

ORH



14000D Isuzu Diesel Truck Operation Manual



Specialising in Mining Equipment

MINING - INDUSTRIAL - CONSTRUCTION - CIVIL - GOVERNMENT

www.orh.net.au

VEHICLE IDENTIFICATION

MAKE:

MODEL:

VIN NUMBER:

ENGINE NUMBER:

REGISTRATION NUMBER:

ORH MODIFICATION PLATE NUMBER:

DELIVERY DATE:

HOURS OF TRADE

NEW EQUIPMENT SALES & SPARE PARTS: Monday to Friday 7.00am to 5.00pm

ADMINISTRATION: Monday to Friday 8.00am to 5.00pm

CONTACT NAMES & NUMBERS

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CONTENTS

SECTION 1 - FOREWORDS.....	4
SECTION 2 - DIESEL TRUCK OVERVIEW.....	5
SECTION 3 - WARNINGS, SYMBOLS & SAFETY PRECAUTIONS.....	6
SECTION 4 - VEHICLE ROLL OVER PROTECTIVE STRUCTURE.....	7
SECTION 5 - ACCESS LADDER.....	8
SECTION 6 - SAFETY HAND RAILS.....	8
SECTION 7 - WORK INSPECTION LIGHTS.....	9
SECTION 8 - FIRE EXTINGUISHER.....	9
SECTION 9 - WARNING LIGHT BEACON.....	10
SECTION 10 - BATTERY SWITCH.....	10
SECTION 11 - OPERATION.....	10
SECTION 12 - REFILLING.....	12
SECTION 13 - COMPRESSOR.....	13
SECTION 14 - ADDITIONAL FEATURES.....	13
SECTION 15 - REVERSING CAMERA.....	15
SECTION 16 - MAINTENANCE INFORMATION.....	15
SECTION 17 - WARRANTY INFORMATION AND CLAIM FORM.....	16

SECTION 1 - FOREWORDS

This Operations Manual outlines and explains the operation of the Diesel Truck Module. This manual is designed to provide you with the information required as a guide for the safe and effective operation of this product.

It is important that you take the time to read this manual and familiarise yourself with the safety warnings and notices enclosed. It is your responsibility to ensure that these warnings and notices are adhered to during operation of this product. Failure to do so may result in harm or injury to personnel and/or damage to the product.

This manual covers a broad range of product models; there may be certain aspects of your product which, due to additional options, may not be specifically covered within this manual. Alternatively some options included in this manual may not be fitted to your product.

This manual is to be used in conjunction with other operation manuals specific to components fitted to this product and the vehicle the product is mounted on. These additional operation manuals are referenced where applicable. It is important that all operation manuals supplied with this product are kept together and stored in the vehicle for reference as required.

All information and advice in this manual was current at the time of printing. However, because of ORH Truck Solutions policy of continual product improvement, ORH Truck Solutions reserves the right to make changes without notice. ORH Truck Solutions may void any applicable warranties if any modifications are made to the product without prior approval from ORH Truck Solutions .

If you require any additional information on the safe and effective operation of this product please contact ORH Truck Solutions on (08) 9250 2250.

SECTION 2 - DIESEL TRUCK OVERVIEW



DRIVER SIDE



PASSENGER SIDE



REAR VIEW

SECTION 3 - WARNING SYMBOLS & SAFETY PRECAUTIONS



This Warning/Caution symbol is used throughout this manual to alert the user that the associated task or operation may have risks and dangers associated depending on the application. Where shown the symbol will include comments to be used as a guide to reduce operational risk. Each task will have its own unique risks and the user must ensure that these risks are identified and adequate controls implemented to reduce the risk to an acceptable level wherever practicable.



This symbol is used on the module to highlight the risk of suffocation of entering tanks. The interior of the tanks are classed as **Confined Spaces** and entering the tank, could lead to serious injury or death. If work must be conducted inside the tank all persons must hold the relevant Confined Spaces certification.



This symbol indicates that correct lifting equipment should be attached to the module if the module is to be lifted from the vehicle. Ensure the correct lifting equipment is used including spreader bars. Failure to use the correct lifting equipment and/or attaching at points other than those designed for the task may result in injury or damage to the module. Consult ORH Truck Solutions if further information is required on the correct lifting method.



This symbol is used on the module to highlight the location of the fitted fire extinguisher.

**SHADED
BACK-
GROUND**

Where text is shown with a shaded background it is used to draw to the user's attention special points of interest. These may include tips to assist in the effective and efficient operation of the module or to ensure correct care and maintenance practices are applied to extend the operational life of the module.

