GOLDACRES

G6 Crop Cruiser

SERIES 2

Faster, Smarter, Stronger

AUSTRALIAN MADE AND OWNED


G6

Aussie made

Built just down the road.

AUSTRALIAN MADE AND OWNED

Goldacres is an Australian owned and operated manufacturer of the country's finest spray equipment, produced in Ballarat, Victoria.

From our inception over four decades ago, Goldacres has prospered by constantly reinventing its products and business practices in this fast changing landscape that's modern farming.

Our philosophy is simple;

> *"to put farmers in the driver's seat of best fit technology to make them outstanding in their field"*

We are driven by four core values, innovation, uncompromising quality, adaptability and lastly being courageous.

Our sprayers are fully designed, engineered and manufactured in Australia with over 40 years manufacturing experience along with valuable feedback from owners and operators on what is important to you.

The G6 Crop Cruiser Series 2 is Goldacres flagship model, with numerous new features this machine leads the way in efficiency, technology and operator usability.

Read on to learn how the G6 Crop Cruiser Series 2 can help your farming enterprise with it's faster, smarter, stronger features and benefits.

Cabin

Operator comfort and style.

Now with G-Hub - Goldacres Integrated System.

Centrally located cabin with suspension and an air ride seat to help reduce operator fatigue, mechanical driveline is also quieter by design.

The sprayer is one of the most utilised items of equipment on the farm today. Long hours day after day, places plenty of demand on the operator to get the spraying program completed.

The G6 Crop Cruiser cabin makes it all possible, with features like:

- Seven way adjustable seat.
- Adjustable side console with G-Hub and G-Motion joystick.
- Automatic climate control air-conditioning system with carbon filter.
- Adjustable steering column ensures operators can find the optimal seating position.
- Padded training seat with seatbelt.
- Narrow profile four post frame with external truss Roll Over Protective Structure (ROPS).
- Double skinned rear wall and extensive sound deadening provide a strong, yet peaceful uninterrupted view of the job at hand.

65.5 db*
Lowest cabin noise in class

*25km/h at 1550 RPM

Cabin

Sprayer operation made easy.

Cabin side console - Comfortable, adjustable & intuitive.

Intuitive side console enables the operator to easily control all vital sprayer functions.

The G-Motion® joystick (2) puts the sprayer control into the palm of your hand. This controls all boom raise / lower, boom tilts, cruise control, fenceline jets & autosteer functions. For ease of use all boom fold functions (3) are positioned next to the G-Motion joystick.

The G-Hub (1) controls and monitors all critical machine functions and packages it all into one easy to use fully integrated system.

1 G-Hub - Goldacres integrated system

- Displays drivetrain and sprayer information.
- Full system diagnostics.

2 G-Motion

- 3 modes of Cruise Control - Classic, variable & 2 speed.
- Boom height and spray operation.
- GPS Auto Steer.

3 Boom folding functions

- Auto fold.
- Bi-fold / Tri-fold operation (48m only).

4 USB charger

5 Transmission selector

- Push button selector.

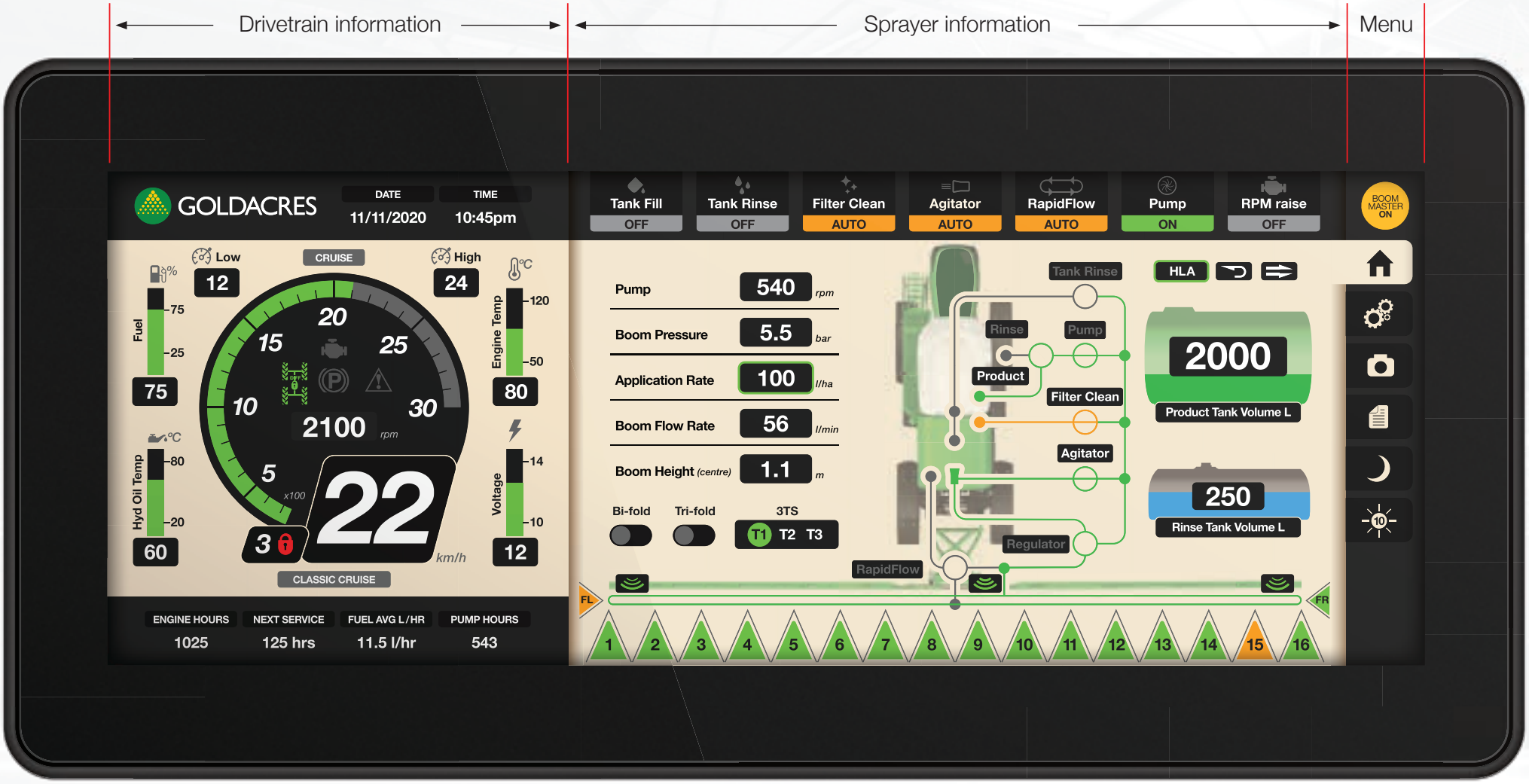
6 Driveline functions

- Spray / Road mode.
- Cruise Master.
- Spray / Road mode.
- Centre transfer case lock.

7 Arm rest

- Padded arm rest.
- Lifts to reveal large storage area.

G-Hub - Cabin Display



Intuitive & easy to use system with on-board diagnostics.

A completely new electronic control system referred to as G-Hub – Goldacres Integrated System.

The G-Hub system comprises of a cabin display, external display, PLC (programmable logic controller), I/O (input / output) modules, sensors and switches to control and monitor all critical machine functions and packages it all into one easy to use fully integrated system.

The G-Hub communicates seamlessly with most leading steering and mapping providers using the ISO BUS protocol for steering and section control.

On-board diagnostics allows operators to quickly pinpoint problems without the need for laptops specialised service tools or internet connections, thus minimising downtime.

G-Hub cabin display features:

- Low profile 12” full colour touch display. Situated into the operator side console without restricting external vision.
- The home screen is segmented into two screens.
  1. Drivetrain information and
  2. Sprayer information.
- On-board sprayer diagnostics.
- Manual boom section control.
- Classic, variable and 2 speed Cruise Control.
- Rear camera view.
- Virtual controls.

