

Product: 2010 TEREX TS14G Tier3 Motor Scraper Operator Workshop Manual[OHE913]

Full Download: <https://www.aresairmanual.com/downloads/2010-terex-ts14g-tier3-dump-truck-operator-workshop-manualohe913/>



TEREX Equipment Limited Operator Handbook

Operator Handbook TS14G Tier3



Sample of manual. Download All 140 pages at:
<https://www.aresairmanual.com/downloads/2010-terex-ts14g-tier3-dump-truck-operator-workshop-manualohe913/>

15365546
OHE913

Original Operating Instructions

Product: 2010 TEREX TS14G Tier3 Motor Scraper Operator Workshop Manual[OHE913]
Full Download: <https://www.arepairmanual.com/downloads/2010-terex-ts14g-tier3-dump-truck-operator-workshop-manualohe913/>

This Page is Intentionally Left Blank



TEREX Equipment Limited Operator Handbook Re-order

Issued by;
Customer Support Department
Terex Equipment Limited
Newhouse Industrial Estate
Motherwell, ML1 5RY
Scotland

Tel; +44 (0) 1698 732121
Fax; +44 (0) 1698 503210

<http://constructionsupport.terex.com>
www.terex.com

OHE913
Re-order Part Number
15503546

This controlled document is the original instruction
and should remain with the vehicle at all times.

Revision: November 2010

Dealer:

Operator Handbook
TS14GTier3

15503546
OHE913

This Page is Intentionally Left Blank



TEREX Equipment Limited Operator Handbook - Introduction

For further information on the subject matter detailed within this operator handbook, please refer to Terex Equipment Limited Service Manuals and Product Parts Books.

Alternatively, please contact;

Customer Support Department
Terex Equipment Limited
Newhouse Industrial Estate
Motherwell, ML1 5RY

Tel; +44 (0) 1698 732121
Fax; +44 (0) 1698 503210

<http://constuctionsupport.terex.com>

www.terex.com

The illustrations, technical information, data and descriptive text in this manual, to the best of our knowledge, were correct at the time of print. The right to change specifications, equipment and maintenance instructions at any time without notice, is reserved as part of the Terex Equipment Limited policy of continuous development and improvement of the product.

No part of this publication may be reproduced, transmitted in any form - electronic, mechanical, photocopying, recording, translating or by any other means without prior permission of Customer Support Department - Terex Equipment Limited.

Please refer to TEREX Specification Sheets or consult Factory Representatives to ensure that information is current.

Operator Handbook
TS14GTier3

15503546
OHE913

This Page is Intentionally Left Blank

**ONLY TRAINED COMPETENT PERSONNEL
SHOULD BE ALLOWED TO OPERATE THIS
VEHICLE**

The operator is responsible and must be familiar with the contents of the Operator's Handbook and any Local / National regulations prior to operating this vehicle.

This Page is Intentionally Left Blank

CALIFORNIA
Proposition 65 Warnings

WARNING: Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**

SPARE PARTS STATEMENT

When carrying out repairs, alterations or fitting attachments, it is important that only genuine spare parts are used to ensure the operating safety of the machine is not impaired.

It is only by using genuine parts that the technical requirements stipulated by the manufacturer can be maintained.

If a General Operating Approval is issued for this machine, it may be considered null and void if non-genuine parts are used.



EC DECLARATION OF CONFORMITY

| | |
|--|---|
| MANUFACTURERS NAME AND FULL ADDRESS: | |
| Terex Equipment Limited, Newhouse Industrial Estate, Motherwell, Scotland. ML1 5RY | |
| PERSON AUTHORISED TO COMPILE TECHNICAL FILE | DIRECTIVES COMPLIED WITH: |
| Name: Alan Clark, Address: Newhouse Industrial Estate, Motherwell, Scotland. ML1 5RY | 2000/14/EC 2004/108/EC 2006/42/EC |
| DESCRIPTION OF MACHINERY: | |
| MAKE: | TEREX |
| MODEL/DESIGNATION: | TS14G Scraper |
| INSPECTOR: | |
| UNIT SERIAL NUMBER: | |
| WE DECLARE THAT THE ABOVE MACHINERY FULFILLS ALL THE RELEVANT PROVISIONS OF THE ABOVE DIRECTIVES | |
| FULL QUALITY ASSURANCE (Annex X): | CERTIFICATE NUMBER: |
| L.R.Q.A. Ltd., Hiramford, Middlemarch Office Village, Siskin Drive, Coventry. CV3 4FJ. England | LRQ 0925301/A |
| | DATE OF MANUFACTURE: |
| FOR AND ON BEHALF OF THE MANUFACTURER: | SIGNATURE: |
| NAME: Alan Clark |  |
| POSITION: Head of Engineering | |
| PLACE: Motherwell, Scotland | DATE: |