WARNING



It is the operator's responsibility to ensure the water tank is within road legal limits and does not exceed the manufacturers GVM mass. It is important that the tank is not overfilled for on-highway use. Check legal weight over weigh-bridge and take off TARE weight off GVM to work out the load the truck can legally carry for highway use. Your TARE weight will be stated on the registration form.

GVM - TARE = LOAD WEIGHT.
1000L = 1 metric TONNE

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⚠ The following safety precautions should be used as a general guide whilst operating the ORH Diesel Module. These are basic safety precautions remembering that each situation may have its own unique safety precautions to be adhered too. Ensure all hazards are first identified, and the appropriate control measures are adopted before use.

- Before operating the Diesel Module, the truck should be parked on stable even ground with the park brake applied.
- Do not smoke whilst operating or within close proximity to the diesel module.
- Do not wear loose or torn clothing while operating the diesel module.
- All equipment should be maintained in good working order at all times.
- Always operate in a well ventilated area.
- Keep the diesel module in a clean and tidy state at all times.
- Never point a control valve at any portion of your body or another person.
- Eye protection must always be worn when operating the diesel module.
- All ignition sources should be kept clear of the diesel module.

SECTION 4 - VEHICLE ROLL OVER PROTECTIVE STRUCTURE

This vehicle is fitted with a Roll Over Protective Structure (ROPS).

THE ROPS IS A CERTIFIED STRUCTURE DESIGNED TO PROTECT THE OCCUPANTS OF THE VEHICLE IN THE EVENT OF A VEHICLE ROLL OVER.

⚠ DO NOT modify the ROPS in any way. This includes but is not limited to drilling, welding, cutting or grinding. Doing so may affect the integral structure of the ROPS and may result in harm or injury to personnel in the event of an accident.

In the event of accidental damage, the ROPS must be structurally inspected by a certified engineer.

⚠ Each ROPS have their own identification tag. The ID tag is located on the drivers side of the ROPS.




SECTION 5 - ACCESS LADDER

The module is fitted with an access ladder which is positioned to the rear of the vehicle as shown. The ladder is used to safely access the top of the module to fill the diesel tank using a cam lock type filler and to perform maintenance. The top of the module should only be accessed using the ladder.

A collapsible step is fitted to the rear tray.

 Ensure hands and body parts are kept clear of pinch points.

 **DO NOT** operate the vehicle with the collapsible step in the down position as this may result in damage to the step or module.

Whilst accessing and the module via the Ladder:

- Maintain three points of contact and face the vehicle / ladder at all times.
- Ensure the ladder steps are clean and in good condition.
- Do not jump off the machine or ladder steps.



SECTION 6 - SAFETY HANDRAILS

The Diesel module water is fitted with safety hand rails to prevent accidental falls whilst accessing the top of the diesel tank.

Ensure you remain within the boundaries of the hand rails at all times whilst accessing the top of the module diesel tank.

YOUR MODULE MAY HAVE BEEN TRANSPORTED WITH THE HAND RAILS IN THE TRANSPORT / SHIPPING POSITION. IF SO, THE HAND RAILS MUST BE ASSEMBLED AND SECURED IN THE CORRECT POSITION PRIOR TO OPERATING THE DIESEL TRUCK. A SAFETY HARNESS WITH SECURED LANYARD MUST BE USED WHILST ASSEMBLING THE HAND RAILS INTO THE OPERATIONAL POSITION.

SECTION 7 - WORK INSPECTION LIGHTS

The module is fitted with Four (4) work/inspection lights. They are mounted one (1) at each of the four corners of the roof top. There is also one (1) rear reversing light (optional extra). The mountings can be positioned so to provide adequate work are lighting whilst the vehicle is stationary.

The lights are turned on and off with rocker switches located in the operator's cabin of the vehicle. These are located to the lower left and right of the vehicle instrument cluster.

⚠ DO NOT operate (drive) the vehicle with the lights on, this will interfere with the vision of other drivers which may lead to an accident.

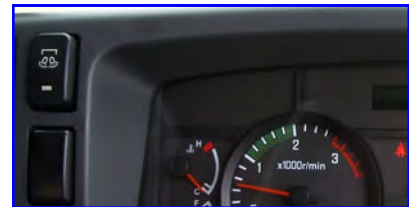
ADJUST THE WORK LIGHTS TO ENSURE YOUR WORKSPACE IS WELL LIT WHILST THE VEHICLE IS STATIONARY DURING FILL AND DRAIN FUNCTIONS.