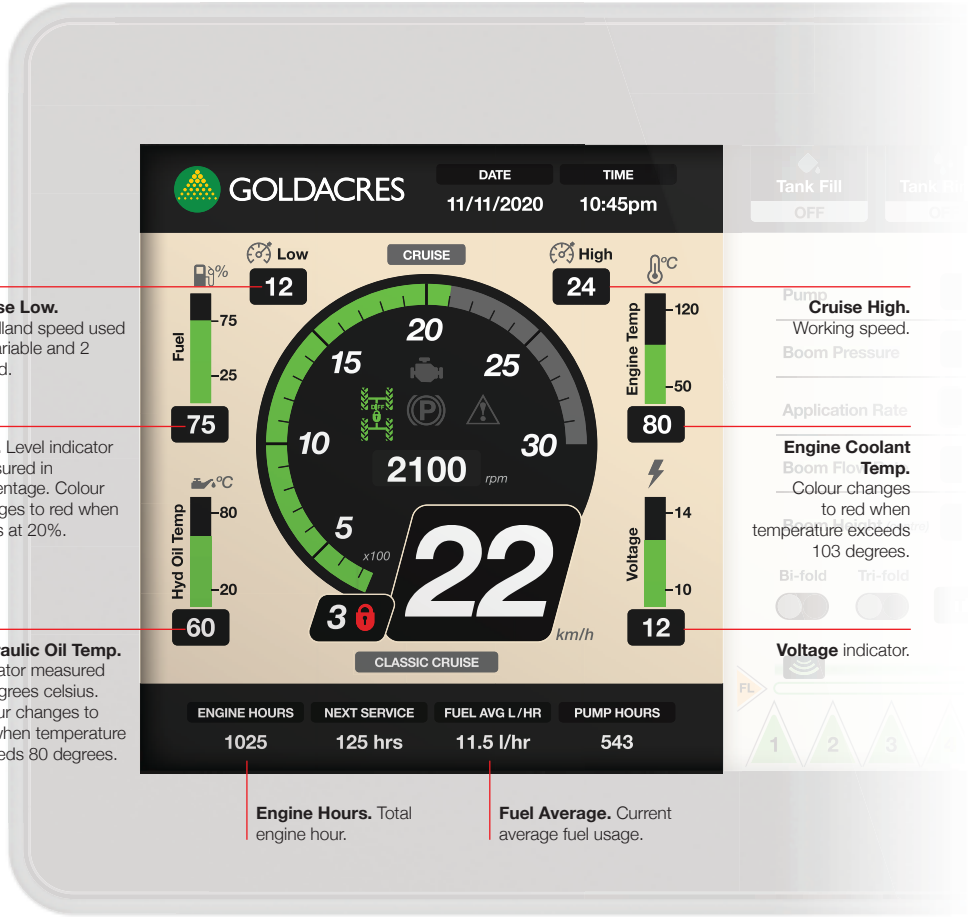
G-Hub cabin display

G-Hub external display

G-Hub - Cabin Display

Drivetrain information.

Additional information from the engine, transmission, servicing, cruise control and system warning.



Cruise Low. Headland speed used on variable and 2 speed.

Fuel. Level indicator measured in percentage. Colour changes to red when fuel is at 20%.

Hydraulic Oil Temp. Indicator measured in degrees celsius. Colour changes to red when temperature exceeds 80 degrees.

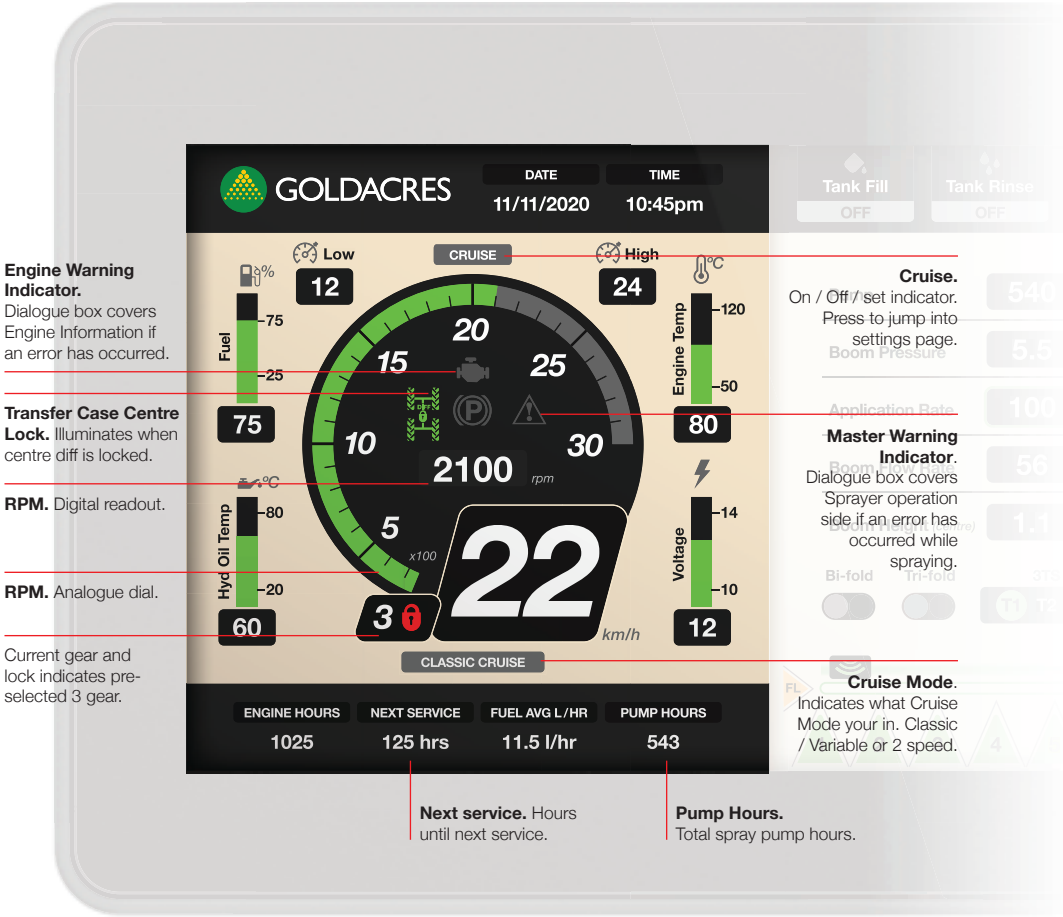
Cruise High. Working speed.

Engine Coolant Temp. Colour changes to red when temperature exceeds 103 degrees.

Voltage indicator.

Engine Hours. Total engine hour.

Fuel Average. Current average fuel usage.



Engine Warning Indicator. Dialogue box covers Engine Information if an error has occurred.

Transfer Case Centre Lock. Illuminates when centre diff is locked.

RPM. Digital readout.

RPM. Analogue dial.

Current gear and lock indicates pre-selected 3 gear.

Cruise. On / Off / set indicator. Press to jump into settings page.

Master Warning Indicator. Dialogue box covers Sprayer operation side if an error has occurred while spraying.

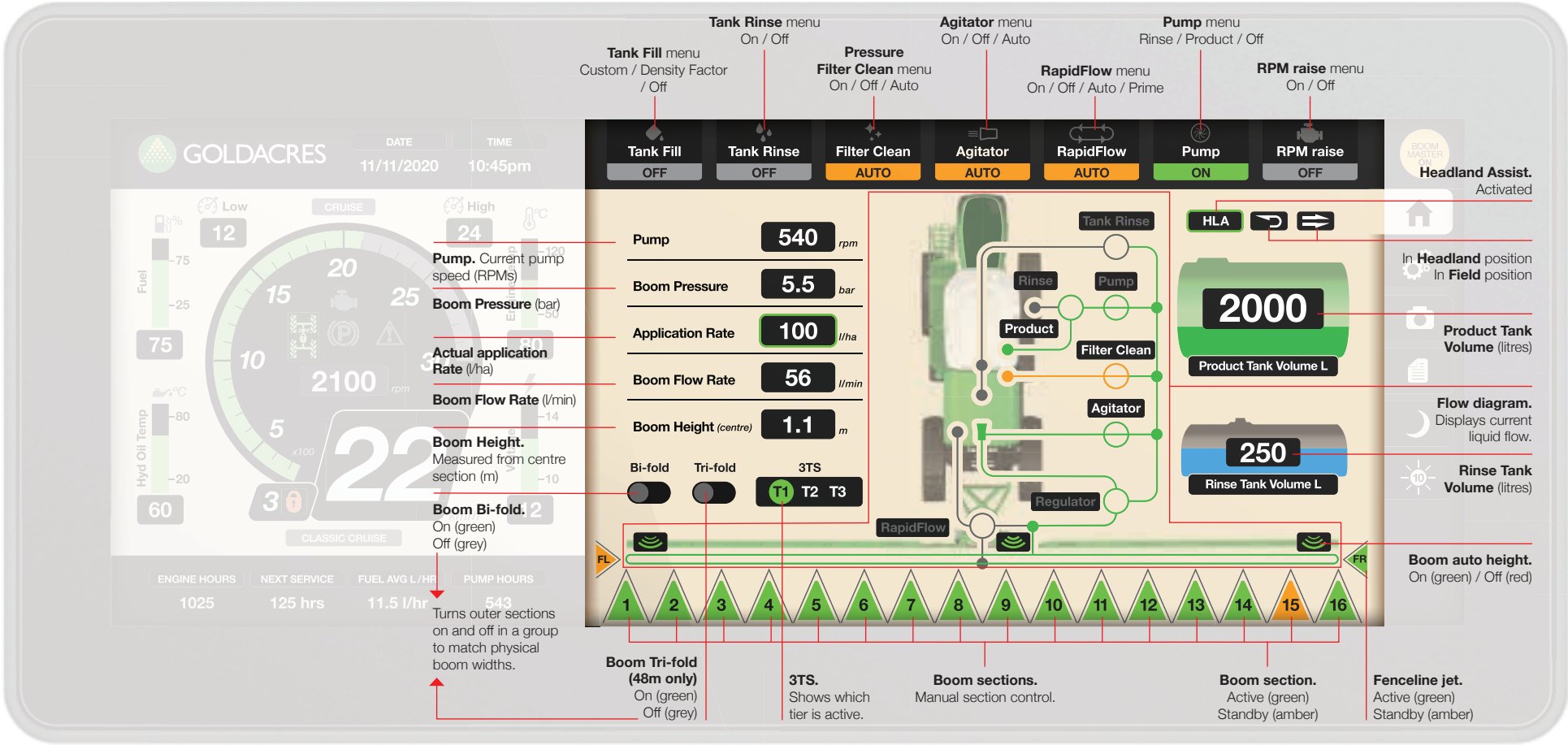
Cruise Mode. Indicates what Cruise Mode your in. Classic / Variable or 2 speed.

