has been designed to suit Caterpillar trucks that are converted into service trucks or water carts and have an electric over hydraulic hoist control. The product is installed to replace the OEM hoist control lever and provides limited control of the hoist pump.

The electric hoist control is designed to operate in conjunction with Muirhead™ Automatic Throttle Control systems. When activated, it will operate the vehicles OEM hoist hydraulic system.

Part No: 0364
ELECTRIC HOIST CONTROL KIT TO SUIT CATERPILLAR TRUCKS
AUXILIARY WARNING AND CONTROLS

ELECTRONIC LATCH CONTROLLER

The Muirhead™ Electronic Latch Controller has been designed to interface into RCT control devices and latch when triggered. The control unit senses input from a control device and will trigger an output to latch. Reset of the unit is through the reset key.

Part No: 4308
UNIVERSAL LATCH CONTROLLER

AUXILIARY WARNING AND CONTROLS

ENGINE HOURMETERS AND CONTROLLERS

HOURMETER & HOURMETER CONTROLLER (PART NO. 4398 & 3150)

The Muirhead™ Hourmeter & Hourmeter Controller have been specifically designed to record genuine working hours. They do this by monitoring engine revs as opposed to measuring time. During periods when the machine is idling, for example at lunch time or in periods of changing work shifts, the engine hourmeter will not operate, therefore recording only genuine machine working hours.

To enable universal application, an input frequency signal from the machine’s alternator to the hourmeter controller has been used. Electrical wiring is used for signal transmission between the control unit and alternator. An adjustable potentiometer is incorporated in the control unit which allows the operator to adjust the RPM setting to suit specific machines.

HOURMETER SHUTDOWN CONTROLLER (PART NO. 8566)

The Muirhead™ Hourmeter Shutdown Controller is a unique product which includes multiple functions. The system serves as an hourmeter controller, auxiliary output shutdown controller, idle down timer and extended idle shutdown controller all in the one system.

Part No: 8566
ENGINE HOURMETER CONTROLLER
24V SHUTDOWN

Part No: 4398
HOURMETER TIMED 24V (M-E EHMC-4-24V)

Part No: 3150
CONTROL HOURMETER TIMED 24V
AUXILIARY WARNING AND CONTROLS

FIRE CONTROLLERS

FIRE STATUS PANEL (PART NO. 5884) AUSTRALIAN STANDARD 5062

The Muirhead™ Fire Status Panel is designed and built to the latest Australian Standards AS5062. The panel will monitor the status of the fire bottle from two pressure switch inputs. The low pressure input warns the operator when the bottle pressure is below the desired kPa level. The shutdown pressure switch will trigger when the bottle has been discharged. It also has a key switch for override and pushbutton for extended shutdown when activated.

IDLE TIMER/FIRE CONTROLLER (PART NO. 3329)

The Muirhead™ Idle Timer/Fire Controller is a dual purpose product that incorporates both idle down and fire detection shutdown used to protect diesel engines and turbo chargers against immediate shut off, which traps high temperatures in the engine, resulting in component failure. A delay to shutdown ensures the operator has time to safely park the machine prior to the automatic shutdown. The system also activates if it senses a pressure loss in the fire suppression system and prevents normal operation if unsafe levels are detected.

<table>
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<th>Part No: 5884</th>
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<td>PRESSURE SWITCH 1200KPA FALLING 1/8 NPT</td>
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</table>
The Muirhead™ GPS Zoning system is a powerful and low cost zoning system. This unique product design is a powerful, low cost zoning system. The system calculates the vehicle’s global position and uses this information to determine which predefined zone the vehicle is currently operating within.

The controller (11020) monitors the vehicle’s position using global positioning system (GPS) which tracks the unit using satellites while the unit has a clear view of the sky.

The controller compares the vehicles position with its set zoning area to determine which zone the vehicle is in. Zones are downloaded from a remote user’s website, by means of the unit, through the GSM or WiFi network. When an area is created or modified, it is saved on a secure server ready for the controller to download. The unit periodically establishes a connection with the server to upload data and download any new or modified areas. Upon downloading new zones, the unit continues uninterrupted zoning using the new zoning areas.

The graphical method is a powerful tool for both beginners and experts is as simple as clicking on a graphical map, and selecting the corners of a zone to generate a zoning area. The gap boundaries are automatically generated.

The manual method is advised for use by trained operators only. This method allows for a greater level of accuracy to be achieved with the coordinates of the zoning areas. This method consists of typing in the exact coordinates of each corner of the zone (these coordinates must be measured on the site).

Speed limiting is also a feature of the zoning system. The user can setup zones around hazardous areas, high traffic areas, access ways, etc. Speed control is achieved by coupling the GPS zoning system with the Fly-by-wire FBW speed limiter (Please contact RCT for the correct speed limiter for your machine). The speed limiter then uses the vehicles zoning information to determine the permitted top speed for the vehicle, for the current location.
LADDER LIGHTING CONTROLLER (PART NO. 2976 & 0834)
The Muirhead™ Ladder Lighting Controller is designed to limit injuries when ascending and descending machine ladders. The lighting allows the operator to clearly see the ladder rungs as they board and exit their machine. The system allows the operator to turn on the ladder lights from either the cabin or ground position prior to exiting or boarding the machine.

Once the ladder lights have been illuminated, they will turn off after a pre-set time to minimise power consumption. The time delay for turning off the ladder lights can be adjusted between 1, 2, 4 and 8 minutes.

DOCKING LADDER CONTROLLER (PART NO. 9037)
The Muirhead™ Docking Ladder Control (Part No. 9037) has been designed to provide electrical operation of a machine's docking type boarding ladder (often found on dozers). The unit will allow the ladder to be lowered when the machine is stationary with the park brake applied. It features automatic operation of the ladder raise control if the ladder is down and the operator releases the park brake.

The docking ladder control has maximum time cycles for both raise and lower functions that will stop excessive run times damaging components or draining batteries. The ladder time cycle will start by the operation of the spring return toggle switch that allows the operator to control a raise or lower function as required.