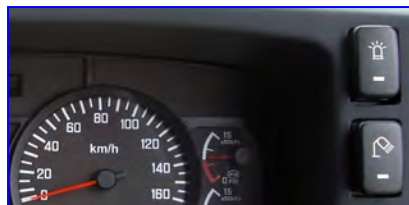
LEFT HAND ROOF TOP
WORK LIGHT



WORK / INSPECTION LIGHT
SWITCHES
LOCATED TO THE LEFT AND
RIGHT OF THE INSTRUMENT



WORK / INSPECTION LIGHT SWITCH
LOCATED TO THE LEFT OF THE
INSTRUMENT CLUSTER. TOP SWITCH
OPERATES THE REEL CABINET LIGHTS.



WORK / INSPECTION LIGHT SWITCHES
LOCATED TO THE RIGHT OF THE
INSTRUMENT CLUSTER. TOP SWITCH
OPERATES THE BEACON LIGHT,
LOWER SWITCH OPERATES THE
WORK LIGHTS.

SECTION 8 - FIRE EXTINGUISHER

The diesel module is fitted with two (2) dry chemical powder type fire extinguishers located at the right hand front of the module on the ROP and rear left hand side of the diesel module (behind the grease pod).



FIRE EXTINGUISHER LOCATED
AT THE REAR LEFT HAND
CORNER OF THE MODULE

SECTION 9 - WARNING LIGHT BEACON

The 14000L Diesel truck is fitted with two (2) amber strobe warning light / beacon located middle of the ROPS as well as the rear right hand side of the module. The warning light / beacon is turned on and off with a switch located on the right hand side of the vehicle cabin instrument cluster.

⚠ DO NOT operate the warning light /beacon when travelling on public roads.



AMBER STROBE WARNING LIGHT / BEACON FITTED TO THE TOP REAR OF THE MODULE AND MIDDLE OF ROPS



BEACON SWITCH LOCATED TO THE RIGHT OF THE VEHICLE CABIN INSTRUMENT CLUSTER

SECTION 10 - BATTERY ISOLATOR SWITCH

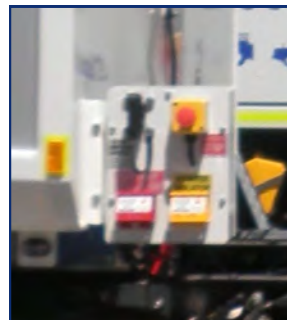
The vehicle is fitted with a battery isolation switch to prevent accidental starting of the vehicle during maintenance and pre-start inspections. The switch is located on the control panel at the front right hand side of the module. Rotate the switch to the left (anti clockwise) to place the switch in the "OFF" position and isolate the vehicle battery supply. Rotate the switch to the right (clockwise) to place the switch in the "ON" position, supplying battery power to the vehicle.

⚠ DO NOT conduct electric arc welding and/or repairs on the vehicle whilst the battery isolation switch is in the "ON" position. Damage to the vehicle will result.

IN THE "OFF" POSITION THE SWITCH CAN BE MECHANICALLY LOCKED USING AN ISOLATION HASP OR PADLOCK.



BATTERY ISOLATION SWITCH



BATTERY ISOLATION SWITCH LOCATED ON THE CONTROL PANEL AT THE FRONT RIGHT HAND SIDE OF THE MODULE

SECTION 11 - OPERATION

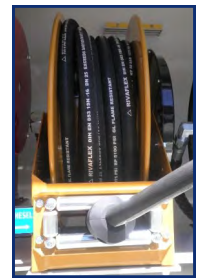
Open the reel locker located on the right hand side of the module. In this locker there is a range of pneumatic driven reels containing fuel and greases. Select the product to be used and turn on the corresponding ball valve located on the right hand side of the reel locker. Uncoil the hose reel to the desired length. It can be locked by means of the latch mechanism which is a clicking noise heard after each half revolution of the drum.

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By gently pulling the hose until the clicking noise has stopped, the latch is released and the hose is automatically recoiled.



RANGE OF BALL VALVES



DAILY DRAINING OF THE MOISTURE TRAP AT THE BOTTOM OF THE BALL VALVE MANIFOLD WILL AID IN THE OVERALL SERVICE LIFE OF THE PNEUMATIC SYSTEM

ORH Truck Solutions Pty Ltd uses a range of quality reels and control valves in all models of the Diesel Module that marry up to provide the best combination for each application.

A remote display unit is fitted to the fast flow fuel reel for convenient monitoring of the product flow, set to 75 PSI and has a flow rate of 105 litres/min.

The light vehicle fuel reel has a diesel regulator to prevent foaming of the diesel. This is set to 20 PSI and has a flow rate of 40 litres/min.