Next service. Hours until next service.

Pump Hours. Total spray pump hours.

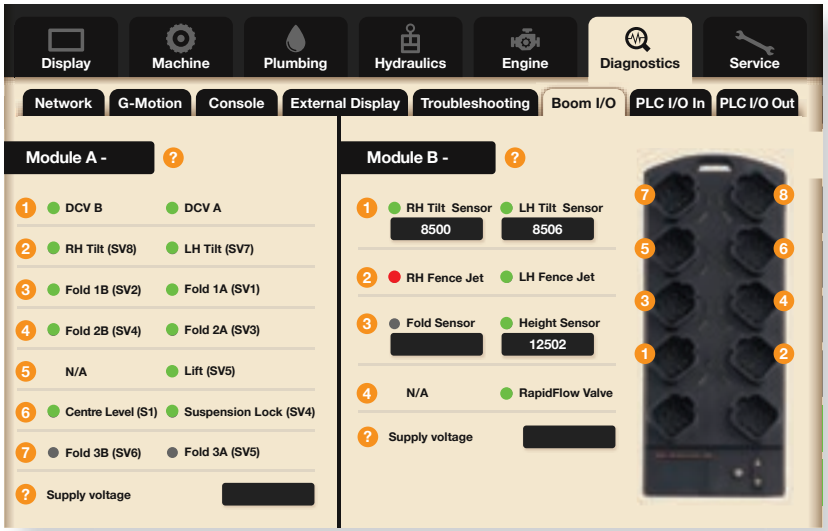
Sprayer information.

Displays and controls, tank fill levels, spray application performance, boom section manual control plus various important pump and liquid control valves.
Once up and running the operator can quickly glance at all critical spraying functions to ensure everything is working as it should be.



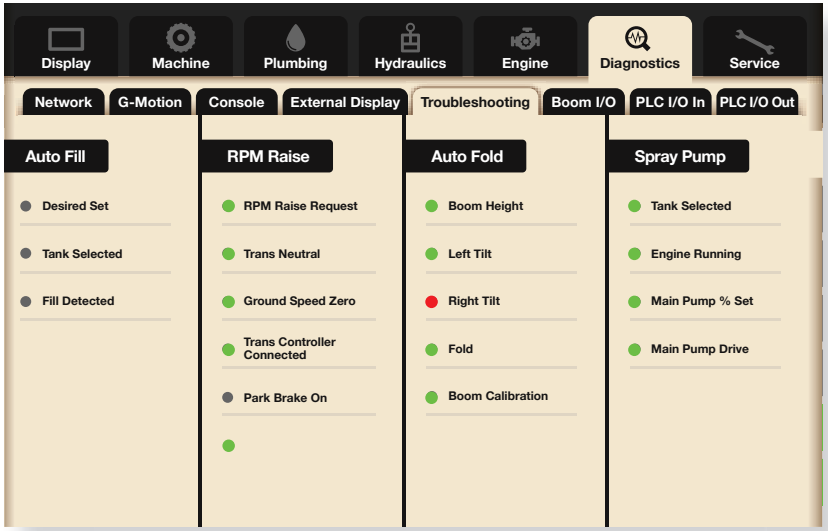
G-Hub - Diagnostics

Settings - Diagnostics / Boom I/O.



Full boom information diagnostics - sensing of electronics, hydraulics and plumbing.

Settings - Diagnostics / Troubleshooting.



Using these pages each function can be operated to ensure that first the input signal is being read and secondly that the output signal is being sent. This feature will quickly point to where the problem could exist.

Integrated system diagnostics.

G-Hub - diagnostics snap shot.

Integrated diagnostics have been a major design consideration for the G6 Crop Cruiser Series 2.

If there is a fault with the control system, the operator can quickly diagnose or overcome the issue to keep spraying.

Our system development team have put a huge amount of resources into providing a powerful self-diagnosis tool within the G-Hub system to help track down faults and more importantly how to bypass the issue.

Faults can be diagnosed on the cabin display and many functions can be transferred onto the touch screen in the event of a switch or sensor failure.

Virtual controls include:

- G-Motion joystick buttons.
- Console: Boom Rest, Boom Folding, Diff Lock, Cruise Master.
- G-Hub External (fill only) & button keypad.

G-Hub - External Display

Control fill & cleaning functions from the G-Hub external display.

Enter the desired tank volume, connect the fill hose &
the G-Hub system will automatically shut off when desired volume is met.

Featuring a full colour 5" screen and button panel to control all fill and clean functions with the push of a button.

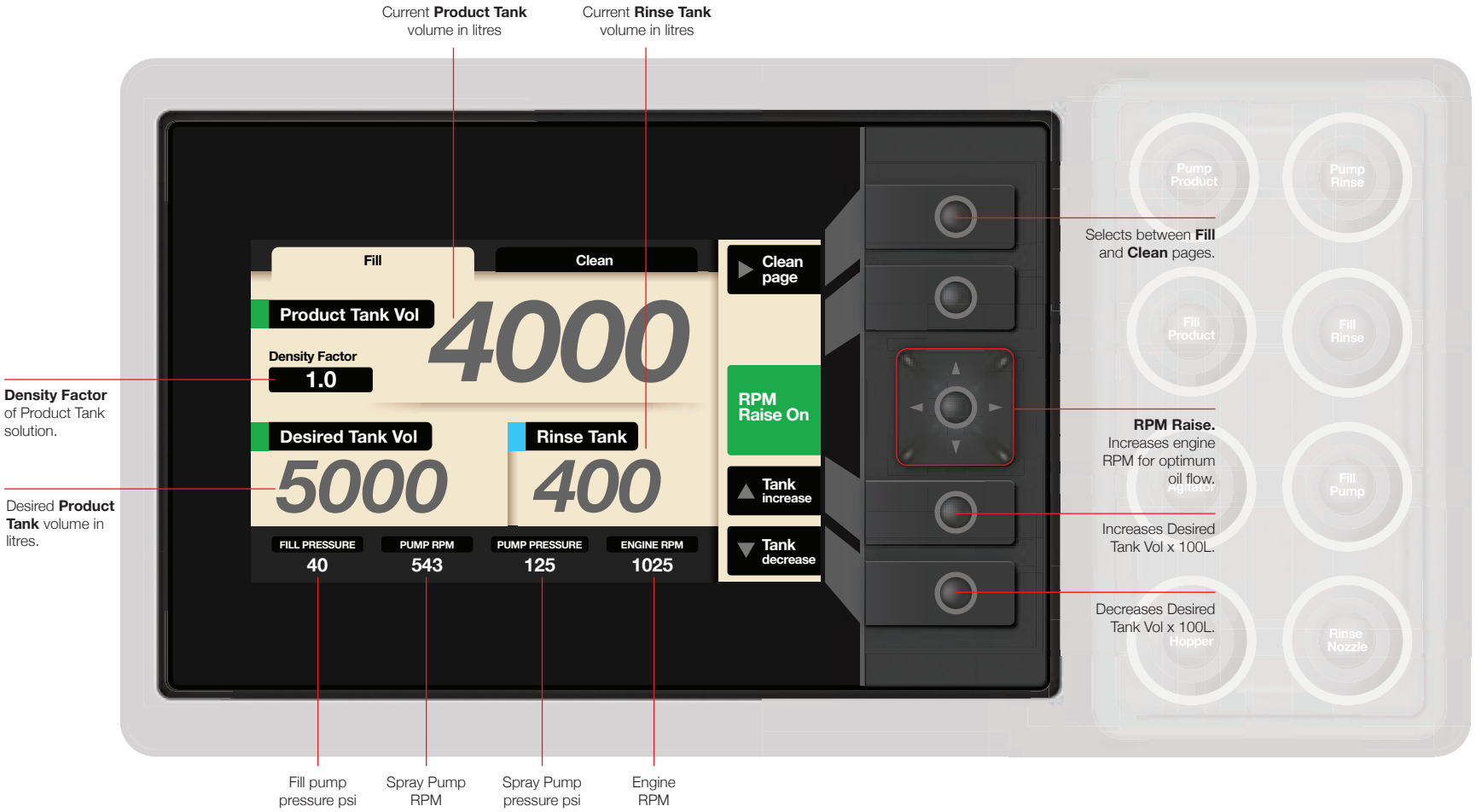
Located in the storage compartment, the screen and button panel are mounted on an adjustable bracket which positions the controls at the operator's ideal location. The G-Hub system also manages all the liquid control valves which operate chemical induction, agitation and cleaning functions.

The PLC (Programmable Logic Controller) is located inside the storage compartment and provides diagnostic lights to assist troubleshooting.

