



HYDRAULIC TILT SLIDE BODY & CRADLE

OPERATIONS MANUAL



IMPORTANT

THIS MANUAL SHOULD BE READ BEFORE OPERATING EQUIPMENT

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Suburban Towing & Equipment Pty Ltd reserve the right to alter all or any parts or specifications at any time

VEHICLE DETAILS

Owner	
Vehicle	
Model	
Vin Number	
Delivery date	
Winch details	Make:
	Serial Number:
Remote details	Make:
	Serial Number:
Tray Serial Number	
PTO Serial Number	
Control board Serial Number	
Deck capacity	
Cradle lift cap	
Tow hitch type	
Tow hitch cap	

WARRANTY

Suburban Towing & Equipment Pty Ltd warrant all work carried out on new truck bodies for a period of 12months.

This warranty covers all Labour, Material & Parts.

Individual suppliers carry their own warranty.

The warranty **DOES NOT** cover the following:

Overloading or damage caused to the vehicle from misuse or neglect.

Damage caused by lack of or incorrect maintenance

Damage caused by unauthorised persons or companies working on the vehicle.

Damage as a result of cab/chassis failure.

Normal wear and tear.

ANY WARRANTY CLAIM MUST BE PROCESSED IN THE FOLLOWING MANNER

Report problem to Suburban Towing & Equipment immediately.

Local vehicles must be returned to our premises for repair.

If out of Sydney, a written quote is required and authorised, prior to any repairs being carried out, in some areas we may have an authorised repairer.

All costs associated with freight or transport are at the owners expense.

All repairs will be carried out in the quickest possible time.

No warranty costs will be accepted without prior authorisation in writing.

Suburban Towing & Equipment Pty Ltd
ACCEPT NO RESPONSIBILITY FOR LOST INCOME
due to any warranty claim



Save this manual for future reference.

Fully read and understand this manual before operating this equipment.
See PTO, winch remote, wheel clamp and light bar manuals before operating.
Local & state regulations vary regarding load restraint systems.
See your local authority for these regulations.
Always use approved restraint equipment.
Never overload this vehicle.
This body is rated to carry the payload of this vehicle only.



By using this equipment, you agree to have read, understood and always follow instructions provided by the truck and peripheral equipment manufacturers.

SAFETY

This machine has many moving parts, always keep clear when in operation.

Do not allow untrained people to operate.

Keep all other people clear when in use.

Do not use equipment if faulty or broken.

Do not drive truck with PTO engaged.

Follow all maintenance instructions.

Use a safety prop on the body or cradle when carrying out maintenance.

Never disconnect hydraulic lines when body or cradle is in the raised position.

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HYDRAULICS

HYDRAULIC CONTROLS

Operates the hydraulic functions via dead man controls
The speed of the functions can be varied using these controls.
Always be aware of moving parts



1. WARNING BUZZER

This buzzer is mounted at the valve control
It will sound when
The stop button has been depressed.
If a fuse has blown on the body circuit board.

2. PUSH ACTIVE CONTROL

Depress this switch to activate the hydraulic hand control

3. PTO ON, PUSH RPM OFF

Depress this switch to manually turn the idle up function off

4. RED MUSHROOM BUTTON

Depress this button to stop all hydraulic functions



STOP SWITCH

This switch will cause the hydraulic oil to bypass the valve block if activated, thereby stopping the hydraulic operations.
This will shut the power off to the remote.

THIS IS NOT AN E STOP FUNCTION

UNLOADER VALVE

The unloader valve controls the hydraulic oil flow, when the red stop button is depressed, or the stop button on the remote, is depressed the buzzer will sound and the unloader valve will redirect the oil flow straight back to the tank resulting in the body stopping.

HYDRAULIC OPERATION

ENGAGING THE HYDRAULICS

Manual Transmissions

Ensure truck is stopped, in neutral and park brake engaged.
Depress clutch and hold.
Engage PTO switch.
Release clutch evenly.
Hydraulics are now engaged.
If any unusual noises occur disengage PTO switch.

Automatic Transmissions

Ensure truck is stopped, in neutral and park brake engaged.
Apply foot brake.
Engage PTO switch.
Hydraulics are now engaged.
If any unusual noises occur disengage PTO.