HOLD THE DELIVERY HOSE SECURELY UNTIL THE REEL IS SECURELY LATCHED OR FULLY RETRACTED. UNCONTROLLED RETRACTION CAN RESULT IN PERSONAL INJURY. NEVER LET GO OF THE HOSE WHILE REWINDING.

FOR FURTHER INSTRUCTIONS ON THE OPERATION OF THE REMOTE DISPLAY UNIT, REFER TO THE OPERATOR'S MANUAL SUPPLIED.

CONTROL VALVE OPERATION

Each individual Control Valve has its own unique set of operating instructions. Refer to the Operators Manuals supplied for these instructions.

Never point a Control Valve at any portion of your body or another person. Lubricant discharged at high velocity can penetrate the skin and cause severe injury. Should any fluid appear to puncture the skin, seek medical care immediately.



FAST FLOW CONTROL



FUEL CONTROL VALVE

SECTION 12 - REFILLING

There are sight glass tank level indicators at points on both sides of the Diesel Module. These are in the form of high, half and low level indicators.

The diesel tank can be filled from two (2) different locations on the Module:

- Convenient filling point through the manifold with Quick Lock fitting inside the reel locker on the left hand side.
- Roof top fill point through Cam Lock fitting. These filling points are fitted with breathers.
- The roof top filling point is accessed via the rear ladder of the module. The safety warning steps outlined should be adhered to while traversing these steps.



SIGHT GLASS LEVEL INDICATOR



REEL LOCKER MANIFOLD
FILL POINT



ROOF TOP FILL POINT

The 180L grease pod installed at the rear of the module has its own separate quick lock fill point at the base of the pod.



SECTION 13 - COMPRESSOR

The compressor unit is started via a key operation, located on the front panel of the unit.

1. Open the ball valve to begin air flow to the variable air regulator with moisture trap. An auxiliary ball valve air supply is also included.
2. The variable air regulator is fitted with an adjustable valve for setting the air pressure required and a moisture trap for capture and removal of moisture through the moisture trap drain valve. The regulator is situated on the right hand side wall of the reel cabinet.



ENSURE TRUCK IS PARKED UP ON STABLE EVEN GROUND WITH PARK BRAKE APPLIED.

FOR FURTHER INSTRUCTIONS ON THE OPERATION OF THE COMPRESSOR UNIT INSTALLED, REFER TO THE OPERATOR'S MANUAL FOR THAT COMPRESSOR.

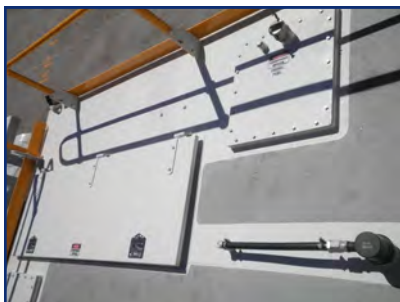
SECTION 14 - ADDITIONAL FEATURES

An access hatch has been built into the roof of the reel locker. The hatch can be accessed via the steps onto the roof of the pod. This feature has been added to gain access to the various pumps and hoses installed in the rear of the reel locker, for such tasks as maintenance and cleaning.

To open the hatch:

Lift the two (2) T handles. Turn both T handles $\frac{1}{4}$ turn to left. Pull up to open.

Inside the hatch are three (3) steps leading into the pump chamber.



TOP ACCESS HATCH FOR HOSE
REEL LOCKER



T HANDLE



INSIDE THE HATCH

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Three (3) storage lockers are built into the front left hand side of the module.



An Oil filter recovery box is located under the rear tray on the passenger side.



A Tool box complete with spill kit is located under the rear tray on the drivers side.



A 160L Water container is located below drivers side of the reel cabinet in front of the mudguard. A set of wheel chocks is located under the rear tray on the rear of the drivers side mudguard.



SECTION 15 - REVERSING CAMERA

The Diesel Module is fitted with a reversing camera to assist with rear vision whilst reversing.

⚠ The reversing camera is provided as an aid only to assist the operator and should not be relied upon in ensuring the path to be taken is free of obstacles or pedestrians.

The reversing camera is located at the top rear of the Diesel module below the amber strobe warning light / beacon. The reversing camera screen is mounted on the dash board of the vehicle cabin. Consult the reversing camera operation manual for correct operation.

⚠ Ensure the camera lens is kept clean at all times. Dirt on the camera lens will result in poor picture quality.

⚠ DO NOT apply high pressure or hot water to the camera as this may damage the camera.