G-Hub - External Display

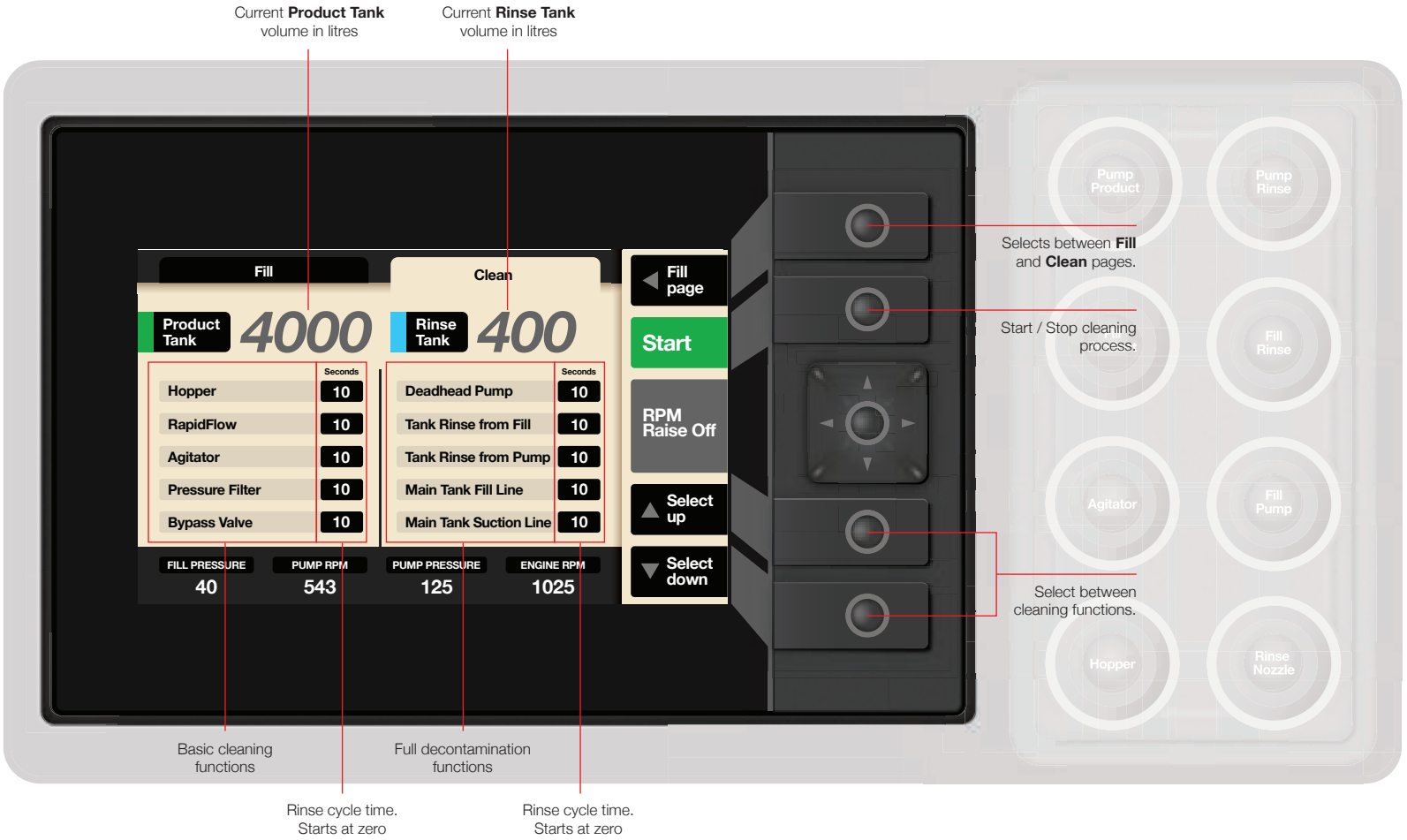
Fill Page.

Display shows the operator the current product tank volume, desired tank volume and current rinse tank volume in litres. The operator can increase or decrease the desired volumes in 100L increments via the buttons on the right of the screen face. The fill screen also displays all functions required at the filling stage. Simple and intuitive controls make filling the sprayer a push button task.



Clean Page.

The clean page allows the user to effectively clean all parts of the system by selecting between cleaning functions. The operator can set the system to cycle through the cleaning functions for simple and thorough decontamination of the sprayer.



Class leading performance

"The choice of self-propelled sprayers available on the market is quite large and all do a great job, for our conditions, the Goldacres just does it better"

CHARLIE VALLANCE


AUSTRALIAN MADE
AND OWNED

Chemical Handling

Fill rate

1150

l/min

Simple controls / increased capacities.

Operator workstation pod with “Fast Fill”.

The operator workstation area and fill system dramatically reduces sprayer refill times. In addition this system offers many more features whilst still retaining its easy to use philosophy.^

1 Storage locker

- Lockable storage locker with internal shelf. Holder for soap bottle plus and internal light for night time use.
- Location for G-Hub external display which is used for all external filling and rinsing functions.

2 Connection points.

- 3” camlock “clean” connection point using an on-board fill pump to transfer clean water throughout the sprayer at rates of up to 1150 l/min.
- 3” Camlock “dirty” connection point for pre mixed water and chemical for transfer directly into the main product tank.
- Both connection points allow accurate measured volumes to be transferred into the main product tank.
- 1” Camlock connection point for neat chemical transfer using the on-board chemical transfer pump.
- 1” Camlock connection point which provides a pressure source for sprayer wash down purposes.
- Micromatic socket rinse coupler.

3 Induction hopper

- 60L capacity
- Chemical transfer rates of up to 120 l/min**.
- Foot operated lower shutoff valve.
- Wash down gun powered by separate 12V pump using water from rinse tank.

*40% increase based on previous 60L model hopper. ^Compared to Crop Cruiser Series 1. **tested with water.

Fluid Distribution System

The fluid distribution system allows quicker filling, high spray application rates, simplified plumbing layout as well as a host of smarter features to integrate with the G-Hub system.

1 Spray pump

- A diaphragm or centrifugal spray pump can be optioned.
- The Udor Zeta 260 l/min diaphragm pump features Greentech diaphragms for increased service life, providing a constant flow rate regardless of pressure. Tests have shown that nearly 85% of the pump capacity is available to the spray line. This increased capacity allows spray application rates of up to 140 l/ha @ 25km/h to be achieved (220 l/min total flow rate across a 36m boom).
- The five-stage centrifugal pump can deliver up to 400 l/min at 8 bar of pressure. With the multistage pump technology a far more linear relationship between flow and pressure has been achieved, this is crucial in keeping large volumes of chemical in solution whilst spraying at relatively high pressures. The centrifugal pump is standard on the 48m wide boom and also when Hawkeye PWM are fitted.
- Both pumps are protected by a large suction filter as well as rpm and run dry sensors for peace of mind spraying.

2 Fill pump

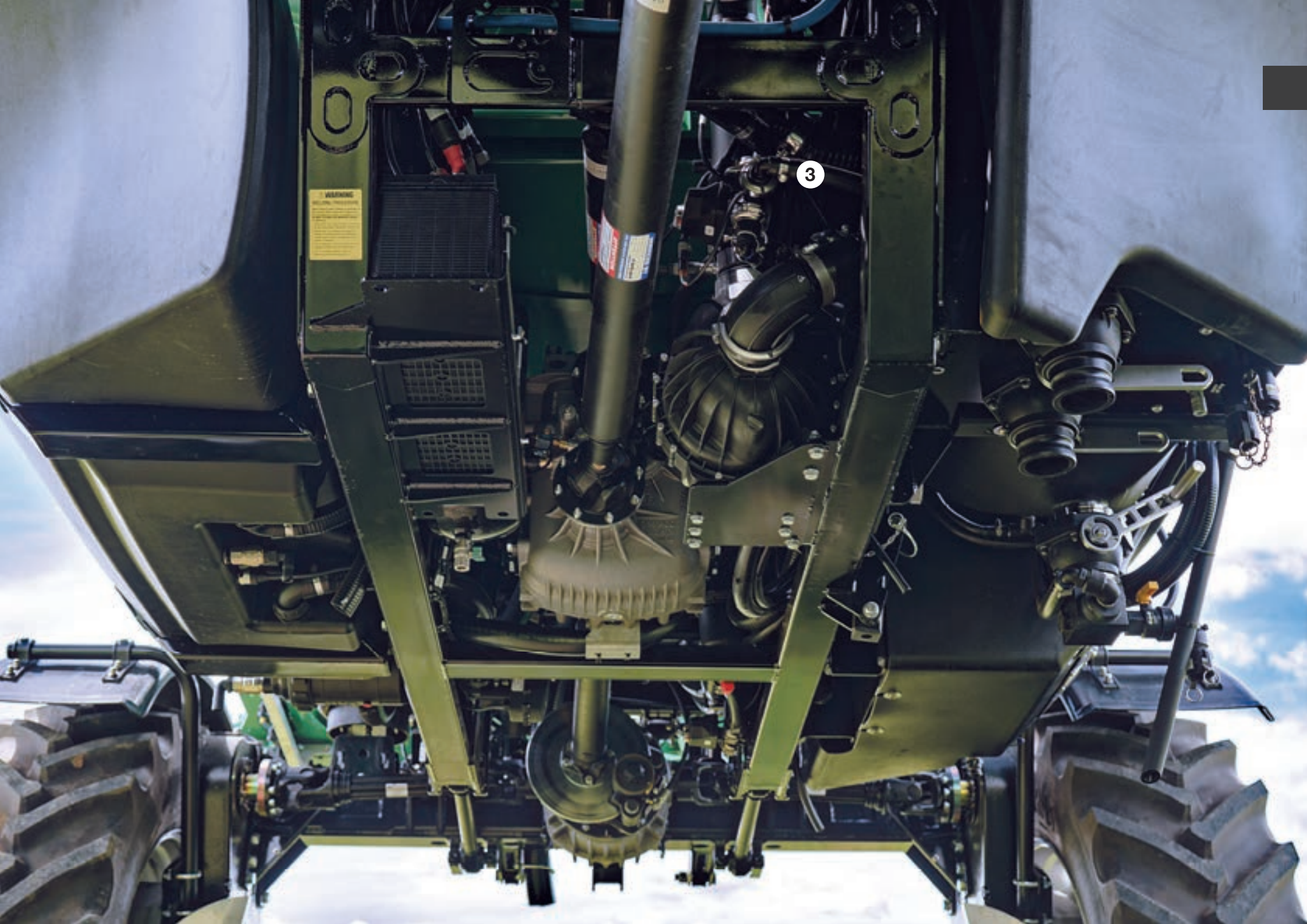
- A 3" high-capacity fill pump is fitted, combined with high flow fluid plumbing and hydraulics the system is capable of filling the sprayer at rates of up to 1150 l/min. The pump and distribution valves are all controlled by the G-Hub system to regulate the fill rate and tank level soft shut-off.