SPARE PARTS STATEMENT

When carrying out repairs, alterations or fitting attachments, it is important that only genuine spare parts are used to ensure the operating safety of the machine is not impaired.

It is only by using genuine parts that the technical requirements stipulated by the manufacturer can be maintained.

If a General Operating Approval is issued for this machine, it may be considered null and void if non-genuine parts are used.



EC DECLARATION OF CONFORMITY

| | |
|--|---|
| MANUFACTURERS NAME AND FULL ADDRESS: | |
| Terex Equipment Limited, Newhouse Industrial Estate, Motherwell, Scotland. ML1 5RY | |
| PERSON AUTHORISED TO COMPILE TECHNICAL FILE | DIRECTIVES COMPLIED WITH: |
| Name: Alan Clark, Address: Newhouse Industrial Estate, Motherwell, Scotland. ML1 5RY | 2000/14/EC 2004/108/EC 2006/42/EC |
| DESCRIPTION OF MACHINERY: | |
| MAKE: | TEREX |
| MODEL/DESIGNATION: | TS14G Scraper |
| INSPECTOR: | |
| UNIT SERIAL NUMBER: | |
| WE DECLARE THAT THE ABOVE MACHINERY FULFILLS ALL THE RELEVANT PROVISIONS OF THE ABOVE DIRECTIVES | |
| FULL QUALITY ASSURANCE (Annex X): | CERTIFICATE NUMBER: |
| L.R.Q.A. Ltd., Hiramford, Middlemarch Office Village, Siskin Drive, Coventry. CV3 4FJ. England | LRQ 0925301/A |
| | DATE OF MANUFACTURE: |
| FOR AND ON BEHALF OF THE MANUFACTURER: | SIGNATURE: |
| NAME: Alan Clark |  |
| POSITION: Head of Engineering | |
| PLACE: Motherwell, Scotland | DATE: |

SPARE PARTS STATEMENT

When carrying out repairs, alterations or fitting attachments, it is important that only genuine spare parts are used to ensure the operating safety of the machine is not impaired.

It is only by using genuine parts that the technical requirements stipulated by the manufacturer can be maintained.

If a General Operating Approval is issued for this machine, it may be considered null and void if non-genuine parts are used.

CONTENTS

| | |
|-----------------------------------|------------|
| 1 INTRODUCTION | 1-1 |
| Safety Alert Symbol | 1-1 |
| Hazard Classification | 1-1 |
| Intended Use of Machine | 1-2 |
| Machine Identification | 1-3 |
| Theft Deterrent Practises | 1-4 |
| 2 SAFETY | 2-3 |
| Safety Precautions | 2-4 |
| General | 2-4 |
| Twin Hitch Safety Precautions | 2-5 |
| Preventing Fire Hazards | 2-6 |
| Mounting and Dismounting | 2-7 |
| Pre-Starting | 2-8 |
| Starting | 2-8 |
| Operating | 2-8 |
| Rooding | 2-9 |
| Lubrication and Servicing | 2-10 |
| Wheels And Tyres | 2-12 |
| Avoid Tyre Explosion Hazard | 2-13 |
| Decals And Instruction Plates | 2-14 |
| 3 CONTROLS AND INSTRUMENTS | 3-3 |
| Basic Data | 3-4 |
| Warning Lights | 3-4 |
| Instruments | 3-7 |
| Switches | 3-8 |
| Controls | 3-11 |
| Heater | 3-11 |
| Air Conditioner | 3-11 |
| Operator's Seat Air Suspension | 3-13 |
| Seat Belt | 3-14 |
| Machine Controls | 3-15 |
| Braking | 3-15 |
| Service Brake | 3-15 |
| Park/Emergency Brake | 3-15 |
| Engine | 3-16 |
| Electronic Foot Pedals | 3-16 |
| Quantum Electronic Fuel System | 3-16 |
| Steering | 3-24 |
| Transmission | 3-25 |
| General Theory of Operation | 3-25 |
| System Components | 3-26 |
| Description and Operation | 3-26 |
| General Transmission Operation | 3-28 |
| Hydraulic System Controls | 3-28 |
| 4 OPERATING THE SCRAPER | 4-3 |
| Pre-Starting Inspection | 4-3 |
| Components Check- Tractor | 4-4 |
| Component Check- Scraper | 4-6 |
| Engine Operation | 4-8 |
| Starting the Engine | 4-9 |
| Tractor Engine | 4-9 |
| Scraper Engine | 4-11 |