ENGINE SPEED

Some vehicles are equipped with an automatic idle advance, in such cases there is no need to adjust the idle speed.
In vehicles that are not equipped with an automatic function, it is necessary to advance the idle speed to no more than 1,100rpm when operating the hydraulics.

TILT SLIDE OPERATION

Controls are generally mounted on the n/s rear of the vehicle.

See control panel for direction of body operation.

Ensure red stop button is released and depress activate control button, to activate the controls.

A blue light will come on in the button.

If the vehicle is fitted with stabiliser legs these should be used.

Using valve control handles, slide body rear wards, there are safety valves and proximity switches

fitted to the body, the body can only be lifted once it is clear of all body locks.

Tilt body upwards to desired angle.

Slide body rearwards until body reaches the ground.

To return the body to travel position procedure.

Slide the body forwards whilst in the raised position, the body will automatically stop at the proximity switches.

Lower the body to the chassis and then slide the body forwards into the locks.

CAUTION

ALWAYS BE AWARE OF OVERHEAD OBSTACLES & TRAFFIC WHEN OPERATING THE BODY.

NOTE: In some instances, if the vehicle is on uneven ground the body may not return all the way into the locks. In this case the vehicle should be moved to level ground to allow the proximity switches to work correctly. (See Trouble Shooting)

LOADING

**Following the winch manual directions, or guidelines,
hook up the load and winch onto the truck.**

Secure load to truck (follow regulations and manufacturers guidelines).

If required, the cradle may be used as a stabilizer at this stage.

Slide the body forward.

Centre of load must be in front of the rear axles before tilting the body.

Tilt the body down and slide into body locks.



WINCH

Suburban supply a variety of winches for the tilt slide bodies.

Always consult the winch manual prior to use.

Keep the winch serviced and well maintained.

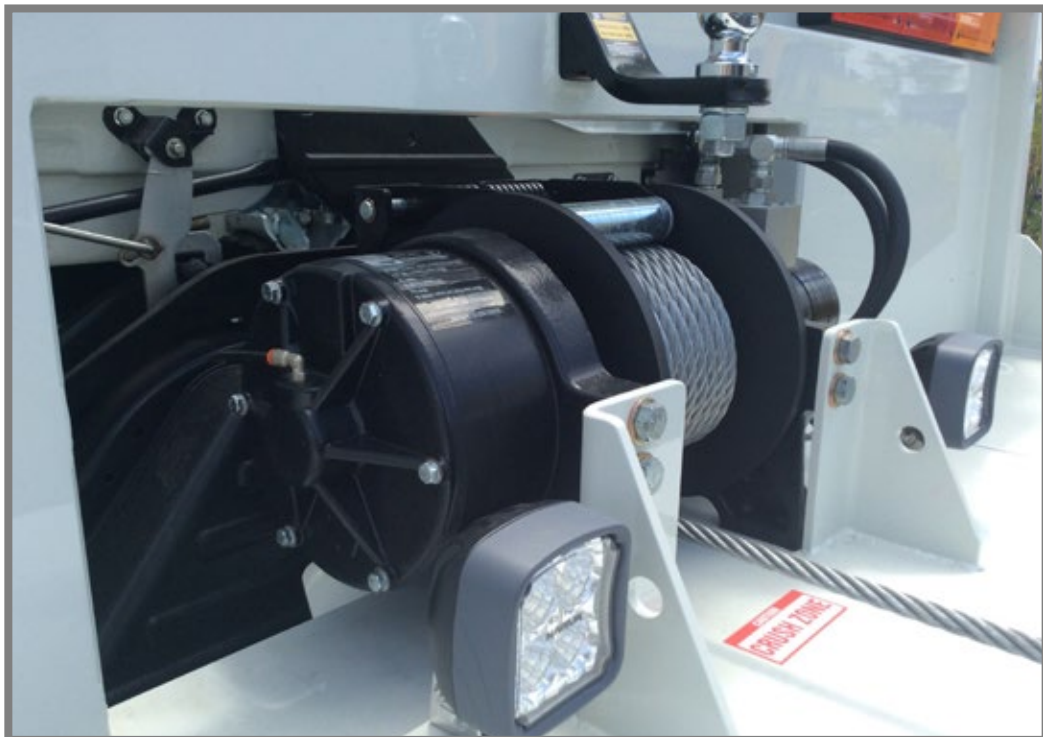
Replace the cable if it is damaged or worn.