The docking ladder control also incorporates an internal sonar unit which alerts the operator when a raise or lower time cycle is complete or if a condition is not met and a fault has occurred. An output is provided for an external ladder access lamp which will become active for 45 seconds whenever the ladder raise/lower switch on the controller is activated.

DOUBLE ACTING LADDER CONTROLLER (PART NO. 9111)
The Muirhead™ Double Acting Ladder Control unit has been designed to provide electrical control of a machine’s boarding ladder.

The ladder control unit will allow the ladder to be lowered when the machine is stationary with the park brake applied. It features automatic operation of ‘the ladder raise control’ if the ladder is down and the operator releases the park brake.

The ladder controller has maximum time cycles for both raise and lower functions that will stop excessive run times damaging components or draining batteries. The ladder time cycle will start by means of the operation of the spring return toggle switch that allows the operator to control a raise or lower function as required. The ladder controller also incorporates an internal sonar unit which alerts the operator when a raise or lower time cycle is active or if a condition is not met and a fault has occurred.

A ladder access lamp will illuminate for 45 seconds whenever the ladder raise/lower switch is toggled in either direction.
AUXILIARY WARNING AND CONTROLS

MULTIPURPOSE CONTROL DEVICE

The Multipurpose Control Device (PMX) is a programmable input and output controller. It accepts digital, analogue and PWM inputs and outputs. The system, used in conjunction with the PowerMaster™ software provides a very flexible product base. This configuration software doubles as a diagnostics tool as it displays the inputs and outputs live when connected to a PC.

The PMX can be used in any application where programmable control is required to operate valves, alarms, braking, speed, throttle and other applications on mobile equipment.

For further information or specific requirements, please refer to your nearest RCT branch.
The Park Brake Warning system is a unique product that incorporates the following features:

**DOOR SENSING**

The control unit senses when the door is opened or closed via proximity switches.

**PARK BRAKE SENSING**

The control unit senses the state of the park brake via a park brake switch.

**OPERATOR WARNING**

Operates a visual alarm and incorporates an output for the OEM horn circuit (manufacturer recommends this output be connected to the OEM horn circuit via a relay).

**KEY OVERRIDE FUNCTION**

The system incorporates a key override in the external circuit so that the system becomes inactive and maintenance can be carried out.

**SELF TEST FUNCTION**

When the control unit is first powered up, the alarms will self test for approx. 1-2 seconds.

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**Part No: 11386**  
PARK BRAKE WARNING KIT MULTI-VOLTAGE

**Part No: 11387**  
PARK BRAKE WARNING KIT MULTI-VOLTAGE 1 DOOR ACCESS

**Part No: 0869**  
LOOM TO SUIT 0230 / 10886

**Part No: 8722**  
PARK BRAKE WARNING MODULE (LIGHT DUTY)

**Part No: 8286**  
PARK BRAKE LOCKOUT KIT TO SUIT CATERPILLAR D10T

**Part No: 11377**  
PANEL DOOR OPEN PARK BRAKE
AUXILIARY WARNING AND CONTROLS

POWER MODE BYPASS

The Power Mode Bypass has been designed to prevent excess fuel usage by controlling the power mode on Komatsu 785-5 & 7 haul trucks. Part No. 11337

PRE-START WARNING TIMERS

The Muirhead™ Pre-start Warning Timers are designed to warn personnel within the vicinity of a machine that the engine is about to start. The system interfaces directly into the machine's starter circuit, automatically triggering when the ignition switch is activated. The system can be set to sound for a pre-set time period before allowing the machine to start or linked to trigger the machine's horn, lights or any electronic warning device.

Part No: 6337
PRE-START WARNING ELECTRONIC TIMER WITH ALARM AND PLUG

Part No: 2625
PRE-START WARNING ELECTRONIC TIMER WITH EXTERNAL ALARM AND LEAD
The Muirhead™ Pulse Width Modulation (PWM) Sense Switch Control can be programmed in the field to switch at any given PWM duty cycle set point.

This exceptionally useful device can monitor the duty cycle percentage and provides a set of changeover outputs (both positive), one below the pre-set programmed value and one above.

An example application would see it monitoring the duty cycle on a proportional retarder control valve using PWM control. The 5534 could be set to bring on an external light to indicate when the retarder is being heavily applied.

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The Muirhead™ Relay Ratchet Controller can be utilised in a multitude of applications where an alternating state between on and off is desired utilising only one input (negative ground).

The unit contains a set of voltage free changeover contacts and inbuilt memory, enabling the unit to remember what state it is in when last de-powered so when re-powered it will return to that state. A green LED also indicates what state it is in.
The Muirhead™ Service Monitor is a count down timer used to indicate when a vehicle is due for a service. It has two stages of warning; the first stage, an amber LED indicates that the service is due, the second stage, a red flashing LED indicates that the service is 10% overdue. Both stages also activate an output that can operate a visual and audible alarm. A green LED illuminates when the vehicle is operating efficiently.

For example, if a vehicle requires a service every 250 hours, the unit is programmed to 250 hours. After 250 hours of operation, the amber LED activates, indicating that the service is due. 25 hours later, the red flashing LED will illuminate. This mode will continue until the unit is reset using the reset key switch.

Part No: 3342
SERVICE MONITOR (HOURS)

Part No: 5947
KEY SWITCH 2 POSITION (USED FOR RESET OF 3342)

Part No: 6591
SERVICE MONITOR PROGRAMMER

Part No: 8847
SERVICE MONITOR RESETTER
AUXILIARY WARNING AND CONTROLS

THIRD GEAR TRAVEL ALARM SYSTEM

The Muirhead™ Third Gear Travel Alarm System for Caterpillar dozers has been designed to alert the operator when third gear has been selected in either forward or reverse.

Generally, in most dozer operations first and second gears only are used. Third gear and higher are not normally used when the machine is moving material. The system interfaces into the Caterpillar dozer transmission system and senses when third gear is selected. The system then activates an audible and visual alarm alerting the operator to change down gears.

Compatible with CAT D10R / D11R and T series dozers.

Part No: 4913
3RD GEAR TRAVEL ALARM SYSTEM

AUXILIARY WARNING AND CONTROLS

THROTTLE CONTROL MODULE (TCM)

This module is designed to be incorporated into Original Equipment Manufacturer (OEM) electronic throttle system when the electronic throttle is required to be disabled (e.g. return to idle).