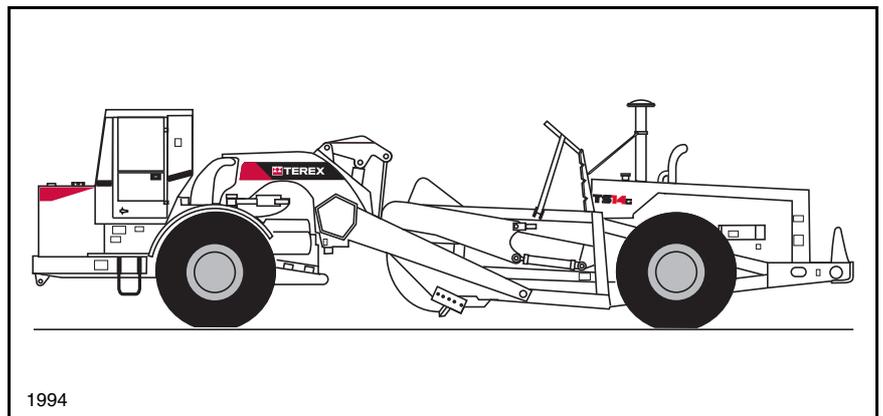
This Page is Intentionally Left Blank

| | |
|--|-------------|
| OPERATING THE SCRAPER (CONTINUED) | |
| Starting the Engine With Jumper Cables | 4-13 |
| Pre-Operating Checks | 4-14 |
| Brake Function Checks | 4-15 |
| Service Brake Holding Ability Check | 4-15 |
| Emergency Brake Holding Ability Check | 4-15 |
| Driving And Stopping | 4-16 |
| Stopping the Engine | 4-18 |
| Parking | 4-19 |
| 5 WORKING THE SCRAPER | 5-3 |
| Standard Functions | 5-3 |
| Loading | 5-4 |
| Self Loading | 5-4 |
| Push Loading | 5-5 |
| Hauling | 5-6 |
| Spreading | 5-6 |
| Returning to the Cut | 5-7 |
| Working Special Materials | 5-8 |
| Blade Arrangements | 5-10 |
| Twin Hitch Loading (Optional Attachment) | 5-11 |
| Types of Cut | 5-13 |
| Types of Fills | 5-14 |
| Finishing and Grading | 5-14 |
| 6 ROADING | 6-3 |
| General | 6-3 |
| Preparation Prior to Roading | 6-3 |
| Lubrication | 6-3 |
| In Case of Trouble | 6-4 |
| 7 MOVING DISABLED SCRAPER | 7-3 |
| 8 LUBRICATION AND SERVICING | 8-3 |
| Safety Precautions | 8-3 |
| Lubrications and Servicing | 8-4 |
| Remote Lubrication Points | 8-7 |
| Miscellaneous Servicing | 8-8 |
| Engines and Transmission | 8-9 |
| Remote Lubrication Points | 8-14 |
| 9 TECHNICAL DATA TS14G TIER3 | 9-3 |
| TS14G Technical Data | 9-3 |
| 10 SYMBOL IDENTIFICATION | 10-3 |