3 Chemical transfer pump

- Neat chemical transfer is done using a pneumatic twin diaphragm high-capacity pump (up to 40 l/min), ideal for high viscosity chemicals. The neat chemical can be delivered directly to the main product tank or diverted to the induction hopper where it can be measured before being transferred.

4 Centralised fluid distribution valves & filtration

- All filling, rinsing and spraying fluid circuits are controlled using motorised electric ball valves. The valves are positioned in a centralised area which significantly reduces the amount of hose required. This reduction in hose length minimises pressure drop, essential for maximising pump performance.
- The electric motorised ball valves feature LED status lights and valve position indicators to aid trouble shooting. In the event of failure, the valves can be operated manually.
- A large single pressure filter featuring a flushing function helps keep contaminates from blocking nozzles.


3

Chemical Handling

Batching, mixing & product loading.

Every agricultural operation is looking to improve its efficiency wherever possible. Correct batching and mixing of product to the label is the start of any spraying task. The ultimate in mixing and transferring chemicals is the 800L Goldacres BatchMate*.

This standalone batching system allows chemicals to be pre-mixed easily, safely and quickly ready for transfer into the sprayer via the dirty 3” connection point on the sprayer. The BatchMate features its own high flow engine driven centrifugal pump so there is no need to leave the sprayer engine running whilst filling, substantially reducing engine hours over the duration of the annual spraying program. All the controls are well labelled and laid out to make chemical transfer safe and intuitive. For more details on the BatchMate refer to your Goldacres dealer.

- 800L product tank.
- Venturi chemical induction probe.
- Drum buster bag splitter.
- 23L handwash tank with soap dispenser.
- Drum / Jug rinse nozzle with stainless basket.
- 3” transfer outlet.
- Honda GX200 petrol engine and 3” high volume centrifugal poly pump.

*Batchmate sold separately.

Driveline

*Optional 4WD system shown

The heart and soul of its class leading performance.

The Goldacres G6 has set the benchmark for mechanically driven self-propelled sprayer for many years.

1 Engine & Transmission

- A Cummins QSB 6.7L 6 cylinder engine with Tier 3 emission standard is rated to 168kw and 949N.m of torque. This is matched to an Allison 2500 series 6 speed transmission featuring a lock up torque converter to help achieve incredible performance whilst vastly reducing fuel consumption. Constant ground speed is controlled in conjunction with the all new G-Hub system using a joystick with three modes of cruise control available to the operator.

2 Drive axles

- To get maximum power to the ground with the least power losses the G6 uses a fully enclosed cast iron case, double reduction, oil bath heavy duty chain drive system. The chain drive system is the most efficient method of transferring power over such a large input to output drop (700mm). The large drop results in excellent ground clearance of up to 1500mm (depending on tyre options). The rear limited slip differential is mounted in an aluminium housing to help dissipate heat whilst reducing weight.
- Available in Two Wheel Drive (2WD) or Four Wheel Drive (4WD).

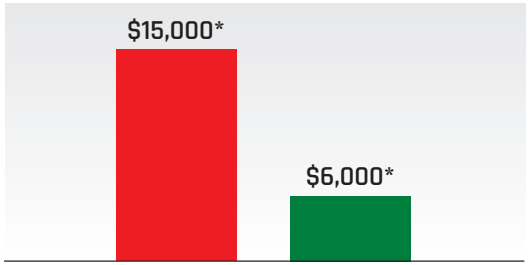
3 Four Wheel Drive (4WD) system

- When conditions are at their worst the option of 4WD will bring out the best in the G6. Power is transferred from the transmission to the front and rear axle via a transfer case. When in normal spraying conditions the power is split between the front and rear axle via an internal differential (All wheel drive mode). When the going gets tough the operator can lock the centre differential to provide a 50:50 power split to ensure optimum traction (4WD mode).

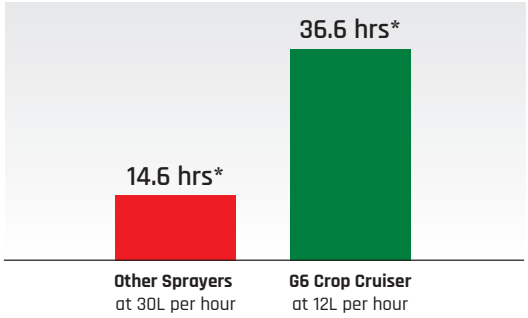
4 Fuel tank

- 440L fuel capacity. At 11.8 l/hr* this equates to over 36 spraying hours.

Fuel cost over 500 hours



Spraying range with a 440L tank



*Average fuel usage taken from a 4WD G6 Crop Cruiser with 50" tyres operating in the Western District of Victoria over a 40 hour period. Fuel cost measured @ $1.30 per litre.

Foundations

The foundations of a great sprayer.

Building on the principles learnt from previous models to deliver better chassis dynamics resulting in improved ride quality and boom stability.

The chassis is constructed as a semi-truss rigid non-flexing design which provides the foundations as to which the sprayer is built around.

1 Suspension system

- The suspension system uses a 5 link arrangement (4 x parallel links and 1 x panhard link) at each end of the sprayer. To cater for higher loads (48m boom) the parallel links are positioned further apart on the chassis*. This reduces the stresses on the links and also improves bush longevity. The rear axle features an extra heavy duty sway bar to help keep the sprayer chassis level to the ground at all times. Each corner is supported by air springs which are placed as wide apart as possible to improve sprayer stability in undulating terrain.

2 Operator comfort

- To make the long days as comfortable as possible the G6 features a suspended cabin. The cabin is positioned behind the front axle which greatly reduces vertical movement, thus improving the ride for the operator.

3 Chassis surface treatment

- Every Goldacres fabricated component is given the special treatment when it comes to corrosion protection. First the item is shot blasted to remove any surface contaminates, rust and scale. It is then sealed with a high build primer / sealer before being treated to a high gloss durable top coat which is oven baked. The resultant finish is one that will last for many years in the most demanding situations.

*Compared to the Series 1 G6 Crop Cruiser.

Weight distribution

Weight distribution, a balancing act.

Soil compaction threatens agricultural production degrading the productivity of most cropping soils. In addition, compaction caused by machinery can reduce the productivity of the land and increase run-off rates.

The weight of the sprayer is paramount to its performance in the paddock. The G6 is the lightest self-propelled sprayer in its class, this is not by default, this is a major design consideration.

The engineering team have spent many hours developing the chassis for the optimal balance between rigidity, lightweight & strength, while avoiding heavy castings where possible.

Goldacres pioneered the use of lightweight aluminium over 2 decades ago on the boom outer wings. A trussing design is used through the boom structure for the perfect mix of strength, durability & lightweight.

Weight distribution on the sprayer is critical to the sprayer dynamics and operator comfort.

The layout of the main components, front mounted engine, centrally located cabin, & rear mounted tank, spraying systems & boom, allow for an almost perfect weight split across the machine.

A cabin positioned behind the front axle gives a naturally superior ride due to the reduced vertical movement. All this adds up to the lightest, best balanced machine in its class. These factors allow the operator to get back on paddocks sooner after rain events with less soil compaction, less wheel tracking, while greatly reducing the risk of bogging.

*2WD, 36m, 480/80R46 tyres.

Application made easy


AUSTRALIAN MADE
AND OWNED

Booms 36-42m

The No 1 boom now performs even better.

36 and 42m TriTech RivX boom.

Instantly recognisable with a new structural riveted outer boom wing, bright yellow boom tips & a hydraulic fold mechanism. The TriTech RivX boom lifts the standard for spray boom construction & performance.

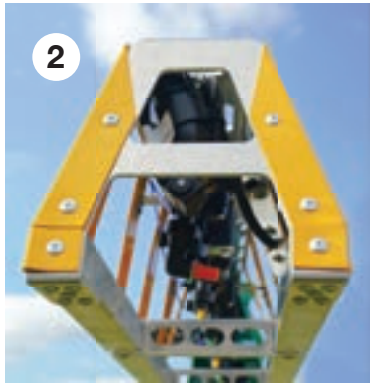
Boom control can be the difference between a good spray result, and no result at all. Goldacres understand this and it is why all our sprayer designs are centred around the boom first and foremost.

