

# GEN2 SERVICE BODIES

# HD-OM-1





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Revision	Date	Description of changes	Notes
1	May 2023	Initial Release	
2	June 2023	Added Lube and Crane info	
3	Feb 2024	General update to content and formatting	

## **CUSTOMER SERVICE**

For all your service and parts needs please contact Hidrive Customer Care:

Call 1300 325 845

Email customercare@hidrive.com.au

Our Customer Care team is here to support you to keep your fleet on the road with minimal downtime for years to come.



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# **HIDRIVE LOCATIONS**



Brisbane

INSTALLATION / SHOWROOM

Located in the suburb of Northgate, our Brisbane service body sales and installation office is close to the M1 and M7, with convenient access to the Fisherman Island vehicle logistics hubs.

1300 379 561

• 146 CROCKFORD STREET, NORTHGATE, QLD 4013

## Goulburn

MANUFACTURING / INSTALLATION / SHOWROOM

Our Goulburn manufacturing plant is located in regional New South Wales, just off the Hume highway. This central location allows us to quickly deliver service bodies Australia wide.



17 O'SULLIVAN PLACE, GOULBURN, NSW 2580

## Perth

MANUFACTURING / INSTALLATION / SHOWROOM

Located in the suburb of Canning Vale, our Perth service body sales and manufacturing and installation location is close to the Roe Hwy and Kwinana Fwy, with convenient access to the Fremantle vehicle logistics hubs.



 18 CATALANO ROAD, CANNING VALE, WA 6155 Sydney

Located near the M5 and M7 interchange, our Sydney service body sales and installation office is strategically located near the Port Kembla and Minto vehicle logistics hubs.



10 GARNER PLACE, INGLEBURN, NSW 2565



# **IMPORTANT SAFETY INFORMATION**

Hidrive Service Bodies and Tool Modules are designed to be a secure storage area for tools of trade, and a mobile workspace that is resistant to water and dust ingress.

Note that impervious sealing to ingress is not guaranteed and storage of items must be considered accordingly.





# SAFETY WARNINGS

The service body is a workspace that is tailored to the operator's requirements. Not all equipment and features can be covered in this manual. It is recommended that the service body be regularly reviewed as part of your organisation's safety procedures.

IMPORTANT SAFETY INFORMATION

- a) Pinch points may be present in some folding/hinged, or sliding components, and appropriate care should be taken.
- b) Ensure that all doors and drawers are fully closed and latched before driving.
- c) Take care when opening doors that are operated by gas struts as the door operates under pressure.
- d) Take care when opening doors as contents may move during transport and fall from the open door.
- e) Failure to observe safety warnings from vehicle or accessory suppliers may result in serious injury or death.
- f) Modifications to, and/or fitment of, additional accessories to the service body or tool module that are not approved by Hidrive Engineering may affect the safety and integrity of the product and void the warranty.

These warnings must be read and understood in conjunction with any warnings from the vehicle manufacturer.

## WARNING! NOT SUITABLE FOR ACCOMMODATION

The service body is not intended to be used for personnel accommodation.

For emergency exit from inside the service body, proceed as follows:

- 1. Fold down the internal door lock cover
- 2. Remove the 'R' clip retainers on both door-locking rods
- 3. Remove the door-locking rods and push the door open



# **GENERAL OPERATIONAL PROCEDURES**

## **Operation of Gullwing Doors**

## DOOR CLOSING METHOD

The two-stage hinge and gas strut are some of the door components of the Hidrive product with its signature curved gullwing doors providing user-friendly benefits such as maximum accessibility and the door open seal. The struts deliver 40–45kgs of pushing force (400–450nm), engineered to provide the inertia for the door to open smoothly and correctly. DO NOT 'assist' the door in opening as this can result in damage to the door if the second hinge stage engages too early. When closing, the door is engineered to provide leverage to close with no strain on the operator – as long as the correct procedure is followed.

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## CORRECT METHOD OF CLOSING

## STEP ONE

The door pull-down strap allows the operator to bring the door down to the first stage of the hinge function (useful when the height of the opened door is above the comfortable reach of the operator).

## STEP TWO

The door should then be pulled down by placing both hands on top of the door with the palms facing downwards. No shoulder rotation should be required. Using only one hand will put too much strain on the shoulders.