Manual free spool winch, a lever is fitted on the winch to free spool the cable.

Never operate this function if it is under load.

Air freespool winch, a switch is located at the valve controls.

The winch can be operated via the remote hand piece or control levers at the rear.



CRADLE OPERATION

The cradle is designed to tow cars.

All cradles are rated with a lift capacity and rated capacity.

Do not exceed the minimum of these limits.



AIR CRADLE LOCK

Ensure the air cradle lock is released before operating the cradle.

Using the hydraulic controls extend the cradle boom out to maximum reach.

If folding type: fold cradle head over.

Ensure the air cradle lock has released, if not raise the cradle to release the lock.

Lower the cradle to the ground.

If folding type: slide forward pins into place and fit safety clips.

Locate the car over the cradle.

Locate the rear cradle pins as close as possible to the rear of the two tyres.

If 'L' arm system, fit 'L' arms as close to tyres as possible. Fit safety pins and clips.

Using the hydraulics, lift the cradle to the desired travel height.

Fit safety chains or straps to ensure the vehicle is secure and safe.

Release car hand brake. If vehicle is towed on handbrake axle.

Leave car in neutral if vehicle is towed on driven wheels.

If the vehicle is not towed on the driven or handbrake wheels, engage gears and handbrake.

Ensure the cradle extension lock is engaged.

Ensure all pins are fitted with safety clips and all components are locked securely.

DO NOT CLIMB OR LAY UNDER THE CRADLE OR VEHICLE

To unload reverse this procedure.

Ensure the cradle lift lock engages.

NEVER TRANSPORT WITHOUT SECURING VEHICLE TO THE CRADLE

DO NOT

- Use the cradle as a jack to lift the truck.
- Exceed the weight capacities.
- Use the cradle for salvage work.
- Use the cradle for leverage or as a forklift.

CAUTION

Do not allow any part of your body under the cradle or car when in the raised position.

ENSURE THE AIR CRADLE LOCK OR MECHANICAL LOCK IS ENGAGED WHILE IN TRANSIT.

The cradle extension lock must be engaged every time the cradle is loaded with a vehicle or trailer.

The cradle lift lock is designed so that if a load is on the cradle the lock will **NOT** automatically release, the cradle must be raised to release the lock in this situation. When there is no load present on the cradle, in normal conditions the cradle lock should disengage automatically. The operator must always ensure the lock has engaged and disengaged correctly when operating the cradle.

NEVER TRANSPORT A VEHICLE WITHOUT ENSURING THAT BOTH CRADLE LOCKS ARE FULLY ENGAGED

WARNING:

It is the operator's responsibility to ensure the car is suitable for towing with this equipment.

STABILIZER LEGS

Stabilizer legs are designed to support the body and chassis when loading the body back onto and off the chassis.



ALWAYS KEEP CLEAR OF THE LEGS WHEN IN OPERATION

OPERATION

MANUAL & HYDRAULIC ADJUSTMENT

If the vehicle is fitted with rear mounted stabilizers select the required height position so that the legs sit on the ground, when the body reaches the ground.

Side mounted stabilizers should be deployed prior to moving the body.

If on soft ground or driveways where damage may occur, timber or rubber mats may be placed under the legs.

Never drive the legs hard into the ground or use as a lifting device.

CONTAINER PINS

(Where fitted)

Container pins must be used when transporting all containers.

Always use all 4 pins.

LOADING

Winch container onto truck until it reaches the container stops.

Return the body to the chassis in the transport position.

Fit the container pins making sure they are locked in correctly.

Release the winch.

UNLOADING

Take tension up on the container with the winch.

Remove all container pins.

Deploy the stabilizer legs.

Slide body clear of the body locks and tilt to highest angle.

Slide body to the ground.

Using the winch slide the container to the ground.



If a container pusher cylinder is fitted the following applies.

Ensure the container pusher cylinder is locked in position.

Activate the air diverter switch at the valve control.

Leave the winch cable attached with enough slack to enable the container to move.