Why do Goldacres booms ride so well?

Goldacres pioneered the use of lightweight aluminium in the outer boom wings over two decades ago. The philosophy was, and still is today that mass on a boom is fine so long as it is as close to the centre as possible. Reduced mass on the boom extremities reduces boom forces in both yaw and roll. This combined with the unique boom suspension results in a very stable boom ride, regardless of the terrain.

TriTech booms are contour following, meaning that the boom level will be referenced to the sprayer chassis and not purely on gravity such as a pendulum boom. This allows the sprayer to transverse the sides of hills and contours whilst keeping the boom level to the ground at all times. This results in placing the nozzle at the optimum height above the target.

Booms 36-42m



300%

Increased boom fatigue strength

Features & benefits of the RivX boom.

Using design principals borrowed from the aircraft industry the RivX boom features a riveted construction for the outer wings. Thin mild steel plates are glued & riveted to the aluminium to produce a very strong truss without any heat effected aluminium areas.

1 Inner / Outer boom wings

- Outer wings are aluminium riveted construction, no welding.
- The outer fold incorporates bi-fold in its design. The hydraulic fold cylinder is fully retracted when the boom is open, this is when the hydraulic cylinder is at its strongest position and there is no chance of bending a cylinder rod. In addition it includes a hydraulic breakaway system.

2 Boom breakaway

- The new breakaway now incorporates a protection frame. The nozzles, lights and fenceline nozzle are fully protected by this new design. Breakaway section is also fully riveted.

3 Auto boom fold

- Push boom fold button on the console to raise, auto level and fold-in.

4 Boom Plumbing

- 1” boom plumbing fitted for both higher application rates but to also reduces pressure drop along the length of the boom.

5 Boom latch

- Hydraulic latching is used when boom is in bi-fold and transport positions.

Booms 48m

48m
TriTech V boom

48m of controlled spraying accuracy.

48m TriTech V boom.

Productivity and flexibility when you need it, 48m, 36m or 20m spray widths at the push of a button.

The 48m TriTech V boom is constructed as a tri-folding design. This method of boom construction dramatically reduces the overall folded length of the sprayer compared to two fold booms making storage and transporting much easier. Clever packaging of the folded sections results in a relatively narrow transport width of just 4.3m without impeding on operator entrance to the cabin. The tri-folding construction also allows for multiple spray widths to be achieved. The boom can be operated in either 48m, 36m or 20m widths.

1 20m spray width

- Mid and outer section folded back.

2 36m spray width

- Outer section fold back.

3 48m spray width

- Fully open.

Booms 48m

33%
Increased productivity*

Features & benefits of the 48m boom.

A 48m wide boom compared to a 36m can potentially achieve a 33% increase in productivity (depending on application rate).

- 36m boom at 25km/hr = 90ha/hr.
- 48m boom at 25km/hr = 120ha/hr.

1 Centre Section

- Provides control for the boom. Featuring TriTech suspension, the centre section uses hydraulics to control boom yaw and dampeners for the roll. Pitch of the boom is controlled via hydraulic accumulators fitted to the paralift arms.

2 Inner Wings

- Steel RHS truss structure provides strength and flexibility to support the mid and outer wings.
- Accumulation is built into the fold cylinders to provide cushioning when accelerating or decelerating, reducing forces on the entire boom.
- A latching mechanism supports the mid & outer boom wings to the inner, while in the 20m working and transport position.

3 Mid & Outer Wings

- Full truss aluminium construction to provides strength and lightweight.
- Three dimensional breakaways and fitted to the end three meter boom section.

4 Plumbing

- 1” boom plumbing is fitted for both higher application rates but to also reduce pressure drop along the length of the boom.

5 Height Control

- XRT radar boom height control is fitted as standard – Ref pages 46-47.

*36m boom to a 48m potentially 33% increase in productivity (depending on application rate)

Boom Suspension

TriTech
Suspension Technology

The Goldacres TriTech suspension system has been developed to provide you with the best boom ride possible and assist in an accurate application.

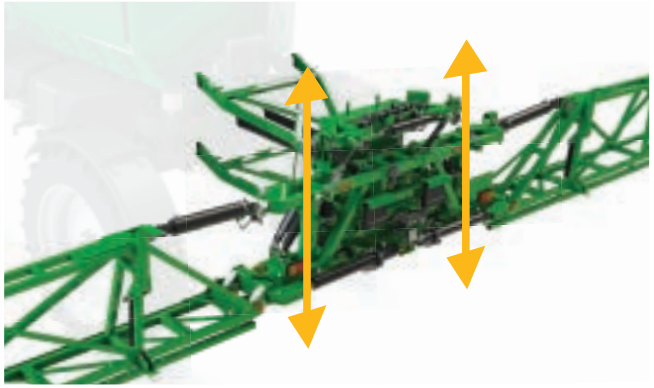
Working in conjunction with the chassis airbags the boom features three way suspension that works to reduce boom pitch, roll and yaw - the three enemies of accurate application. Hydraulic cylinders and accumulators work together to provide the best boom ride possible.

The TriTech suspension system has contributed to Goldacres consistently having the best boom ride in the spraying industry.

Centre of attention. The underlying key to boom stability.

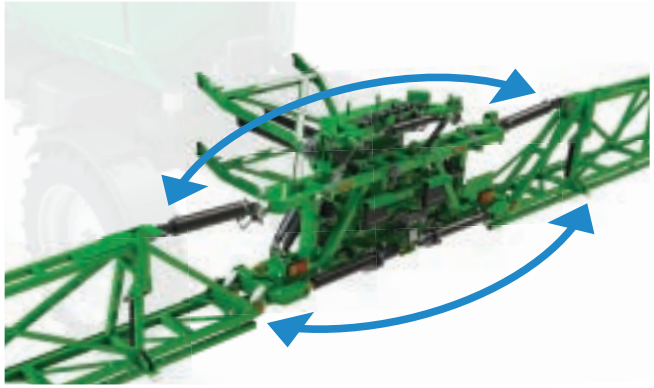
TriTech boom centre section – Why is boom ride and stability so important?

A boom which bounces, sways or yaws deposits chemical unevenly on the target. This can result in weed escapes and may even contribute to resistant weeds.



1 Pitch

- The boom parallelogram lift provides 1200mm of boom height adjustment as well as the vertical boom suspension (pitch).



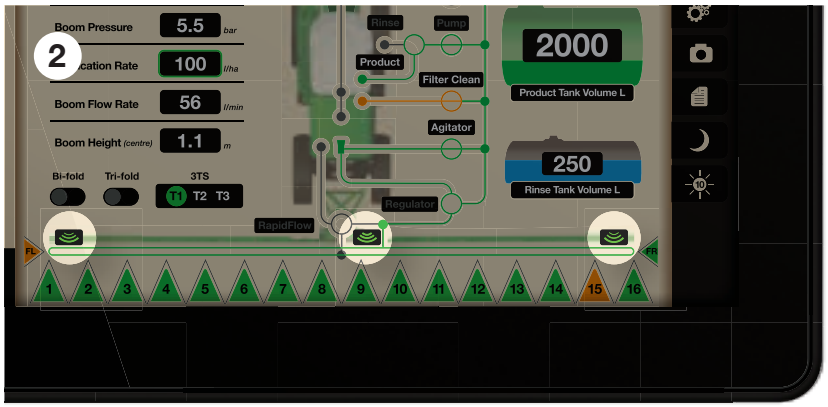
2 Roll

- The key to the superior boom ride is the strategically placed delta links. In all, there are four links. Each link features spherical ball ends which allow the centre to move in all directions.
  The roll centre point is the location at which the boom pivots around, both in roll & yaw. Roll dampeners reduce high-frequency oscillation of the boom roll.

3 Yaw

- Two opposing hydraulic cylinders are mechanically connected together either side of the pivoting boom centre section. As the centre yaws one cylinder is retracted, the other is extended. This results in oil movement which compresses in a nitrogen charged accumulator. The result is precise boom yaw control.

Booms



Radar boom height sensing technology.

AutoBoom XRT - Boom height control system.

AutoBoom XRT radar sensor technology uses simultaneous ground and canopy detection to maintain optimal spray height for maximum product efficacy.

Pressure-based control allows for smooth movement and quicker reaction time while centre rack stability technology with variable dampers gives the system complete boom control.

1 Centre section

- The variable rate dampeners are used to stiffen the centre section roll action when wing tilts are operated. This allows much quicker reactions to occur without effecting the overall stability of the opposing boom wing.

2 G-Hub

- The XRT operating status is displayed on the G-Hub internal screen whilst the setup is configured through the ISO BUS terminal.