Once installed this module prevents any logging of ECM fault codes.

This product is commonly used in conjunction with Muirhead™ Engine Protection and ControlMaster® Systems.

Part No: 7767
THROTTLE CONTROL MODULE DE-ENERGISED TO LIMIT
AUXILIARY WARNING AND CONTROLS

TRAY ANGLE KICK OUT SYSTEM

The Muirhead™ Tray Angle Kick Out system is designed to prevent damage to trays by limiting the raised tray angle. With the ability to install larger capacity trays to haul trucks the chances of damage to trays or other equipment is increased.

The Tray Angle Kick Out system is designed to allow aftermarket trays to elevate to a specific point to dump the payload material.

Part No: 6274
TRAY ANGLE KICK OUT CONTROLLER

Part No: 6119
CONTROL TILT DUAL AXIS ADJ RANGE
1 TO 45 DEGREES

Part No: 7994
MOUNT T/S 6119
WATER SPRAY CONTROLLERS

WATER SPRAY TIMER (PART NO. 2774 & 4530)
The Muirhead™ Water Spray Timer/Automatic Water Spray Controller (Part No. 4530/2774) allows the operator to manually or automatically adjust the water release rate by simply turning the potentiometer on the water spray timer to the desired discharge rate.

The water spray timer utilises a solenoid valve to turn the water output level on and off and has a 2-15 second standard timer, allowing the operator to optimise the rate of water discharged to suit their application.

The water spray timer incorporates two types of water disperse modes, continuous and pulse.

AUTO SPRAY CONTROLLER (PART NO. 6232)
The Muirhead™ Auto Spray Controller (ASC) has been designed to provide semi-automated spraying dependent on the conditions. The controller has three outputs, two of which control the spray heads and one which controls the water delivery by way of a variable PWM output.

The ASC also incorporates a speed input which senses frequency and two digital inputs for adjusting the water spray by adjusting the variable PWM output. The system is configured to have the spray heads activate automatically in relation to the ground speed of the vehicle.

The ASC has various set points which are adjustable via a custom software package. While the machine is travelling below a pre-set speed, it cuts off the spray heads and the water spray. At various levels of ground speed it will vary the output controls. It also has two inputs which adjust the flow output. The low input is designed to operate the PWM output at a reduced duty cycle and the high input is designed to activate the PWM output duty cycle at the maximum level when calibrated.

The ASC will connect to a custom water spray system installed onto a water truck to control the spray heads and the water pump. It will sense the speed at which the truck is travelling via a wire that is connected to the truck’s electric speedometer. The spray outputs will be factory set but will be field adjustable via a computer, PowerMaster software version 2.44 up and a programming lead 3314.

Note that the speed settings will have to be calibrated for each different machine.

7 FUNCTION VARIABLE SPRAY CONTROLLER (PART NO. 8995)
The Muirhead™ Variable Spray Controller (VSC) incorporates seven (7) function switches with LED indication to signal the active state and a number of inbuilt features for the spray control.

Functions include automatic spray control that pulses the water spray on and off at a variable rate dependant on the speed of the truck. The spray will automatically turn off when the truck slows down or stops and will automatically turn on when the truck is moving.

The VSC will connect to the existing truck solenoid valves that control the water pump and three (3) water spray heads. It will sense the speed of the truck via a wire that is connected to the truck’s electronic speedometer. The spray outputs will be factory set and are field adjustable using a computer fitted with PowerMaster software version 2.10 and a programming lead.

Note that the speed will have to be calibrated for each machine.

6 FUNCTION VARIABLE SPRAY CONTROLLER (PART NO. 10910)
The Muirhead™ Variable Spray Controller (VSC) is the latest addition to the Muirhead™ range of water spray controllers.

The system has six (6) spray head outputs for individual control, auto/manual function switch, three adjustable speed settings, one shot pulse and an adjustable constant pulse setting. The controller has been designed to interface into an OEM mobile water truck control panel.

There are added features for cannon and pump control with inputs from vehicle speed sensor and tank low level sensor.
Part No: 6232
AUTOMATIC WATER SPRAY CONTROLLER

Part No: 4530
WATER SPRAY TIMER PULSE TO SUIT WATER TRUCK

Part No: 2774
WATER SPRAY TIMER VARIABLE

Part No: 8995
WATER SPRAY TIMER VARIABLE WITH AUTOMATIC / MANUAL SWITCHING

Part No: 10910
VARIABLE SPRAY CONTROLLER AUTO / MANUAL CUSTOM PROGRAM
The following products are a selection of additional labels suited to the Muirhead™ Engine Protection Systems (EPS).

**Part No:** 4349
**Alternator Warning**

**Part No:** 5629
**Belt Break**

**Part No:** 5636
**Blank No Red Dot**

**Part No:** 0427
**Blank With Red Dot**

**Part No:** 1417
**Brake Oil Temperature**

**Part No:** 6143
**Compressor Discharge Temperature**

**Part No:** 0442
**Compressor Oil Level**

**Part No:** 0453
**Compressor Oil Pressure**

**Part No:** 0428
**Convertor Oil Temperature**

**Part No:** 5630
**Coolant Flow**

**Part No:** 5635
**Coolant Level**

**Part No:** 1372
**Coolant Level / Flow**
Part No: 5633
HYDRAULIC OIL LEVEL

Part No: 4350
HYDRAULIC OIL PRESSURE

Part No: 5631
HYDRAULIC OIL TEMPERATURE

Part No: 5634
OIL LEVEL

Part No: 5637
OIL PRESSURE

Part No: 1368
OIL PRESSURE / LEVEL

Part No: 8424
PUMP FLOW

Part No: 5632
TRANSMISSION OIL LEVEL

Part No: 4348
TRANSMISSION OIL PRESSURE

Part No: 1411
TRANSMISSION OIL TEMPERATURE
The following products are a selection of alarms and buzzers suited to the Muirhead™ Engine Protection Systems. For additional products, please refer to the AusProTec™ section of our catalogue.