Using the winch control, slowly push the cylinder rearwards by alternating between the winch and the cylinder until the rear of the container is on the ground.



NEVER:

Allow any person on the tray when the load is being moved.

Allow any person behind the container or any other load while loading or unloading.

ALWAYS:

Keep clear of the container, tray and winch cable when loading and unloading.

AIR BAG SUSPENSION

Where air bag suspension is fitted,
unless the chassis manufacturer states otherwise we
recommend the air bags are lowered during loading and unloading.

BODY ACCESS STEPS

Steps and hand holds are provided on each side of the body. Always climb onto and off the body with caution.

Ensure pull out steps are fully retracted and locked before driving.

Handles are also provided above the steps. These should be used to gain access to the floor area of the body.



NEVER USE THE STEPS WHEN THE BODY IS TILTED OR IN OPERATION

The body may also be accessed at the rear, when the rear of the body is firmly on the ground.

A non-slip surface is sprayed onto the floor of the body, if this surface becomes worn it must be replaced to provide a safe surface.

ALWAYS be cautious of oil etc. on the body.

ALWAYS keep the floor surface clean.

If no steps are provided, **DO NOT** access the body by climbing on wheels, fuel tank, air tanks etc.

SAFETY CHAIN MOUNTS

Always ensure chains and straps are firmly anchored into the floor chain mounts.

Do not allow chains to hang below the floor.

Never use chain mounts that are damaged.

Ensure the chain mounts used are rated for the capacity needed.

Ensure that all lashing equipment is rated and correct for the job it is intended for.

If in doubt refer to the 'Load Restraint Guide' available from the RMS or state authority.

Never use restraints that are damaged or worn.

Refer to the relevant transport department or manufacturer as to the correct procedure in lashing the load.

Ropes should NOT be used.

Always use safety chains or straps on cars being transported in the cradle.



TOW HITCHES

The cradle mount tow hitch fits a 50mm ball,
2 safety chain mounts are provided and must be used.
Ensure the extension lock is engaged when using a cradle mounted tow hitch.



A tow tongue is provided on the headboard, this is for the transport of low weight trailer only.

Safety chains must be used in conjunction with this mount.

Ensure the pin and clip are fitted.

Optional tow hitches may be fitted at the rear.

Safety chains must be used at all times.

See the fixed rating plate for the capacity of the rear tow hitch.

NEVER EXCEED THE VEHICLES RATED GCM OR LEGAL RATINGS.

ALWAYS ENSURE YOUR LOAD IS SECURE BEFORE PROCEEDING.

BROOM AND SHOVEL MOUNTS

(Where fitted)

Are mounted under the tray body or off the chassis subframe.
Not for crowbars.



OPTIONAL EQUIPMENT

WHEEL CLAMP SYSTEM (QUICKLASH)

Lock wheel clamps into the tracks or keyholes fitted in the floor.

Winch or drive the vehicle up to the double ratchet clamp stopper bar.

Apply the handbrake and leave in park (Auto) or in gear (Manual).

Place the single clamp as close as possible, into the tracks or keyholes behind the wheels (ensure the locking pin is fitted).

Place the webbing strap over the centre of the tyre and fit the strap into the ratchet.

Using the handle provided, ratchet the webbing down ensuring that the tyre is compressed to restrict any possible movement.

Rear safety chains or straps must be used.

Do not use on loads over 3 tonnes.

Do not use if any parts are damaged or worn.

This system is designed for use on motor cars under 3000kgs in conjunction with additional lashings.

SAFETY

Never allow anyone else to assist in securing a vehicle or loading onto your truck.

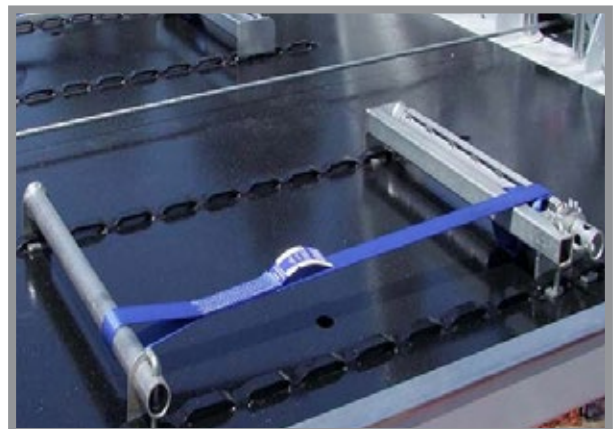
Ensure the wheel clamps are securely locked in place.