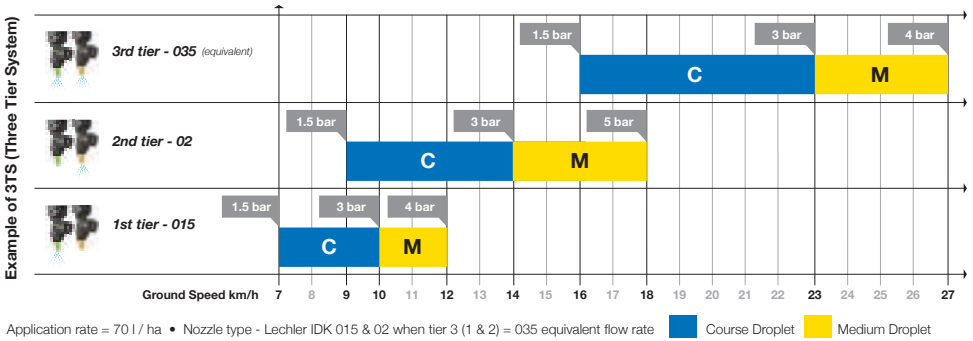
3 Height sensors

- The height sensors use radar based distance technology. The radar sensors enable a larger height measurement range, can detect both ground and crop canopy and are less effected by spray drift, dust and mud.
- The system uses additional sensors to monitor the sprayer chassis rate of roll, the boom centre position relative to the chassis as well as boom wing tilt angle. These extra sensors allow the computer to predict how the boom will react well before the radar sensors even see the change in boom height. The end result is a more stable boom in uneven terrain.

Application Technology

Ultimate control and flexibility with 3TS and 3TS Pro.

Nozzle technology has advanced in leaps and bounds over the years and a strong emphasis on drift control has influenced many nozzle designs.



3TS

The spray nozzles operating pressure range and size determine the application rate and speed band at which the driver must adhere to. This band is usually quite narrow. Goldacres offer a 3 tier system (3TS) which effectively gives the driver a much wider operating band whilst still maintaining optimum droplet size.

Think of 3TS as a three step gearbox. Each nozzle type has an operating pressure band for a given droplet size. As the first nozzle reaches the top of the pressure band it switches off and the next larger size nozzle switches on. When that nozzle reaches the top of that pressure band the first nozzle will switch on again, effectively giving three operating bands.

The table below shows the pressure variations of two common nozzles, 015 & 02 operating at 70 l/ha through their respective pressure ranges from 7 km/h through to 27 km/h.

3TS Pro - the ultimate control and flexibility without leaving the cab.

The 3TS Pro is essentially our 3TS system with an added nozzle to give a wider range of spray rates without manually changing jets.

> *If you are constantly changing rates but want to keep your speed consistent, the 3TS Pro is for you.*

For example you may want to apply 70 l/ha with your combination of 015 & 02 nozzles to give the overall capacity of an 035 nozzle (as per 3TS chart shown), then increase your rate in certain parts of the crop, other paddocks or even in the application of fertilisers.

In most cases you would need to slow down to increase the rate as you would previously exceed the nozzle pressure range. With the additional nozzle the 3TS Pro will automatically select the best nozzle combinations for your speed and rate while maintaining the working pressure range of the nozzles.

“An absolute pleasure to use”

BRODEN HOLLAND


AUSTRALIAN MADE
AND OWNED

Application Technology

16 boom sections for less overlap

Optimising chemical application with RapidFire and RapidFlow.

RapidFire is instant boom nozzle on / off capability with 16 section control. Quick line priming and flushing of spray lines with RapidFlow boom recirculation.

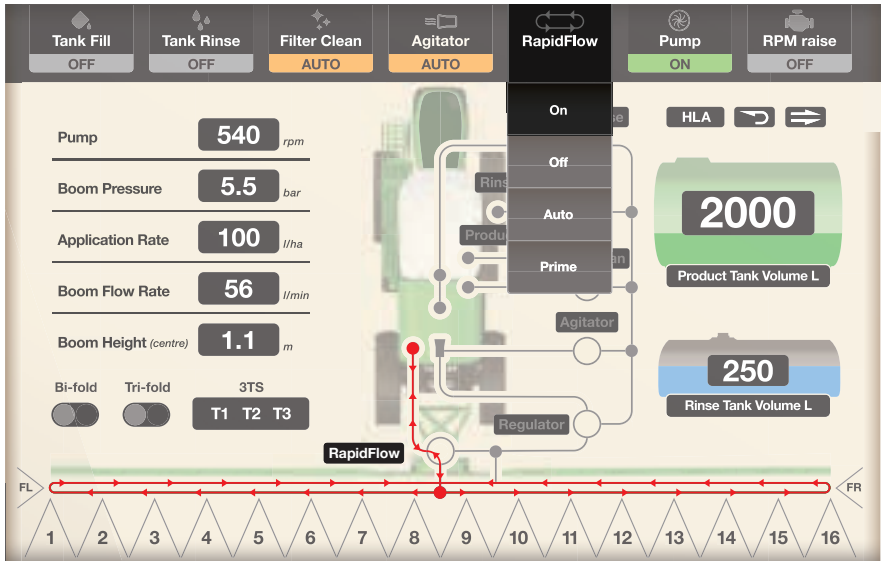
RapidFire

Goldacres pioneered RapidFire technology on Australian built sprayers in 2006. At the time the new technology vastly improved section switching times by replacing traditional motorised boom section valves with air controlled switching right at the nozzle. RapidFire DM (Direct Master) further improves on this by moving the electric over air solenoid from a bank in the centre of the sprayer to the first nozzle of each section. This results in a significant reduction in air hose required and also evens up the switching time across all sections of the boom.

The boom is configured in 16 sections to improve spray resolution when using an auto section controller for odd shaped paddocks. Goldacres have determined that 16 sections provides the perfect balance between spray overlapping and complexity.

RapidFlow (Boom Recirculation)

RapidFlow allows the sprayer boom lines to be fully primed without spraying a single drop. This reduces wastage at the start of a tank load or when switching chemicals. RapidFlow can also be used to thoroughly flush out the boom lines without the need to physically spray on the ground.

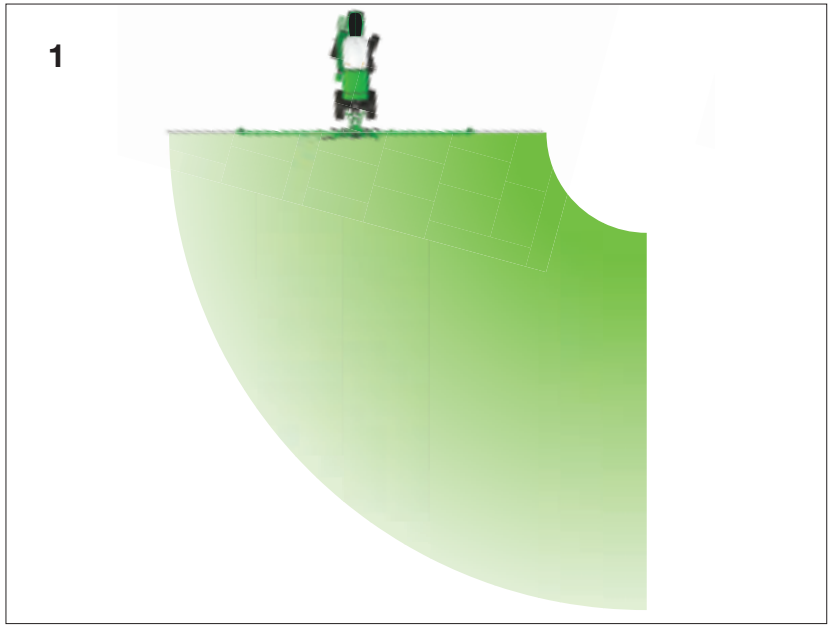


Application Technology

"I chose the Hawkeye 2 for exceptional performance with turn compensation, constant pressure and droplet size with a varying range of speeds"

GREG SMITH

1



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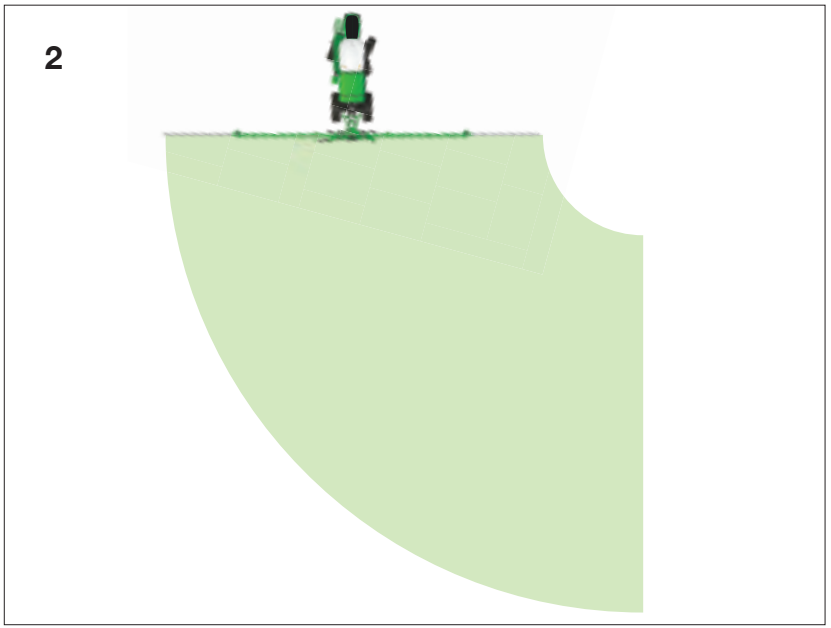


Hawkeye® - Nozzle control system.