This Page is Intentionally Left Blank

INTRODUCTION

The Terex Scrapers are the heavy duty with full floating axles, single reduction bevel gear differential and planetary reduction in each wheel. A No spin differential is standard in the rear axle for improved traction in difficult conditions. The machine is equipped with the new power- down apron for positive closing and precision ejection. There are seven speed electronically controlled transmissions with sequential “bump” shift for smooth, low effort changes. The Heaped capacity of the machine is 20 yd³ (15.3 m³), and Payload is 24 US ton (21800 Kg).



This Handbook is provided as a guide to familiarize the operator and serviceman with the controls, recommended inspections, start-up, operating, shutdown and parking procedures for TS14G Scraper. It is essential that operators read and understand the manual before operating the machine.



Safety Alert Symbol

The safety alert symbol is used to alert you to a potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

Hazard Classification

A multi-tier hazard classification system is used to communicate potential personal injury hazards. The following signal words used with the safety alert symbol indicate a specific level of severity of the potential hazard. Signal words used without the safety alert symbol relate to property damage and protection only. All are used as attention getting devices throughout this manual as well as well as on decals and labels fixed to the machinery to assist in potential hazard recognition and prevention.

Introduction

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



CAUTION

Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



INTENDED USE OF MACHINE

This product and its approved attachments are designed to perform the following functions.

1. Loading
2. Hauling
3. Spreading



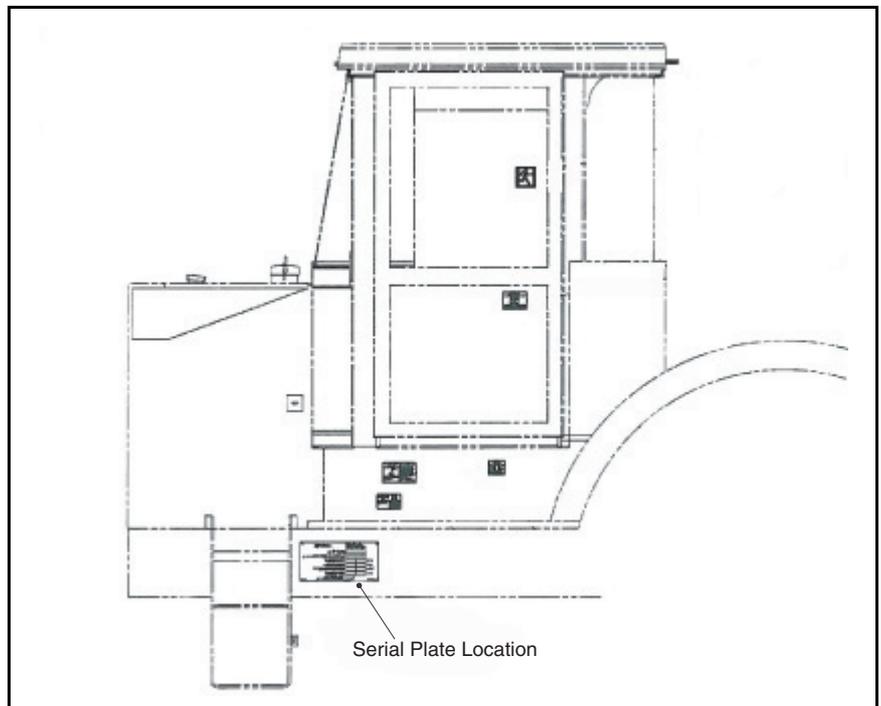
USE OTHER THAN INTENDED

Any use other than that stated in “Intended use” shall be considered impermissible.

The manufacturer shall not be held liable for any resulting damage. The risk is borne by the user alone.

Machine Identification

Information regarding the machine model, code and chassis serial number is found on the unit serial number plate on the rear right of the front frame. The machine model and serial number should always be referenced in any correspondence with your dealer or factory.



While reading this handbook you will notice references to controls and equipment which may not be found on all machines. It is important that you know your machine and its equipment and how to operate it properly.