![Alarm Image]

**Part No: 1723**
WARNING ALARM CONSTANT OR INTERMITTENT SIREN 12/24V

**Part No: 6162**
WARNING ALARM 102dB 12/24V (HEAVY DUTY)

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The following products are a selection of belt break switches suited to the Muirhead™ Engine Protection Systems. For additional products, please refer to the AusProTec™ section of our catalogue.

![Belt Break Sensor Image]

**Part No: 1593**
PROXIMITY SWITCH 30 MM SENSING NORMALLY OPEN 2 WIRE SYSTEM

**Part No: 4072**
PROXIMITY SWITCH 30MM SENSING NORMALLY OPEN 3 WIRE SWITCHED TO GROUND
The following products are a selection of coolant level probes suited to the Muirhead™ Engine Protection Systems. For additional products, please refer to the AusProTec™ section of our catalogue.

Part No: 2006
LIGHT DUTY COOLANT PROBE 1/8 NPT

Part No: 2887
MEDIUM DUTY COOLANT PROBE 1/4 NPT

Part No: 2205
HEAVY DUTY COOLANT PROBE 1/4 NPT

Part No: 6510
HEAVY DUTY COOLANT SWITCH (CAPACITIVE) 1/4 NPT
The Muirhead™ Engine Protection System (EPS) is designed to monitor practically any alarm condition on virtually any machine. The electronic EPS is smaller in design and integrates more features than all of its previous models. With no mechanical parts, the EPS control module is extremely reliable, easy to install and simple to use. The system follows in the footsteps of its predecessors delivering purpose built engine protection.

Every EPS control module can be customised to monitor known problems and functions commonly associated with equipment failure. This is one of the many reasons Muirhead™ products are the preferred equipment protection systems for Australian and international mines, contractors and Original Equipment Manufacturers.

Part No: 9200
ENGINE PROTECTION SYSTEM 4
FUNCTION TO SUIT WATER COOLED ENGINES

Part No: 9301
ENGINE PROTECTION SYSTEM 4
FUNCTION TO SUIT AIR COOLED ENGINES

Part No: 8797
LOOM 5M TO SUIT 9200 AND 9301

Part No: 8805
LOOM 10M TO SUIT 9200 AND 9301

Part No: 3565
ENGINE PROTECTION SYSTEM 6
FUNCTION TO SUIT WATER COOLED ENGINES

Part No: 3747
ENGINE PROTECTION SYSTEM 6
FUNCTION TO SUIT AIR COOLED ENGINES

Part No: 5994
LOOM 10M TO SUIT 3565 AND 3747
The Muirhead™ Light Vehicle Engine Protection systems offer protection for your light commercial, off road mobile equipment by monitoring engine oil pressure, coolant temperature and coolant levels. The system, by alerting the operator, prevents premature engine failure, damage and costly repairs.

The systems provide audible and visual warnings and incorporate additional outputs for return to idle or shutdown modes. Compact in design and easy to install.

**ENGINE PROTECTION SYSTEMS (EPS)**

**ENGINE PROTECTION SYSTEMS LIGHT DUTY (EPS)**

The following products are a selection of flow switches suited to the Muirhead™ Engine Protection Systems. For additional products, please refer to the AusProTec™ section of our catalogue.

**FLOW SWITCH**

Part No: 6041
FLOW SWITCH NORMALLY OPEN 56MM PADDLE (CATERPILLAR ENGINES ONLY)

Part No: 2987
GASKET TO SUIT 6041
ENGINE PROTECTION SYSTEMS (EPS)

OIL LEVEL SWITCH

The following products are a selection of oil level switches suited to the Muirhead™ Engine Protection Systems. For additional products, please refer to the AusProTec™ section of our catalogue.

Part No: 3072
OIL LEVEL SWITCH CAPACITIVE USED FOR TEMPERATURES BELOW 100°C 1/4 NPT

ENGINE PROTECTION SYSTEMS (EPS)

PRESSURE SWITCHES

The following products are a selection of pressure switches suited to the Muirhead™ Engine Protection Systems. For additional products, please refer to the AusProTec™ section of our catalogue.

Part No: 3074
PRESSURE SWITCH 8 PSI 2 TERMINAL NORMALLY OPEN 1/8 NPT (LIGHT DUTY)

Part No: 8725
PRESSURE SWITCH 8 PSI 2 TERMINAL NORMALLY OPEN 1/8 NPT (HEAVY DUTY)

Part No: 9976
PRESSURE SWITCH 12 PSI SURE-SEAL CONNECTION 9/16 UNO (PERKIN'S ENGINE THREAD)

Part No: 7968
O'RING SEAL TO SUIT 9976 (RECOMMENDED)

Part No: 3430
PRESSURE SWITCH 9 PSI FALLING NORMALLY OPEN 1/8 NPT

Part No: 3429
PRESSURE SWITCH 16 PSI FALLING NORMALLY OPEN 1/8 NPT
The Muirhead™ Return to Idle Controllers and Kits are available for pneumatic and hydraulic throttle systems. These kits are designed to integrate with Muirhead™ equipment to restrict or control the throttle actuation of a machine.

For professional advice on choosing the right engine control or idle down kit for your machine, please contact your nearest RCT branch.

**Part No: 7767**
RETURN TO IDLE CONTROLLER TO SUIT MACHINES WITH ELECTRONIC THROTTLE SYSTEMS

**Part No: 4570**
RETURN TO IDLE HYDRAULIC VALVE TO SUIT MACHINES WITH HYDRAULIC THROTTLE SYSTEMS
The following products are a selection of sundry parts and install kits suited to the Muirhead™ Engine Protection Systems. For additional products, please refer to the AusProTec™ section of our catalogue.

**Part No: 4420**
INSTALL CRIMP KIT TO SUIT Muirhead™ EPS

**Part No: 3506**
INSTALL SUNDRY KIT TO SUIT Muirhead™ EPS

**Part No: 0899**
THREAD SEALANT LOCTITE 567 50ML

**Part No: 3379**
ADAPTOR BUSH 3/8 NPT FEMALE TO 1/2 NPT MALE TO SUIT 3/8 NPT TEMPERATURE SWITCHES

**Part No: 0789**
CABLE TIE 100MM * 2.5MM (SMALL)

**Part No: 0211**
CABLE TIE 270MM * 4.8MM (MEDIUM)

**Part No: 0788**
CABLE TIE 270MM * 8.6MM (LARGE)
The following products are a selection of temperature switches suited to the Muirhead™ Engine Protection Systems. For additional products, please refer to the AusProTec™ section of our catalogue.