Never allow the webbing to encounter sharp edges or to rub against parts of the car.

The wheel clamp system is designed for use on cars only.

Additional lashing is required at the rear.

Consult the operator's manual before use.



HYDRAULIC GOVERNOR

The governor raises the idle speed of the engine to a pre-set limit.

Engage the PTO as normal, operate the valve controls or remote, the idle speed will increase each time the controls are used.

This function can be turned off manually at the valve control by depressing the RPM off switch.

On some vehicles an option to turn the governor off is also on the wireless remote transmitter.

NOTE: This function relies on back pressure via the hydraulics in some situations where the body does not create enough back pressure the idle may not increase.

DOLLY WHEELS

Use as per instructions supplied with Dolly Wheels.

TOW LIGHTS

Must be used whenever a vehicle is being towed on the cradle.

Plug connector into trailer plug on vehicle.

Attach lights to rear of the car and tie the power lead up to prevent the lead from damaging the car or other vehicles.

The rear trailer plug is 24volt as standard.

If wireless lights are fitted follow the instructions provided.



**ASK SOMEONE FOR ADVICE IF IN DOUBT
NEVER USE DAMAGED OR WORN EQUIPMENT**

SPECIALISED BODIES

HINGED FLOOR BODY

Extend the body out and to the ground as usual, when the body is fully extended and, on the ground, tilt up further to allow the hinged section to engage.

Reverse this procedure to return the body back to the truck.

SAFETY

BE CAUTIOUS OF PINCH POINTS ON THE SIDES OF THE BODY



FIXED HEADBOARD BODY

This model has the head board fixed to the chassis with the body separate.

When fitted in conjunction with a lift lazy axle, the body may be extended further back, while also extending the body to give more air space or adjust the weight on the axles. Always slide the body rearward to clear the body guides before lifting. Lower the body, before the body guides when returning to the chassis.

NEVER stand or allow anyone to stand between the body and the headboard.



HEADBOARD

Headboard `H' Frame

FOR THE RESTRAINT OF BOOMS

Always strap or chain the boom to the `H' frame while in transit.

Never operate the body with the boom restrained to the H frame.

Always chain the machine to the tray body securely.

HEADBOARD RAMPS

Fit ramps to mounts using correct pins and clips.

The vehicle must be restrained to the body not the ramps.

When loading the vehicle be aware of overhead obstacles and the truck cabin.



SAFETY EQUIPMENT

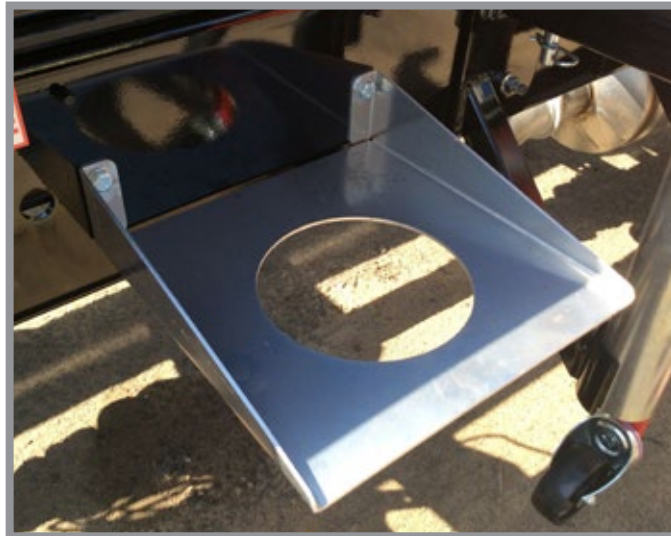
FIRE EXTINGUISHER

A 4.5kg dry powder extinguisher is fitted.

Use as per the instructions.

Ensure the extinguisher is in date.