## STEP THREE

Once your arms are below chest height and shoulders in the medial position (and with no need to change your hand positioning) the operator begins to push the door rather than pull down as the door continues through its arc. The door can then be pushed all the way to the closed position with minimal shoulder flexion and rotation.





## **INCORRECT METHOD OF CLOSING**

Do not pull the door all the way down by the strap as this can cause unnecessary strain on the operator.	
Do not close the door with one arm as this can result in the shoulder rotating with the potential for strain.	
Do not close the door without using the pull-down strap as this can require unnecessary reach and cause strain to the operator.	



## **Operation of Bi-Fold Doors**

## DOOR CLOSING METHOD

## STEP ONE

**STEP TWO** 

of the door's arc.

Use the door handle to bring the bi-fold door down to the top of the first stage of the hinge movement.

With one hand still holding the handle, place your other hand palm down on the door above the bi-fold join to enable more downward

pressure to bring the door through the early part



## STEP THREE

As the door passes the median part of the arc, your assisting hand will transition from a pulling to a pushing motion in a single smooth comfortable arm movement. Your shoulder should not feel any strain during this movement. Once fully closed, turn the handle to engage the latch.





## INCORRECT METHOD OF CLOSING

Do not pull the door down without using the handle as this can cause unnecessary reach and strain on the operator.	
Do not close the door the whole way with the handle as this can cause strain on the operators' shoulders and back.	



## **Operation of Accessories**





## Fold Down Safety Step & Guard Rails

To access the fold down step ladder, simply lift the locking pin located on the side of the step ladder and rotate down. It will then latch in the ready position.

Guard rails may or may not be removable depending on the design. Guard rails must always be in position when accessing the tray.

Guard rails and fold down ladder must be checked and secured into position before operating the vehicle.

Note: Use of platform should be undertaken in accordance with appropriate working at heights procedures.





# **SPECIALITY ACCESSORIES**

Correct operation of accessories unique to your build will have been explained during handover. A separate list may be provided.

When using non-Hidrive manufactured accessories, use the manufacturer's operators' manual.

# TRUCK LUBRICATION SYSTEMS

The following is a step-by-step guide to operating truck lubrication systems.

## **Operating the Fresh Oil Pumping System**

## Filling the Fresh Oil Tanks

## STEP ONE Connect your fresh oil supply hose to the respective tank inlet of the tank that you wish to fill. In this example, we will operate pump circuit 1. Connect hose to the quick-connect coupler of Inlet Tank 1 (as shown at right). PUMP PUMP PUMP PUMP EVAC ASTE TU **STEP TWO** After connecting the supply hose to Inlet Tank 1, turn on the pump that is connected to your fresh oil supply and open the valve at Inlet Tank 1. Take note that this lube system's fresh oil tanks have been designed to be filled using an external pump. Tank 1 (shown right) will begin to fill with oil. Take note of the amount of oil that is pumped into the tank by looking at the level indicator on the tank.

Once the desired level has been reached, turn off the pump, close the valve and disconnect your fresh oil supply equipment from the quick-connect coupler.



## **Operating the Fresh Oil Filling System**

## STEP ONE

Switch the compressor on as below.

The ignition should be installed on the inside of the canopy, key start modules may vary slightly from the one shown in the picture.

Ensure the key is in the ignition.

Turn the ignition from position 'O' to position 'I'.

## STEP TWO

Turn the decompression switch to the position shown in the picture.

Allow approximately 10 seconds for the glow plug to heat up.

Then crank the ignition shown in STEP ONE.

The engine of the compressor should start. If it does not start, repeat this step.

Once started, allow the compressor to build up to approximately 6 Bar of pressure before using the lube unit pumps.

## STEP THREE

After using the lubrication system, turn off the compressor by turning the ignition switch from position 'I' to position 'O' as shown in the picture.





## STEP FOUR

If the compressor does not switch off immediately, switch the decompression switch (shown right) to the opposite position from which it will be during operation.



## STEP FIVE

Turn the valve on 'Pump Tank 1' (shown right) to the Open position by swinging the valve handle through 90 degrees.

Note that the position shown in the picture is the closed position.