**ENGINE PROTECTION SYSTEMS (EPS)**

**TEMPERATURE SWITCHES (TO SUIT EPS SYSTEMS)**

- **Part No: 1232**
  TEMPERATURE SWITCH 185°C TO SUIT DEUTZ

- **Part No: 9454**
  TEMPERATURE SWITCH 100°C NORMALLY CLOSED 1/8 NPT

- **Part No: 1763**
  TEMPERATURE SWITCH 205°F NORMALLY CLOSED 2 TERMINAL 3/8 NPT (KIDDE FENWAL)

- **Part No: 1764**
  TEMPERATURE SWITCH 212°F NORMALLY CLOSED 2 TERMINAL 3/8 NPT (KIDDE FENWAL)

- **Part No: 1765**
  TEMPERATURE SWITCH 220°F NORMALLY CLOSED 2 TERMINAL 3/8 NPT (KIDDE FENWAL)

- **Part No: 1767**
  TEMPERATURE SWITCH 250°F NORMALLY CLOSED 2 TERMINAL 3/8 NPT (KIDDE FENWAL)

- **Part No: 1768**
  TEMPERATURE SWITCH 275°F NORMALLY CLOSED 2 TERMINAL 3/8 NPT (KIDDE FENWAL)

- **Part No: 8491**
  TEMPERATURE SWITCH 225°F NORMALLY CLOSED 2 TERMINAL O-RING 3/4 UNO

- **Part No: 3379**
  ADAPTOR BUSH 3/8 NPT FEMALE TO 1/2 NPT MALE TO SUIT 3/8 NPT TEMPERATURE SWITCHES
ENGINE PROTECTION SYSTEMS (EPS)

UNIVERSAL WARNING SYSTEMS

The Muirhead™ Universal Warning systems offer protection for your light commercial, off-road mobile equipment by monitoring engine oil pressure, coolant temperature and coolant levels. The systems, by alerting the operator, prevent premature engine failure, damage and costly repairs.

The systems provide audible and visual warnings and incorporate additional outputs for return to idle or shutdown modes. Compact in design and easy to install.

Part No: 0225
UNIVERSAL WARNING KIT

Part No: 4461
PANEL TO SUIT 0225 (SINGLE LED AND ALARM)

Part No: 0221
LOOM TO SUIT 0225

FLUID MONITORING / WARNING SYSTEMS

COOLANT LEVEL KITS AND PROBES

The Muirhead™ Coolant Level Kits are designed to monitor engine coolant levels on motor powered equipment to prevent premature engine failure.

In the event of a blown hose or cracked seal, most engine temperature gauges and protection systems will not detect loss of coolant fluid. This is due to the fact that gauges and temperature switches rely on sensing the coolant temperature and when there is no coolant, the gauges cannot sense the temperature.

The Muirhead™ Coolant Level Kits eliminate these concerns by warning the operator that the coolant has reached a dangerously low level. This warning provides the operator enough time to take preventative action before major engine damage occurs.

Part No: 11873
COOLANT LEVEL KIT MULTI-VOLTAGE WITH LIGHT DUTY PROBE (2 x 2006)

Part No: 11871
COOLANT LEVEL KIT MULTI-VOLTAGE WITH HEAVY DUTY PROBE (1 x 2205)

Part No: 11872
COOLANT LEVEL KIT MULTI-VOLTAGE WITH HEAVY DUTY PROBE (2 x 2205)
Part No: 1301
COOLANT LEVEL KIT 24V WITH HEAVY DUTY PROBE (2 x 2205)

Part No: 1739
COOLANT LEVEL MODULE MULTI-VOLTAGE (MODULE ONLY)

Part No: 2006
COOLANT LEVEL PROBE LIGHT DUTY 1/8 NPT (PLASTIC BODY)

Part No: 3552
COOLANT LEVEL PROBE LIGHT DUTY EXPANSION

Part No: 2887
COOLANT LEVEL PROBE LIGHT DUTY 1/4 NPT (COMPLETE WITH BRASS BUSH)

Part No: 2205
COOLANT LEVEL PROBE HEAVY DUTY 1/4 NPT (BRASS BODY)

Part No: 6510
COOLANT LEVEL PROBE HEAVY DUTY 1/4 NPT (3 WIRE CAPACITIVE)
The Muirhead™ Low Oil/Fuel Warning Kits are used to detect low diesel fuel levels. When low fuel level is detected, the LED will illuminate and the audible alarm will sound.

The probe’s electronic circuitry is enclosed within a single sealed unit. The level sensor will suit any diesel fuel application for either mobile or stationary equipment.

A distinct advantage of this switch, over a float switch, is its compact design and high resistance to vibration. It contains no moving parts. The switch, being isolated, allows it to be used in an above ground application.

Part No: 8612
LOW OIL LEVEL KIT (WITH 3072 SWITCH)

Part No: 3072
OIL LEVEL SWITCH 1/4 NPT (CAPACITIVE)

The Muirhead™ Lubrication Controllers are purpose built to all mobile equipment. The system has been designed to be user friendly with inbuilt diagnostics. It incorporates infrared programming capabilities, overload protection, lubrication counter and full diagnostics.

The lubrication controller is designed to inject grease at pre-set/programmable intervals. If the grease confirmation is not received within two minutes, the controller will display “FAIL” and the grease fault alarm will signal the VIMS system to record and display a lube fail warning.

The grease time interval can be pre-programmed to suit the client’s specifications or adjusted on site with an optional lube control programmer.

The Muirhead™ Programmable Lubrication Controller has been designed with flexibility in mind. The system is capable of operating in many different modes, which will suit multiple lubrication systems available in the market.
The Muirhead™ Directional Change Controller is designed to prevent accidents and damage to forklifts from continued directional change whilst the forklifts are moving.