WITCHES HAT MOUNTS



BUCKET MOUNTS



SERVICE AND MAINTENANCE SCHEDULE

IMPORTANT

FIRST SERVICE

MUST BE PERFORMED WITHIN THE FIRST 20,000KM

- Check hydraulic oil level.
- Check all light operations.
- Check remote operation.
- Check all hydraulic operations.
- Check hydraulic governor operation.
- Check all hoses and cylinders for leaks.
- Check all hoses and wiring is not rubbing on components.
- Re-tension PTO.
- Grease all points.
- Check all straps, chains etc. for damage.
- Check all auxiliary equipment, e.g.: tool box, spare wheel etc. are secure.
- Check subframes for cracks, loose bolts.
- Check tool box, oil tank, ancillary equipment mounts.

**THE BODY SHOULD BE FULLY EXTENDED AND ON THE GROUND
WHEN CARRYING OUT THE SERVICE**



OIL

- Grade 68 hydraulic oil to be used only in the hydraulic system.
- The return filter is fitted into the tank.
- The filter must be checked at normal service intervals.
- There is a strainer filter located inside the lid.
- Change the oil filters as instructed on the tank.
- Oil filter part no: SFC-5710E



GREASE

- High temp bearing grease is to be used on all grease nipples.
- Body pivot bar to be greased every 30,000km.
- Cradle slide to be greased every 30,000km.
- Scissor arms (where fitted) to be greased every 15,000km.
- Cylinder mounts to be greased every 15,000km.
- Grease nipples are located at the main pivot on the body (6) and on all the hydraulic cylinders and scissor arms.

WINCH

- See the winch manual provided.
- Ensure the winch is in good working order and the cable is free of damage.
- Follow all safety directions in the manual.

HYDRAULICS

NEVER adjust hydraulic pressures, consult the manufacturer if the body is not performing correctly.

HYDRAULIC LINES

- Check for cracks, kinks, deterioration, leaks etc.
- Replace if not in safe condition.

HOSES, FITTINGS, CYLINDERS

- Should be checked monthly for wear and leaks etc.
- All leaks should be rectified immediately.

CONTROL VALVE

Should be checked monthly for leaks and ease of use.

TEFLON WEAR STRIPS

Should be checked at each service for wear and damage.

CLEANING

- A non – abrasive wash should be used, **DO NOT** use a pressure cleaner.
- Never use undiluted degreaser on the vehicle.

STEEL FRAME WORK

- Should be checked at each service for wear and damage.
- Report any damage to the manufacturer.

ELECTRICAL

- A fuse box is located under the centre of the body towards the rear of the vehicle, for all body related electrical systems.
- All body tail light wiring is run through a separate junction box at the rear of the chassis.
- All electrical components / wiring fitted by the body manufacturer are independent to the vehicle wiring.
- A 7-pin trailer plug is fitted at the front of body, which can be used to disconnect the body electricals.
- A 7-pin trailer plug is also fitted on the rear light board to enable isolation of the light board.
- A main fuse is located at the battery box.
- Relays and fuses are mounted in the fuse box.
- The wireless remote receiver unit is mounted in the power box.
- The relays for the body lock valves are mounted in the control box.
- If any fault occurs, consult the manufacturer **BEFORE** carrying out any work, as this may save you time and unnecessary work.

ALWAYS USE A QUALIFIED AUTO ELECTRICIAN

PTO / PUMP

- At each service of the truck, mounting bolts are to be checked and re-tensioned.
- Any oil leaks must be rectified immediately.
- Consult the PTO manufacturers service book.

WARNING:

ALWAYS make sure the body is propped when working on the chassis

PLEASE NOTE – it is the owner's responsibility to maintain the vehicle

Any problems should be reported to the manufacturer

TROUBLE SHOOTING

PTO DOES NOT ENGAGE

Check PTO switch light comes on.

No	Check connections at back of switch Check main fuse at batteries Check fuses in control box at valve control Consult the manufacturer
Yes	Check red safety switch at valve is released & green button is depressed Air solenoid at air tanks (see air solenoid details) Consult the manufacturer

REMOTE DOES NOT WORK

Check hand control lights flash

No	Check battery charge Check charger
Yes	Check, PTO engaged Check, red safety switch at valve released

HYDRAULIC SYSTEM RUNS SLOW

	Check engine rpm Should be approx. 1100rpm when functions operated Check oil tank level Should be approx. $\frac{3}{4}$ full, use Hydraulic 68 grade oil only
Cavitation noises	Check hydraulic oil level
Hydraulic system operates but lacks power	Check engine rpm Check hydraulic oil level Consult hydraulic specialist to test relief valve pressure
No power at switches or valve	Check the primary fuse at the truck batteries Consult the manufacturer
The body will not go into body locks	Move the truck to more level ground. See body lock trouble shooting.
Governor does not engage	Check oil level. Test other functions. Consult the manufacturer.