There is a dealer serving every part of the world where these products are sold. Your dealer is ready to provide you with any additional information needed and should be consulted for additional publications for this machine.



WARNING

SPARE PARTS

When carrying out repairs, alterations or fitting attachments, it is important that only genuine spare parts are used to ensure the operating safety of the machine is not impaired.

It is only by using genuine parts that the technical requirements stipulated by the manufacturer can be maintained.

If a General Operating Approval is issued for this machine, it may be considered null and void if non-genuine parts are used.

Introduction

THEFT DETERRENT PRACTICES

General

The owner/operator should take the following precautions to discourage theft, to aid in the recovery in the event that the machine is stolen, or to reduce vandalism.

Actions to Discourage Theft and Vandalism

Remove all keys any time the machine is left unattended.

At night lock all doors and attach, secure or lock all anti-vandalism and anti-theft devices on the machine.

Immobilize the machine by removing a critical electrical or starting system device.

Upon receipt of a machine, record the machine serial number and the serial numbers of all major components and attachments. Keep this list up to date and filed in a safe location for fast retrieval.

Place a decal or notice on the machine that all serial numbers are recorded.

Discourage the thief! Inspect the gates and fences of the machinery storage yard or construction site. Keep machines in well-lit areas and ask the local law enforcement authorities to make frequent checks around the storage yard or work site.

Establish liaison with neighbours and ask them to watch equipment left at job sites and to report any suspicious activities to the local law enforcement authorities.

Make frequent inventories of machines to promptly detect losses or vandalism.

Actions to Aid in Recovery of Stolen Machines

In the event of theft, immediately notify the law enforcement authorities having jurisdiction. Provide the investigating officer with name, type of equipment, chassis and serial numbers of major attachments and components. It is helpful to show the investigating officer an Operator's Handbook, photographs, and advertising, to familiarize him with the appearance of the machine.

Report the theft to the insurance company. Provide the model and all serial numbers.

Report the model and serial numbers of the stolen machine to a dealer handling the respective line of equipment. Request that the dealer forward this same information to the equipment manufacturer.



2 - Safety

This Page is Intentionally Left Blank

SAFETY

The machine should be properly operated and maintained to keep it in safe, efficient operating condition. Be sure that all controls are free of mud, grease, or other matter that might cause slips hazardous to the operator, serviceman, or other personnel or equipment. Report all malfunctions to those responsible for maintenance, and, do not operate the equipment until corrected. Normal service or maintenance performed as required can prevent unexpected and unnecessary downtime.

This Handbook describes general inspections, servicing and operation with the normal safety precautions required for normal servicing and operating conditions. It is not a guide however, for other than normal conditions or situations, and therefore, servicemen and operators must be safety conscious and alert to recognize potential servicing or operating safety hazards at all times, and take, necessary precautions to assure safe servicing and operation of the machine.



These machines are equipped with cylinders containing compressed nitrogen gas. Transportation of these machines by any method may require a special permit from the appropriate authority of the country involved. Consult your dealer for details.

All information, illustrations and specifications contained in this publication are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice.

Continuing improvement and advancement of the design may cause changes to your machine which may not be included in this publication. Each publication is reviewed and revised, as required, to update and include these changes in later editions.