The control unit will inhibit a change of machine direction unless the machine is stationary. The system does this by sensing that the forward or reverse gears have been selected whilst detecting the forklift's ground speed to check that the machine is stationary.

The system is compatible with most types of forklifts that are installed with electric shifts.

The super sense controller senses both ground speed and gear position. The unit will not allow a change in direction unless the machine is travelling below the pre-set speed. When forward is selected and the machine is moving, the operator will not be able to select reverse until the machine is below the pre-set speed programmed in the control.

Customised versions are available on request.
The forklift engine protection kit is designed to suit all makes and models of forklifts; from small 2 ton to the larger 20 ton the kit can suit. From the smallest to the largest machines the forklift engine protection kit delivers peace of mind to prevent major engine damage.

Part No: 9303
KIT EPS T/S FORKLIFT 12/24V

The Maxi Vision™ Mast Forklift Camera systems offer forklift operators a new perspective on driving and operating equipment. The camera systems are designed to enhance safety by improving the operator’s vision when performing such tasks as lifting, transporting loads or reversing the forklift. The systems are suitable for use on small or large forklift trucks, battery or I/C models.

The Maxi Vision™ range of colour LCD monitor and camera options are robust in design and are ideally suited to industrial equipment. Heavy duty casing and mounting options are also available to suit custom applications.

The camera system has been designed to suit forklifts and includes pulleys, heavy duty cabling, special mounting and fittings to enable reliable installation to most electrical and IC forklifts.

Part No: 6660
FORKLIFT MAST CAMERA SYSTEM (SUITS 2 AND 3 STAGE MASTS) OPEN CAB IP67

Part No: 12576
FORKLIFT MAST CAMERA SYSTEM (SUITS 2 AND 3 STAGE MASTS) CLOSED CAB

Part No: 5790
VOLTAGE REDUCER FOR ELECTRONIC FORKLIFTS
FORKLIFT AND LOGISTICS SAFETY SYSTEMS

FORKLIFT SPEED LIMITERS

The Muirhead™ Speed Limiter will revolutionise the forklift industry. Its robust construction and universal application makes the system a safe, reliable solution to manage forklift speed.

The system combines a heavy duty actuator and the latest technology controller to give smooth speed control, without compromising productivity or safety. As a key safety feature, the system defaults to a pre-set speed limit if the speed signal is lost. Along with the added compatibility of speed zone control, the kit suits all types of forklift applications.

With speed being one of the major contributors to forklift accidents, the Muirhead™ Speed Limiter provides a safe reliable solution.
The Muirhead™ Safety interlocks are designed to interface into a vehicle's system and assist with operator safety and machine productivity. The simple design and robust construction ensures a user friendly outcome. The interlocks are multi-voltage and come complete as a kit for easy installation into machine seat switches, seat belt assemblies or transmissions.

Systems include:

**SEAT BELT INTERLOCK**
Ensures seat belt is applied before starting the machine

**SEQUENTIAL SEAT BELT CONTROLLER**
Assists the operator to follow safety procedures by ensuring the machine is started following the correct start up sequence

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The following products are a selection of seat belts and seat activated switches suited to the Muirhead™ Seat Belt Warning systems.

- **Part No: 5002**  
  SEAT BELT RETRACTOR AND BUCKLE RIGHT HAND MOUNT 45° 90MM STALK (BLACK)

- **Part No: 5495**  
  SEAT ACTIVATED SWITCH LEVER TYPE (NORMALLY OPEN CIRCUIT)

- **Part No: 0235**  
  SEAT ACTIVATED PRESSURE SWITCH (NORMALLY OPEN CIRCUIT)

- **Part No: 5203**  
  HEAVY DUTY SEAT BELT 3 INCH WIDE (NO SWITCH)

- **Part No: 10089**  
  RETRACTOR & BUCKLE SWITCH (TOYOTA)

- **Part No: 10090**  
  RETRACTOR & BUCKLE SWITCH (TCM)

- **Part No: 10091**  
  RETRACTOR & BUCKLE SWITCH (KOMATSU / CLARK)

- **Part No: 10113**  
  RETRACTOR & BUCKLE SWITCH 220MM (FLEXIBLE STALK)
The following products are a selection of speed sensors suited to the Muirhead™ Forklift Speed Limiter range. For further information or specific requirements, please refer to your nearest RCT branch.

- **Part No: 11621**
  - ISOLATED SIGNAL AMPLIFIER

- **Part No: 0465**
  - SPEED SENSOR (PROXIMITY SWITCH TYPE)

- **Part No: 5305**
  - SPEED SENSOR 78MM (MAGNETIC PICKUP STYLE)

- **Part No: 12505**
  - CAN GROUND SPEED SENSOR

- **Part No: 7961**
  - GROUND SPEED RADAR SENSOR

- **Part No: 8176**
  - MOUNT TO SUIT 7961/917
The Muirhead™ Engine Shutdown Controller (excess idle shutdown system) is designed to detect if the machine has idled for long periods before shutting off the machine.

It also protects diesel engines and turbo chargers against immediate shutdown damage. The system can turn off lights, air conditioning and other electrical components one minute before engine shut off occurs, avoiding flattening the vehicle’s battery.

The unit is capable of controlling the engine shutdown circuit and up to six auxiliary circuits before shutdown occurs.
IDLE AND SHUTDOWN SYSTEMS

IDLE TIMERS

The Muirhead™ Idle Timers are designed to moderate extreme operating temperatures before final shutdown occurs on mobile equipment. The idle timers regulate temperature in the engine and turbo components by idling the engine for a set time period before final shutdown occurs.

The idle timers are a cost effective means of protecting diesel engines and turbo components from excessive wear due to immediate shutdown without an idle period.

Customised idle timers are available with additional functions such as lights & auxiliary shutoff on request.