The Reversing Camera and Screen contain sensitive electronic components.

⚠ DO NOT use electronic devices or devices with magnetic fields in close proximity.



REVERSING CAMERA LOCATED AT THE TOP REAR OF THE MODULE BELOW THE AMBER STROBE WARNING LIGHT / BEACON



REVERSING CAMERA SCREEN LOCATED ON TOP OF THE VEHICLE CABIN DASH BOARD

CHECK ALL FLUID LEVELS OF THE TANKS AND IN THE ENGINE COMPARTMENT OF THE TRUCK BEFORE USE, VIA THE SIGHT GLASSES OR DIP STICKS, ALSO CHECK FOR LEAKS PRIOR TO USE.

SECTION 16 - MAINTENANCE INFORMATION

Drain air tanks daily to avoid moisture in air lines, air switches and brake system. Increased wear and tear will occur.

Thank you for your support in purchasing our product. Please do not hesitate to contact ORH Truck Solutions Pty Ltd for any further requirements.



SECTION 17 - WARRANTY INFORMATION

WARRANTY

ORH Truck Solutions Pty Ltd warrants their parts against defects in material or workmanship for a period of 12 months.

This warranty is limited to the repair or replacement of defective items. To receive warranty consideration all defective parts must be returned to ORH Truck Solutions for inspection along with the completed Warranty Claim form. Replacement items will be supplied upon receipt of a purchase order and invoiced to the client at the time of sending. Upon receipt of the faulty item, be inspected by ourselves or the relevant supplier. If the warranty claim is successful a full credit will be issued, if refused payment will be required as per our terms of sale.

ORH Truck Solutions reserves the right to inspect all defective items prior to any warranty considerations being issued. This warranty will not cover failures due to neglect, improper use, improper maintenance, accidental damage or operator abuse. Hydraulic pumps, PTO's, compressors and special equipment manufactured by others, is covered by the warranty of these manufacturers.

Individual truck chassis' are covered by their manufacturers warranty. Please refer to your truck manual for details. ORH Truck Solutions will facilitate repairs through the relevant dealership if required.

ORH Truck Solutions will not be held liable for special, commercial, consequential or any damages, expenses or legal fees with respect to the sale of the said equipment, or its use, or operation.

PROCEDURE TO CLAIM

Please contact: ORH Truck Solutions if you find you have a faulty issue

Phone: (08) 9250 2250 or email glandrum@orh.net.au

Please provide: Parts details, Vin # of trucks, date of purchase & complete the Warranty Claim form



WARRANTY CLAIM/RETURN FORM
CLAIM NUMBER – _____

DATE: _____

CUSTOMER DETAILS:

CUSTOMER PO # _____

NAME: _____

ADDRESS: _____

PHONE: _____ EMAIL ADDRESS: _____

TRUCK DETAILS

MAKE: _____ MODEL: _____ VIN # _____

PLEASE SUPPLY FAULT DETAILS & ANY CORRECTIVE ACTION TAKEN TO RECTIFY THE ISSUE

RETURN INSTRUCTIONS

1. Complete form and email to glandrum@orh.net.au
2. PO for replacement part required prior to despatch.
3. Goods will be assessed upon receipt and outcome advised.
4. If the item is deemed not to be warranty, you as the customer accept that the invoice for the replacement part is due and payable.

RETURN ITEMS TO:

**ORH TRUCK SOLUTIONS PTY LTD
ATTN: GRAHAM LANDRUM
1 CENTRAL AVENUE
HAZELMERE WA 6055**

CLEARLY MARK PACKAGES WITH THE CLAIM #

CUSTOMER DECLARATION:

I declare the above information is true and correct and accept ORH Truck Solutions Terms & Conditions

NAME _____ SIGNATURE _____ DATE _____
PLEASE PRINT NAME CLEARLY

**PLEASE ENSURE THAT ALL INFORMATION IS COMPLETED IN FULL SO AS NOT TO HOLD UP THE WARRANTY PROCESS
– FAILURE TO PROVIDE ALL RELEVANT INFORMATION MAY RESULT IN THE VOIDING OF THE CLAIM**

ORH OFFICE USE ONLY

<u>PARTS RETURNED</u>	YES NO	<u>SUPPLIERS RETURN AUTHORITY #</u>	_____
<u>SUPPLIER REPORT RECEIVED</u>	YES NO	<u>CLAIM APPROVED</u>	YES NO
<u>REASON FOR REJECTION</u>	_____		
<u>DATE CLAIM CLOSED</u>	_____		

ORH



(HEAD OFFICE & SHOWROOM)

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