Pulse Width Modulated (PWM) technology is now available as an option for your Goldacres sprayer.

PWM technology uses a small electrically operated solenoid mounted to the nozzle body to control the flow rate delivered to each nozzle. The system rapidly pulses the nozzle on and off at rates of 10hz (10 times per second) whilst also adjusting the amount of time the nozzle is opened and closed (this is called the duty cycle). The spray line is set to maintain a constant liquid pressure, whilst the computer adjusts the duty cycle to vary the application rate. The system allows the selected nozzle to operate at a target droplet size independent of the forward speed (within the system and nozzle capacity)

Using the PWM technology also provides a method of providing turn compensation. When making a turn the inner wing tip speed slows and the outer wing tip speeds up, which in turn over and under applies chemical to the target. As each nozzle is controlled independently it is possible to adjust the duty cycle to either decrease or increase the application rate across the entire width of the boom.

Features:

- Nozzle by nozzle turn compensation.
- 16 virtual sections or the option to have individual nozzle sections.
- Fully integrated into the G-Hub system as well as ISO BUS compatible.
- Available in either 250mm or 500mm spacing.

1 Without Hawkeye®

- Over apply on the inner and under apply on the outer wing when turning.

2 With Hawkeye®

- Consistent coverage when turning. Note: within nozzle parameters.

Transport

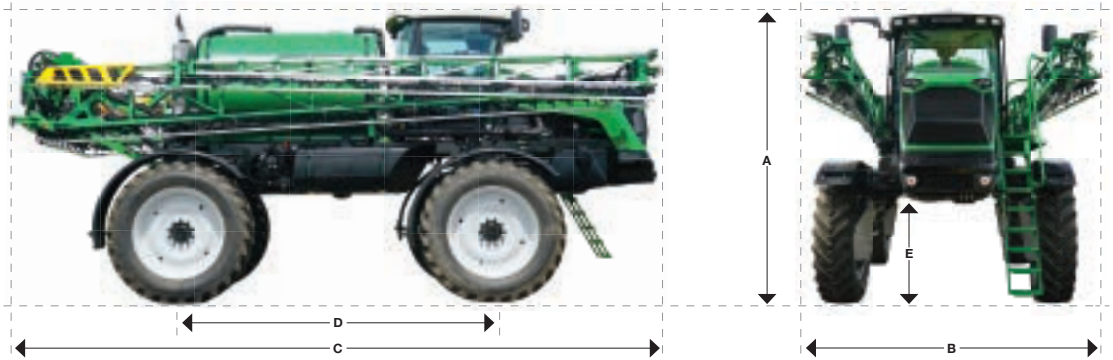
Ease of transport.

Whether you are spraying in the field or driving down the road, uninterrupted vision around the sprayer is essential for the safety of you and others.

Features like the flat folding boom wings so the operator's line of sight is uninterrupted. Power adjustable side mirrors provide a clear view of the road behind. 360° rotation windscreen wiper blade for maximum cleaning area of the front window.

Hydraulically adjustable LHS boom rest provides the operator with easy access to the cabin in the wide position yet brings the overall transport width down for road transport to under 3.5m*, eliminating the need for an escort vehicle. Twin circuit, 4 wheel disc brakes fitted as standard. LED daytime running lamps, turn indicators, high / low beam projector style halogen head lights and twin rotating warning beacons round out the package. The Crop Cruiser really is one for the road.

Dimensions	A (m)	B (m)	C (m)	D (m)	E* (m)
36m boom	4.2	3.5	10.5	4.2	1.4
42m boom	4.2	3.5	11.1	4.2	1.4
48m boom	4.2	4.3	11.1	4.2	1.4



*3.5m when 480/80R46 tyres fitted at standard wheel track 2970mm. ^Not on 48m boom.

Specifications

Engine

Cummins QSB 6.7L, 6 cylinder, Tier 3 emission. 168kw (225hp), 949N.m (700lb-ft)	Std
Vertically stacked combi cooler package. Fuel, transmission, water jacket, charge air & air conditioning	Std
Variable speed hydraulic driven cooling fan	Std

Transmission

Allison 2500 series automatic. Push button selector, lock up torque converter, 6 forward & 1 reverse	Std

Drive system

4.4:1 final drive leg with oil bath lubrication	Std
2 wheel drive with LSD 5.125:1 ratio	Std
Full-time 4 wheel drive system with centre diff lock	Opt

Fuel tank

440L	Std

Steering

2 wheel front steering system with true Ackerman alignment	Std
Danfoss PVED-CLS steer by wire autosteer ready variable ratio	Std

Hydraulics

100L plastic reservoir with level & temperature sensors Twin gear pumps 22 and 32 cc/rev Single variable displacement pump 45 cc /rev Rear mount oil cooler with thermostat 3 x pressure filters, 1 x tank mounted return filter	Std

Electrical system

12V – 200amp electrical capacity	Std
Dual batteries with master isolator	Std
Fully sealed connectors with colour coded wires used throughout the wiring harness	Std
6 x LED cabin lights	Std
3 x LED service lights	Std
LED light bar for lower bonnet (18 x 10W CREE)	Opt
LED light bar for upper cabin (12 x 10W CREE)	Opt

Braking system

Full hydraulic brake circuit 4 wheel disc Spring operated diff mounted disc park brake	Std

Chassis

Fully welded semi truss rigid mild steel	
200 x 100 x 9mm main rails	

Suspension

5 link torque rods with rear sway bar. 4 x rolling lobe air springs with ride height levelling. Shock absorbers on all corners, front feature double knuckle for extreme axle articulation	Std

Paint system

Grit blasted steel work followed by high build primer. All unwelded sections seam sealed. 2 pack top coat paint system.	Std

Wheel Equipment

16mm pressed centre, 10 studs on 335mm PCD	Std
480/80R46 (166A8/159D)	Std
520/85R46 (173A8/169D)	Opt
480/80R50 (177A8/166D)	Opt

Axle tracks

Axle track widths are dependent on tyre width selected	
2970mm fixed wheel track	Std
3048mm (120″) fixed wheel track (uses offset wheels)	Opt
3000-4000mm hydraulically adjustable track (2WD only)	Opt

Mudguards

4 x full length axle mounted polyethylene mudguards	Std

Deflectors

4 x leading edge stainless steel crop deflectors	Std
4 x brake mud shields	Std
Crop dividers for front wheels	Opt
Crop dividers for rear wheels	Opt

Cabin

Business class styled cabin with suspension	Std
Dual tilt and telescopic steering column	Std
Air suspension seat with seat belt. Fully adjustable	Std
Training seat with seat belt	Std

Accessory mounting rail on RHS	Std
Carbon filtration with positive cab pressurisation	Std
Bluetooth equipped radio and UHF with high gain antennas	Std

Main cabin access

Full length LHS access platform with auto folding ladder. Hydraulically adjustable width LHS boom rest (fixed position on 48m boom) for ease of access and convenient road transport. Rubber dampened hand rail.	Std
RHS service platform with manual fold up ladder	Opt

Boom

TriTech RivX boom (36 or 42m). Mild steel inner wings with aluminium outer wings & breakaway.	Std
48m TriTech V boom (3 spray widths. 20m, 36m & 48m). Mild steel inner wings with aluminium mid, outer wings and breakaway.	Opt
Available in the following widths. 36, 42 & 48m. All booms plumbed in 16 sections – no “Extra boom sections available”	Std
RapidFire single line in 500mm spacing	Std
RapidFlow boom recirculation	Std
3 tier system (3TS)	Opt
3 tier system PRO (3TS PRO)	Opt
Hawkeye PWM with turn compensation	Opt
Trijet nozzle bodies	Opt
Cross Fire 3TS (3TS capability with nozzles staggered every 250mm)	Opt
Custom nozzle spacing and configurations on request	Opt
Hydraulic wing tilt	Std
Hydraulic bi-fold	Std
Hydraulic yaw system	Std
Automatic boom height control system (standard on 48m)	Opt
Remote fence line jets (both sides)	Std

Control system

G-Hub - Goldacres Integrated System	Std
ISOBUS control system using RCM (CR7 separate VT option)	Std

Solution tanks

UV stable Polyethylene heavy walled tank. Supported in a steel cradle	Std
Main tank – 6000L	Std
Rinse tank – 550L side mount	Std
Electronic tank measurement	Std

Spray Pump

260 l/min, oil backed 6 diaphragm positive displacement. RPM readout	Std
High flow centrifugal pump (standard on 48m boom and Hawkeye)	Opt
Suction filter plus self cleaning pressure filter, electric switching between all functions	Std

Chemical handling and transfer

Chemical suction probe via pneumatic diaphragm chemical pump	Std
60L induction hopper	Std
Micromatic rinse socket and coupler	Std
3” integrated water transfer pump	Std
3” separate front fill direct to tank	Opt
3” side fill with twin points with auto shut-off (clean and dirty lines)	Std

Service / Maintenance

Remote grease nipple bank	Std
Auto grease system	Opt

Turning circle

18m curb to curb 3m axle with 480/80R46 wheels (2WD)

Weight

Tare weight – 12,000kg*
Gross weight – 18,990kg*

*Weights based on 6000L 36m boom 2WD are approx. and depend on options fitted

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