Part No: 11450
ENERGISED TO RUN IDLE TIMER
MULTI-VOLTAGE INTEGRATED

Part No: 6189
ENERGISED TO RUN IDLE TIMER
24V INTEGRATED (TO SUIT HITACHI EXCAVATORS)

Part No: 3329
ENERGISED TO RUN IDLE / FIRE TIMER 24V SURFACE MOUNT

Part No: 11452
KIT IDLE TIMER MULTI-VOLTAGE

Part No: 11951
KIT IDLE TIMER (PANEL & PLUG)

Part No: 12285
KIT IDLE TIMER T/S F-SERIES VOLVO LOADER

Part No: 12286
KIT IDLE TIMER T/S KOMATSU MACHINES
The Muirhead™ Fuel Cap Isolation system has been designed to prevent the machine operator from starting the machine and driving away with the fuel filler still attached. This will eliminate damage to machines, refuelling stations and hoses, and prevent hazardous fuel spills.

The system inhibits the operator from starting the machine, without firstly ensuring the fuel cap has been placed securely back onto the quick fill adaptor on the fuel tank.

The Muirhead™ Fuel Cap Isolation system has an intrinsically safe circuit design with supporting certification conformity for use in zone 0 applications.

Part No: 7811
FUEL CAP ISOLATION SYSTEM

Part No: 10136
KIT DUAL FUEL CAP ISOLATION SYSTEM

Part No: 7808
FUEL CAP ISOLATION CONTROLLER TO SUIT 7811 (PANEL ONLY)

Part No: 7809
REPLACEMENT FUEL CAP TO SUIT 7811
The Muirhead™ Live Fuel Lockout system is designed to engage the machine’s park brake and activate a flashing beacon. The beacon alerts personnel near the machine that the vehicle is in the process of being refuelled. The system locks on the park brake to prevent the machine from moving, while the flashing beacon provides a visual warning to surrounding personnel that the machine is currently being refuelled.

For part numbers for the electrical live fuel lockout system, please refer to your nearest RCT branch.

Part No: 5338
MECHANICAL LIVE FUEL LOCKOUT KIT

The Muirhead™ Live Fuel Service Lockout Controller (Part No. 8972) has been specifically designed to be the main lockout mechanism to ensure that the park brake remains applied and alarms remain activated while service personnel refuel or perform maintenance tasks on the machine.

The isolation mechanism activates the alarm and beacon to alert personnel near the machine that the vehicle is in the process of being serviced or refuelled. The system reduces the danger of drive off accidents and improves the overall servicing safety whilst the machine is still running.

Part No: 8972
LIVE FUEL SERVICE LOCKOUT CONTROLLER
The Muirhead™ AMS-100 series 2 is an advanced management system designed to monitor critical operating functions and control various components on mobile and stationary machines. The system is capable of monitoring eight (8) inputs and has both LED and LCD displays. These displays can be programmed to alert the operator of any alarm conditions and can display a particular function status.

The AMS-100 series 2 comprises a central display data linked to a Programmable Output Device (POD) enabling the system to monitor both Original Equipment Manufactured (OEM) and non-OEM components. The central display keeps the operator informed of the status of their machine and helps to prevent premature engine wear, unexpected breakdowns and costly repairs.

The system can be programmed to monitor and/or display various safety functions, such as, vehicle and engine overspeed, park brake warning, raised tray and opened doors. All monitored functions can be assigned a pre-determined level of warning response, allowing for uniform safety and operational control. As a means to protect equipment components from damage, the AMS-100 series 2 can be set to idle and/or shutdown the machine if an abnormal operating condition is detected.

Part No: 1111
AMS-100 ELECTRONIC INPUT / OUTPUT MODULE (POD)

Part No: 9887
AMS-100 VERSION 2 ELECTRONIC DISPLAY
The Muirhead™ Fatigue Warning system has been developed with operator safety in mind. This system, once activated, randomly checks the operator’s awareness using a visual warning. If this warning is not acknowledged by means of a reset switch, an audible alarm will sound until the operator resets the system.

The Muirhead™ Fatigue Warning System is most effective in managing driver fatigue for fast moving earthmoving vehicles such as ON/OFF highway trucks and other fast moving heavy equipment.

As an added feature, the fatigue warning system is versatile enough to be used on all other types of operating vehicles.

The Muirhead™ Driver Alert Fatigue Warning system is designed to maintain operator’s alertness to help eliminate fatigue induced accidents. The system checks the operator’s awareness by randomly activating fatigue warning alerts. The system incorporates a real time clock which can be programmed to operate during a specific time period when operator fatigue is most prevalent (i.e. early hours of the morning or late in an operator’s shift).

The system also features an optional speed set point function whereby the system can be programmed to operate only after a pre-set speed is reached. The system can also be programmed to actively detect if the driver is reversing the machine, or if the machine’s park brake is applied. This function pauses the system to prevent any alarm activation whilst the driver is performing tasks which require their full concentration and/or when the machine is in idle.

Part No: 8614
FATIGUE WARNING SYSTEM (RANDOM)

Part No: 9055
FATIGUE WARNING KIT (MCU STYLE)
The Muirhead™ Seat Belt Interlock is a simple device that ensures the operator seat belt is fastened correctly. The SBC (Seat Belt Controller) is suitable for all machine types and is simple to install and maintain. Kits are available that include a controller, loom, warning light and alarm and label.

Part No: 9369
SEAT BELT PARK BRAKE KIT WITH IGNITION MOD

Part No: 9561
CONTROL SBC WITH IGNITION MOD

Part No: 6385
LOOM SEAT BELT CONTROLLER IGN MOD

Part No: 9962
LABEL T/S 9561 SEAT BELT CONTROLLER
The Muirhead™ Lighting Tower Shut down system is specifically designed to allow lighting towers to be controlled semi automatically. The system has two modes of operation, manual mode and automatic mode. In manual mode, the system operates as per normal. In automatic mode, the operator must initially start the engine manually via the key switch, allow the engine to run up to operational RPM then arm the system. The engine is latched on in the running mode until light is sensed the next day. When daylight is confirmed the lighting tower is shutdown automatically and the ignition is isolated.

The Muirhead™ Lighting Tower Auto Start/Stop Control has been designed to eliminate the need for site staff to manually start every light tower each evening.

On larger worksites, this can prove costly in terms of man hours, fuel and wear and tear on both staff vehicles and light towers. Some of these towers may run four hours or more than is required every day. The light tower auto start/stop will save both time and money.