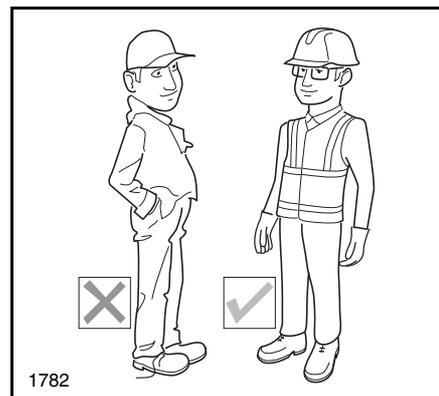
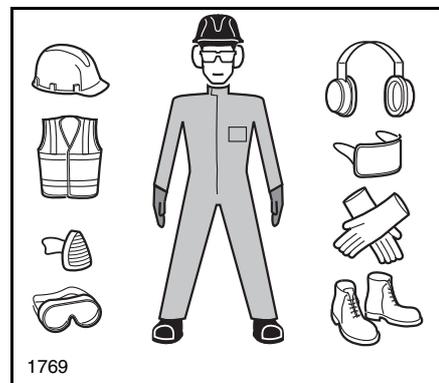
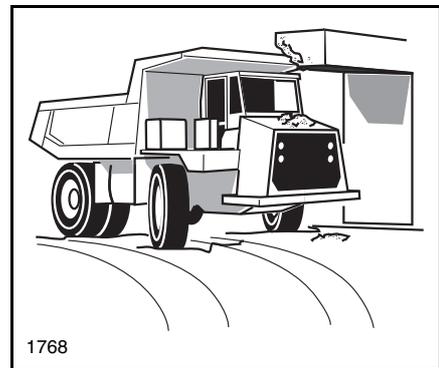
This Handbook contains lubrication and routine servicing instructions, most of which can be performed in the field. Maintenance manuals containing repair/ rebuild procedures can be obtained from your dealer.

Safety

SAFETY PRECAUTIONS

General

- Read this Operator's Handbook and learn the operating characteristics and limitations of the vehicle. Know what operating clearances the vehicle requires.
- Read and understand all the safety signs prior to operation.
- If the safety signs are obstructed by dirt or debris, clean them using mild soap and water prior to operation.
- If the safety signs are damaged or illegible, replace them immediately, prior to operation.
- Read the AEM Safety Manual and follow the recommended safety precautions.
- Know clearances of all side and overhead obstructions such as wires, bridges, etc., for operating safely.
- Be especially aware of overhead power lines.
- Always know all traffic rules, signs, flags and hand signals used on the job and know who has the responsibility for signalling.
- Be aware of operating hazards that weather changes can create on the job. Know proper procedures to follow when a severe rain or electrical storm strikes.
- Never attempt to operate or work on a vehicle when not feeling physically fit.
- Know what safety equipment is required and use it. Such equipment may be: Hard hat, safety glasses, reflector type vests, respirators and ear plugs.
- Never wear loose clothing, rings, watches, heavy gloves etc., that might catch levers and controls and cause loss of control.
- Keep hands and controls free from water, grease and mud to assure nonslip control.
- Handle fuels and lubricants carefully and clean up spills to avoid fire and slipping hazards.
- Clean any mud, grease or oil from controls, handrails, ladders and decks. Lash necessary tools securely and remove all loose items before operating the vehicle. Never rush. Walk, do not run.
- Never carry more than one passenger and only in the passenger seat.



The protection offered by the roll over and falling object protective structure may be impaired if it has been subjected to any modification or damage. Unauthorized modification will void certification.

Twin Hitch Safety Precautions

- Do not operate the machine with the bail down, except when coupled to another machine, as this results in a dozing action, bending the bail and causing unnecessary damage to hitch assembly and machine.
- Never park or leave the machine with the bail in the raised position. Bail can be dropped by accidental control lever movement, or loss of cylinder air pressure, and could be dangerous to any personnel in the area of the bail. If the machine is being parked for an extended period of time, or being serviced with the air supply (engine) shut off, the bail, if left in the raised position, will eventually drop to the lowered position of its own weight. Always lower the bail when dismounting the machine for any reason.

NOTICE

Holes are provided in the side plates of the push plate assembly for propping the bail in the raised position with a pin, for servicing procedures.

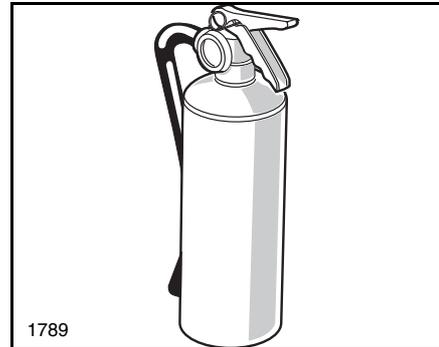
- Twin hitch scrapers are designed to operate in pairs of the same size and type. Twin hitch operations with unequal size scrapers, three or more scrapers in train or push tractor assistance could seriously impair the service life of the machines.
- Never turn the machine when hitched to another machine. The machines must remain in a straight line while hooked together as turning of either machine will damage the bail of the rear machine.
- Keep bowl as low as possible, but high enough to clear objects in the haul road, as this increases ground clearance of hitch push plate and bail assembly on the front of the machine.
- The Scraper team should alternate pushing and pulling functions during loading cycles to equalize wear of the attachments on both machines.