This valve activates the stub pump.



## STEP SIX

You should be able to hear pump number one starting to pump.

If using the pumps for the first time you may need to prime the pump line, thus removing the air from inside the pipelines.



## STEP SEVEN

Remove 'Oil Control Gun 1' from its holder, roll as much hose off the reel as required and press the trigger of the gun. Oil should begin to flow from the gun.

The gun has a reset function that zeroes the measurement should an exact amount of oil need to be measured. The front end of the nozzle can be adjusted to regulate the flow – ensure this nozzle is turned closed after using the gun.

The same process applies when using fresh oil systems 2, 3 or 4 (depending on how many systems have been installed).



## **Operating the Waste Oil Pumping System**

## Filling the Waste Oil Tank

**STEP ONE** Unroll the waste oil reel to the required length.



**STEP TWO** Remove the 'Waste Oil Nozzle' from its storage position.





## STEP THREE

**STEP FOUR** 

Connect the waste oil nozzle into the female quick couple connector of the waste oil reel.

Place the nozzle into the tank/sump from where it will be sucking out the waste oil.

Turn the handle on the Evac Valve to the 'Fill' position. This position will suck the

waste oil into the storage tank.





## STEP FIVE

Turn the 'Evac Pump' valve on the valve bank shown in the picture to the Open position by swinging the valve handle through 90 degrees.

The position shown in the picture is the closed position.

This valve activates the diaphragm pump.





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## STEP SIX

You should be able to hear the diaphragm pump shown in the picture starting to pump. If the pump is used for the first time, then you may be required to prime the pump line, thus removing the air from inside the pipelines.



## STEP SEVEN

Whilst filling the waste oil tank ensure that the maximum storage capacity is not reached.

The level indicator on the left will show the level of oil in the tank and the one on the right will indicate whether the internal wall of the tank has a leak, the right-hand side level indicator should always be empty.





## **Emptying the Waste Oil Tank**

STEP ONE

Unroll the waste oil reel to the required length.



## **STEP TWO** Remove the waste oil nozzle from its storage position.



## STEP THREE

Connect the waste oil nozzle into the female quick couple connector of the waste oil reel.

Place the nozzle into the bulk holding tank into which you will be pumping the waste oil.



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## **STEP FOUR**

Turn the handle on the Evac Valve to the 'Empty' position. This position will suck the waste oil from the storage tank into your depot's bulk holding tank.





## STEP FIVE

Turn the 'Evac Pump' valve on the valve bank shown in the picture to the Open position by swinging the valve handle through 90 degrees.

This valve activates the diaphragm pump.

NOTE: The position shown in the picture is the closed position.

## STEP SIX

You should be able to hear the diaphragm pump (shown right) starting to pump.





## STEP SEVEN

Whilst emptying the waste oil tank ensure that the tank is not emptied entirely, doing so would require you to prime the diaphragm pump again before filling. It is advised to leave some oil in the tank so that it is just above the lower outlet of the tank.

The level indicator ON THE LEFT will show the level of oil in the tank, and the one ON THE RIGHT will indicate whether the internal wall of the tank has a leak. The right-hand side level indicator should always be empty.



## **Undertray Tanks**

The undertray tanks are found between the subframe members below the canopy tray. This tank holds all the oil that is poured inside the filter storage tray/box as well as any oil that is spilled into the main bunds of the lubrication unit.

## STEP ONE

**STEP TWO** 

Place all oil filters inside this filter tray and allow all oil to drain out of them before discarding the old filters.

fitted on the underside of the body.

The example shown has two undertray tanks, this will vary from model to model.

to ensure they do not overfill.





# **REAR MOUNTED CRANE**

# TAKE NOTE: It is required that you read and understand the original crane manufacturer's operation and safety manual before operating and using the Rear Mounted Crane!

The following is a step-by-step guide to operating to Rear Mounted Crane's manual stabiliser legs.

## **IMPORTANT INFORMATION – Lowering the stabiliser legs**

Ensure the vehicle is on firm ground and the vehicle parking brake is engaged PRIOR TO operating the crane.

If the ground below the stabiliser foot is not firm, place load spreader plates below the foot to ensure the foot does not sink into the ground under load.