PTO AIR SOLINIOD DETAILS

- Generally located near truck air tanks
- Fitted with an override screw or button to allow air to be passed direct to PTO
- Turn truck engine off
- Depress button and turn clockwise to lock
- Depress clutch pedal
- Turn engine back on
- The PTO should now be engaged



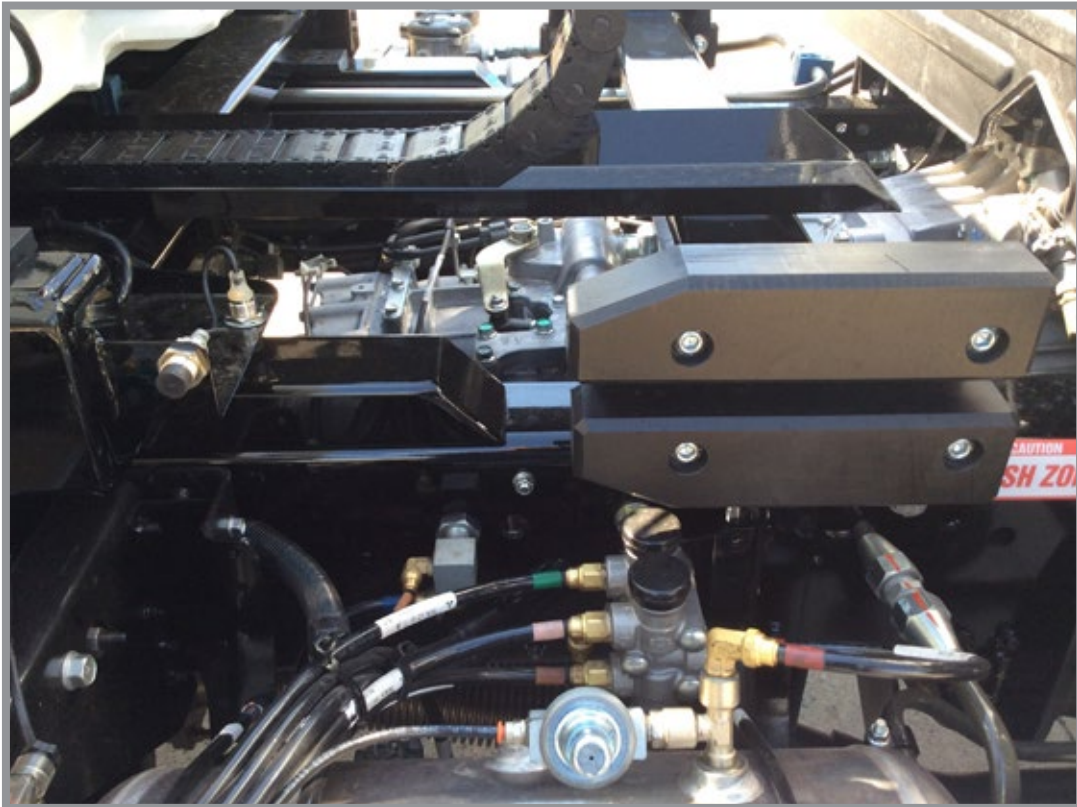
Many automatic transmissions are fitted with electronic operation at the PTO.

These may not be fitted with an override.

Be sure to disengage the override before engaging gears or driving the truck.

BODY LOCKS

- If the vehicle is on very uneven ground the body may become stuck in one position
- The override function may be used
- Depress the red mushroom button
- Buzzer will sound
- Depress and hold the Control Active (blue) button
- Use the valve handle to slide the body rearwards
- DO NOT slide the body forwards



UNLOADER VALVE

If the power is lost to the unloader valve the override may be depressed and turned clockwise to re-establish hydraulic power.



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