Safety

PREVENTING FIRE HAZARDS

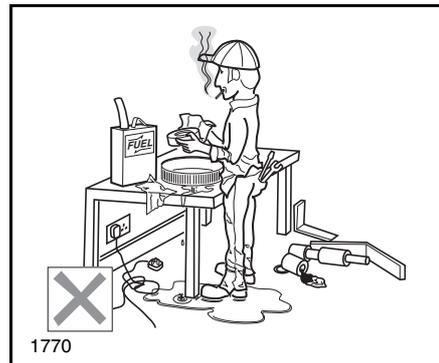
General Fire Precautions

- Make sure the vehicle has a fire extinguisher and that it is accessible and fully charged. (Not furnished with the vehicle).
- Never use an open flame as a light anywhere on, or around, the vehicle.
- Clean all dirt, oil, grease and other fluids from systems and components to minimize fire hazards and aid in spotting loose or leaking lines, fittings etc.
- Check the engine compartment for rubbish, oily rags or other debris that could cause fires before starting the engine.
- Don't let greasy, oily rags or similar hazards accumulate in the cab.
- If the vehicle has been operated with an under inflated tyre. Make sure that the tyre has cooled sufficiently before parking and leaving the vehicle unattended.



Flammable Fluid Precautions

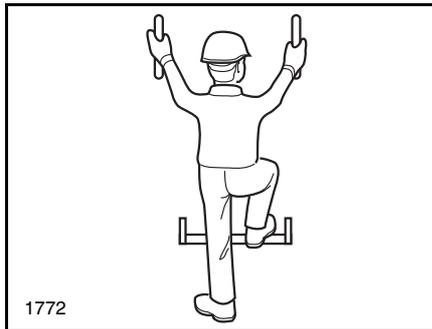
- Don't use diesel fuel or other flammable fluids for cleaning purposes. Use approved, non-flammable solvents.
- Make sure all fluid system caps, drain cocks, valves, fittings, lines etc., are secure and leak free.
- Never use an open flame (match, lighter etc.) when checking fuel, lubricant, coolant and battery fluid levels or when checking for fluid leaks. Use a flashlight or other safe lighting only.
- Shut off the engine and use extra caution if engine is hot when refuelling. Ground the hose spout to prevent sparks when the spout is touched to fuel tank filler tube.
- Never smoke while checking or adding fuel or other fluids or handling fluid containers and lines.
- Use care and do not stand downwind when adding fuel or other flammable fluids to tanks and reservoirs to avoid fluids being blown or splashed onto clothing.
- Close fuel tank shut-off valves, if used, before servicing fuel system.
- When preparing vehicles or components for storage, seal and tape all openings and close containers tightly to seal in all volatile inhibitor fluids and compounds used.
- Follow the manufacturer's recommendations when handling and using engine starting fluids and disposing of spent containers. Do not puncture or burn empty containers. These fluids are explosive and highly flammable.



Electrical Hazard Precautions



- Never smoke or allow open flames or sparks near batteries.
- Leave the battery box open when charging batteries in the vehicle for adequate ventilation. Explosive gas (hydrogen) produced.
- Always disconnect batteries before repairing electrical system to avoid danger of fire-causing sparks. Disconnect battery ground cable first and reconnect last.
- Always disconnect batteries & alternator leads before carrying out any welding on the vehicle.
- Never check battery charge by placing metal objects across battery posts to avoid sparks at battery posts.
- Use jumper cables only as recommended. Improper use can result in battery explosion or unexpected vehicle motion.
- Never operate engine starter for more than 30 seconds and allow two minutes between long cranking periods for cooling. An overheated starter could cause a fire.
- If electric coolant or lubricant heaters are used, be sure to follow heater manufacturer's recommendations for use to avoid electrical and/or fire hazards.