Part No: 7768
LIGHTING TOWER SHUTDOWN CONTROLLER 12/24V

Part No: 9046
LIGHT SENSOR TO SUIT 7768
The following products are a selection of programming tools and software suited to the Muirhead™ product range. For further information or specific requirements, please refer to your nearest RCT branch.

- **Part No: 2694**
  USB TO SERIAL ADAPTOR LEAD
- **Part No: 3314**
  PROGRAMMING LEAD TO SUIT POWERMASTER SOFTWARE
- **Part No: 10795**
  PROGRAMMING LEAD TO SUIT 11094 / 11186 / 10452 SPEED LIMITER
- **Part No: 9990**
  POWERMASTER SOFTWARE
- **Part No: 11199**
  KIT LUBE CONTROL PROGRAMMING MUIRHEAD
- **Part No: 12076**
  KIT ADAPTOR USB TO SERIAL RS232 CONVERTER INC DRIVERS FOR 64 BIT WINDOWS
- **Part No: 12531**
  BLUETOOTH WIRELESS USB-SERIAL LINK
Drivers of large trucks inherently face hazardous conditions when operating near power lines, overpasses and underground portals. A truck with a raised tray in these surroundings can cause an enormous amount of damage to core operating facilities and endanger the lives of both the driver and personnel within the vicinity. It is therefore, extremely important that the truck operator is aware of which position their tray is in while they are driving.

The Muirhead™ Raised Tray Warning system can minimise these risks by alerting the operator and personnel within the area that the vehicle's tray is in a raised position. A system is also available which can limit the machine's transmission to first gear when the tray is raised, thereby avoiding high speed accidents.

The Muirhead™ Tray Collision Warning system (4270) has been designed to alert the operator of an impending tray collision when operating in a height restricted working area.

This system utilises a programmable ultra sonic sensor with two interval switching outputs that provide the operator with a two stage visual and audio alarm alert.

Part No: 2214
RAISED TRAY WARNING KIT (WITH TRANSMISSION INHIBITOR)

Part No: 4270
TRAY COLLISION WARNING KIT

The Muirhead™ Incline Shutdown systems have been designed to warn machine operators that the machine they are operating is on a dangerous incline (at angles over 35° or 60°). The operator will be alerted via an audible and visual warning for a pre-set time after which the engine will be shutdown. The time delay prior to shutdown is switch selectable between 5, 6, 15 and 25 seconds. The system has an override switch incorporated to enable the operator to override the system before it has shutdown in an over inclined state.

The incline shutdown systems provide the operator with enough early warning to prevent machine rollovers, serious injuries and machine damage.

Part No: 1800
INCLINE SHUTDOWN 35° DETECTION

Part No: 4089
INCLINE SHUTDOWN 60° DETECTION

Part No: 6119
CONTROL TILT DUAL AXIS ADJ RANGE 1 TO 45 DEGREES
Vehicle rollovers are commonly attributed to unstable road conditions, overloading, blown tyres and excessive speeding around sharp corners. In a vehicle rollover, it is vital that the operator be protected by an automatic shutdown system which allows them enough time to exit the vehicle, in the event of a fire.

The Muirhead™ Vehicle Rollover Shutdown system is designed to shutdown the vehicle's engine in the event of a rollover, reducing the risk of major engine damage. Used in conjunction with a battery isolator, the system can disconnect the vehicle's ignition and electrical system to reduce the risk of fire.

**VEHICLE SPEED / ENGINE SPEED SYSTEMS**

**SPEED ALERT SYSTEMS**

The Muirhead™ Speed Alert system has been designed to prevent speed related accidents by warning the operator and surrounding personnel that the vehicle is travelling beyond its pre-set speed limit. The system detects the vehicle's speed via a proximity pickup sensor mounted in the drive train.

If the driver does not slow down to allow the vehicle's speed to fall below the second pre-set speed limit the pre-alarm will continue to sound and activate additional warning devices, such as a strobe light or flashing indicators.

Once the driver reduces their speed below the set speed limit, the warning alarms will reset and return to normal status.
**VEHICLE SPEED / ENGINE SPEED SYSTEMS**

**SPEED LIMITERS**

The Muirhead™ Electronic Speed Limiter is designed to maintain control of a vehicle’s maximum speed by electronically interfacing into the throttle system. With speed being a major factor in many automotive accidents, the Muirhead™ Electronic Speed Limiter will control the vehicle’s maximum speed to enable safe and productive operation at all times.

This software enables the user to set a machine’s maximum speed to suit the application and the operating conditions. The system eliminates the need to lockout gears to try and reduce the overall speed of the vehicle.

**Part No: 7298**
LOOM TO SUIT 3508
(TOYOTA AND NISSAN)

**Part No: 11186**
ELECTRONIC SPEED LIMITER
(ISOLATION RELAY)

**Part No: 11068**
LOOM TO SUIT 0-5V SPEED LIMITER

**Part No: 7290**
KIT SPEED LIMITER GENERIC FBW
DUAL TPS
The Muirhead™ Vehicle Overspeed (VOS) and Engine Over RPM systems are designed to warn and prevent operators from over speeding and over revving their machines. These systems are primarily used to prevent machine damage from operator abuse.

For professional advice on choosing the right overspeed / vehicle over RPM system, please contact your nearest RCT branch.

- Part No: 9914
  VEHICLE ENGINE OVER RPM SYSTEM TO SUIT ELECTRONIC BRAKE KOMATSU AND CATERPILLAR DOZERS

- Part No: 2806
  VEHICLE OVERSPEED AND ENGINE OVERSPEED KIT 24V

- Part No: 3327
  VEHICLE OVERSPEED CONTROLLER 12V (INTEGRATED)

- Part No: 4362
  VEHICLE OVERSPEED KIT SET TO 25 / 28 KM/H 12V

- Part No: 2755
  ENGINE OVER RPM SYSTEM LATCHING 24V

- Part No: 11094
  DUAL POT FBW SPEED LIMITER
“SOLUTIONS TO SUPPORT CLIENTS AROUND THE WORLD, IN MINING, INDUSTRIAL, AGRICULTURAL AND CIVIL SECTORS.”