## **Operation of Stabiliser Legs**

#### STEP ONE

The crane stabiliser leg should be stowed away in the position as shown in the picture.



#### **STEP TWO**

When the crane stabiliser leg is stowed away the leg locking pin will be in the position shown in the picture.



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## STEP THREE

Pull the handle shown in the picture towards you using your right hand, with your left hand holding the weight of the stabiliser leg.

Once the handle is retracted the stabiliser leg will want to fall into its 90-degree position. Gently guide the stabiliser down ensuring your legs are out of the way.

NOTE: If the stabiliser drops without being held it could injure the operator's leg.



## STEP FOUR

The handle is spring-loaded and should lock the stabiliser leg into its vertical position once the locators line up correctly.



## STEP FIVE

Pull the leg locking pin directly down and rotate the handle by 180 degrees – this will free the leg from its locked position.

Pull the leg out around 2cm then rotate the handle back to its previous position – this will allow the leg to lock into its fully extended position once it is pulled out and that position is reached.





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## STEP SIX

Before pulling the leg out you will be required to release the side locking plates.

This can be done by simultaneously pulling the plate away from the stabiliser beam and pulling the stabiliser leg out.

Once the leg has been freed from the locking position, the plate can be released.

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Ensure that the leg locking pin is placed back in its locked position, this will ensure the leg cannot move during operation.





The stabiliser should now be in the position shown in the picture.



## STEP NINE

Release the lynch pin and pull out the retainer pin as shown in the picture.

Holding the foot, lower it to the ground.





## STEP TEN

Place the retainer pin and lynch pin back in the hole closest to the foot's resting position.

You may need to lift the foot slightly to allow the pin to slide through the tube.



## STEP ELEVEN

Place the supplied crank handle on the ratchet as shown and crank the handle so that the foot pushes into the ground or load spreader plates.

It is recommended that you adjust the crank until you see that the stabiliser takes up some of the slack of the suspension.

Remove the crank handle and store it away.

#### STEP TWELVE

Repeat this operation for the other stabiliser leg.

To store the stabiliser leg away after usage, do this entire process backwards.



# **KNOW YOUR VEHICLE**

The carrying capacity details of your vehicle are available from the vehicle manufacturer and must not be exceeded. The vehicle manufacturer may also specify axle weight details which must not be exceeded. Refer to the vehicle manufacturer for details.

Vehicles fitted with Hidrive Service Bodies and Hidrive installed accessories may be driven at the posted speed limit in the state or territory of operation, provided all the vehicle manufacturer's recommendations are observed, and the driver is aware of the importance of reducing speed and driving to conditions including:

- a) Variations in road surfaces, alignments, gradients, narrow roads, and inclement weather conditions
- b) Carrying any loads, particularly roof mounted loads, and/or loads with a higher centre of gravity
- c) The presence of crosswinds, curves, or braking
- d) Areas of high vehicle and/or pedestrian traffic, school zones, rail crossings, roadworks
- e) Proximity to heavy vehicles and road trains
- f) Awareness that laden vehicles and vehicles towing trailers have a longer stopping distance
- g) Correct restraint of accessories, loads and tools of trade (refer to 'Load Restraints' below)
- h) Some accessories may have a maximum speed limitation whilst in operation (e.g., fold up arrow or message boards). Such accessories must be fitted with appropriate warning decals or speed limiting interlock by Hidrive or the installer.
- i) Fitment of a canopy or service body/toolbox may restrict rear vision, and additional measures may be required to achieve safe and adequate rear vision.
- j) Reverse cameras, and/or parking sensors are recommended if reverse vision is insufficient or unsafe.

# LOAD RESTRAINTS

Items stored internally and in any external tray area must be securely restrained. Additionally, a load covering net or tarpaulin may be required for external loads in your country/state/territory/municipality. Items stored on the roof must be securely restrained to a load restraint device such as roof bars or an 'item specific' device (ie: ladder slides). Do not carry bulky wind-resisting loads on the roof.

Maximum weight for external roof storage must be the lower of either:

- a) The maximum load specified by Hidrive (information for your specific canopy/service body is available on request).
- b) The maximum weight specified by the relevant statutory authority in your country/state/territory/municipality.





# LOAD DISTRIBUTION

Positioning any load safely is important:

- a) Keep weight as low as possible. A high centre of gravity (ie: excess weight on the roof) may contribute to vehicle rollover.
- b) Distribute loads evenly. Excess weight stored directly above, or behind rear axle centre will affect the driving characteristics and safety of the vehicle.
- c) All loads must be distributed so that the vehicle manufacturer's maximum axle loads and GVM are not exceeded.

# ELECTRICAL

- a) Electrical components and cables must be regularly inspected for serviceability and safety against wear and tear or damage. Check that the insulation on cables is not damaged.
- b) 12V 240V power inverters (where fitted) must be kept dry and in safe working order. An external earth leakage protection device is recommended for investors.

# GAS STORAGE



Flammable/combustible gas cylinders and/or products stored in pressure packs/pressurised vessels must only be stowed within a sealed gas cabinet that is vented to the outside atmosphere.

Alternately, flammable/combustible gas cylinders and/or products stored in pressure packs/pressurised vessels may be restrained externally (outside of the canopy/tool box).

Gas and flammable goods storage must be in accordance with the relevant statutory authority in your country/state/territory/municipality.

# SAFE STORAGE OF CHEMICALS, OIL AND FUEL

- a) Auxiliary containers holding chemical, oil or fuel must be manufactured in accordance with standards published by the relevant statutory authority in your country/state/territory/municipality.
- b) Chemical, oil or fuel storage and restraint in or on an enclosed canopy/toolbox must be safe and in accordance with any standards published by the relevant statutory authority in your country/state/territory/municipality.
- c) Appropriate ventilation must be provided if storing chemical, oil or fuel in an enclosed canopy/toolbox.
- d) If carrying chemical, oil or fuel in or on a vehicle, an industry spill kit may be required by the relevant statutory authority in your country/state/territory/municipality.
- e) Auxiliary chemical, oil or fuel containers must be removed from the vehicle before decanting or filling.
- f) Leakage of chemical, oil or fuel onto or near electrical components is a fire risk.



# **MAINTENANCE CHECKS**

## **Pre-Drive Checks**

- a) Ensure internal drawers and accessories are in locked position and other items are stowed correctly.
- b) Ensure external items are stocked correctly and tightly fastened.
- c) External 'quick release' type fixing points must be checked for security/fatigue or tamper each time before driving vehicle.
- d) Ensure doors are closed and in locked position.

## **Initial Check - Week 1**

- a) Check all mounting/fixing and connecting points to the chassis.
- b) Check all mounting/fixing points of internal accessories.
- c) Check mounting/fixing points of external accessories.
- d) Check vehicle fuel tank filler point(s) and fuel lines.
- e) Check electrical components/accessories/cables and lighting for function and safety.
- f) Check all hardware, hinges, locks, slides and mechanical items for security/adjustment.
- g) Check that gas struts on doors are functioning correctly, if these appear to have lost pressure (ie: door not holding fully open, or struts feel 'soft' when operating door), replacement struts must be fitted.

## **Monthly Checks**

The following items should be checked every month:

- a) All mounting/fixing and connecting points to the chassis for security/fatigue or tamper.
- b) All mounting/fixing points of internal accessories for security/fatigue or tamper.
- c) Mounting/fixing points of external accessories for security/fatigue or tamper.
- d) Vehicle fuel tank filler point(s) and fuel lines for security and safety.
- e) Electrical components/accessories/cables and lighting for function, safety, and damage.
- f) All hardware, hinges, locks, slides and mechanical items for security/adjustment/damage and fatigue.
- g) Check that gas struts on doors are functioning correctly, if these appear to have lost pressure (ie: door not holding fully open, or struts feel 'soft' when operating door), replacement struts must be fitted.

Any damaged item that affects function or safety should be replaced.

## **Annual Servicing**

- a) Lubricate all lock mechanisms and hinges using lnox spray/lubricant.
- b) Check all items for damage or leaks and replace as necessary.

# **SERVICE BODY CLEANING**

Washing procedure is the same as for your vehicle paintwork. Refer to your vehicle manufacturer's cleaning instructions.

If accessories are installed externally (by a third party), check manufacturer's instructions for cleaning recommendations.