Mounting and Dismounting

- Only use steps and hand holds provided to mount or dismount the vehicle. Do not grasp steering wheel.
- Always face the access system and maintain at least three points of support to mount or dismount the vehicle.
- Always use care when mounting the vehicle with oil covered, frosted, or iced fenders, decks, hand holds or steps.
- Never mount or dismount a moving vehicle. Never jump off the vehicle.

Safety

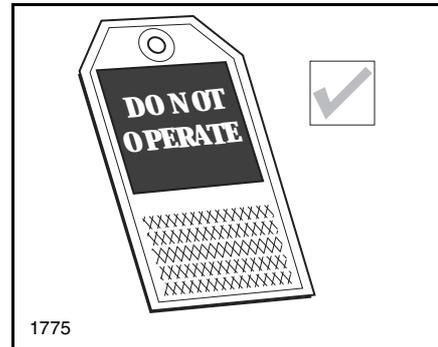
Pre-Starting

- If the engine is to be started and run indoors, ensure proper ventilation to remove deadly exhaust gases.
- Always perform 'Pre-Starting Inspection' instructions described on page 4-3 to ensure the vehicle is ready for operation.
- Always walk around the vehicle to make sure no-one is working on, underneath or close to the vehicle before starting the engine or operating the vehicle.
- Adjust, secure and latch the seat and fasten the seat belt before starting the vehicle.
- Sound horn before starting the engine or beginning to move the vehicle; two blasts for forward and three blasts for reverse.



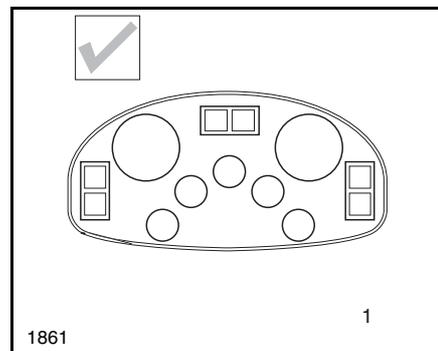
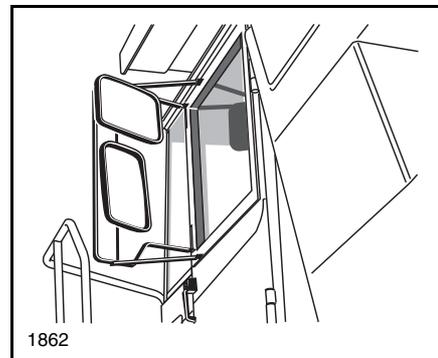
Starting

- Do not start the engine or operate any control if there is a 'DO NOT OPERATE' or similar warning sign attached to any control.
- Use jumper cables only as recommended. Improper use can result in battery explosion or unexpected vehicle motion.
- Always obey 'Starting the Engine' instructions described on page 4-9.
- Do not bypass the vehicle's neutral-start system. The neutral start system must be repaired if it malfunctions.
- Start and operate the vehicle only from the operator's seat.



Operating

- Ensure all cab glass, mirrors and light lenses are clean during vehicle operation for maximum visibility. Ensure mirrors are properly set / positioned.
- Always keep cab floor clear of anything that could restrict full operation of pedals.
- Always make sure all gauges, warning/indicator lights and controls are working properly before operating the vehicle.
- Always perform 'Pre-Operating Checks' described on page 4-13 to ensure the vehicle is ready for operating.
- Always wear seat belts when operating the vehicle.
- Do not operate if personnel enter the immediate work area without safety equipment.
- Sound horn before starting engine or beginning to move the vehicle; two blasts for forward and three blasts for reverse.
- Watch for ground crew and other personnel on foot. Sound horn as a warning before setting the vehicle in motion and when approaching ground crew.
- Never release the parking brake or move the machine until the needle in the air pressure gauge is in, or approaching the centre of the green zone.



Sample of manual. Download All 140 pages at: