

OPERATOR'S MANUAL

RK55
Shuttle Shift

Rural King Supply
4216 Dewitt Ave.
Mattoon IL 61938



Rural King®



OPERATOR'S MANUAL



Rural King

RK55
Shuttle Shift



FORWARD

FORWARD

Thank you for purchasing our tractor. We are confident it will give you many years of reliable Service.

The introduction in this manual set out the correct manner of operating, maintaining and checking the tractor to ensure long-term durability.

Please ensure correct operation of the tractor as incorrect operation can cause substantial mechanical damage as well as cause accidents with the associated injuries.

Please note that in some cases differences can exist between this manual and your tractor due to the manufacturer's policy of constant product improvement.

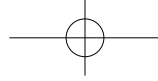
In the event that you strike a problem not covered by this manual please contact your nearest RK Tractor store who will assist you in resolving your problem.



WARNING

CALIFORNIA Proposition 65 Warning





The Engine Exhaust from this product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.



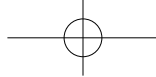
FORWARD

WARNING SIGNS IN THIS MANUAL

The following warning signs in this manual draw additional attention to items of importance for the safe and correct operation of the tractor.

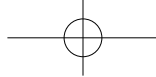
SIGN	MEANING OF THE SIGN
 DANGER	This indicates that a condition may result in harm, serious injury or death to you or other persons if the warning is not heeded. Follow the advice provided with the warning.
 WARNING	Hazard or unsafe practice that can lead to severe injury or death.
 CAUTION	Hazard or unsafe practice that can lead in injury or death.
 IMPORTANT	Instructions for the correct operation of the machine which, if followed, will ensure that it performs at it's best.

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



INDEX

GENERAL INFORMATION		1
SAFETY PRECAUTIONS		2
DESCRIPTION OF TRACTOR CONTROLS		3
OPERATION		4
MAINTENANCE		5
CABIN SYSTEM		6
SPECIFICATION		7
TROUBLESHOOTING		8
APPENDIX		9
INDEX		10
WARRANTY		11



CONTENTS



GENERAL INFORMATION

1

1. TRACTOR IDENTIFICATION 1-2
2. ABOUT THIS MANUAL 1-3
3. INTRODUCTION & DESCRIPTION 1-4
4. OWNER ASSISTANCE 1-6
5. ROPS (ROLL OVER PROTECTIVE STRUCTURES)..... 1-7



SAFETY PRECAUTIONS

2

1. SAFETY INSTRUCTIONS..... 2-2
2. DO'S AND DON'T'S 2-22
3. SAFETY SIGNS 2-24
4. UNIVERSAL SYMBOLS 2-28



DESCRIPTION OF TRACTOR CONTROLS

3

1. INSTRUMENT AND SWITCHES..... 3-2
2. OPERATION THE CONTROLS 3-12
3. PTO GEAR SELECTION LEVER 3-19
4. OPERATING THE HYDRAULICS 3-20
5. EXTERIOR HYDRAULIC LEVER (OPTIONAL) .. 3-21
6. OPERATING THE 3 POINT LINKAGE (TPL)... 3-25



OPERATION

4

1. STARTING THE ENGINE 4-2
2. STOPPING THE ENGINE 4-3
3. WARMING UP 4-3
4. TIGHT TURNS IN THE FIELD..... 4-4
5. NORMAL BRAKING AND PARKING 4-5
6. UPHILL STARTS ON A STEEP SLOPE 4-5
7. OPERATION OF THE DIFF LOCK..... 4-6
8. CHECK DURING DRIVING..... 4-6



LUBRICATION & MAINTENANCE

5

1. CHECKS AND SERVICE 5-2
2. MAINTENANCE AND ADJUSTMENT SCHEDULE 5-6
3. FILLING DIAGRAM & CAPACITY TABLE 5-9
4. LUBRICANTS..... 5-10
5. OPENING METHOD OF EACH COVER..... 5-11
6. BLEEDING THE FUEL SYSTEM 5-12
7. CHANGING THE OILS IN THE TRACTOR.. 5-13
8. CLEANING AND CHANGING FILTERS..... 5-16
9. CHANGING THE COOLANT 5-18
10. GREASING THE TRACTOR 5-20
11. GAP ADJUSTMENT 5-20



CONTENTS

12. BATTERY MAINTENANCE	5-22
13. FAN BELT ADJUSTMENT	5-23
14. OTHER MAINTENANCE	5-24
15. STORAGE	5-27
16. FUEL SAVING TIPS	5-29

CABIN SYSTEM 6

1. MAJOR FEATURES	6-2
2. INSTRUMENT AND RELATED PARTS	6-3
3. HOW TO CONTROLS CABIN	6-5

SPECIFICATION 7

1. SPECIFICATIONSN	7-2
--------------------------	-----

TROUBLESHOOTING 8

1. TROUBLESHOOTING	8-2
--------------------------	-----

APPENDIX 9

1. ELECTRIC SYSTEM DIAGRAM	9-2
2. ROLL-BAR WIRING DIAGRAM	9-4

3. CABIN WIRING DIAGRAM (1)	9-5
4. CABIN WIRING DIAGRAM (2)	9-6
5. CABIN WIRING DIAGRAM (3)	9-7
6. DRAWING FOR FIXING POSITION OF THE FUSE	9-8
7. WIRING DIAGRAM OF THE ELECTRIC INSTRUMENT	9-9
8. TRACTOR HISTORY CARD	9-10
9. SERVICE RECORD	9-11
10. DAILY OPERATION LOG	9-12
11. PART REPLACEMENT RECORD	9-13

INDEX 10

1. INDEX	10-2
----------------	------

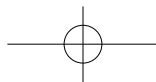
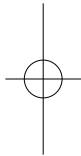
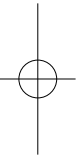
WARRANTY 11

1. ENGINE WARRANTIES	11-2
2. EMISSION SYSTEM WARRANTY	11-5
3. RK WARRANTY	11-9



MEMO

A series of horizontal dotted lines for writing a memo.





GENERAL INFORMATION

- 1. TRACTOR IDENTIFICATION 1-2
- 2. ABOUT THIS MANUAL 1-3
- 3. INTRODUCTION & DESCRIPTION..... 1-4
- 4. OWNER ASSISTANCE 1-6
- 5. ROPS (ROLL OVER PROTECTIVE STRUCTURES)... 1-7

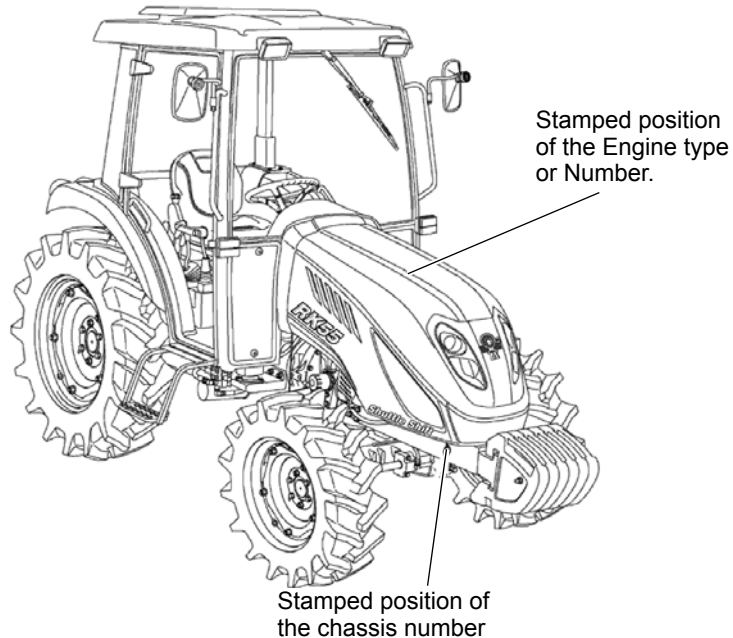


GENERAL INFORMATION

1. TRACTOR IDENTIFICATION

The engine number is stamped on the left hand side of the engine block.

The chassis number is shown on the left hand side of the tractor as shown in the drawing.



R5S0001A

► WARRANTY OF THE PRODUCT

The manufacturer warrants this product and full details of the warranty are provided on a separate warranty schedule.

► SERVICE

Service is available from any **RK Tractor store** in the country.

► PARTS

To obtain spare parts please contact your nearest **RK Tractor store** and give him the details listed below.

- Tractor model
- Tractor serial number
- Tractor engine number
- Part number and description
- Quantity required



2. ABOUT THIS MANUAL

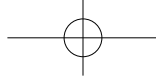
This manual has been prepared to assist you in following/adopting the correct procedure for running-in operation and maintenance of your new **RK Tractors** (Here in after refer to **RK**) Tractor.

Your Tractor has been designed and built to give maximum performance, with good fuel economy and ease of operation under a wide variety of operating conditions. Prior to delivery, The tractor was carefully inspected, both at the factory and by your **RK Tractor store**, to ensure that it reaches you in optimum conditions .To maintain this condition and ensure trouble free performance. it is important that the routine services, as specified in this manual, are carried out at the recommended intervals.

Read this Manual carefully and keep it in a convenient place for future reference. If at any time you require advice concerning your Tractor, do not hesitate to contact your Authorized **RK Tractor store**. He has trained personnel, genuine parts and necessary equipments to undertake all your service requirements.

Manufacturer's policy is one of continuous improvement, and the right to change prices, specifications or equipments at any time without notice is reserved.

All data given in this book is subject to production variations. Dimensions & weight are approximate only and the illustrations do not necessarily show Tractors in standard condition. For exact information about any particular Tractor, please consult your **RK Tractor store**.



GENERAL INFORMATION

3. INTRODUCTION & DESCRIPTION

▶ TRACTOR AN INTRODUCTION

The word, 'Tractor' has been derived from 'Traction' which means pulling.

A Tractor is required to pull or haul an equipment, implement or trolley which are coupled to the Tractor body through suitable linkage. A Tractor can also be used as a prime mover as it has a power outlet source which is also called Power Take or PTO shaft.

In this book the operating, maintenance and storage instructions for all models of RK Diesel Tractors has been compiled. This material has been prepared in detail to help you in the better understanding of maintenance and efficient operation of the machine.

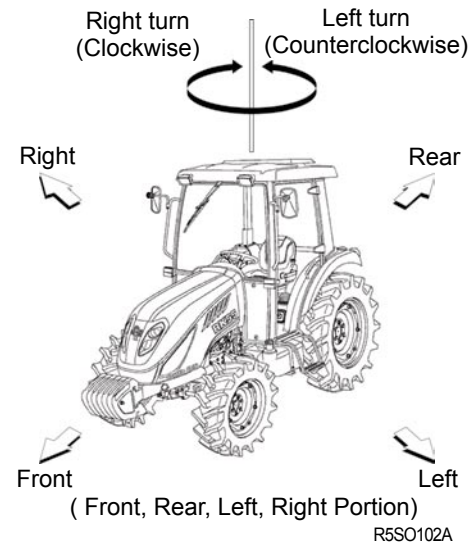
If you need any information not given in this manual, or require the services of a trained mechanic, please get in touch with the RK Tractor

store in your locality. Tractor Stores are kept informed of the latest methods of servicing Tractors. They stock genuine spare parts and are backed by the Company's full support.

Through this manual. The use of the terms LEFT, RIGHT, FRONT and REAR must be understood, to avoid any confusion when following the introductions. The LEFT and RIGHT means left and right sides of the Tractor when facing forward in the driver's seat, Reference to the FRONT indicates the radiator end of the Tractor, while the REAR, indicates the drawbar end (illustration T45O102B)

When spare parts are required, always specify the Tractor and engine serial number when ordering these parts. (See illustration T454101B). This will facilitate faster delivery and help ensure that the correct parts for your particular Tractor is re-

ceived. The tractor serial number is punched on a plate attached to the left hand side of the engine body (illustration T45O101B). For easy reference, we suggest you to write the number in the space provided in the owner's personal data.





GENERAL INFORMATION

1

▶ DESCRIPTION

GENERAL CONSTRUCTION

The transmission case, Clutch, Clutch housing, Engine and Front Axle Support are bolted together to form a rigid unit.

FRONT AXLE & WHEELS

The 4WD front axle is a center-pivot, reverse Eliot type. The front wheel drive mechanism is incorporated as a part of the axle.

The front wheel drive power is taken off the rear transmission and transmitted to the differential in the front axle where the power is divided into right and left and to the respective final cases.

In the final cases, the transmitted revolution is reduced by the level gears to drive the front wheel. The 4WD mechanism with level gears provides wider steering and greater durability.

ENGINE

The tractors are fitted with fuel efficient Turbo charged engines with 4cylinders of **RK55S / RK55SC** designed by Yanmar Engines Company.

CLUTCH AND TRANSMISSION

A single plate dry clutch (10.24" diameter) is used on these tractors. Tractor with IPTO (Independent Power Take Off) are fitted with hydraulic Clutch Assy. The transmission Gear box has 16 forward & 16 reverse speeds of **RK55S / RK55SC**. Presently, **RK** Tractors are fitted with partial synchro mesh type gears.

BRAKES

RK tractors are provided with independent disc brakes operated by two road travel. A foot brake lever is fitted for parking.

REAR AXLE & WHEELS

This is mounted on ball bearings and is enclosed in removable housing which are bolted to the transmission case. The rim & Disc fitted with Rear tires are bolted to the outer flange of Rear Axle.

HYDRAULIC SYSTEM & LINKAGES

RK Tractors are fitted with Live (i.e. system is in operation even when clutch is disengaged.) independent, very touch of hydraulic System. Three point Linkages can be used for USA-Category 1 type.

STEERING

It consists of Hydrostatic Power steering system, which has a hydraulic cylinder and tandem type hydraulic pump.



GENERAL INFORMATION

4. OWNER ASSISTANCE

ELECTRICAL SYSTEM

A 12 Volt Lead Acid Propylene Battery is used to activate the Engine through the Starter Motor and the Electrical system comprising Horn, Head Lamp, Side indicator Lamps, Brake Light, Gauge lamp, Hazard Lamp, Generator or Alternator, Fuse box also from part of the Electrical system.

WARNING

- When operating the tractor at High speed, Do not attempt to make sharp turns by using the brakes. This may result in overturning of the Tractor causing serious injury or DEATH.

We at **RK Tractors** and your **RK Tractor** store wants you to be completely satisfied with your investment. Normally any problems with your equipment will be handled by your RK Tractor store/Distributor's Service Departments, however, misunderstanding can occur. If you feel that your problem has not been handled to your satisfaction, we suggest the following.

Contact the owner or General Manager of the RK Tractor store, explain the problem, and request assistance. When additional assistance is needed, Your RK Tractor store/Distributor has direct access to your office. If you cannot obtain satisfaction by doing this, contact the **RK Tractors** Office and provide them with;

- Your name, address and telephone number
- Model and tractor serial number
- RK Tractor store/Distributor Name & Address
- Machine purchase date and Hours used
- Nature of problem

Before contacting **RK Supply, Inc** office, be aware that your problem will likely to be resolved in the RK Tractor store using the RK Tractor store's/Distributor's facilities, equipment and personnel. So it is important that your initial contact be with the RK Tractor store/Distributor.



5. ROPS (ROLL OVER PROTECTIVE STRUCTURES)

1

▶ ROLL OVER PROTECTIVE STRUCTURES (ROPS)

RK Tractors are equipped with a frame for the protection of operators.

In the case of cab tractors the frame is incorporated in the cab structure.

The objective of the frame or cab structure is to protect the operator in the event of a roll over and they are designed to support the entire weight of the tractor in that event.

Each **RK** ROPS frame or cab structure is designed and has been tested to meet industry and or Government standards.

Included in these tests were all mounting bases and bolts or other fasteners.

⚠ DANGER

- For ROPS frames to be effective and protect the operator, the seat belt provided must be worn in order to keep operators within the ROPS protected area in the event of a roll over. Failure to use the seat belt can still cause serious injury or death.

On some models the ROPS frame has a fold down feature, which can be used to enter low buildings etc.

Take care when lowering the upper section of the ROPS frame and take extreme care while driving the tractor with the ROPS frame lowered.

Do not wear the seat belt with the ROPS lowered and please remember that the fold down facility is for special circumstances only and must not be lowered for general use.

▶ USE OF THE TRACTOR WITH THE ROPS LOWERED CAN CAUSE FATAL INJURIES

As the ROPS frame or cab together with the seat belt was designed to meet certain standards, they must be maintained in good order and condition.

To achieve this objective, both the structure and the seat belt should be inspected on a regular basis (every time the tractor is serviced)

In the event that the seat belt is damaged or frayed, it should be replaced and in the event that the ROPS frame or any part of the mounting structure is damaged or cracked, the faulty component must be replaced with a new unit.

Such a unit must meet all of the test criteria of the original unit.

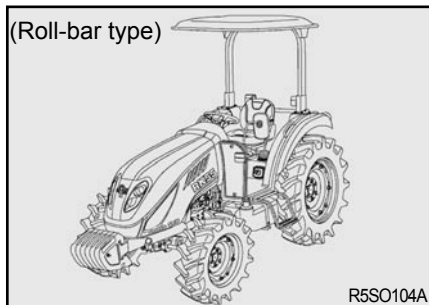
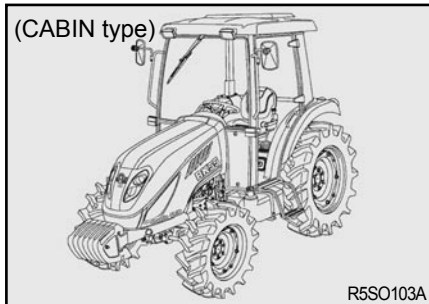
Fitment of an inferior item or items affects the certification of the entire ROPS structure and the effectiveness of the structure in the event of an accident. Drilling or welding of the ROPS structure is forbidden.

1-7



GENERAL INFORMATION

► DAMAGE OF THE ROPS



If the tractor has rolled over or the ROPS has damaged (such as striking an overhead object during transport), It must be replaced to provide the original protection. After an ac-

cident, check for damages to the 1.ROPS. 2.Seat 3.seat belt & seat mountings. Before you operate a Tractor, replace all damaged parts.

► DO NOT WELD, DRILL OR STRAIGHTEN THE ROPS

⚠ WARNING

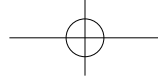
- Never attach chains, ropes to the ROPS for pulling purposes; this will cause the Tractor to tip backwards. Always pull from the Tractor drawbar. Be careful when driving through door opening or under low overhead objects. Make sure there is sufficient overhead clearance for the ROPS to avoid fatal injuries.

⚠ WARNING

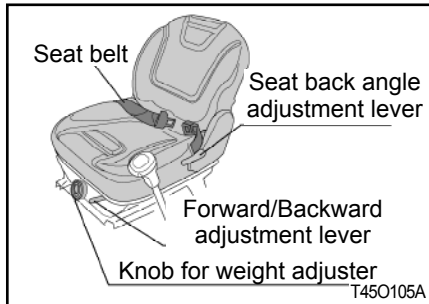
- If the ROPS is removed or replaced, make certain that the proper hardware is used to replace the ROPS and the recommended torque values are applied to the attaching bolts

⚠ WARNING

- Always wear your seat belt if the tractor is equipped with ROPS.



▶ HOW TO ADJUST THE SEAT



Before operating a Tractor it is important to adjust the seat to the most comfortable position & check whether it is properly locked in its position. Figure 1 identifies the seat fitted to your Tractor.

NOTE

- Do not use solvents to clean the seat. Use warm water with a little detergent added.

▶ FOR SLIDING SEAT

To select Seat position, move Adjusting lever and slide Seat closer to or away from Dash panel and controls.

⚠ DANGER

- Check whether the seat properly locked in its position before driving the tractor.

⚠ DANGER

- Always use the seat belt when the ROPS is installed. Do not use the seat belt if a foldable ROPS is down or there is no ROPS. Check the seat belt regularly and replace if frayed or damaged.

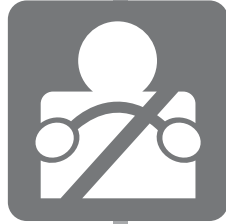


GENERAL INFORMATION

MEMO

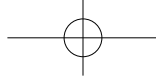
Handwriting practice area with 20 horizontal dotted lines.

1 - 10



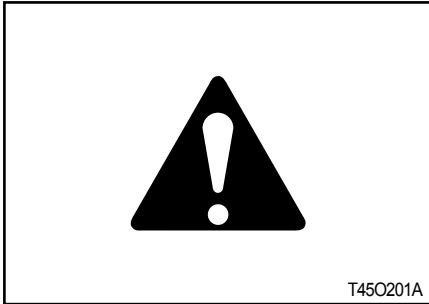
SAFETY PRECAUTIONS

- 1. SAFETY INSTRUCTIONS 2-2
- 2. DO'S AND DON'T'S 2-22
- 3. SAFETY SIGNS 2-24
- 4. UNIVERSAL SYMBOLS 2-28



SAFETY PRECAUTIONS

1. SAFETY INSTRUCTIONS



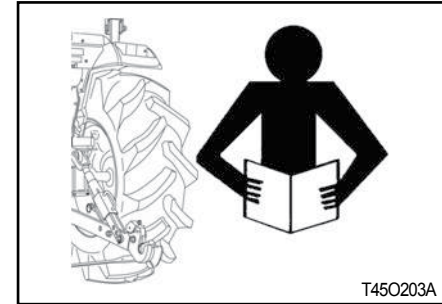
► RECOGNIZE SAFETY INFORMATION

This symbol means ATTENTION! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about safety. Carefully read the message.



► SIGNAL WORDS

A signal word "DANGER, WARNING OR CAUTION" is used with safety alert symbol. DANGER identifies the most serious hazards. Safety signs with signal Word "DANGER OR WARNING" are typically near specific hazards. General precautions are listed on CAUTION safety signs.



► READ SAFETY INSTRUCTION

Carefully read all safety instructions given in this manual for your safety. Tempering with any of the safety devices can cause serious injuries or death. Keep all safety signs in good condition. Replace missing or damaged safety signs.

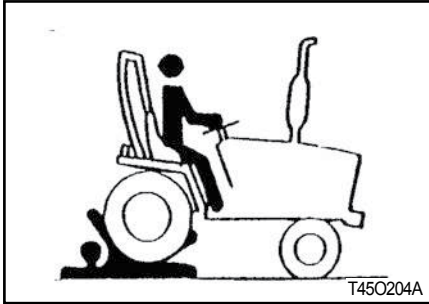
Keep your tractor in proper condition and do not allow any unauthorized modifications to be carried out on the tractor, which may impair the function/safety and affect tractor life.



SAFETY PRECAUTIONS



2



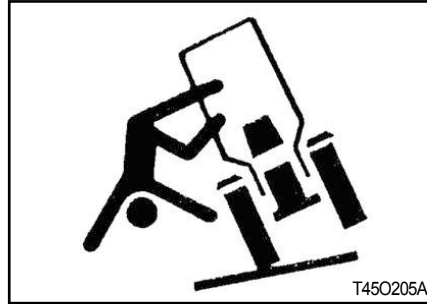
T45O204A

► PROTECTION CHILDREN

Keep children and others away from the tractor while operating.

BEFORE YOU REVERSE:

- Look behind tractor for children.
- Do not let children to ride on tractor or any implement.



T45O205A

► USE OF ROPS AND SEAT BELT

The Roll Over Protective Structure (ROPS) has been certified to industry and/or government standards. Any damage or alternation to the ROPS, mounting hardware, or seat belt voids the certification and will reduce or eliminate protection for the operator in the event of a roll-over. The ROPS, mounting hardware, and seat belt should be checked after the first 100 hours of tractor and every 500 hours thereafter for any evidence of damage,

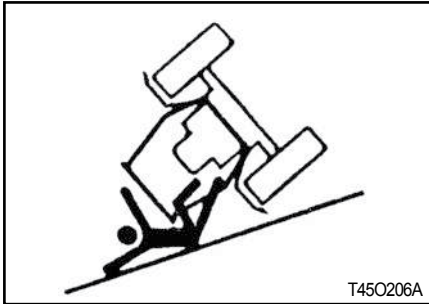
wear or cracks. In the event of damage or alteration, the ROPS must be replaced prior to further operation of the tractor.

The seat belt must be worn during machine operation when the machine is equipped with a certified ROPS.

Failure to do so will reduce or eliminate protection for the operator in the event of a roll over.



SAFETY PRECAUTIONS



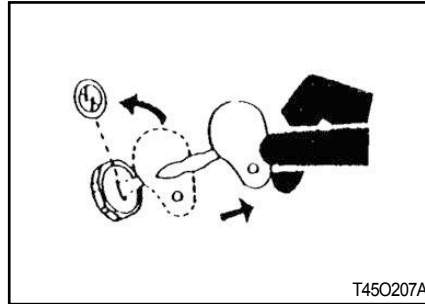
► PRECAUTION TO AVOID TIPPING

Do not drive where the tractor could slip or tip.

Stay alert for holes and rocks in the terrain, and other hidden hazards.

Slow down before you make a sharp turn.

Driving forward out of a ditch or mired condition could cause tractor to tip over backward. Back out of these situations if possible.

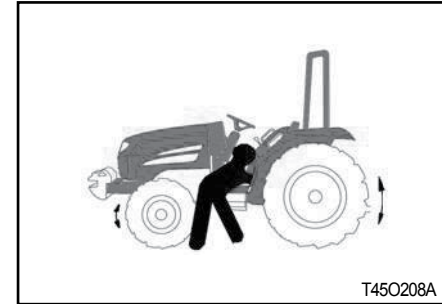


► PARK TRACTOR SAFELY

Before working on the tractor;

Lower all equipment to the ground.

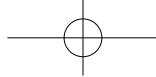
Stop the engine and remove the key.



► KEEP RIDERS OFF TRACTOR

Do not allow riders on the tractor.

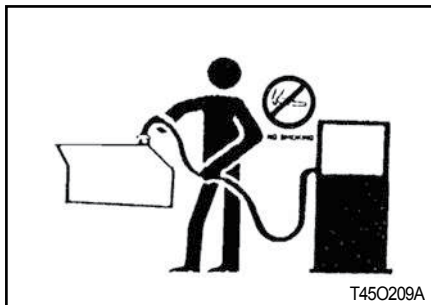
Riders on tractor are subject to injury such as being stuck by foreign objects and being thrown off of the tractor.



SAFETY PRECAUTIONS



2



▶ HANDLE FUEL SAFELY AVOID FIRES

Handle fuel with care; it is highly flammable. Do not refuel the tractor while smoking or near open flame or sparks.

Always stop engine before refueling tractors.

Always keep your tractor clean of accumulated grease, and debris. Always clean up spilled fuel.

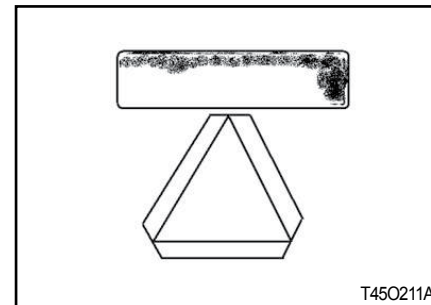


▶ STAY CLEAR OF ROTATING SHAFTS

Entanglement in rotating shaft can cause serious injury or death.

Keep PTO shield in place at all times.

Wear close fitting clothing. Stop the engine and be sure PTO drive is stopped before making adjustments, connections, or cleaning out PTO driven equipment.



▶ ALWAYS USE SAFETY LIGHTS AND DEVICES

Use of hazard warning lights and turn signals are recommended when towing equipment on public roads unless prohibited by state or local regulations.

Use slow moving vehicle (SMV) sign when driving on public road during both day & night time, unless prohibited by law.

2-5



SAFETY PRECAUTIONS



► PRACTICE SAFE MAINTENANCE

Understand service procedure before doing work.

Keep the surrounding area of the tractor clean and dry.

Do not attempt to service tractor when it is in motion.

Keep body and clothing away from rotating shafts.

Always lower equipment to the ground. Stop the engine.

Remove the key. Allow tractor to cool before any work repair is caused on it.

2-6

Securely support any tractor elements that must be raised for service work.

Keep all parts in good condition and properly installed.

Replace worn or broken parts. Replace damage/missing decals.

Remove any buildup of grease or oil from the tractor.

Disconnect battery ground cable(-) before making adjustments on electrical systems or welding on tractor.



► AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Keep hands and body away from pinholes and nozzles, which eject fluids under high pressure. If any fluid is injected into the skin. Consult your doctor immediately.



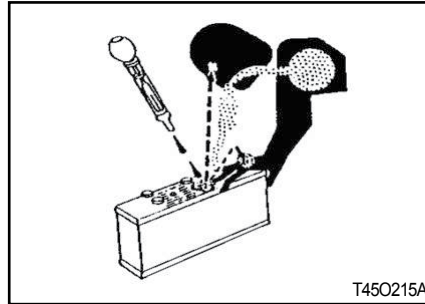
SAFETY PRECAUTIONS



► PREVENT BATTERY EXPLOSIONS

Keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode.

Never check battery charge by placing a metal object across the poles.



► PREVENT ACID BURNS

Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, cause holes in clothing and cause blindness if found entry into eyes.

For adequate safety always;

1. Fill batteries in a well-ventilated area.
2. Wear eye protection and acid proof hand gloves.
3. Avoid breathing direct fumes when electrolyte is added.

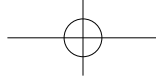
4. Do not add water to electrolyte as it may splash off causing severe burns.

If you spill acid on yourself;

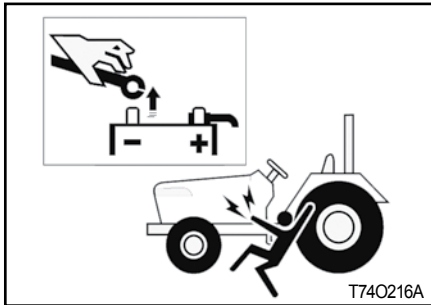
1. Flush your skin with water.
2. Flush your eyes with water for 10-15 minutes.

Get medical attention immediately.

2

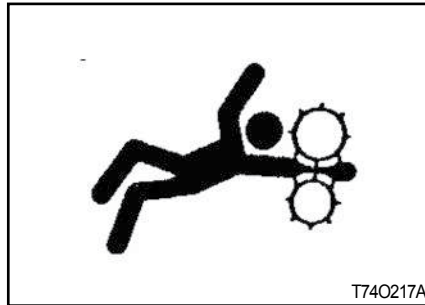


SAFETY PRECAUTIONS



▶ BATTERY DISCONNECT

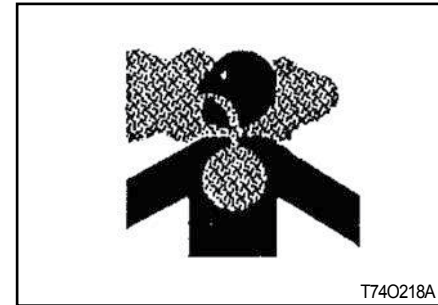
1. When working with your tractors electrical components you must first disconnect the battery cables.
2. To ensure that there are no accidents from sparks you must first disconnect the negative battery cable.



▶ SERVICE TRACTOR SAFELY

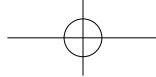
Do not wear a necktie, scarf or loose clothing when you work near moving parts. If these items were to get caught, severe injury could result.

Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



▶ WORK IN VENTILATED AREA

Do not start the tractor in an enclosed building unless the doors & windows are open for proper ventilation, as tractor fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area remove the exhaust fumes by connecting exhaust pipe extension.



SAFETY PRECAUTIONS



▶ TRACTOR RUNAWAY

1. The tractor can start even if the transmission is engaged position causing tractor to runaway and serious injury to the people standing nearby the tractor.
2. For additional safety keep the pull to stop knob (Fuel shut off control) in fully pulled out position.

Transmission in neutral position, Foot brake engaged and PTO lever in disengaged position while attending to Safety Starter Switch or any other work on tractor.

▶ SAFETY STARTER SWITCH

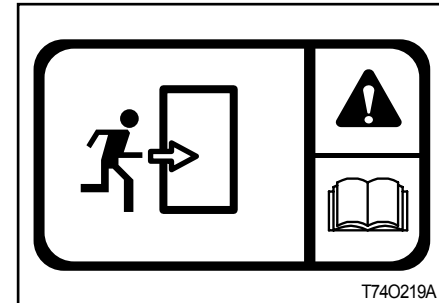
1. Clutch operated safety switch is provided on all tractors which allow the starting system to become operational only when the Clutch pedal is fully pressed.
2. Do not By-pass this safety starter switch or work on it. Only Authorized RK Tractor stores are recommended to work on safety starter switch.
3. On some models Safety Starter switch is provided on transmission High-low shifter lever and in PTO shifter lever. The tractor can be started only if High-low shifter lever is in neutral position.

▲ CAUTION

- Safety Starter Switch is to be replaced after every 2,000 hours/4 years, whichever is earlier.

▶ EMERGENCY EXITS

If exit from the cab side doors is blocked (following an accident or vehicle overturn) the alternative safety exits are indicated by decals.

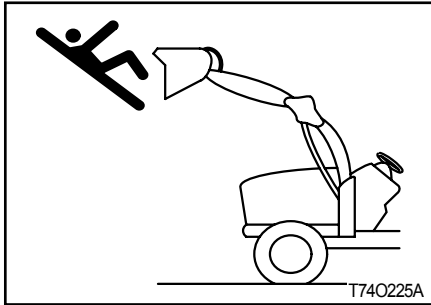


The possible safety exits are:

- Rear window hatch (All tractors)
- Front window (For versions with openable front window).

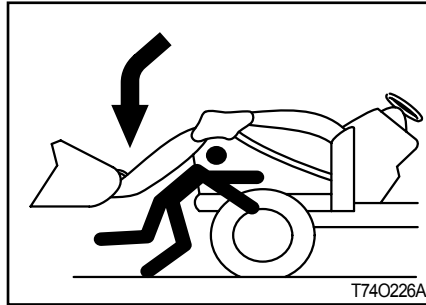


SAFETY PRECAUTIONS

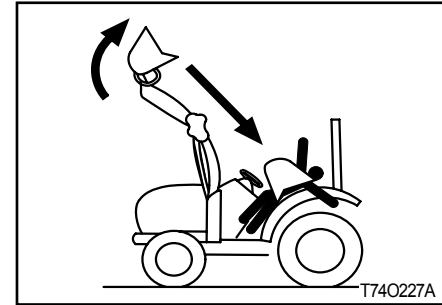


▶ SAFETY PRECAUTIONS WHEN USING THE LOADER

Never let anyone get in the loader and use the loader as a workbench. Otherwise, it may lead to a fatal injury or even death.



Do not stand under the lifted loader or get close to it. Also, lower the loader arm onto the ground before leaving the tractor. Otherwise, it may lead to a fatal injury or even death.



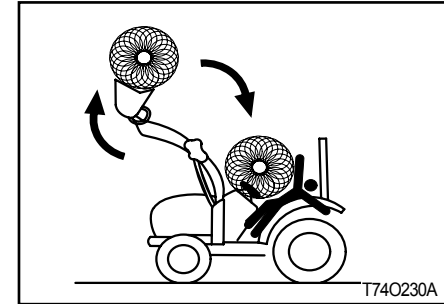
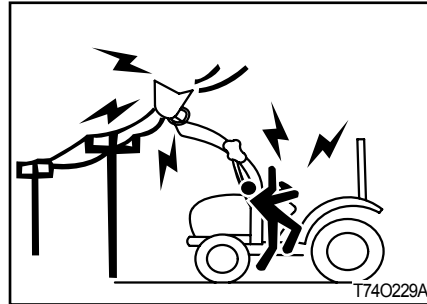
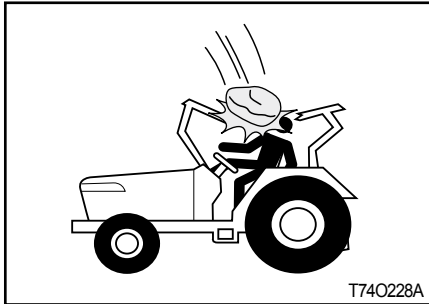
When attaching or detaching the loader, fix all parts which are connected to the bucket and boom. The bucket or boom can be accidentally dropped down, leading to an injury or even death.



SAFETY PRECAUTIONS



2



IMPORTANT

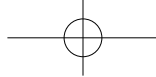
- ROPS (Roll Over Protective Structure), sun canopy or cabin are not a FOPS (Falling Object Protective Structure).

It never can protect the riders against falling objects.

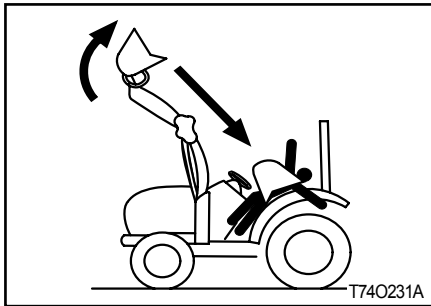
Avoid driving the vehicle into a dangerous area such as falling rocks zone.

Do not allow loader arms or attachment to contact electrical power lines. Electrocutation will cause serious injury or death.

Never carry a big object with the loader unless a proper implement is attached. Keep a carried object low during driving. Otherwise, it may lead to an injury or even death.



SAFETY PRECAUTIONS



When attaching or detaching the loader, fix all parts which are connected to the bucket and boom. The bucket or boom can be accidentally dropped down, leading to an injury or even death.

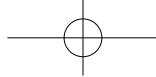
► TOWING SAFELY

For the maximum towable loads, refer to the paragraph " Maximum towable loads in the Technical Data Section.

- Maintain a suitable speed taking into account the weight of the trailed load and the gradient, remembering that braking distances will be greater than with just the tractor. Trailled loads with or without brakes that are too heavy for the tractor or that towed at too high speed may cause the operator to lose control of the tractor.
- Always take into consideration the total weight of the implements and their loads.

▲ CAUTION

- When a trailer is hitched to the tractor, before you leave the driving seat remember to put all the controls in neutral, apply the handbrake, switch off the engine, engage first gear (if the tractor has a mechanical transmission) and remove the key from the starter switch. If the tractor is not parked on level ground, ALWAYS place chocks under the wheels of both the tractor and the trailer. For further information on safe working procedures, refer to the chapter "Parking the tractor" in the safe section of this manual.



- When trailers are hitched to the tractor, before you leave the operator seat remember to put all the controls in neutral, apply the handbrake, switch off the engine, engage first gear (with mechanical transmissions) and remove the ignition key. ALWAYS chock both the tractor and the trailer wheels. The best way to transport a tractor that has broken down is to transport it on a low loader. Always secure the tractor to the loader bed with chains. Before transporting the tractor on a low loader or on a railway wagon, make sure that the engine hood, doors, openable roof (if present) and windows are all closed and securely fastened. Never tow the tractor at speeds in excess of 10 kph. An operator must stay in the operator position to steer and brake the tractor.

▶ FALLING OBJECT PROTECTIVE STRUCTURE (FOPS)

The term F.O.P.S refers to structure installed on the tractor intended to reduce the risk to the operator of injury from falling objects during normal use of the vehicle.

⚠ IMPORTANT

- This tractor is equipped with a FOPS.
- The energy level of drop test is 1365J.

▶ OPERATOR PROTECTIVE STRUCTURE (OPS)

The term OPS refers to a protective structure installed on a tractor in order to minimise risk of operator injury caused by objects penetrating into the operator position area.

⚠ DANGER

- This tractor is not equipped with an OPS. If work must be performed in areas subject to the risk of the penetration of objects into the operator position, consult your RK Tractor store before starting work so that the tractor can be equipped with an appropriate protective structure.



SAFETY PRECAUTIONS

► USE OF HAZARDOUS SUBSTANCES

European standard EN 15695-1 is applicable to the cabs of agricultural or forestry tractors and self-propelled sprayers.

The purpose of the standard is to limit the exposure of the operator (driver) to hazardous substances when applying plant protection products and liquid fertilisers.

In accordance with the stipulations of EN 15695-1 regarding cab classification, measurement of the internal positive pres-sure differential must be carried out in conformance with ISO 14269-5:

1. The engine operating at nominal speed;
2. The maximum quantity of air drawn from outside the cab (recirculation closed);
3. Fan set to maximum speed.

2 - 14

The following terms and definitions are applied:

- Hazardous substances: substances such as dust, vapours and aerosols, with the exception of fumigants which can be dispersed during the application of plant protection products and liquid fertilisers, which may have a harmful effect on the operator.
- Dust general term identifying solid air-borne particles, finely divided and sedimented
- Aerosol: suspension of solid, liquid or solid and liquid particulate in gaseous medium with a negligible fall rate (generally less than 0.25 ms⁻¹)
- Vapour: gaseous phase of a substance whose liquid or solid state is stable at 20° C and 1 bar (absolute).
This cab, even when closed, does not protect against the inhalation of hazardous substances. If the man-

ufacturer's instructions for using these substances recommend personal protective equipment, wear the equipment even in the cab.

⚠ DANGER

- Use all the personal protective equipment suitable for the tasks in hand and relative substances, in compliance with the requirements of statutory legislation in your country.

Cabs are classified as follows:

- Category 1: the cab does not provide protection against hazardous substances.
- Category 2 the cab provides protection exclusively from dust.
- Category 3: the cab provides protection from dust and aerosol.
- Category 4: the cab provides protection from dust, aerosol and chemical vapours.



SAFETY PRECAUTIONS

2

The classification category, as stipulated by ISO 14269-5, of the cab installed on this range of tractors is given below:

- the engine operating at nominal speed
- the maximum quantity of air drawn from outside the cab (recirculation closed)
- with fan at maximum speed

Tab. 2 - Technical data

	RK55S / RK55SC
CAB / ROPS	
Hazardous substances protection category CAB	Category 1

► SAFE OPERATION OF YOUR TRACTOR

The manufacturer of your tractor has made every effort to make it as safe as is humanly possible.

Beyond this point it is the responsibility of the operator to avoid accidents and we ask that you read and implement our suggestions for your safety.

Ensure that only trained and competent operators use this tractor and ensure that they are fully conversant with the machine and aware of all its control and safety features.

Operators should not operate the tractor or associated machinery while tired or untrained.

To avoid accidents please ensure that the operator wears clothing which will not get entangled in the moving parts of the tractor or machine and protect him or her from the elements.

When spraying or using chemicals, please ensure that clothing and protective equipment is worn which prevents respiratory or skin problems.

For full details consult the manufacturer of the chemicals.

To avoid lengthy exposure to noise ensure that ear protection is worn.

If adjustment to the tractor or machinery need to be made ensure the tractor or machine are turned off beforehand.

Use of certified Roll Over Protection Structure (ROPS) is a must while operating a tractor.

Use of seat belt is a must while operating a tractor.

In summary, ensure at all times that the safety of the operator and any other worker is paramount.

Ensure no one is between the tractor and a towed vehicle (trailer or implement).



SAFETY PRECAUTIONS

▶ SAFETY TIPS DURING MAINTENANCE

1. At least on a daily basis check all oil levels. Water level in the radiator and electrolyte level in the battery and perform services according to the service schedule.
2. Ensure tire pressure are even and the correct pressure for the job being done is maintained.
3. Check to ensure that the all controls and preventative mechanisms of the tractor and implement work correctly and effectively.
4. Ensure that an adequate set of the correct tools is available for maintenance and minor repairs.
5. Ensure that all service work and repairs are carried out on a flat area with a concrete or similar floor.

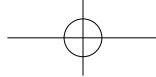
Do not carry out service work on a tractor until it is switched off,

and the parking brake applied and wheels chocked.

Where a tractor is started in a confined area, ensure that the area is well ventilated as exhaust gases are very harmful, and can cause death.

6. Do not work under raised implements.
7. When changing wheels or tires ensure that a suitable wheel stand is placed under the axle prior to removing the wheel and the wheels are chocked.
8. Where guards or shields need to be removed to perform a service or repair, ensure that the guard or shield is correctly reinstalled before starting the tractor.
9. Never refuel near a naked flame or with an overheated engine. Ensure to turn off Engine before refueling.

10. The cooling system operates under pressure, take care when removing the radiator cap on a hot engine to prevent being scalded by steam or hot water. Do not add water in the radiator when the engine is hot. Add water to the radiator only after the engine cools down completely.
11. To prevent fires keep the tractor including the engine clean and free from flammable material and well away from fuels and other flammable material.



SAFETY PRECAUTIONS



► MOUNTING AND DEMOUNTING IMPLEMENTS

1. Ensure that all mounting and removal of implements is done on safe flat ground. Ensure no one is between the tractor and implement and do not get under the implement to avoid accidental injuries.
2. After mounting the implement, ensure that all sway chains are correctly adjusted and, where PTO shafts are used that the shaft is fitted and secured correctly.
3. Where heavy implements are used, ensure that the combination is well balanced or use proper ballast to achieve balance.
4. Before leaving the tractor at any time, lower the implement, stop the PTO shaft where applicable, set the parking brake and switch off the engine.
5. While operating the implements with the PTO keep all bystanders away from any moving parts and do not attempt to make adjustments while the machine is running.
6. Only the driver should ride on the tractor with the ROPS frame fitted and with the seat belt properly fastened.
7. Where young children are present, particular care should be taken and the tractor should not be moved until the whereabouts of all children is known.
8. Only trained operators should operate the tractor and so taking care to ensure that other workers are not injured. In particular they should take care during dusty operations, which will reduce visibility substantially.
9. Never start the tractor unless the transmission is out of gear, the operator is in the seat and all round safety has been checked.
10. Only operate the tractor seated in the drivers seat and never turn or brake suddenly at high speed as this can cause a roll-over and serious injury or death.
11. When traveling on a public road ensure that the tractor and driver both meet all laws relating to safety and licensing. When traveling with wide implements use red flags on the extremities and observe all legal including escort requirements.
12. When operating under adverse conditions, hilly terrain or on bad ground adjust the speed of the tractor to suit the conditions, safety comes first. Never drive down hill at high speed or with the transmission in neutral. Use of the braking capacity of the engine as well as the service brakes.
Do not try to change gear going up or down a steep slope, select the correct gear before starting.
13. Take care when traveling uphill with a heavy implement to ensure that it does not overbalance and tip up the front end.



SAFETY PRECAUTIONS

14. Never remove or modify the seat belt.
15. Never remove, modify or repair the ROPS frame.

Please remember that a little bit of extra care can prevent serious injury or death and avoid damage to your tractor.

▶ THE FOLLOWING PRECAUTIONS ARE SUGGESTED TO HELP PREVENT ACCIDENTS

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. Read and take the following precautions before operating the tractor to prevent accidents.

Tractor should be operated only by those who are responsible and properly trained to do so.

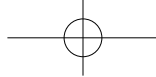
<THE TRACTOR>

1. Read the operator's manual carefully before using the tractor. Lack of operating knowledge can lead to accidents.
2. Use an approved rollover bar and seat belt for safe operation. Overturning of a tractor without a rollover bar can result in death or injury.
3. Do not remove ROPS (Roll Over Protective Structure). Always use the seat belt.

4. Fiberglass canopy does not give any protection.
5. To prevent falls, keep steps and platform clear of mud and oil.
6. Do not permit anyone but the operator to ride on the tractor. There is no safety place for extra riders.
7. Replace all missing, illegible or damaged safety signs.
8. Keep safety signs clean of dirt and grease.

<SERVICING THE TRACTOR>

1. keep the tractor in good operating condition for your safety. An improperly maintained tractor can be hazardous.
2. Stop the engine before performing any service on the tractor.
3. The cooling system operates under pressure, which is controlled by the radiator cap. It is dangerous to remove the cap while the system is hot. First turn the



SAFETY PRECAUTIONS



2

cap slowly to stop and allow the pressure to escape before removing the cap entirely.

4. Do not smoke while the refueling the tractor. Keep away any type of open flame.
5. The fuel in the injection system is under high pressure and can penetrate the skin. Unqualified persons should not remove or attempt to adjust a pump, injector, nozzle or any part of the fuel injection system.

Failure to follow these instructions can result in serious injury.

6. Keep open flame away from battery or cold weather starting aids to prevent fire or explosions.
7. Do not modify or alter or permit anyone else to modify or alter this tractor or any of its components or any tractor functions.

<OPERATING THE TRACTOR>

1. Before starting the tractor apply the parking brake, place the PTO (Power Take Off) lever in the "OFF" position, the hydraulic control levers in the downward position, the remote control valve levers in the neutral position (If fitted) and the transmission in neutral.

2. Do not start the engine or controls while standing besides the tractor. Always sit on the tractor seat when the engine or operating controls.

3. Safety starter switch.

In order to prevent the accidental starting of the tractor, a safety switch has been provided. The starting system of the tractor is connected through this switch, which becomes operative only when the clutch pedal is depressed. On some models shuttle shifter lever and PTO button should also be in neutral position for completing the

starting circuit. Do not bypass the safety starter switch. Consult your **RK Tractor** store if safety- starting switch malfunctions.

4. Avoid accidental contact with the gear shifter lever while the engine is running. Unexpected tractor movement can result from such contact.
5. Do not get off or climb the tractor while it is in motion.
6. Shut off the engine, remove the key and apply the parking brake before getting off the tractor.
7. Do not operate the tractor in an enclosed building without adequate ventilation. Exhaust fumes can cause death.
8. Do not park the tractor on a steep slope.
9. If power steering or Engine seizes to operate, stop the tractor immediately.



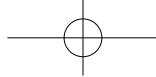
SAFETY PRECAUTIONS

10. Pull only from the swinging drawbar or the lower link drawbar in the down position. Use only a drawbar pin that locks in place. Pulling from the tractor rear axle carriers or any point above the rear axle may cause the tractor's front end to lift.
11. If the front end of the tractor tends to rise when heavy implements are attached to the three-point linkage, install front end or front wheel weights. Do not operate the tractor with a light front end.
12. Always use hydraulic position control lever when attaching equipments/implement and when transporting equipment. Be sure that the hydraulic couplers are properly mounted and will disconnect safely in case of accidental detachment of implement.

13. Do not leave equipment/implement in the raised position.
14. Use the flasher/ Turn signal lights and Slow Moving Vehicle (SMV) signs when driving on public roads during both day and night time, unless prohibited by law.
15. Dim tractor lights when meeting a vehicle at night. Be sure the lights are adjusted to prevent the blinding on the eyes of coming vehicle operator.
16. Emergency stopping instruction; If tractor fails to stop even after application of brakes. Pull the knob of fuel shut off control rod.

<DRIVING THE TRACTOR>

1. Watch where you are going especially at row ends, on roads, around trees and low hanging obstacles.
2. To avoid upsets, drive the tractor with care and at speeds compatible with safety, especially when operating over rough ground, crossing ditches or slopes, and when turning at corners.
3. Lock the tractor brake pedals together when transporting on roads to provide proper wheel braking.
4. Keep the tractor in the same gear when going downhill as used when going uphill. Do not coast or free wheel down hills.
5. Any towed vehicle and/or trailer whose total weight exceeds that of the towing tractor, must be equipped with its own brakes for safe operation.
6. When the tractor is stuck or tires are frozen to the ground, back out to prevent upset.
7. Always check overhead clearance, especially when transporting the tractor.



SAFETY PRECAUTIONS



2

<OPERATING THE PTO>

1. When operating PTO driven equipment, shut off the engine and wait until the PTO stops before getting off the tractor and disconnecting the equipment.
2. Do not wear loose clothing when operating the power take-off or near rotating equipment.
3. When operating stationary PTO driven equipment, always apply the tractor parking brake and block the rear wheels from front and rear side.
4. To avoid injury, always move down flip part of PTO. Do not clean, adjust or service PTO driven equipment when the tractor engine is running.
5. Make sure the PTO master shield is installed at all times and always replace the PTO shield cap when the PTO is not in use.

<DIESEL FUEL>

1. Keep the equipment clean and properly maintained.
2. Under no circumstances should gasoline, alcohol or blended fuels be added to diesel fire or explosive hazard. Such blends are more explosive than pure gasoline. In a closed container, such as a fuel tank. **DO NOT USE THESE BLENDS.**
3. Never remove the fuel cap or refuel the tractor with the engine running.
4. Do not smoke while refueling or when standing near fuel.
5. Maintain control of the fuel filler pipe when filling the tank.
6. Do not fill the fuel tank to capacity. Allow room for expansion.
7. Wipe up spilled fuel immediately.
8. Always tighten the fuel cap securely.

9. If the original fuel tank cap is lost, replace it with genuine cap. A none approved cap may not be safe.
10. Do not drive equipment near open fire.
11. Never use fuel for cleaning purpose.
12. Arrange fuel purchases so that winter grade fuel are not held over and used in the spring.

※N.B: It is suggested that after repairs if any of the Safety Decal/sign is peeled/defaced, the same may be replaced immediately in interest of your safety.



SAFETY PRECAUTIONS

2. DO'S AND DON'T'S

▶ DO'S-FOR BETTER PERFORMANCE

- DO** - Ensure that safety shields are in place and in good condition.
- DO** - Read all operating instructions before commencing to operate tractor.
- DO** - Carry out all maintenance tasks without fail.
- DO** - Keep the air cleaner clean.
- DO** - Ensure that the correct grade of lubricating oils is used and that they are replenished and changed at the recommended intervals.
- DO** - Fit new sealing rings when the filter elements are changed.
- DO** - Watch the oil pressure gauge or warning light and investigate any abnormality immediately.

- DO** - Keep the radiator filled with clean water and in cold weather use anti-freeze mixture. Drain the system only in an emergency and fill before starting the engine.
- DO** - Ensure that the transmission is in neutral before starting the engine.
- DO** - Keep all fuel in clean storage and use a filter when filling the tank.
- DO** - Attend to minor adjustments and repairs as soon as necessity is apparent.
- DO** - Allow the engine to cool before removing the radiator filler cap and adding water, remove the radiator cap slowly.

- DO** - Shift into low gear when driving down steep hills.
- DO** - Latch the brake pedals together when driving on a highway.
- DO** - Keep draft control lever fully down when not in use.



SAFETY PRECAUTIONS



▶ DON'TS-FOR SAFE OPERATION

- DON'T** - Run the engine with the air cleaner disconnected.
- DON'T** - Start the tractor in an enclosed building unless the doors and windows are open for proper ventilation.
- DON'T** - Operate the tractor or engine while lubricating or cleaning.
- DON'T** - Allow the tractor to run out of diesel fuel otherwise it will be necessary to vent the system.
- DON'T** - Temper the fuel injection pump, If seal is broken the warranty becomes void.
- DON'T** - Allow the engine to run idle for a long period.

- DON'T** - Run the engine if it is not firing on all cylinders.
- DON'T** - Ride the brake or clutch pedal. This will result in excessive wear of the brake lining, clutch driven member and clutch release bearing.
- DON'T** - Use the independent brakes for making turns on the highway or at high speeds.
- DON'T** - Refuel the tractor with the engine running.
- DON'T** - Mount or dismount from the right side of the tractor.
- DON'T** - Temper the hydraulic control levers' upper limit stops.
- DON'T** - Use draft control lever for lifting of implements.
- DON'T** - Start the engine with the PTO engaged.

- DON'T** - Use the governor Control Lever (Hand throttle) while driving on roads.
- DON'T** - Move the hydraulic levers rearward.



SAFETY PRECAUTIONS

3. SAFETY SIGNS

▶ GENERAL SAFETY INFORMATION

Replace all missing, damaged or illegible sign.

✚ IMPORTANT

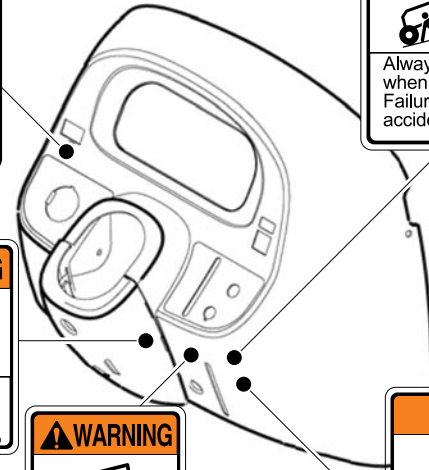
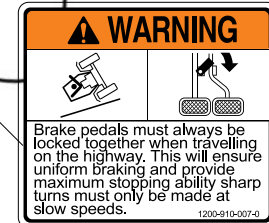
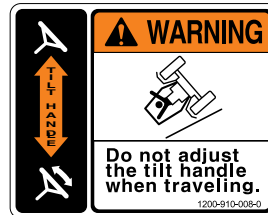
- This “General safety Information” should be kept with the machine at all times as reference data.

⚠ CAUTION

- This symbol means ATTENTION! YOUR SAFETY IS INVOLVED.

The message that follows the symbol contains important information about safety. Follow recommended precautions and safe operating practice.

▶ DECALS MOUNTING LOCATION



R5S0201A



SAFETY PRECAUTIONS



Operator's manual

1200-910-023-0

WARNING

Work in ventilated Area.

1200-910-003-0

DANGER

Periodic ventilation should be made to avoid suffocation while heating an air conditioning is used. Sleeping in the cab is prohibited.

1200-910-011-0

WARNING

LOCK ← → UNLOCK

LOCK BUTTON

Push the button to lock position with joystick lever is neutral whenever the implement is not operation.

1769-910-009-0

WARNING

Always fasten Your seat belt.

1200-910-019-0

WARNING

Never use the diff-lock at high speed or on the road as this can cause rollover and injury.

1200-910-006-0

WARNING

FAST SLOW (LOCK)

Always set the knob to lock when

- 1.Travelling on the road.
- 2.Replacing blades on an implement
- 3.Making adjustment to an implement

Sudden dropping of an implement can cause serious injury or death.

1200-910-004-0

R5S0202A



SAFETY PRECAUTIONS

WARNING

Do not remove radiator cap while engine is hot. Hot steam will injure you.

1200-910-015-0

CAUTION

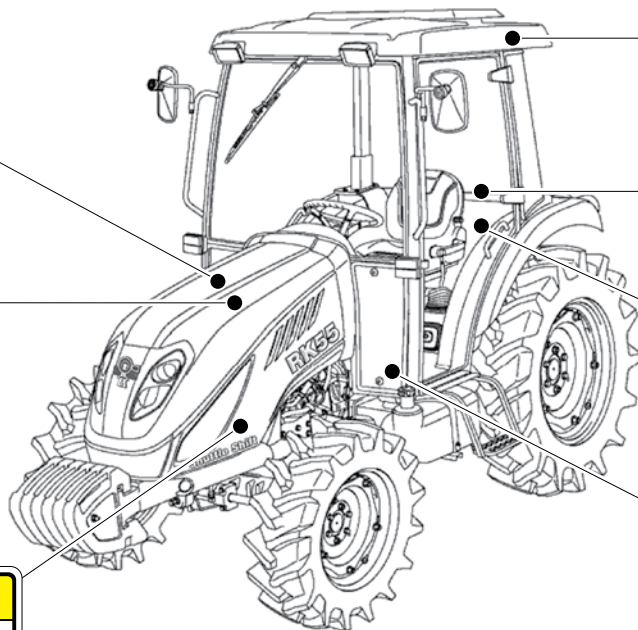
Keep hands and clothing away from rotating fan and belts to prevent serious injury.

1200-910-012-0

CAUTION

Do not touch while the system is hot. It cause serious burns

1200-910-024-0



Inner/Outer air Ventilation

- When grills of rear and both sides are opened, inner air will ventilate in.
- For effective use, open it when operate heater or air conditioner and close when ventilate fresh air.

1220-904-122-0

WARNING

Do not use the sub shift lever at "H" position when driving backward.

1200-910-001-0

DANGER

Do not ride except operator.

1200-910-016-0

WARNING

Do not refuel the tractor while smoking or near naked flame or sparks. always stop engine before refueling tractors.

1200-910-005-0

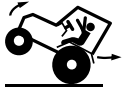
R5S0203A




SAFETY PRECAUTIONS



2



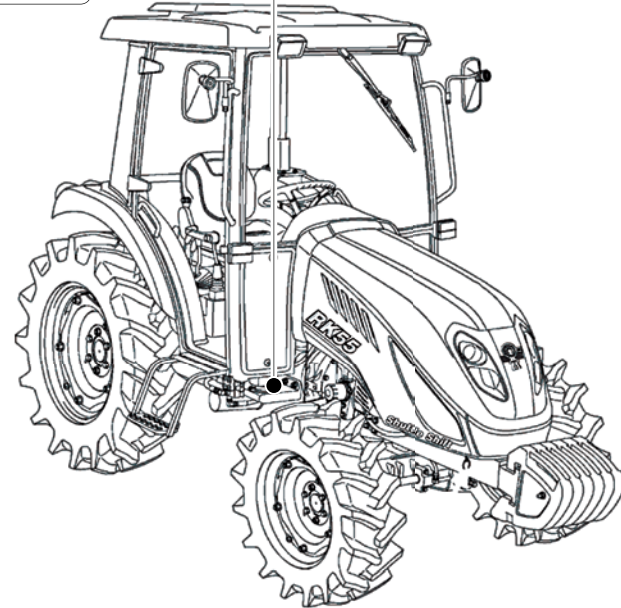
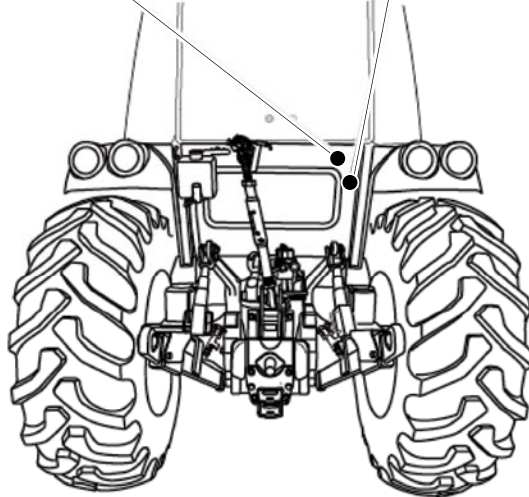
⚠ WARNING
Attach implements and trailers to the tractor only using the prescribed drawbar or hitch. 1200-910-014-0



⚠ DANGER
Rotating driveline contact can cause death.
KEEP AWAY!
Keep all drive line. Tractor and equipment shields in place during operation. 1200-910-013-0



⚠ WARNING
Stay clear of raised Boom and bucket. 1769-910-010-0



R5S0204A

2-27



SAFETY PRECAUTIONS

4. UNIVERSAL SYMBOLS

Some of the universal symbols have been shown below with an indication of their meaning.



Engine speed rev / min x 100)



Air filter



Power take off engaged



Turn signal



Hours, recorded



Battery charge



Power take off Disengaged



Transmission oil temperature



Engine coolant temperature



Pressured open slowly



Lift arm / raise



Parking brake



Fuel level



Continuous variable



Lift arm / lower



Work lamps



Engine Stop control



Warning



Corrosive substance



Differential lock



Lights



Hazard warning



"Tortoise" Slow or minimum setting



See operator's manual



Horn



Neutral



"Hare" fast or maximum setting



Regen Request Lamp



Engine oil pressure



Fan



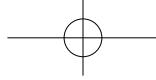
Transmission oil pressure



Regen Disable Lamp

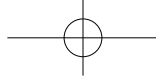


Exhaust Temp Lamp



DESCRIPTION OF TRACTOR CONTROLS

- 1. INSTRUMENT AND SWITCHES 3-2
- 2. OPERATION THE CONTROLS 3-12
- 3. PTO GEAR SELECTION LEVER 3-19
- 4. OPERATING THE HYDRAULICS..... 3-20
- 5. EXTERIOR HYDRAULIC LEVER (OPTIONAL)..... 3-21
- 6. OPERATING THE 3 POINT LINKAGE (TPL)..... 3-25



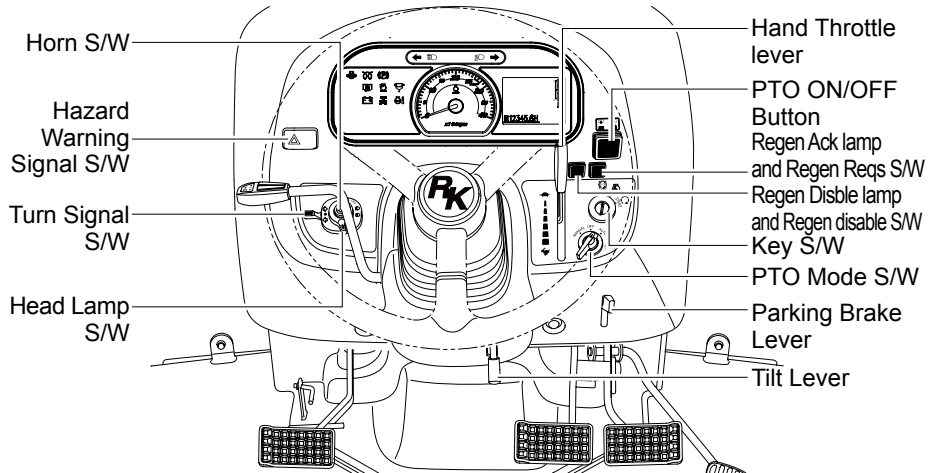
DESCRIPTION OF TRACTOR CONTROLS

1. INSTRUMENT AND SWITCHES

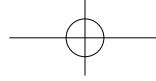
The following pages in this section detail the location and function of various instruments, switches and controls on your tractor. Even if you operate other tractors, you should read through this section of the manual and ensure that you are thoroughly familiar with the location and function of all the features of your new tractor.

Do not start the engine or attempt to drive or operate the tractor until you are fully accustomed to all the controls. It is too late to learn once the tractor is moving. If in doubt about any aspect of the operation of the tractor consult your **RK Tractor** store.

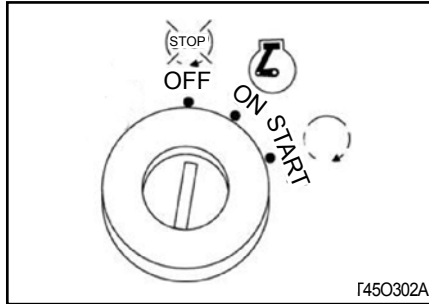
Particular attention should be paid to the recommendations for running-in to ensure that your tractor will give long life and dependable service for which it was intended.



R5SO301B

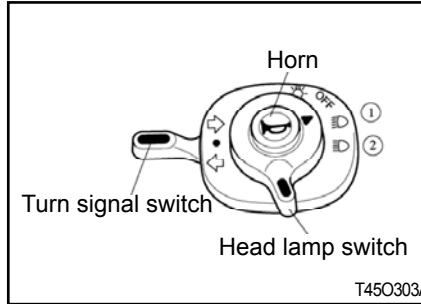


DESCRIPTION OF TRACTOR CONTROLS



▶ MAIN SWITCH (KEY SWITCH)

- OFF - The key can be inserted or removed.
- ON - The electric circuit is on & preheat function
- START - The starter motor is engaged. When the key is released it will return to the ON position.



▶ HEAD LAMP, TURN SIGNAL SWITCH AND HORN

<HEAD LAMP SWITCH>

High and low beam are operated On the main switch

- Position 1. Low beam
- Position 2. High beam

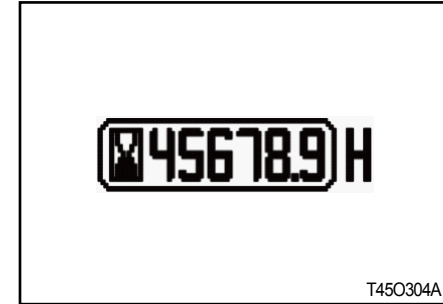
<TURN SIGNAL SWITCH>

Pull the turn signal lever down to signal a left turn.

Push the turn signal lever up to signal a right turn.

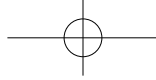
<HORN>

Push the Red button.

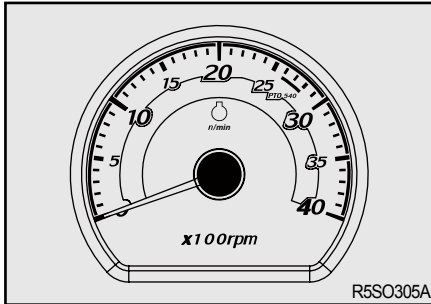


▶ HOUR METER

The hour meter consists of five digits where the last digit indicates 1/10th of an hour

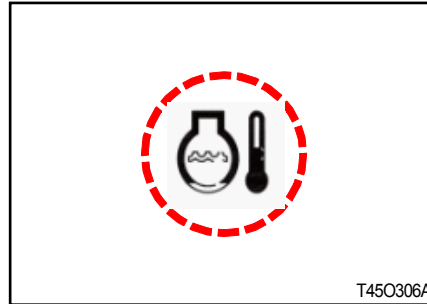


DESCRIPTION OF TRACTOR CONTROLS



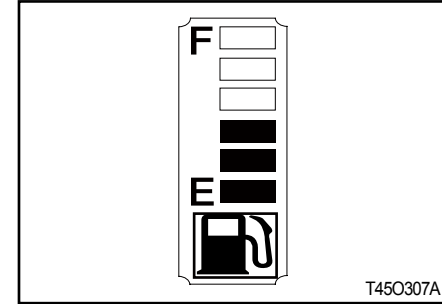
► TACHOMETER

This meter shows the revolutions of the engine and the PTO shafts as well as the travel speed in top gear.



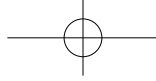
► WATER TEMPERATURE WARNING LAMP

This comes on when the coolant temperature is over 110 degrees.

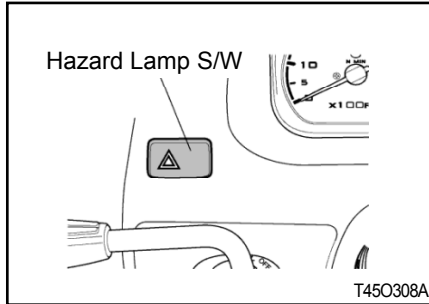


► FUEL GAUGE

Shows the amount of fuel in the tank when the ignition switch is "ON".



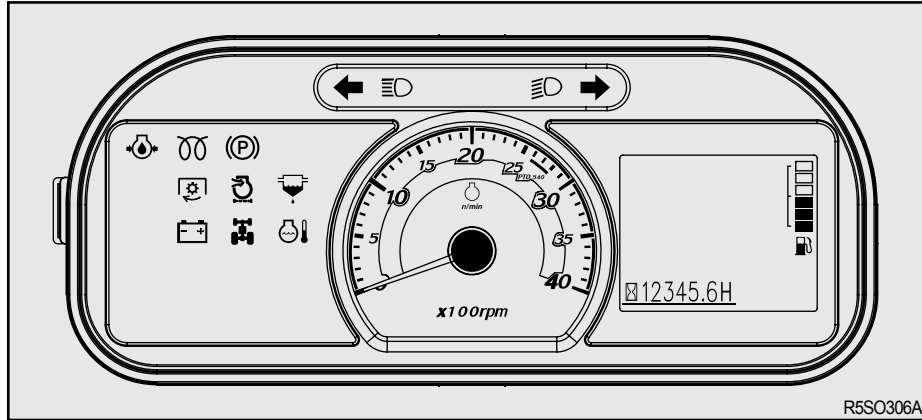
DESCRIPTION OF TRACTOR CONTROLS






▶ HAZARD LAMP SWITCH

Push the hazard warning signal once to operate the hazard warning light. (Left and right turn indicators flash)

Push the hazard warning light switch again to switch off the hazard warning lights.



▶ PANEL INSTRUMENT LAMP

-  High beam lamp is operated on the combination switch.
-  Low beam lamp is operated on the combination switch.
-  Parking brake is operated when footbrake is engaged.



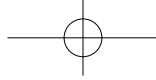
<PTO monitor Lamp>

Shows the revolution of PTO. Refer to monitor lamp on Page 3-6.



<Fuel level indicator lamp>

If it comes on while the engine is running, Fill the tank with fuel.



DESCRIPTION OF TRACTOR CONTROLS



<Engine oil pressure lamp>

Will go out as soon as the engine starts if the oil pressure is correct. If it comes on while the engine is running, stop the engine and get expert advice.



<Charge lamp>

This light will go off as soon as the engine starts to run to indicate that the alternator is changing. (Please note, as broken fan belt can cause the light to come on, please stop the engine as overheating can occur if not rectified immediately)



Glow signal Lamp indicates preheating.



<Air cleaner filter contamination indicator>

This comes on when the air cleaner is clogged by foreign materials.

When this comes on, open the cover and clean the inside of the cleaner.

Also, blow air through the filter in the direction of intake air to clean it or replace the filter with a new one.



<DPF warning lamp>

This lamp blinks when carbon is accumulated in the diesel particulate filter. If this lamp blinks, press the regeneration button.



<DPF progress indicator>

This lamp comes on when DPF regeneration is in progress.



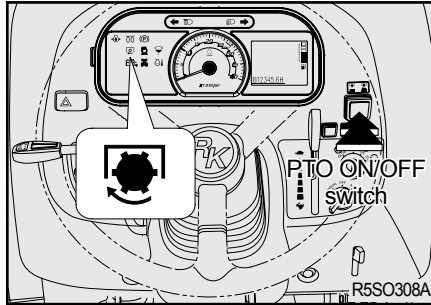
<PTO monitor lamp>

The PTO monitor lamp on the dash panel indicates the state.

1. If the monitor glows:
The PTO is rotating.
2. If the monitor is off: The PTO is off.
3. If the monitor blinks:
The PTO is presently stationary but will instantly start rotating of the clutch pedal is released or the implements lowered.



DESCRIPTION OF TRACTOR CONTROLS

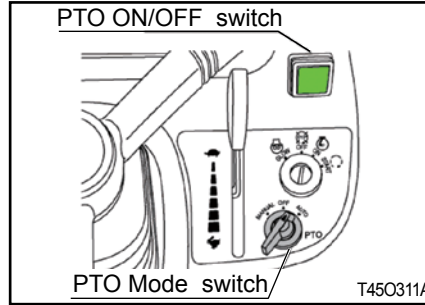


▶ PTO ON/OFF SWITCH

Two switches operate the independent PTO.

PTO "ON/OFF" switch: PTO "ON/OFF" switch is situated on the LHS. on the steering column and can be identified easily with its built in red colored indicator.

When the switch is pushed down to start the PTO indicator glows to indicate that the switch and the PTO are in "ON" position, If the switch is pushed down again the indicator goes off signaling that the PTO is "OFF".



▶ PTO CONTROL SWITCH

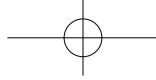
This switch is located near the starting key location on the dash panel. There are three positions marked for this switch.

- "Off" at the center.
- "Manual" at the left.
- "Auto" at the right.

The PTO shaft will not rotate if either of the two switches is in OFF position.

The following table explains how the PTO operates at the two different (MANUAL & AUTO) positions of the PTO control switch with the PTO "ON/OFF" switch in the on position.

3

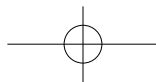


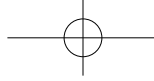
DESCRIPTION OF TRACTOR CONTROLS

First select the specified speed for the PTO by using the PTO shifter on the LHS, below the driver seat.

PTO ON/OFF Switch	PTO Control Switch	Clutch Pedal	Hydraulic Position Control Lever	PTO Monitor Lamp on the dash panel	PTO Shaft
ON	Manual Mode	Either pressed or released	Either raised or lowered	Glow	Rotates
ON	Auto Mode	Pressed	Either raised or lowered	Blinks	Stationary
ON	Auto Mode	Either pressed or released	Raised	Blinks	Stationary
ON	Auto Mode	Released	Lowered	Glow	Rotates

- From the table above we learn about the safety features of the PTO. When the monitor on the dash panel is blinking it indicates to the operator that the PTO is in the "ON" position but temporarily not rotating either because the clutch pedal is pressed or the implement is lifted off the ground or both. The PTO will start rotating instantaneously when either the clutch pedal is released and/or the implement is lowered to the ground.
- The operator must use this blinking signal to clear the area around the tractor off bystanders/onlookers as the rotating blades of certain implements can accidentally cause injuries to the persons standing near the tractor.
- The stopping of the PTO when the implement is lifted off the ground with the position control prevents the damage to the implement or the PTO shaft.





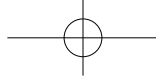
DESCRIPTION OF TRACTOR CONTROLS



WARNING






- When the PTO control switch is in manual position the PTO does not stop rotating even if the clutch pedal is pressed. If working on hard soils, pavements with a rotary implement the PTO "ON/OFF" switch must be put to the "OFF" position to stop the PTO from rotating, If this is not done the rotating blades of the implement will push on the hard ground below and in turn push the tractor toward causing accident which can lead to serious injuries or death.
- Extra precaution must be taken to clear the area of bystanders/onlookers when using PTO driven implements. The rotating blades of the implements can cause serious injuries on contact. The warning that is indicated by the blinking PTO monitor is to make the operator aware that the PTO is in on position and will instantly start rotating if the clutch pedal is released or implement is lowered or both.
- In no case the specified rotating speeds indicated by the implement manufacturer be crossed as the same can lead to serious damage to the tractor/equipment and can lead to serious injuries to persons around.

3



DESCRIPTION OF TRACTOR CONTROLS

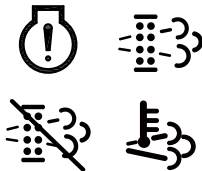




▶ DPF REGENERATION SWITCH

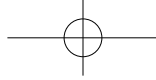
Name and Operation of Switch	Operation of Monitor Panel (meter panel) LCD	Function and Operation
	 High exhaust temperature indicator	(Regeneration progression and precautions) <ol style="list-style-type: none"> 1. When the regeneration process for the DPF system is started, the indicator comes on. 2. While the regeneration process is performed, exhaust gas is very hot. Never touch the DPF and its surrounding parts to avoid personal injury. 3. Perform regeneration in a location far away from others. 4. Make sure that there is no flammable materials near the exhaust pipe. 5. Do not stop the engine until the indicator is automatically turned off. (Otherwise, it can cause a critical failure.)
	Regeneration button	Button: Pressing for 3 seconds (Refer to "Operating stationary regeneration function")  Engine warning indicator  Regeneration warning indicator
	Regeneration stop (regeneration deactivation) button	Button: Pressing once → Stationary regeneration is stopped. Pressing again → Stationary regeneration is resumed.
		(Operating stationary regeneration function) <ol style="list-style-type: none"> 1. Park the tractor on safe level ground, and confirm that there is no flammable materials near the exhaust pipe. 2. Apply the parking brake. 3. Put the shift lever in the neutral position. 4. Set the engine speed to the idle (minimum RPM) speed. 5. Idle the engine for 3 to 4 minutes. 6. Press the Regeneration button for approximately 3 seconds. 7. The engine speed is automatically increased and the "Stationary regeneration" function is activated. 8. The regeneration process typically takes 25 to 30 minutes. The stationary regeneration can be stopped, resumed or deactivated with this button.



DESCRIPTION OF TRACTOR CONTROLS

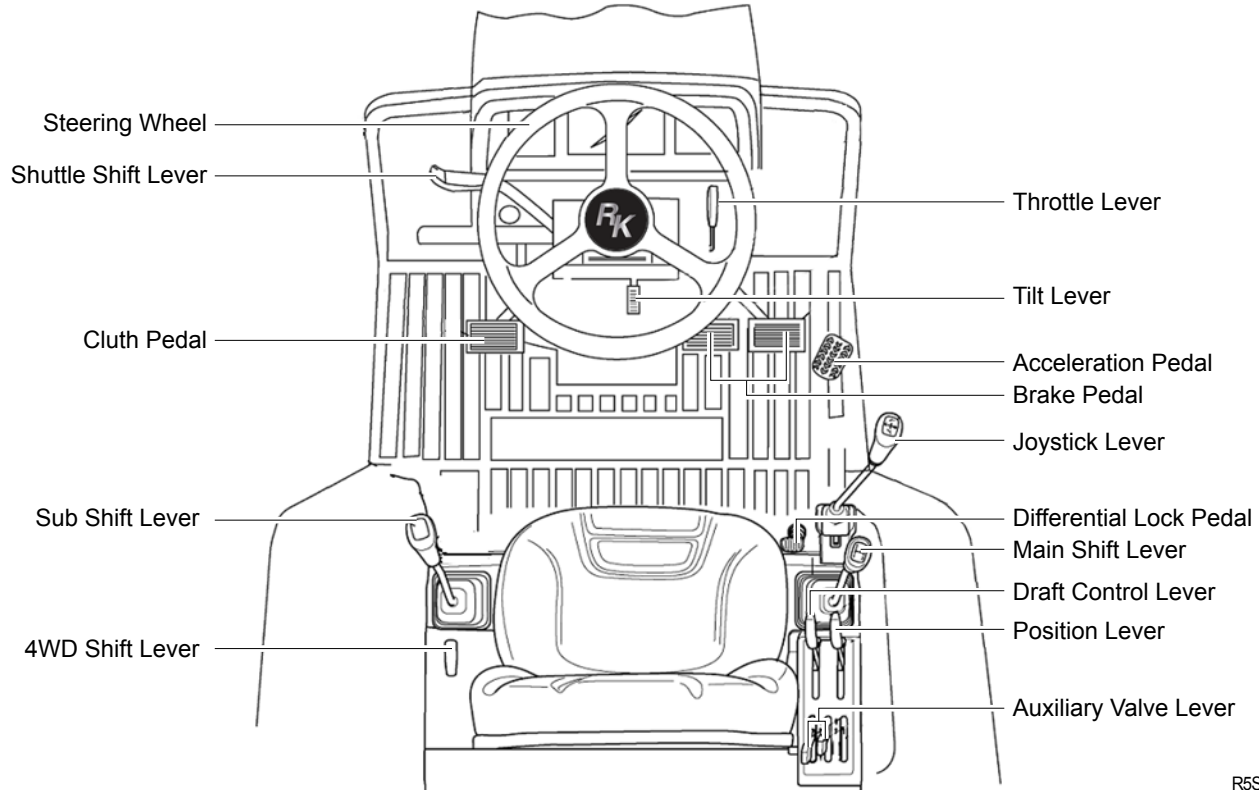
3

Name and Operation of Switch	Operation of Monitor Panel (meter panel) LCD	Function and Operation
-	No monitor panel indicator	<p>< Automatic regeneration function ></p> <ol style="list-style-type: none"> 1. Initial 100 hours of operation: The regeneration process is automatically performed as necessary during driving or operation. 2. After 100 hours of operation: The regeneration process is automatically performed for every 100 hours of operation during driving or operation. (Under normal / high load condition)
-		<p>< Stationary regeneration function ></p> <ol style="list-style-type: none"> 1. The regeneration process may not be automatically performed if the vehicle is repeatedly used under a very low load condition after initial 100 hours of operation. In this case, start the process manually. (Repeated use under very low load condition) <p> Engine warning indicator: Displayed when the stationary regeneration is necessary or the engine system needs to be checked.</p> <p> Regeneration warning indicator: Displayed when the stationary regeneration is necessary.</p> <p> Hot exhaust gas indicator: Displayed when the DPF system is excessively hot during automatic or stationary regeneration. (It indicates the current regeneration status.)</p> <p> Regeneration stop indicator: Displayed when the stationary regeneration is stopped or deactivated.</p>

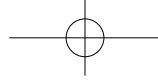


DESCRIPTION OF TRACTOR CONTROLS

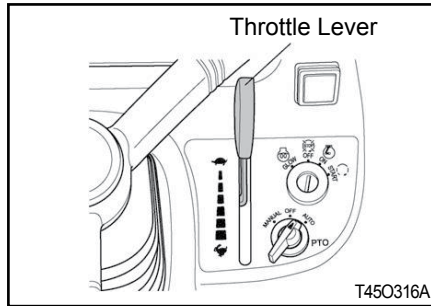
2. OPERATION THE CONTROLS



R5S0304A



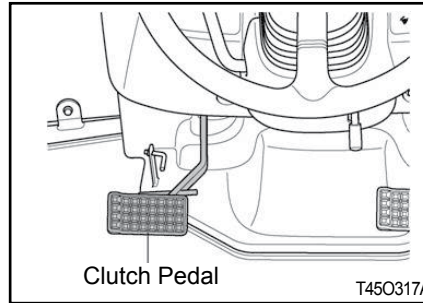
DESCRIPTION OF TRACTOR CONTROLS



▶ THROTTLE LEVER (HAND THROTTLE)

Pulling the hand throttle towards the driver increases revolutions.

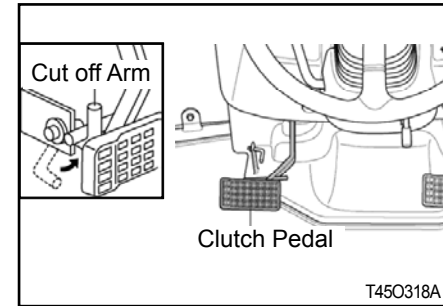
Pushing it away from the driver decreases revolution.



▶ CLUTCH PEDAL

When the clutch pedal is pressed on models with mechanical transmissions, drive is disengaged and the gear range and forward or reverse travel can be selected.

When moving off, smoothly release the pedal to set the tractor moving.



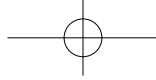
▶ CLUTCH CUT-OFF ARM

For long term storage of the Tractor it is possible to latch the clutch in the disengaged position.

Push clutch down and engage the latch to hold it there.

WARNING

- Do not attempt to start engine when this arm is being used.



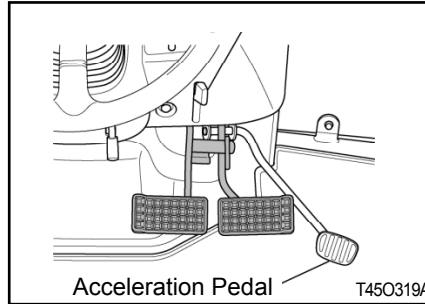
DESCRIPTION OF TRACTOR CONTROLS

► BRAKE PEDAL

Right and left brake pedals are provided to assist in turning the tractor in the field.

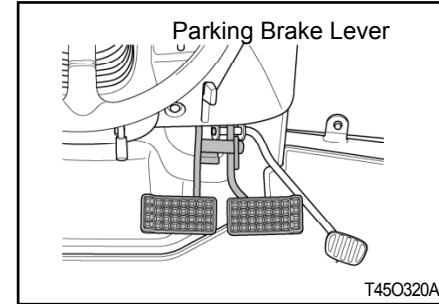
▲ CAUTION

- A connecting latch is provided to connect the right and left brake pedals for high speed or road use.
- In the interest of safety always use it on the road or at high speed as using one side only can cause rollovers.
- When servicing the tractor ensure that the adjustment on both sides in the same.



► FOOT OPERATED ACCELERATOR

This pedal can override a fixed hand throttle setting.

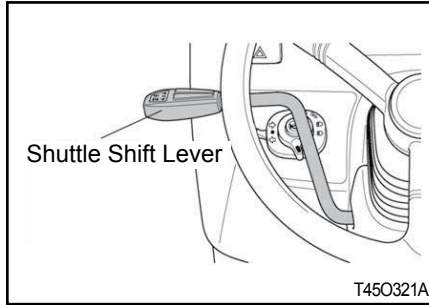


► PARKING BRAKE LEVER

Connect the brake pedals, push them down while pulling the parking brake up to engage. Press the parking brake pedal and push the Brake pedal to release.



DESCRIPTION OF TRACTOR CONTROLS



▶ SHUTTLE SHIFT LEVER

This control allows shifting from forward to reverse & reverse to forward. When stationary set the lever to "N" for neutral.

- Push the lever away from the driver engages forward.
- Pulling the lever towards the driver engages reverse.

IMPORTANT

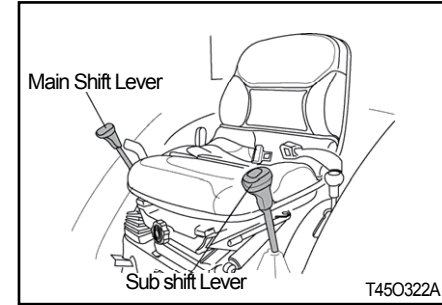
- Press clutch pedal fully before operating shuttle shift lever.

IMPORTANT

- When changing from forward to reverse or back to forward again while in high range make sure the tractor comes to a stop before changing direction. Failure to do so is likely to result in damage to the mechanism and place the driver at risk of injury.

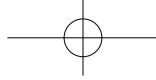
CAUTION

- Operate the shuttle shift only while seated on the tractor.
- Do not use the shuttle shift lever to start the tractor for towing or traveling uphill, use the clutch instead.
- Always stop the tractor before getting off.

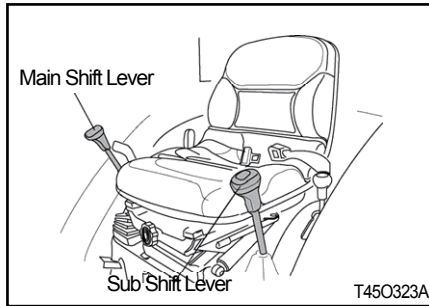


▶ MAIN GEAR LEVER

- H** This lever can be shifted by using the clutch, both when the tractor is stationary or mobile.
- It is located on the RHS of the driver seat.



DESCRIPTION OF TRACTOR CONTROLS



▶ SUB GEAR LEVER (LINEAR SHIFT LEVER)



Operate the sub gear lever using clutch to select the appropriate speed for different applications.

It is located on the LHS of driver seat.

⚠ IMPORTANT

Avoid damage!

Select the proper speed range and gear for the job.

- The machine maybe operated in any gear with engine speeds at 945-2,200 rpm. Within these limits, the engine can be placed under varying load operations.
- Never overload engine by lugging machine at low idle speeds.
- Raise engine speed the match expected loads. If a slight increase engine rpm occurs simultaneously with moving hand throttle lever forward, the engine is not overloaded.

◁The Main shift lever provides four speed ranges. The Sub shift lever provides four gear positions.

The Shuttle shift lever controls travel direction

Use all three levers in different combinations to achieve Sixteen forward and Sixteen reverse speeds.

Machine motion must stop and the clutch pedal must be depressed before changing ranges. Gear may be changed while machine is in motion if clutch pedal is completely depressed.

⚠ IMPORTANT

- Do not operate gear levers without stopping the tractor & without using the clutch.

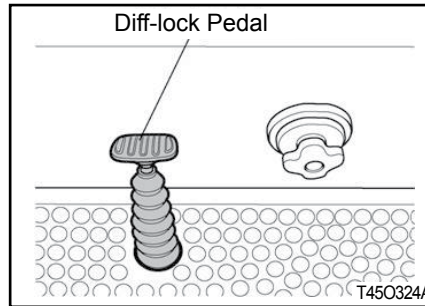


DESCRIPTION OF TRACTOR CONTROLS



<TO AVOID PERSONAL INJURY>

- When you leave the tractor, be sure to apply the parking brake and stop the engine
- In applying the brakes:
 - The torque of wheel axle is extremely high while creep speed is being used. Be sure to step down on the clutch pedal completely before applying the brakes, or they will not work.
 - When starting to operate the tractor, be sure to release the parking brakes. Misuse of the brakes may cause damage to the transmission and is therefore not acceptable to RK for coverage under the warranty.



▶ DIFF-LOCK PEDAL

In case of wheel slippage use the diff-lock by pushing down on the diff lock pedal.

To release it remove the foot from the pedal.

⚠ DANGER

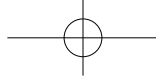
- Tractor will be difficult to turn if the Diff-lock is engaged, ensure the lock is disengaged before turning the steering wheel.

⚠ IMPORTANT

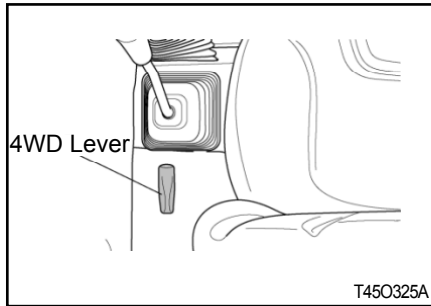
- Do not use high engine RPM when engaging Diff lock. If the diff lock does not release after removing the foot from the diff lock pedal, alternatively brake with the left and right brake until it gets released.

⚠ CAUTION

- Never use the diff lock at high speed or on the road as this can cause roll over and injury.



DESCRIPTION OF TRACTOR CONTROLS



▶ FRONT WHEEL DRIVE LEVER

In the "ON" position the front wheels are engaged and in the "OFF" position they are disengaged.

Engage & disengage the front wheel drive with the front wheels in the straight position and at low Engine RPM.

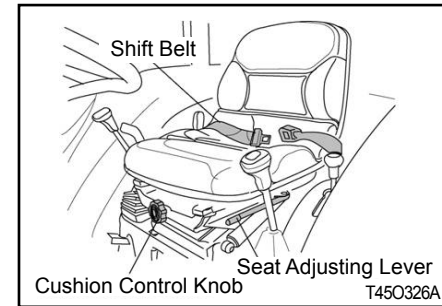
IMPORTANT

- Do not use front wheel drive at high speed or on the road as premature wear of components will result.

IMPORTANT

- Always use the clutch when using the front wheel drive lever.

Use of front wheel drive improves traction performance.



▶ DRIVER'S SEAT



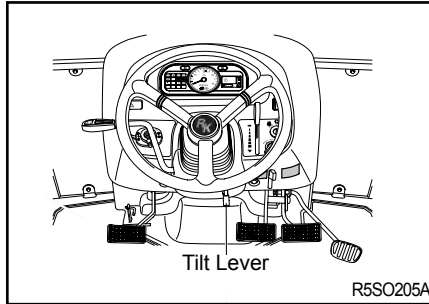
To adjust the seat backwards and forwards lift the lever at the front of the seat and set it to the desired position.



DESCRIPTION OF TRACTOR CONTROLS



3. PTO GEAR SELECTION LEVER

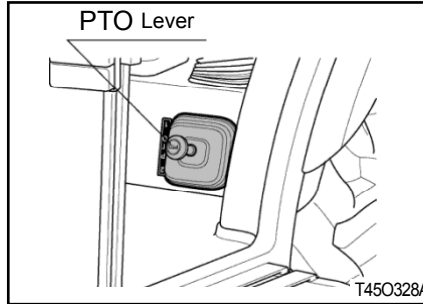


► TILT LEVER

To adjust the inclination of the steering wheel with a 3 stages and set it to the desired position.

⚠ DANGER

- Ensure that the tilt pedal has locked before moving the tractor.



Your tractor is equipped with 1Speed PTO to suit range of applications and conditions.

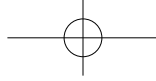
MODEL	POSITION		
	1st	2nd	3rd
RK55S / RK55SC	540	-	-

⚠ IMPORTANT

- Always use the clutch when engaging or disengaging the PTO or changing PTO speed. Let the PTO driven implement come to a complete stop before changing.

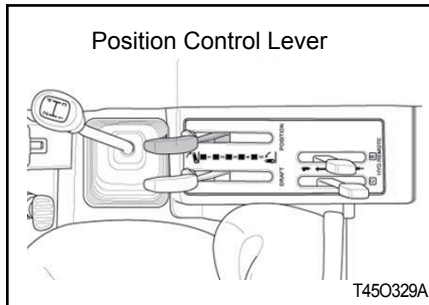
⚠ CAUTION

- Do not operate any implement at a high speed than is specified for it.
- When making adjustments to the implement stop the engine to avoid serious injury.
- When leaving the tractor stop the engine and remove the key Set the parking brake.



DESCRIPTION OF TRACTOR CONTROLS

4. OPERATING THE HYDRAULICS



The hydraulics are powered with an engine driven hydraulic pump and controlled with a position control lever mounted beside the driver.

► POSITION CONTROL

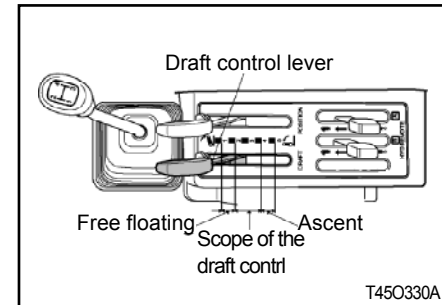
Implements can be raised and lowered with the hydraulic position control lever and can be stopped at any position by stopping the lever.

To ensure a consistent working depth the adjustable stop can be set to ensure that the implement returns to the same depth every time.

- To raise the implement: Pull the lever back.
- To lower the implement: Push the lever forward.

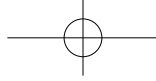
▲ WARNING

- After finishing the work, always lower the implement to the ground and switch off the engine, Set the parking brake to avoid injuries and accidents.



► DRAFT CONTROL LEVER

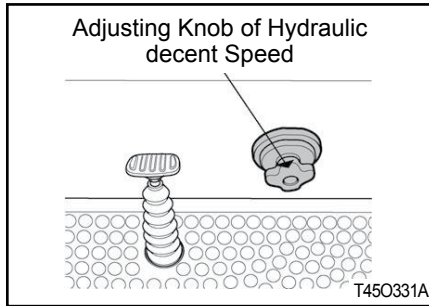
Soil engaging implements can be set for precision work by using draft control. By mounting the lever forward. The depth increase & by moving the lever backwards the depth increases.



DESCRIPTION OF TRACTOR CONTROLS



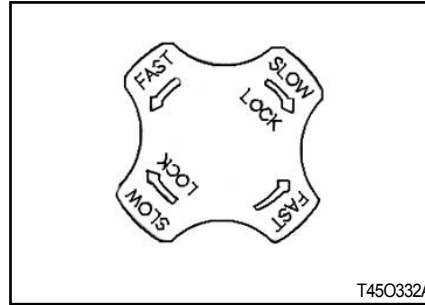
5. EXTERIOR HYDRAULIC LEVER (OPTIONAL)



► LOWERING SPEED CONTROL KNOB FOR THE 3 POINT HITCH

This knob controls the downward speed of the hydraulics three point linkage and is positioned at the front of the driver's seat.

To slow the downward speed turn the knob clockwise.



To increase the downward speed, turn the knob anticlockwise.

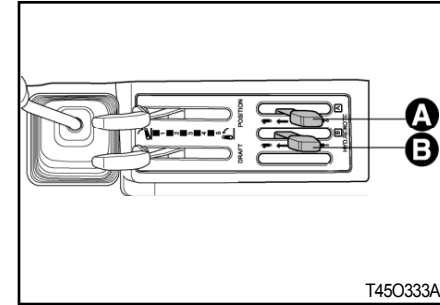
To lock the knob clockwise.

Do not over tighten the knob.

▲ CAUTION

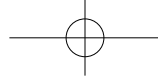
Always set the knob to lock when

- Traveling on the road .
- Replacing tires or blades on an implement.
- Making adjustments to an implement. Sudden dropping of an implement due to hydraulic problems can cause serious injury or death.



Move the lever up or down and hold. This will raise or lower the implement (rotavator or hydraulic plow).

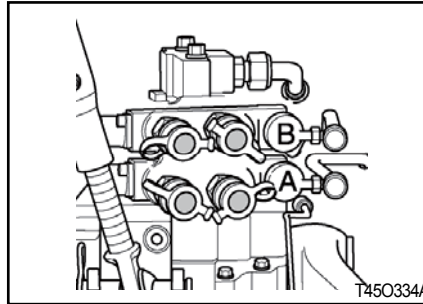
- A type : Spring type – Double-acting with self-return.
- B type : Detent type – Double-acting with Detent Important:



DESCRIPTION OF TRACTOR CONTROLS

IMPORTANT

- Do not hold the lever in the "Pull" or "Push" position once the remote cylinder has reached the end of the stroke. As this will cause oil to flow through the relief valve. Forcing oil through the relief valve for extended periods will overheat the oil.
- When Using the tractor hydraulic system to power front loader, do not operate the boom and bucket cylinders simultaneously.



▶ REMOTE HYDRAULIC CONTROL VALVE COUPLER CONNECTING AND DISCONNECTING

< CONNECTING >

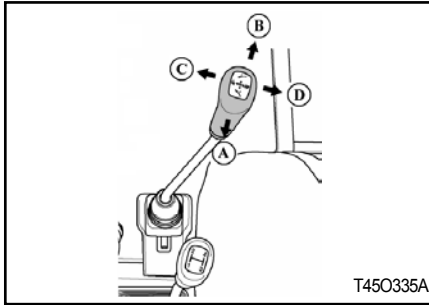
1. Clean both couplers.
2. Remove dust plugs.
3. Insert the implement coupler to the tractor hydraulic coupler.
4. Pull the implement coupler slightly to make sure couplers are firmly connected.

< DISCONNECTING >

1. Lower the implement first to the ground to release hydraulic pressure in the hoses.
2. Clean the couplers.
3. Relieve pressure by moving hydraulic control levers with engine shut off. Pull the hose straight from the hydraulic coupler to release it.
4. Clean oil and dust from the coupler, then replace the dust plugs.



DESCRIPTION OF TRACTOR CONTROLS



▶ JOYSTICK LEVER

This simple joystick lever can control the use of a front-end loader.

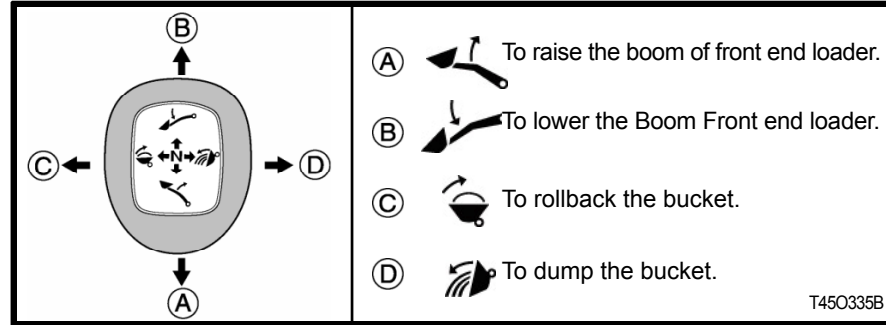
And lift-retract, dump-rollback smoothly and act as one handle lever.

To raise the front end loader : pull the lever to lift position.

To lower the front end loader : push the lever to retract position.

To rollback the bucket : pull the stick to rollback position.

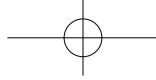
To dump the bucket : push the stick to dump position.



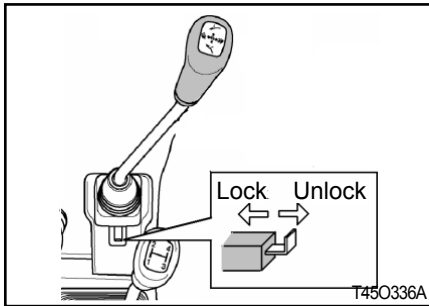
3

NOTE

- The Joystick control and valve can also be used for other applications if a front end loader is not fitted.



DESCRIPTION OF TRACTOR CONTROLS



▶ SAFETY IMPLEMENT FOR JOYSTICK LEVER

This simple Safety locking system can lock the joy stick by pushing the Button and unlocked by pulling .

WARNING

- Hydraulic fluid escaping under pressure can have enough force to penetrate the skin.

WARNING

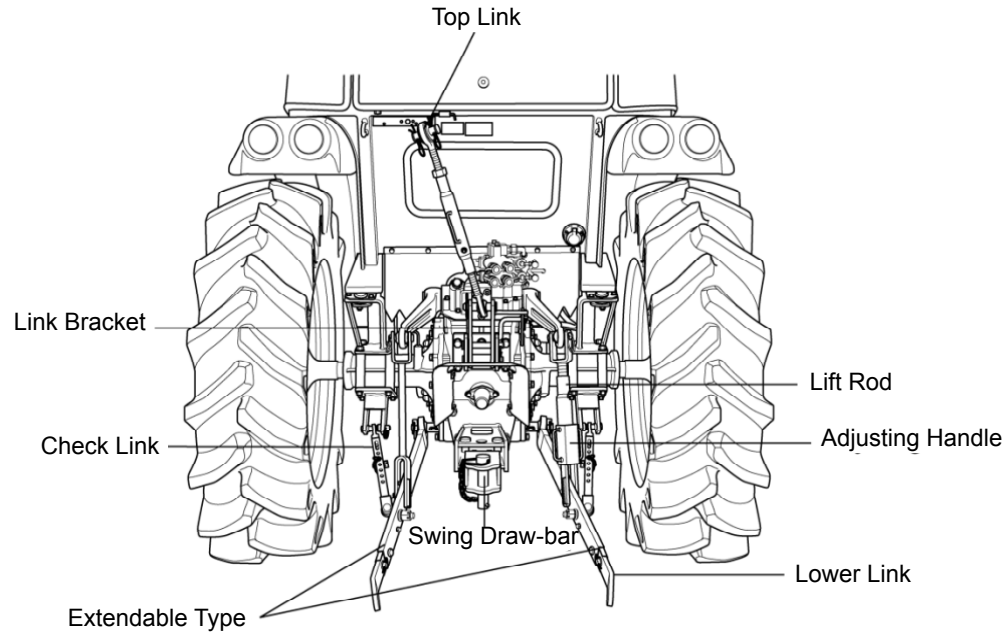
- Hydraulic fluid may also infect a minor cut or opening in the skin. If injured by escaping fluid. See a doctor at once. Serious infection or reaction can result if medical treatment is not given immediately. Make sure all connections are tight and that hoses and lines are in good condition before applying pressure to the system.
- Release all pressure before disconnecting the lines or performing other work on the hydraulic system. To find a leak under pressure use a small piece of cardboard or wood. Never use hands.



DESCRIPTION OF TRACTOR CONTROLS

6. OPERATING THE 3 POINT LINKAGE (TPL)

▶ SWING DRAW BAR TYPE



3

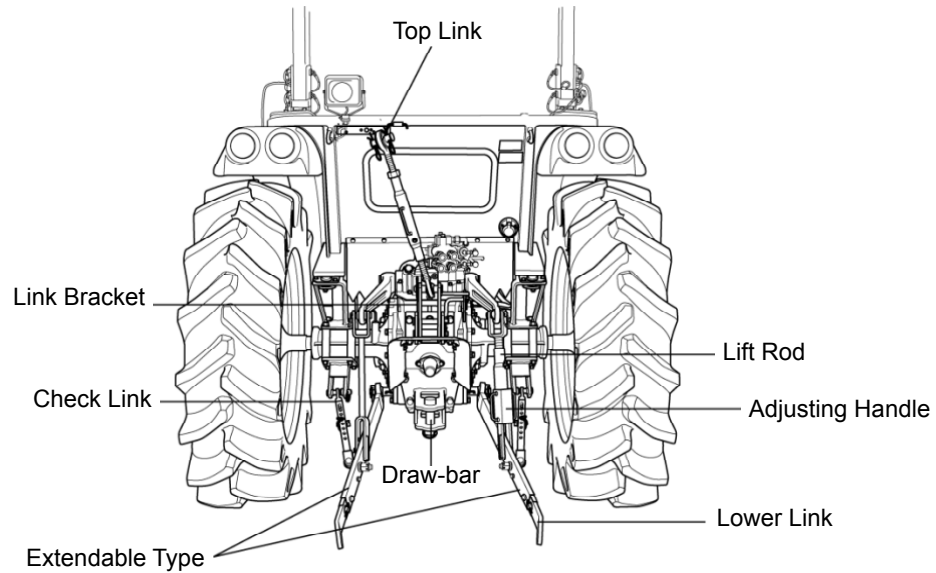
T45O337A

3 - 25

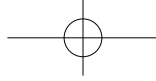


DESCRIPTION OF TRACTOR CONTROLS

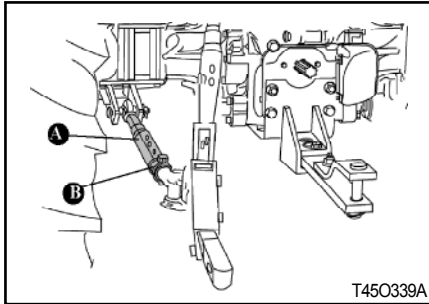
► DRAW BAR TYPE



T45O338A



DESCRIPTION OF TRACTOR CONTROLS

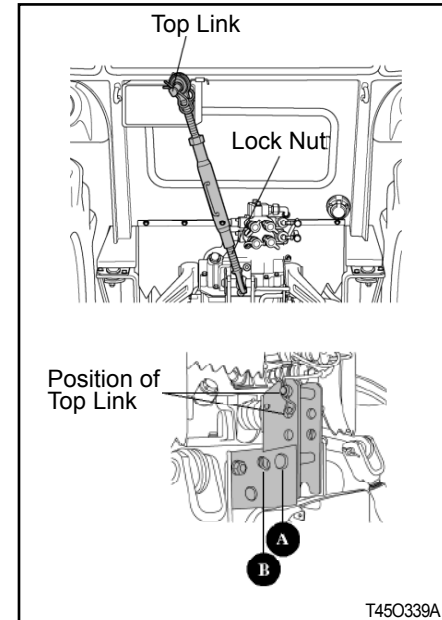


► TELESCOPIC STABILIZERS ADJUSTMENT

The stabilizers are intended for limiting or preventing implement side movement.

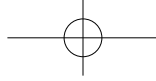
There should be no clearance (Position A) during implement transport and when working with grades, rollers mowers, seeders, drills and similar implements. However, a slight play is necessary (Position B) when working with ploughs, harrows, ditchers, cultivators and the like:

That is when working with “draft control”. The length of stabilizers is adjusted by removing the pin and rotating the turn buckle barrel by which the threaded ends are interconnected.



► ADJUSTMENT OF THE TOP LINK

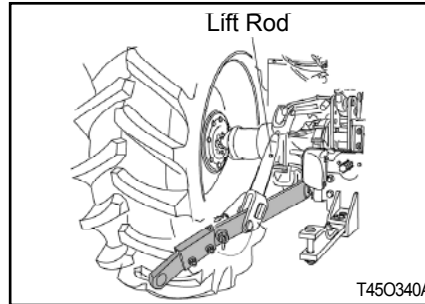
Lengthening or shortening the top link will change the angle of the implement.



DESCRIPTION OF TRACTOR CONTROLS

The locating hole of the top link varies with the type of implement used. The most common locations are the 1st and 2nd hole from the top.

- For general implement: Use the Pin to "A": point
- For Draft control: Use the Pin to "B" point



▶ ADJUSTMENT OF LOWER LINK

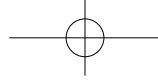
The adjustment is done with the adjusting handle on the Right hand Lift rod.

To shorten it wind the handle clockwise and to lengthen it wind it counter clockwise.

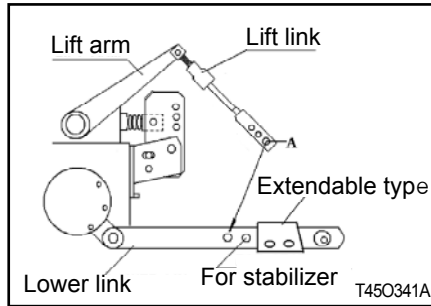
When adjusted correctly hold the turn buckle with the stopper provided.

▶ LOWER LINK (IF EQUIPPED EXTENDABLE TYPE

Push the point area and pull the end of the lower link to adjust the length of lower link.



DESCRIPTION OF TRACTOR CONTROLS

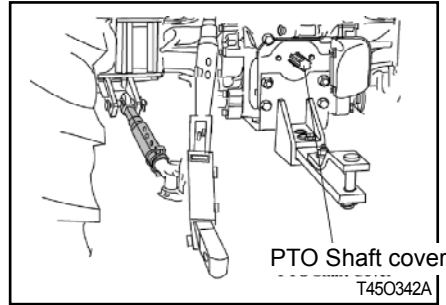


▶ ADJUSTMENT OF THE LIFT LINK ON THE LOWER LINK

For different applications change the position of the lift rod on the lower links as shown and insert the pin in the direction of the arrow.

⚠ DANGER

- Only use drawbar to tow and keep the 3 point linkage in raised position when toeing with the drawbar.
- Position can create unbalance causing the tractor to roll-over & result the death or serious injury.



▶ MOUNTING IMPLEMENT

If the PTO is used, remove the safety cover off the PTO shaft.

Adjust the yoke rod on the lower links to suit the implement in use.

Attach the left lower link, then attach the right lower link using the adjusting handle on the leveling box if required.

Attach the top link.

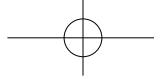
Attach the PTO shaft to the tractor if used, making sure that it is locked in place.

Adjust the check chains to suit the implement and tighten the locknuts.
To remove an implement reverses the procedure

⚠ CAUTION

- Do not attach a PTO shaft with the engine running and ensure all safety shields are in place.

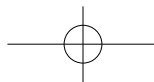
3

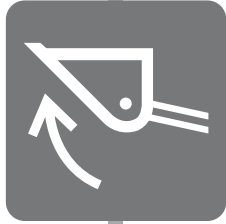


DESCRIPTION OF TRACTOR CONTROLS

MEMO

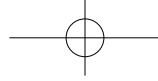
Area with horizontal dotted lines for taking notes.





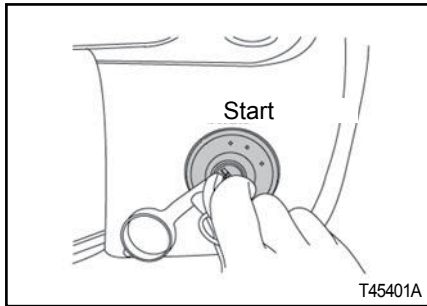
OPERATION

- 1. STARTING THE ENGINE 4-2
- 2. STOPPING THE ENGINE 4-3
- 3. WARMING UP 4-3
- 4. TIGHT TURNS IN THE FIELD 4-4
- 5. NORMAL BRAKING AND PARKING 4-5
- 6. UPHILL STARTS ON A STEEP SLOPE 4-5
- 7. OPERATION OF THE DIFF LOCK 4-6
- 8. CHECK DURING DRIVING 4-6



OPERATION

1. STARTING THE ENGINE



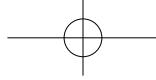
Before starting the engine carry out the pre-operational checks as set out on page 2-5.

1. Sit on the driver seat.
2. Apply the foot brake.
3. Put the hydraulic lever in the down position.
4. Push down the clutch to activate the safety-starting switch.
5. Put the main gear lever in neutral.
6. Insert the ignition key and turn it on.

7. Ensure that the warning lights are working.
8. Operator need to turn key to the "ON" position. The glow circuit automatically activates.
Operator need to wait for glow light to turn off .As the lamp goes off turn the key to the start position to start the engine.
9. Ensure that all the warning lights are off with the engine running.

IMPORTANT

- Never turn the key to the start position while the engine is running as this can cause serious damage to the starter and engine flywheel.
- Only engage the starter for a period of not more than 10 seconds.
- If Engine does not start, rest the starter for about 20 seconds and try again for a maximum of 10 seconds. If the engine does not start after repeated attempts, refer to the fault tracing guide.
- Especially in cold weather, always allow the tractor to idle for a while to warm up & build up sufficient oil pressure to ensure normal operating temperature for longer engine life.



2. STOPPING THE ENGINE

After light work let the engine idle for a while and turn the key off.

IMPORTANT

- After long or heavy work allow the engine to idle for 5~10 minutes and turn the key off.

3. WARMING UP

When starting the engine allow it to warm up to operating temperature by allowing it to idle 5-10 minutes to ensure full lubrication and operating temperature.

Failure to do so can shorten engine life substantially.

► WARMING UP IN COLD WEATHER

Cold weather will change the viscosity of the oil, resulting in a reduced oil pumping capacity, which can cause damage to the engine if it is not warmed up correctly.

It also causes problems with the hydraulic system and the synchromesh in the transmission.

< WARMING UP TIME >

Temperature	Time for warming up
Above 50°F	5~10 min.
50°F~ 32°F	10~20 min.
32°F~14°F	20~30 min.
14°F~-4°F	30~40 min.
Below -4°F	Over 40 min.

IMPORTANT

- Ensure the handbrake (Foot brake) is on during the warming period.
- Failure to warm up correctly can result in problems.

When the engine is warm push down the clutch and engage the main and auxiliary gear levers to the required position.



OPERATION

Push down on the brake pedals and release the handbrake.

Increase the engine revolutions and let out the clutch smoothly.

Only change gears with main gear lever while moving and ensure that this is done with fully use of the clutch.

▶ **STORING ENGINE IN OPERABLE CONDITION FOR 3 MONTHS OR MORE**

When the engine is not operated during storage of three months or more, internal engine parts can rust and lose oil film. As a result, the engine can seize when it is started after storage.

To prevent such a rust, the engine must be operated periodically during storage.

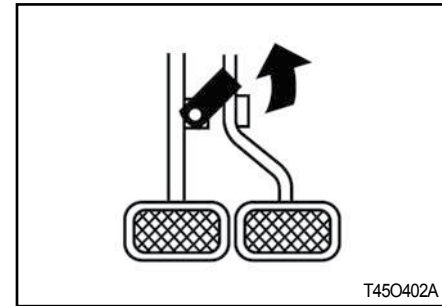
CAUTION

- Do not "ride" the clutch to control speed, use a lower gear.
- Do not travel with your foot on the clutch pedal.

DANGER

- Always connect the brake pedals when traveling on the road.
- Never tow anything except with the draw-bar.
- Do not tow loads which are too large for the tractor's capacity to brake effectively especially in hilly terrain.
- Take special care when towing large or wide implements.
- Do not carry passengers.
- At all times observe local legislation and road rules.

4. TIGHT TURNS IN THE FIELD



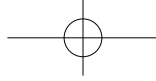
Disconnect the latch connecting left and right brake pedals to allow the use of individual pedals.

To make a tight turn use both the steering wheel and the brake pedal at the same time.

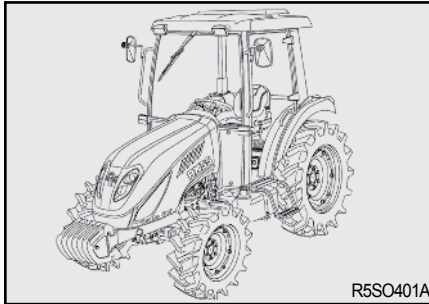
For a left turns use the left pedal and a right turn the right pedal.

CAUTION

- Perform tight turns only at a slow safe speed.
- Doing so at a high speed can cause roll-overs and very serious injury or death.



5. NORMAL BRAKING AND PARKING



Let the engine come back to idle and at the same time push in the clutch and brake simultaneously.

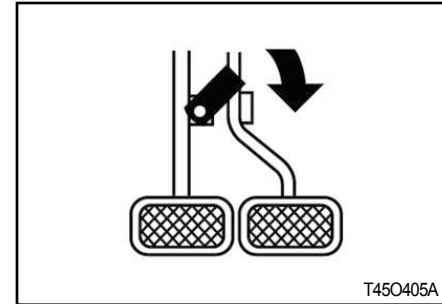
When the tractor has come to a halt, lower any implement to the ground, and put the main gear in neutral.

Apply the park brake, stop the engine, and remove the key.

CAUTION

- Always apply the park brake when parking.
- Failure to do so can cause accidents and damage.
- As an extra precaution when parking on a slope, chock the rear wheels.

6. UPHILL STARTS ON A STEEP SLOPE



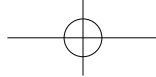
4

With the pedals connected together push down on the brake pedals and push down the clutch.

Set all gear levers to low and the throttle to medium engine speed.

Release the clutch and as it engages release the brake pedals.

Adjust the throttle to the required speed.



OPERATION

► DRIVING DOWNHILL

Use the engine's ability to brake when traveling downhill.

Never rely on the brakes only and never travel downhill with the gears in neutral.

CAUTION

- When operating in hilly terrain the risk of the rollover is increased substantially, please drive with extra care.
- When towing trailers in hilly terrain ensure that they are equipped with brakes, use a lower gear to get maximum engine braking and do not change gears on a down hill run.

7. OPERATION OF THE DIFF LOCK

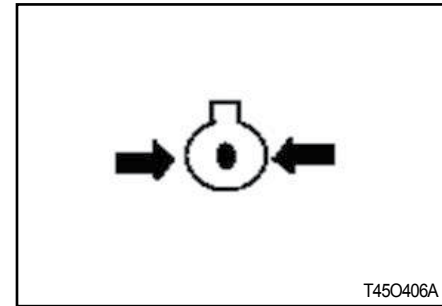
While the diff lock is a very useful feature, care should be taken in its use as misuse can lead to dangerous situations.

The diff lock would only be used in situations where traction is lost on one of the rear wheels.

WARNING

- Use low engine revolutions when using the diff lock.
- If the diff lock does not release after removing the foot from the pedal use the left and right brake pedals in turn to release it.
- Do not try to engage or use the diff lock on tight turns as serious damage can result.

8. CHECK DURING DRIVING

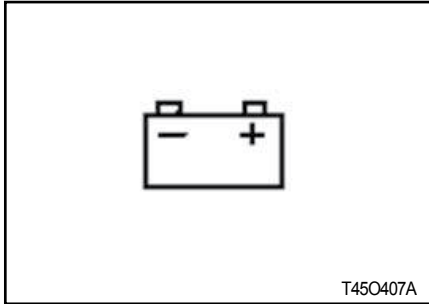
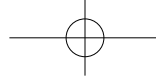


Constantly monitor the warning lights on the dash and if any comes on stop the tractor to determine the cause.

► OIL PRESSURE LIGHT

If the oil pressure light comes on check the oil level first of all.

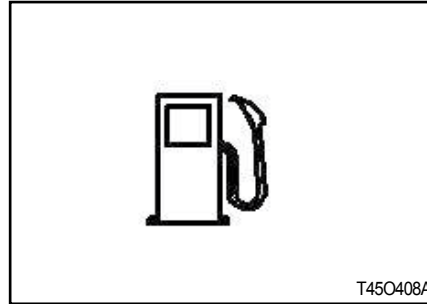
If the oil level is OK ask a qualified RK Tractor store to check the reason for the light coming on.



▶ BATTERY CHARGING

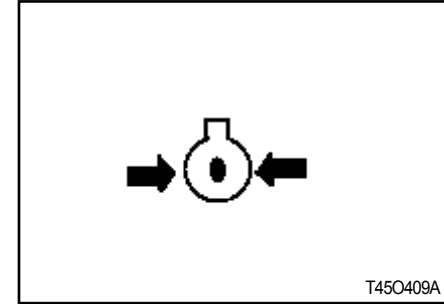
If the alternator warning light comes on check all connections and ensure that the fan belt is not broken.

If all connections and the fan belt are intact consult your RK Tractor store to determine the cause of the problem.



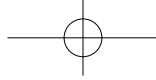
▶ FUEL GAUGE

To avoid excessive condensation in the fuel tank refill at the end of each day's work and ensure during the day that it does not drop to a low level where the fuel system will require bleeding to expel air in the system after refilling the tank.

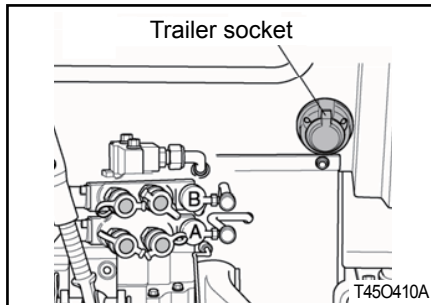


▶ ENGINE COOLING WATER

If the gauge indicates that the engine is running hot, stop the tractor and check the coolant in the radiator.



OPERATION



▶ TRAILER SOCKET (SEVEN TERMINAL ELECTRICAL SOCKET TYPE)

To operate the Electrical systems of implements, trailer lighting, warning lamp etc.

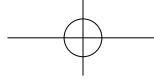
⚠ DANGER

- Allow the engine to cool down before opening radiator cap as serious burns may result due to hot steam & boiling water.

Also check to ensure that the fins in the radiator core are not clogged or that the tractor has a broken or stretched fan belt.

⚠ CAUTION

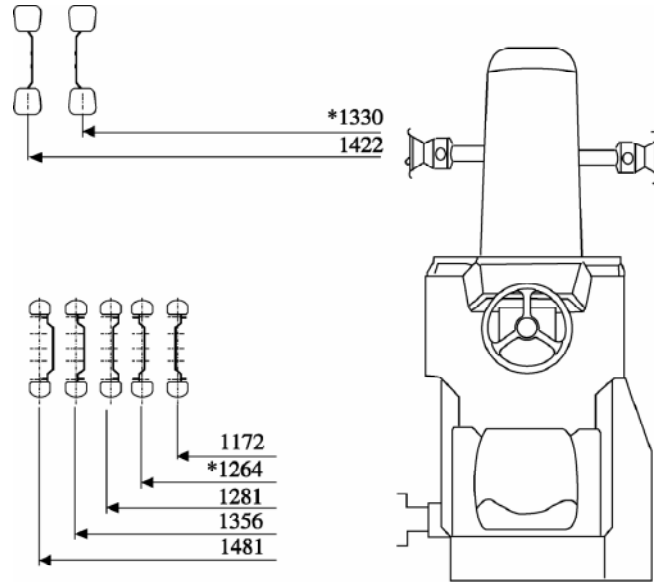
- When traveling on public or farm roads connect both brake pedals and allow for the weight of any mounted implement to ensure that the unit is not unbalanced.
- Also allow for the width when passing other road users.
- Where fitted use the hazard lights provided.
- Strictly follow the local traffic regulations.
- When operating near others with an implement attached take particular care to allow for the width of the implement and avoid accidents.



▶ TRACK ADJUSTMENT

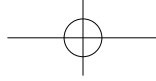
As RK55S / RK55SC models of RK are front wheel assist the front track can be set in 2 positions.

The rear track can be set in 5 positions as illustrated.



T45O411A

MODEL	DIVISION	TYRE	AIR PRESSURE	TRACK ADJUSTMENT (* Marking is STANDARD)
RK55S RK55SC	FRONT	9.5-16-6PR	2.1 kgf/cm ²	1,330 mm
	REAR	13.6-26-8PR	1.5 kgf/cm ²	1,264 mm

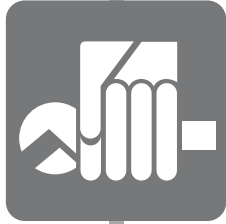


OPERATION

MEMO

A series of horizontal dotted lines for taking notes.

4 - 10



LUBRICATION & MAINTENANCE

- 1. CHECKS AND SERVICE 5-2
- 2. MAINTENANCE AND ADJUSTMENT SCHEDULE . 5-6
- 3. FILLING DIAGRAM & CAPACITY TABLE 5-9
- 4. LUBRICANTS 5-10
- 5. OPENING METHOD OF EACH COVER 5-11
- 6. BLEEDING THE FUEL SYSTEM..... 5-12
- 7. CHANGING THE OILS IN THE TRACTOR 5-13
- 8. CLEANING AND CHANGING FILTERS..... 5-16
- 9. CHANGING THE COOLANT 5-18
- 10. GREASING THE TRACTOR..... 5-20
- 11. GAP ADJUSTMENT..... 5-20
- 12. BATTERY MAINTENANCE 5-22
- 13. FAN BELT ADJUSTMENT..... 5-23
- 14. OTHER MAINTENANCE 5-24
- 15. STORAGE..... 5-27
- 16. FUEL SAVING TIPS..... 5-29



LUBRICATION & MAINTENANCE

1. CHECKS AND SERVICE

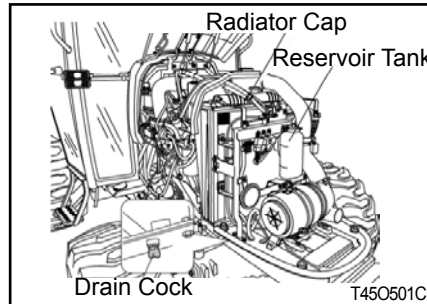
► GENERAL INFORMATION

This section gives full details of the service procedures necessary to maintain your tractor at peak efficiency while the lubrication and maintenance chart provides a ready reference to these requirements.

► PRE-START CHECKS

To avoid problems it is recommended that a range of checks be carried out daily before starting the tractor.

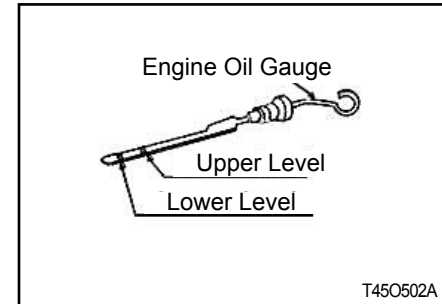
For full details of the items and frequency please refer to the tables on page 5-6, 5-7 and 5-8.



► CHECKING ENGINE COOLANT

Remove the radiator cap and ensure that the coolant is up to the filler neck and that it is clean with the correct anti-freeze or anti corrosion inhibitor in it.

If the coolant is a rusty color, drain the system completely and refill with the correct mixture of water and anti-freeze or corrosion inhibitor.



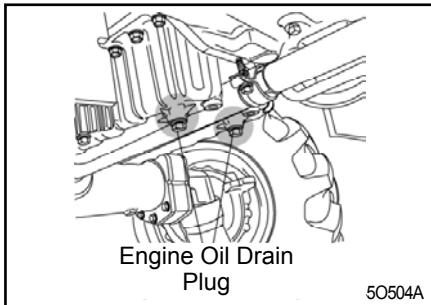
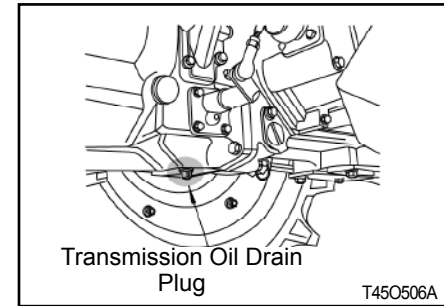
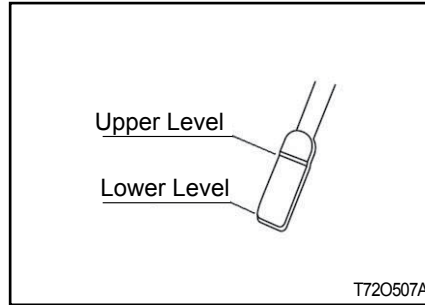
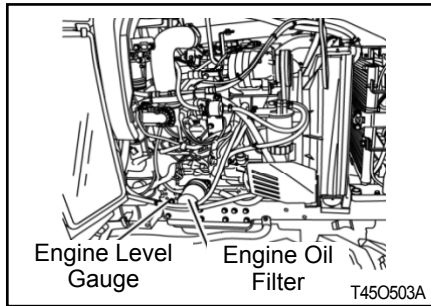
► ENGINE OIL

Pull out the stick, wipe it and dip in the oil sump.

Ensure that oil level is between the upper and lower mark near the upper mark. If too low add oil, but never exceed 100hrs of service interval.

IMPORTANT

- Do not overfill the crankcase with oil.



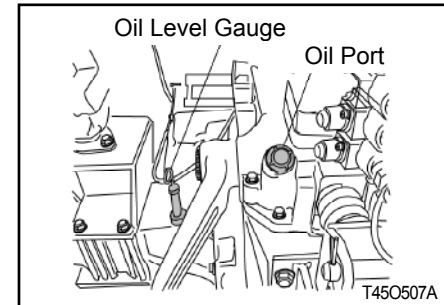
▶ TRANSMISSION OIL

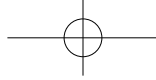
Check the level with the dipstick on top of the transmission in rear of the seat.

If the level is low add oil through the filler hole.

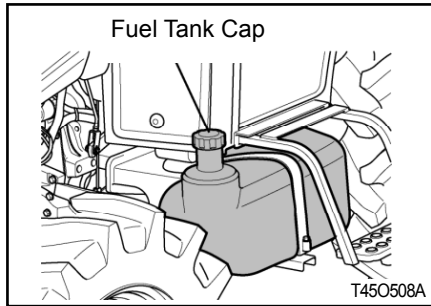
CAUTION

- Always ensure that you use the correct oil for topping up or oil changes.





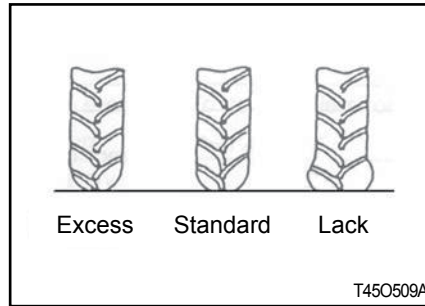
LUBRICATION & MAINTENANCE



► FUEL

Use the fuel gauge to check the fuel level and top up if too low.

It is a good practice to refill the tank immediately after use to avoid condensation.



► TIRE PRESSURE

The air pressure used in the tires has a direct bearing on the life of the tire and its performance in the field.

Ensure that the tire pressures are correct and in accordance with the table on page 7-6.

To make a visual judgment see the drawing on the right.

⚠ IMPORTANT

- It is strongly recommended that tire pressures are checked with a proper gauge only & visual inspections are relied upon.

⚠ DANGER

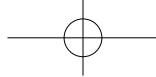
- Excess tire pressure can cause accidents!

► STEERING

Ensure that the steering wheel does not have excessive free play.

► BRAKE

Ensure that the left and right brakes are adjusted correctly so they operate simultaneously. The correct free play on the brake is 1.18~1.57 in. (30~40 mm).



▶ CLUTCH

Ensure that the clutch is adjusted correctly.

Correct free play on the clutch pedal is 0.78~1.18 in. (20~30 mm).

▲ CAUTION

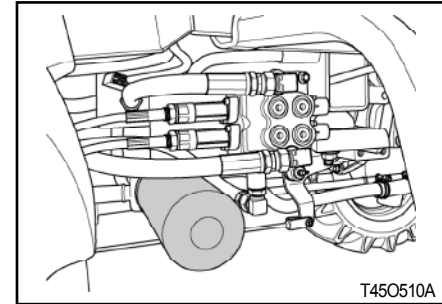
- Incorrect clutch adjustment can cause excessive wear and reduced tractor performance.

▶ ELECTRICAL

Check the operation of all gauge, switches, horn, lights and indicators.

▶ INSTALLING LOADER

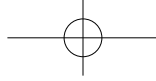
1. Connect P port of loader control valve to the line on the tractor marked P. (From the PTO valve)
2. Connect the T port on the loader control valve to the line on the tractor marked T.
3. Connect the remaining line from the control valve to the line on the tractor marked P1. (To the transmission housing)



5

▶ DETACHING THE LOADER

1. Detach the hydraulic hoses of loader.
2. Assemble the cap (PF3/8) with pipe comp (PF3/8).



LUBRICATION & MAINTENANCE

2. MAINTENANCE AND ADJUSTMENT SCHEDULE

PERIODICAL CHECK AND SERVICE TABLE

○: Check, Top-up or Adjust, ●: Replace, △: Clean or Wash, ★: Consult the Service RK Tractor store

Division	Item	Daily	Service interval (Hour meter, Mark)												1YR	2YR	Comment		
			0 5 0	1 0 0	1 5 0	2 0 0	2 5 0	3 0 0	3 5 0	4 0 0	4 5 0	5 0 0	5 5 0	6 0 0					
1. Engine	Engine oil & Cartridge	○	★					●										Every 250 hours or 12 months after 1st 50 hours	
	Air cleaner	○				○							●						
	Radiator coolant	○															●		
	Fuel	○																Fill tank	
	Fuel filter	○												●					
	Fan belt	○																	
	Battery			○															
	Loose nuts and bolts	○																	Tighten
	Radiator hose clamp	○																	Tighten if required

⚠ CAUTION

- These intervals are for operation under normal conditions and need to be reviewed under severe conditions to a greater frequency.

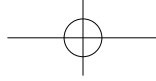


LUBRICATION & MAINTENANCE



○: Check, Top-up or Adjust, ●: Replace, △: Clean or Wash, ★: Consult the Service RK Tractor store

Division	Item	Daily	Service interval (Hour meter, Mark)												1YR	2YR	Comment	
			0 5 0	1 0 0	1 5 0	2 0 0	2 5 0	3 0 0	3 5 0	4 0 0	4 5 0	5 0 0	5 5 0	6 0 0				
2. Chassis	Transmission oil & cartridge		★					○							●		●	Every 500 hours or 12 months after 1st 50 hours
	Clutch pedal play	○																(0.78-1.18 in)
	State of both brake pedals	○																
	Operation of each lever	○																Smooth operation
	Free play of steering wheel	○																About 50 mm (1.97 in) of wheel circumference
	Toe-in							○									○	
	Grease in front wheel hub							○										
	Check the steering wheel joint	○																
	Wheel nut fastening torque	○																
Loose bolts and nuts	○																	Tighten to proper torque



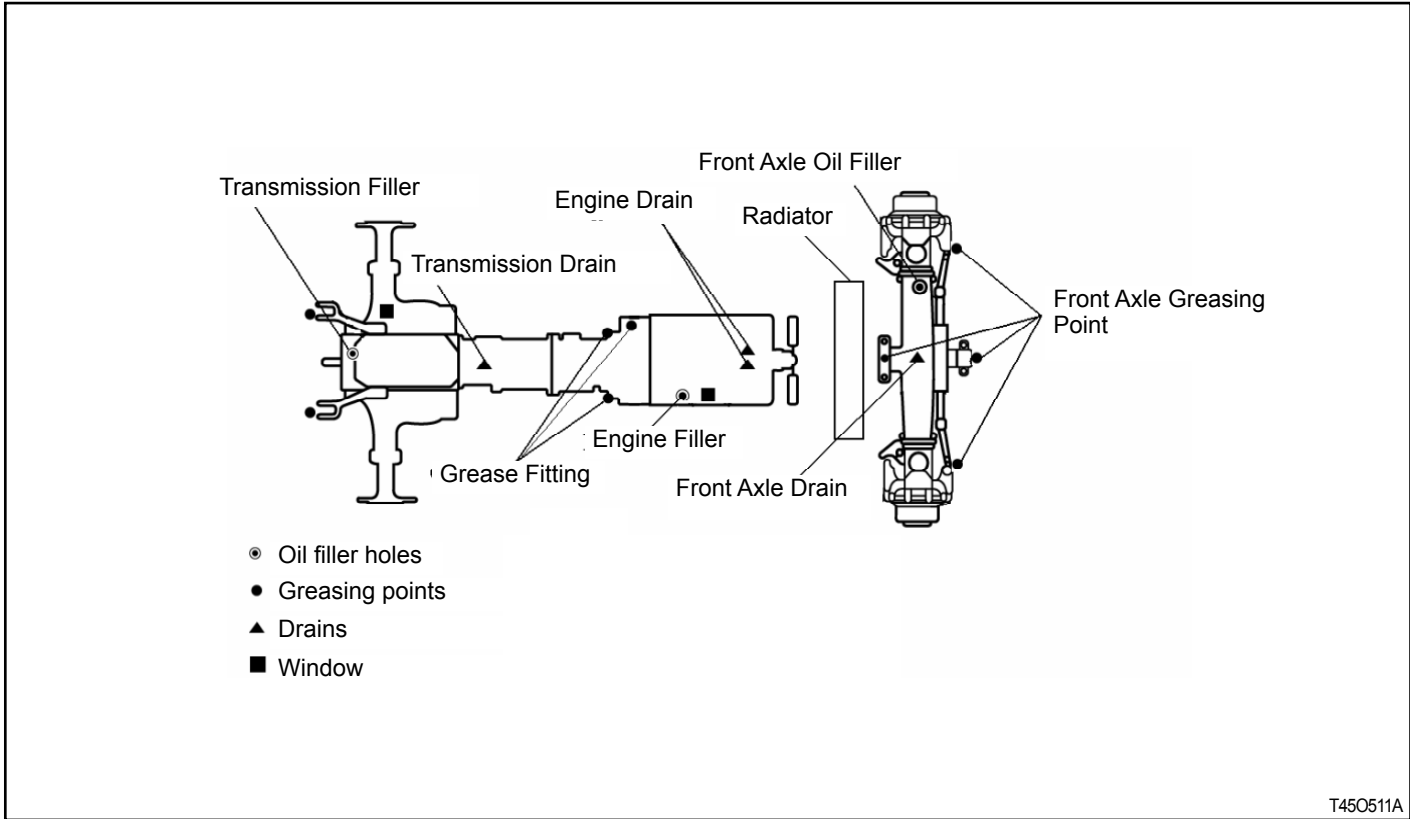
LUBRICATION & MAINTENANCE

○: Check, Top-up or Adjust, ●: Replace, △: Clean or Wash, ★: Consult the Service RK Tractor store

Division	Item	Daily	Service interval (Hour meter, Mark)												1YR	2YR	Comment
			0 5 0	1 0 0	1 5 0	2 0 0	2 5 0	3 0 0	3 5 0	4 0 0	4 5 0	5 0 0	5 5 0	6 0 0			
2. Chassis	Operation of the instrument	○															
	Adjustment of the throttle pedal						○										
	Grease each nipple		○	○	○	○	○	○	○	○	○	○	○				
	Oil of the 4WD front axle		★				○						●		●		
	Check the electric wiring	○															Without loose or broken terminals. Or missing wiring. Correctly clamped.
	Hydraulic hoses & pipes						○										



3. FILLING DIAGRAM & CAPACITY TABLE

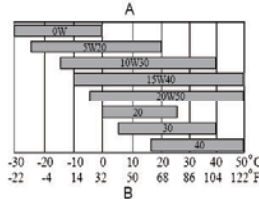


T450511A

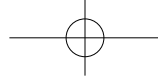


LUBRICATION & MAINTENANCE

4. LUBRICANTS

No.	Filling point	Fillings	Quantity Liter (gal.)
	Model		RK55S / RK55SC
1	Radiator	50/50 : Ethylene Glycol/Water (L.L.C) ASTM D4985 / D6210	9.3ℓ (2.5US gal)
2	Engine	API : CJ-4 grades (API ACEA E-6, JASO PH-2, GRADE 10W40 Recommended SAE viscosity grades  <ul style="list-style-type: none"> • A: Viscosity • B: Temperature 	5.3ℓ (1.4US gal)
3	Transmission Case	(API GL-4 Grade) Tractor transmission and hydraulic oil Below -4°F(-20°C) ISO VG32 Above -4°F(-20°C) between ISO VG46 and 68	35ℓ (9.24 US gal)
4	Front Axle	(API GL4 Grades) Gear oil #80 or #90	10ℓ (2.64 US gal)
5	Final Drive Case (B)	(API GL4 Grades) Gear oil #80 or #90	
6	Clutch Pedal Shaft	Grease	As required
7	Ball Joint	Grease	As required
8	Fuel Tank	Diesel fuel	60ℓ (15.85 US gal)

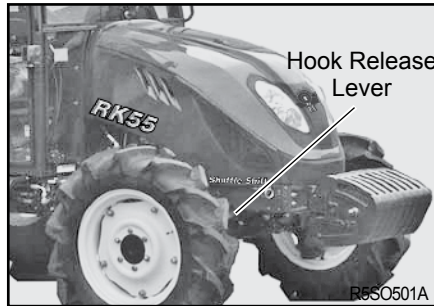
5 - 10



5. OPENING METHOD OF EACH COVER

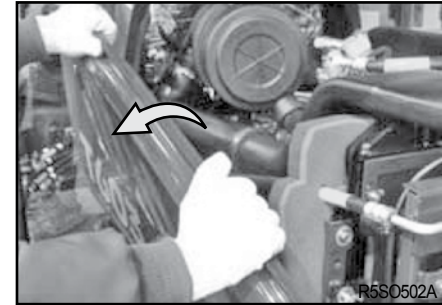
▶ RECOMMENDED TRANSMISSION OIL

1. RPM tractor Hydraulic Fluid or Textron TDH Premium (CALTEX)
2. TDH Oil or TDH Oil special (TEXACO)
3. Chevron 1000THF (CHEVRON)



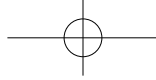
▶ OPENING METHOD OF HOOD

With the hood up, the Hook release lever can be removed by pulling rearwards, having first detached the hood lamp wiring harness. Hood can be open by itself.

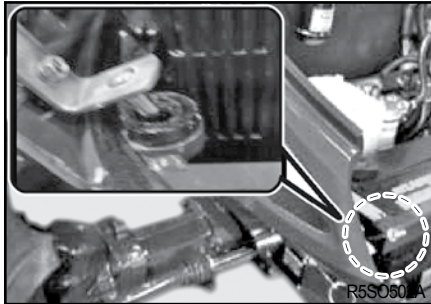


▶ OPENING THE SIDE COVER

To open, grasp the side cover, Pull the forward panel rearward to separate from guide support pin. And pull the side panel rearward again,



LUBRICATION & MAINTENANCE



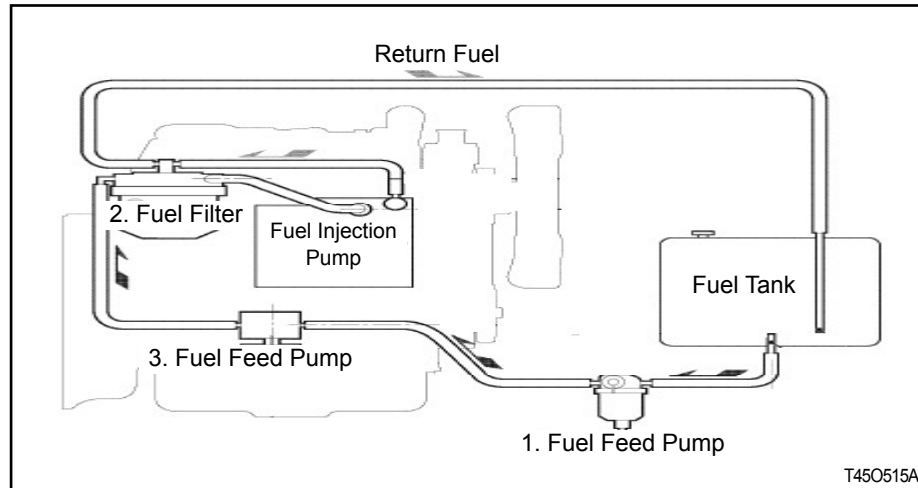
► FUEL

Use clean diesel fuel only.

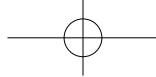
✚ IMPORTANT

- As diesel fuel equipment is susceptible to contamination by dust or water, Ensure that all dust and water is kept well away from the fuel tank.

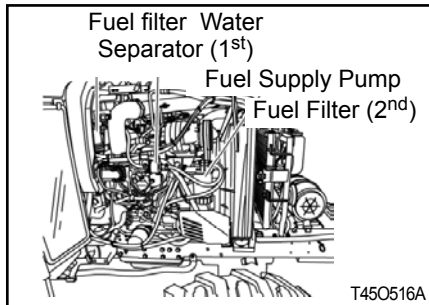
6. BLEEDING THE FUEL SYSTEM



- 1) Fill the tank with fuel and turn the ignition key to on.
- 2) Loosen the air breather screw of the fuel filter two or three turns.
- 3) When fuel free from air flows (bubbles) from the Air breather screw tighten the Air breath screw.
- 4) The bleeding of the system is now finished.

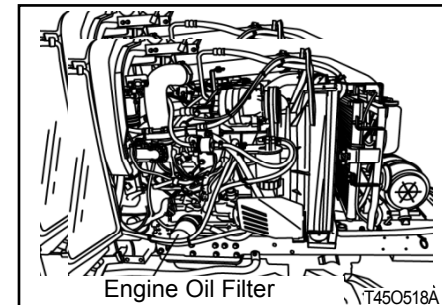


7. CHANGING THE OILS IN THE TRACTOR



Always use quality oils as engine or transmission oil (Refer to the page 5-7).

Refer to the table on page 5-6, 5-7 and 5-8 for the change frequency.



► CHANGING ENGINE OIL

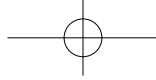
Park tractor on level surface, shut-off engine.

Remove sump plug & drain oil.

Replace and check the sump plug and refill the engine with oil to the correct level on the dipstick. (Approx. 5.3ℓ(1.4 US gal))

The grade of oil to be used will depend on the ambient temperature.

The tractor is shipped from the factory with 15W/40 For summer use over 77°F use SAE 30.



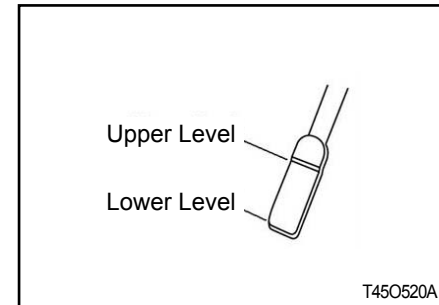
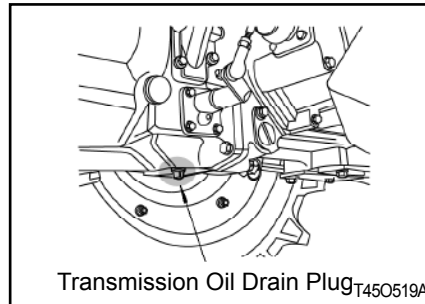
LUBRICATION & MAINTENANCE

For temperatures from 32°F-77°F use SAE20 or 15W/40.

For temperatures below 32°F use SAE 10W.

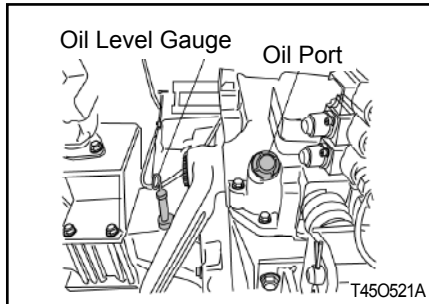
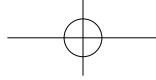
IMPORTANT

- When changing the oil always change the filter.
- Always use the same oil, as using different oils or specifications can cause damage.
- Dispose off the old oil as per local regulations.



► CHANGING THE TRANSMISSION OIL

Remove the drain plug from bottom of the transmission and drain the oil.
Replace and check the drain plug.

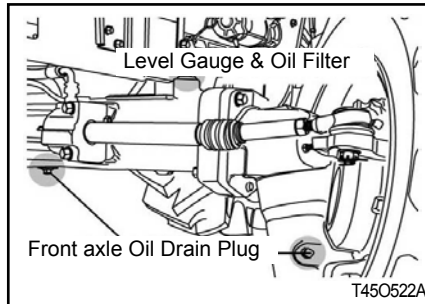


Refill the transmission to the correct level on the dipstick with new oil.

- Capacity: 9.24 US gal (35L)

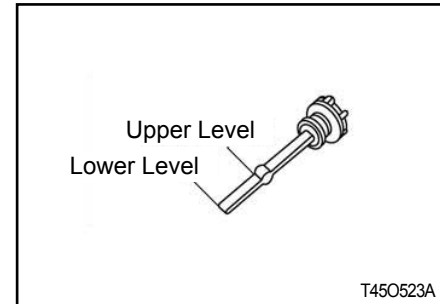
IMPORTANT

- Always use the same grade and specified oil as replacements.
- Dispose off the old oil as per local regulations.

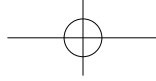


► **CHANGING OIL IN THE FRONT AXLE**

1. Drain the oil from the center diff plug and the drain plug in each drive.
2. Replace and tighten all drain plugs.
3. Remove the top plug (Vent plug) from each final drive to vent air from final drives.



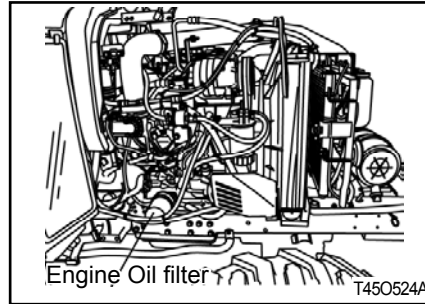
4. Remove the dip stick from the filter hole and fill with 2.64 US gal (10 liters) and allow time for the oil to drain into the final drives.
5. Check the oil level with the dipstick and replace the vent plugs on both final drives and tighten.



8. CLEANING AND CHANGING FILTERS

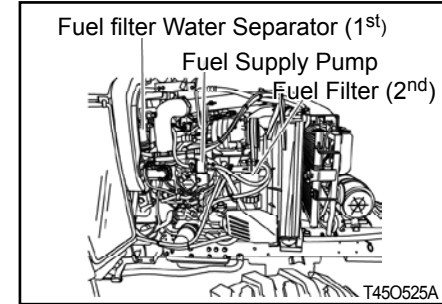
IMPORTANT

- Some operators have found that when they fill with the correct amount of oil and dip it, the oil level on the dipstick is too high due to the fact that it takes a while for the oil to run into the final drives.
- Opening the Vent plugs helps to speed this up.



▶ ENGINE OIL FILTER

Using a filter wrench turn the filter anti clockwise to remove it. Lightly smear the rubber seal on the new filter with oil to ensure, turn it clockwise until the seal contacts the base and then turn it another 2/3 turn to tighten it.

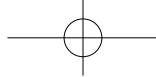


▶ FUEL FILTER

The fuel filter/water separator (if equipped) is not usually supplied by Yanmar.

The following test describes a typical fuel filter/water separator.

Refer to the OEM information for further information in the fuel filter/water separator Turn the fuel supply valve (if equipped) to the OFF position before performing this. Turn the fuel supply valve (if equipped) to the OFF position before performing this maintenance. Place a tray under the



fuel filter in order to catch any fuel that might spill.

Clean up any spilled fuel immediately.

1. Close the fuel supply valve. (If equipped).
2. Clean the outside of the fuel filter assembly.

NOTE

- If the fuel filter element is not equipped with a drain, remove cap. Remove the nylon insert in order to reduce the level of fuel in the fuel filter element. A reduction in the level of fuel in the fuel filter element will help prevent fuel from being spilled when the element is removed.

NOTICE

- Do not use a tool in order to remove the fuel filter filter. Attempting to remove the fuel filter with a filter wrench or a filter strap could damage the locking ring.

3. Hold fuel filter and rotate quick release collar counterclockwise. Removed and discarded.

NOTE

- If the element is equipped with a sediment bowl, remove the sediment bowl from the element. Thoroughly clean the sediment bowl. Inspect the O-ring seals. Install new O-ring seals, if necessary. Install the sediment bowl to the new element. Hand tighten the sediment bowl. Hand tightening is the only method that should be used.

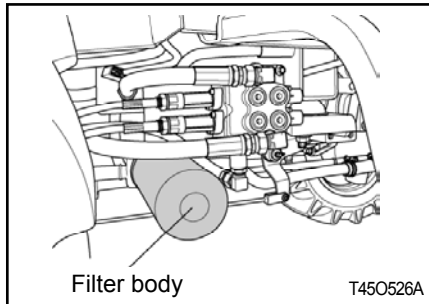
NOTICE

- Do not fill fuel filters with fuel before installing them. Contaminated fuel will cause accelerated wear to fuel system parts.

4. Ensure that the fuel filter base is clean. Push a new fuel filter fully into the fuel filler base.
5. Hold the fuel filter in place. Fit locking ring into position. Rotate the locking ring clockwise in order to fasten the fuel filter to the fuel filter base.
6. Open the fuel supply valve. (If equipped)

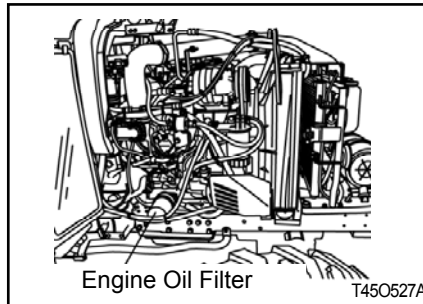
IMPORTANT

- Never use petrol (gasoline) thinner or similar inflammable material to wash the primary fuel filter.
- After replacing the filter always bleed the system.



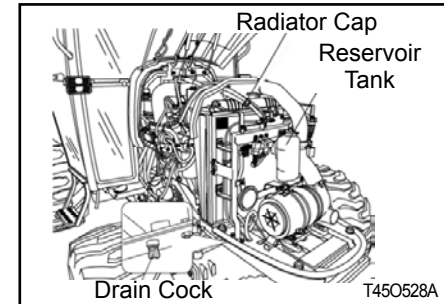
► HYDRAULIC OIL FILTER AND ENGINE OIL FILTER CARTRIDGE

Remove the filter with a filter wrench.



To replace, apply oil or grease on the seal, fit by hand until seal contacts bare, then turn it $2/3^{\text{rd}}$ turn further to tighten it check for leaks.

9. CHANGING THE COOLANT



1. Remove the hose to drain the coolant.
2. Open the radiator cap at the same time.
3. To give a thorough clean run a hose into the radiator and flush it out.
4. Close the tap and refill the radiator with a coolant mixture of water and corrosion inhibitor or anti freeze.
5. Start the engine and allow it to run for approx 5 minutes, check the water level again and top up if required.



CAUTION

- Do not remove the radiator cap on a hot engine.
- Allow the engine to cool down and then turn the cap slowly to ensure, that there is no excessive pressure in the radiator.

CAUTION

- Serious burns, can result from the contents of pressurized, hot radiators.
- Allow the engine to cool down completely before opening radiator cap.

▶ ANTI FREEZE

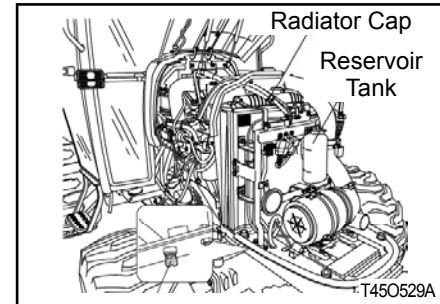
Frozen cooling water can damage the engine.

Before replacing the anti freeze solution flush the radiator.

Mix the anti freeze solution in accordance with the instructions applicable to the brand of anti freeze and the locals climate.

Replace the solution in the radiator.

In case of loss of solution due to evaporation or overflow, replace with the original mixture ratio.

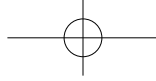


▶ CLEANING THE RADIATOR

Insects, grass straw and dust can all block the radiator, condenser and reduce its efficiency. Remove the radiator cover to clean it and the radiator. Release the bolt and pull to remove the cover. Then clean the radiator between the fins and tube by using clean water.

IMPORTANT

- Water or air under high pressure can distort the cooling fins on the radiator and reduce its efficiency.

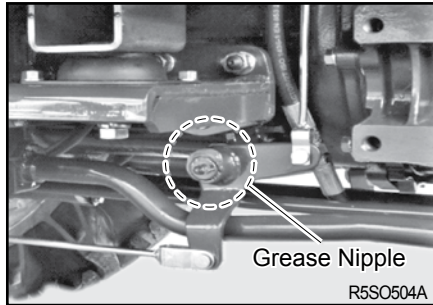


LUBRICATION & MAINTENANCE

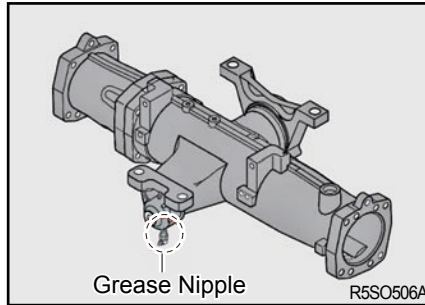
10. GREASING THE TRACTOR

Grease the tractor according to the service schedule. (Page 5-7 and 5-8)
Ensure that grease nipples are cleaned well before any attempt is made to grease them.

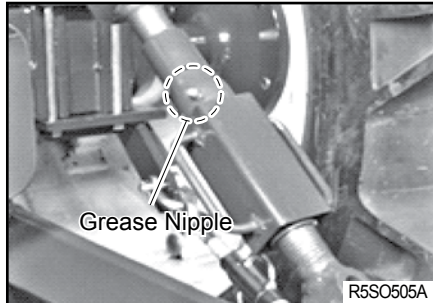
▶ BRAKE AREA / CLUTCH AREA



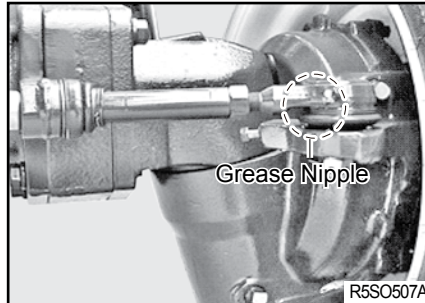
▶ PIVOT METAL



▶ LIFT ROD

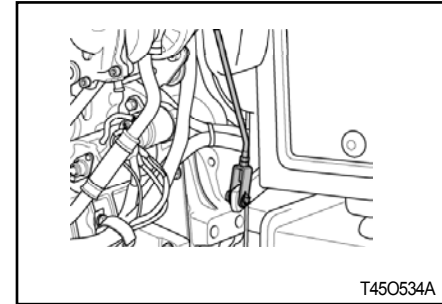


▶ FRONT AXLE



5 - 20

11. GAP ADJUSTMENT



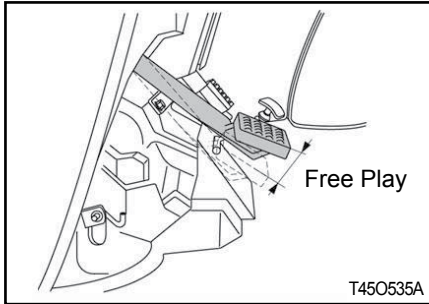
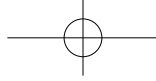
▶ ADJUSTING THE CLUTCH

Using the clutch over a period of time will increase the free play.

The correct free play of the pedal is 0.78~1.18 in. (20~30 mm).

To adjust, loosen the locknut on the turnbuckle and adjust.

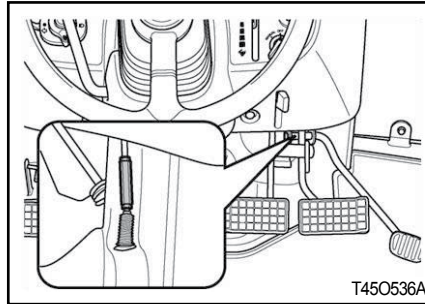
Check the adjustment and tighten the locknut if the free play is correct.



▶ ADJUSTING THE BRAKES

As is the case with the clutch, use of the brakes will change the pedal free play and the balance between the right and left pedal.

The correct pedal free play is 1.18~1.57 in. (30~40 mm).



▶ ADJUSTMENT METHOD

Loosen the double locknuts to adjust the brake.

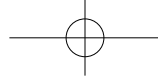
Turning it to increases the free play or decreases it.

Tighten the double locknuts and confirm to fix the Nuts.

Check that the free play is correct and the same on both pedals to ensure even braking.

⚠ CAUTION

- Uneven adjustment of the left and right pedal will result in one sided braking when the pedals are connected and can cause serious accidents, especially at high speeds.
- Double check to ensure free play is the same on both pedals.



12. BATTERY MAINTENANCE

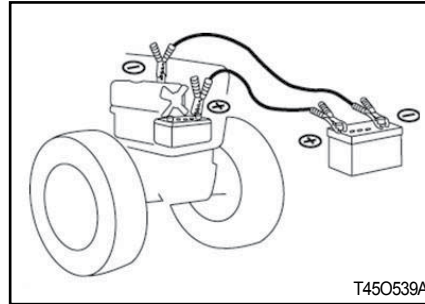
▶ ADJUSTING THE THROTTLE LEVER

If this lever is either loose or difficult to move please consult your RK Tractor store for rectification of the problem.

▶ ADJUSTING TOE-IN

If the toe-in adjustment is incorrect it can cause severe shaking of both the steering wheel and the entire tractor.

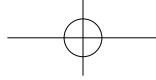
The correct toe in is 0.08~0.24 in. (2~6 mm) We recommend that this adjustment is made by the RK Tractor store.



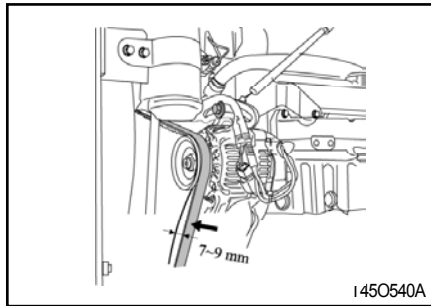
When using a boost-charged battery, it is necessary to recharge the battery as early as possible. Failure to do this will shorten the battery's service life.

⚠ CAUTION

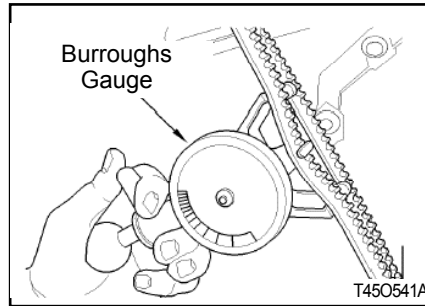
- Always disconnect the negative terminal first when removing the battery and always connect the positive terminal first when fitting the battery.
- When connecting the battery leads make sure not to reverse the polarity.
- Quick charging will reduce battery life.
- Disconnect the terminals prior to charging the battery to avoid damage to the circuit and electrical instruments.



13. FAN BELT ADJUSTMENT



1. Loosen the alternator pivot bolt.
2. Move the alternator in order to increase or decrease the belt tension. Tighten the alternator pivot bolt and the link bolt to 22 N.m (16 lb ft) (1).



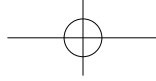
▶ ALTERNATOR INSPECT

Yanmar recommends a scheduled inspection of the alternator. Inspect the alternator for loose connections and proper battery charging. Inspect the ammeter (If equipped) during engine operation in order to ensure proper battery performance and/or proper performance of the electrical system.

Make repairs, as required.

Check the alternator and the battery charger for proper operation. If

the batteries are properly charged, the ammeter reading should be very near Zero. All batteries should be kept warm because temperature affects the cranking power. If the battery is too cold, the battery will not crank the engine. When the engine is not run for long periods of time or if the engine is run for short periods. The batteries may not fully charge. A battery with a low charge will freeze more easily than a battery with a full charge.



LUBRICATION & MAINTENANCE

14. OTHER MAINTENANCE

▶ ALTERNATOR AND FAN BELTS INSPECT/ADJUST/REPLACE

For applications that require multiple drive belts, Replace the belts in matched sets. Replacing only one belt of a matched set will cause the new belt to carry more load because the older belt is stretched.

The additional load on the new belt could cause the new belt to break.

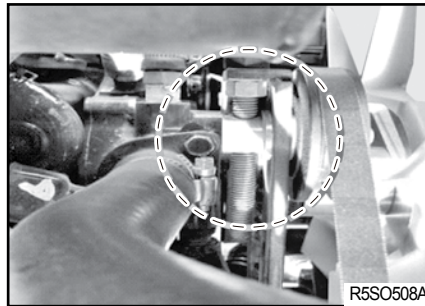
If the belts are too loose. Vibration causes unnecessary wear on the belts and pulleys. Loose belt may slip enough to cause overheating.

To accurately check the belt tension, a suitable gauge should be used.

If twin belts are installed, check and adjust the tension on the both belts.

Fit the gauge (1) at the center of the longest free length and check the tension. The correct tension is 535 N (120 lb). If the tension of the belt is below 250 N (56 lb) adjust the belt to 535 N (120 lb).

5 - 24



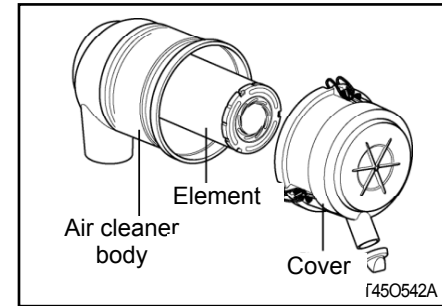
▶ AIR CONDITIONER COMPRESSOR BELT ADJUSTMENT

Check the compressor belt tension regularly and adjust if required.

The correct tension is if the center of the belt is pushed with a finger it moves in approx. 10 mm (0.39 in) as shown in the picture.

To adjust the belt, loosen the top bolt on the alternator, move the alternator to the desired position and tighten the bolt.

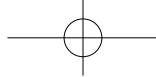
Also ensure that the bottom alternator bolts are tight.



▶ SERVICING THE AIR CLEANER

To remove the dust from the evaporator valve squeeze it between thumb and fingers to let excess dust out and wipe around the valve to keep it clean from outside.

To clean the main element, remove the right fan cover. Remove dust by blowing it out of the element with compressed air. Check the element to ensure it is not damaged. Reassemble the element.



✚ IMPORTANT

- Never beat the element on a stone or concrete floor/wall to clean it.
- Check all connections and hoses especially on the clean side of the air cleaner to ensure no dusty air can enter the engine.
- Check the element for flaws by putting a light inside the element.
- When reassembling make sure all surfaces seal correctly to keep dust out.
- When working in dusty conditions increase the service frequency.

※ Replace the element after cleaning it 5 times or it is damaged.

▶ CHECKING HOSES AND LINES

The fuel lines, radiator hoses, hydraulic and rubber hoses are consumables which deteriorate by age and use.

Check them regularly and replace if faulty.

⚠ CAUTION

- Damaged fuel lines leak and cause fires.
- Damaged radiator hoses can cause hot water burns and in severe cases seize the engine.

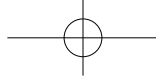
▶ CHECKING THE WIRING HARNESS AND FUSES

Loose wires make inferior connections and damaged wires can cause short circuits, fires burnt wiring or reduce efficiency of components.

Replace or repair any faulty wiring or insulation.

If a fuse burns out again after it has been replaced, do not replace it with wire or a high capacity fuse, find the cause and rectify it or get an auto electrician to do so.

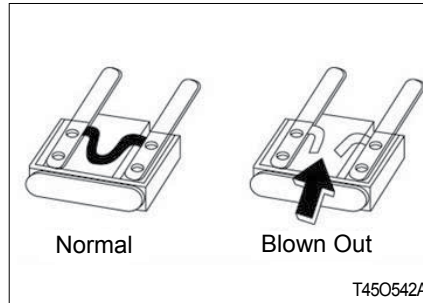
Where insulation is chafed or peeled off, recover the area with a good quality insulation tape. Where wiring comes out of it's fitting replace it correctly with the standard fitting.



LUBRICATION & MAINTENANCE

✚ IMPORTANT

- Incorrect wiring or fuses can cause fires to both the tractor and surrounding area so get the RK Tractor store to check it annually.
- Likewise fuel pipes and wiring age with use.
- Ask your RK Tractor store to check it at least once every 2



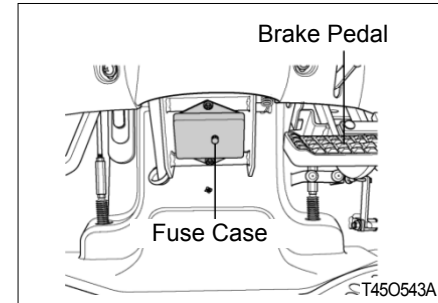
▶ REPLACING FUSES

The circuit has 8 blade type fuses in its wiring circuit.

When a fuse has blown replace it with one of the same value.

Using a large capacity fuse or wire burn out the wiring system.

Use fuse tongs to replace fuses.



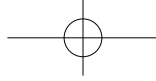
▶ MAIN FUSES

The wiring harness is equipped with 3 main fuses who's function is to preserve the wiring.

However when a main fuse blows the entire circuit is dead.

Always check the reason & rectify before replacing the fuse of the same value.

To indicate that the fuse is blown it will be discolored.



15. STORAGE

IMPORTANT

- Always check the reason for a blown fuse otherwise the new fuse is also likely to blow.
Never ever use wire in place of correct grade fuse.

▶ SERVICE PRIOR TO DAILY AND SHORT TERMS STORAGE

Wash the tractor and keep it clean.

Fill the tank to avoid condensation and rust.

Lower any attached implement to the ground before parking the tractor.

For long-term storage consult your RK Tractor store.

▶ FOR DAILY OR SHORT TERM STORAGE

Clean the tractor and remove all dirt from field work.

Fill the fuel tank to avoid condensation and rust.

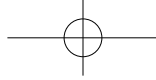
Lower the implement to the ground.

Keep it in a machinery shed or, if not available cover the unit if left outside.

In very cold conditions it is advisable to remove the battery and keep it inside in a warm environment.

This will ensure effective starting when the tractor is required.

When the outside temperature is below 32°F(0°C), replace the Anti-freeze completely or drain the coolant to protect the engine from damage from frozen coolant.



LUBRICATION & MAINTENANCE

IMPORTANT

- When washing the tractor ensure that the water does not get near electrical components or the oil filter points.
- To prevent short circuits remove the ignition key.
- Do not wash the tractor when the engine is running.

▶ LONG-TERM STORAGE.

When the tractor will not be used for a long time carry out the cleaning as for short term storage.

Drain the oil and replace with new oil.

Run the engine for approx. 5 min. to ensure that it has new oil throughout the engine.

Drain the coolant from the radiator and remove the ignition key.

Attach a tag both the key and the steering wheel saying "No coolant".

Lubricate all grease and oil points on the tractor.

Check the pressures and add a small amount of extra pressure.

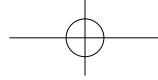
Lower any implement to the ground or store in a shady dry place.

Disconnect the clutch by using the clutch disconnecting arm.

Place a piece of wood under each tire to preserve the tire.

IMPORTANT

- After refilling the engine with the coolant run the engine for approx. 5-10 min. at 1,500~2,000 rpm every month as a corrosion prevention measure.
- Either removes the battery or the negative terminal as mouse damage to wiring can cause short circuits and fires.
- Remove the ignition key and store in a safe place.



► RE-USE AFTER LONG TERM STORAGE.

Carry out a full check of all oils and coolant.

Refit the battery and run the engine at idle for 30 min. to ensure optimum engine life.

16. FUEL SAVING TIPS

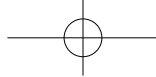
To save fuel & oil in your tractor, following things should always be kept in mind.

► AIR CLEANING SYSTEM

1. Clean the air cleaner regularly so that dust does not settle down.
2. For every 50 hours & everyday in sandy/dusty conditions.
 - Clean the air cleaner filter element with compressed air.
 - If the rubber ring is cut or expanded then change it with an appropriate one. Fix the rubber at the proper location & check for leakages if any.
 - If air is leaking through the hose connection, check & rectify other leakages, too.

NOTE

- If air cleaning system is not properly maintained, it will lead to early wear of piston rings & sleeves. This will lead to problems like loss of engine power, excessive oil consumption fuel consumption.



LUBRICATION & MAINTENANCE

▶ ENGINE

1. Put the engine oil on load after the engine is heated & the water temperature gauge indicates the needle to be in the green zone.
2. If excessive black smoke is visible, then the paper element of air cleaner, Fuel injection pump or nozzles should be checked.
3. Do not run the engine without load for more than 2 minutes. It is better to stop the engine rather than run it idle. This will help in saving of fuel.

▶ CLUTCH & BRAKES

1. Do not reduce the power of the engine by depressing the clutch halfway. Instead use low gear.
2. If the tractor has to be stopped for a long period, it is advisable to bring the transmission in neutral position & release the clutch pedal.
3. Do not over ride the clutch & brake pedals.
4. While coming down from a slope, reduce the engine throttle & use low gear. Do not depend only on the brakes for stoppage.

▶ FUEL SYSTEM

1. Always use filtered diesel for the fuel system.
2. At the end of the day's working, it is preferable to fill the diesel tank so that it may prevent condensation.
3. Change the filter, if the system gets choked. Do not change both the filters at the same time. If the above directives are not adhered to, the fuel injection pump & injection nozzle will lose its life early. Also, it will lead to excessive black smoke & excessive diesel consumption.



▶ ENGINE SYSTEM

1. Always use recommended grade of oil.
2. Everyday before starting the engine, check the oil level with a dipstick & refill between the minimum & maximum level.
3. Charge the engine oil. Replace filter & "O" ring, as & when required.

▶ COOLING SYSTEM

1. Check the fan belt tension regularly. Adjust, if required.
2. Check the coolant level in the radiator fins always clean.
3. Replace the radiator cap with a genuine cap only, if required.
4. Do not remove the thermostat but replace with a new one, if required.
5. Do not change the radiator water often.

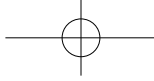
NOTE

- Always stop any fuel or oil leakages.
- Carry out the regular maintenance failure to do so might increase the fuel consumption by 25%.
- Carry out the torque of cylinder head bolt & adjustment of valve clearance regularly. Consult your RK Tractor store

NOTE

- Check the tire pressure & inflate, as recommended.
- Always buy genuine spares from the authorized RK Tractor store/Distributor.
- Always carry out the service of the tractor by your authorized RK Tractor store/Distributor.

※ For any other information, contact your nearest Authorized RK Tractor store/Distributor.

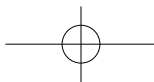
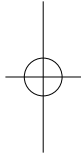
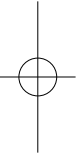


LUBRICATION & MAINTENANCE



MEMO

Area with horizontal dotted lines for writing a memo.





CABIN SYSTEM

- 1. MAJOR FEATURES 6-2
- 2. INSTRUMENT AND RELATED PARTS..... 6-3
- 3. HOW TO CONTROLS CABIN 6-5



CABIN SYSTEM

1. MAJOR FEATURES

The cab fully conforms to the international standard as far as safety and soundproofing are concerned.

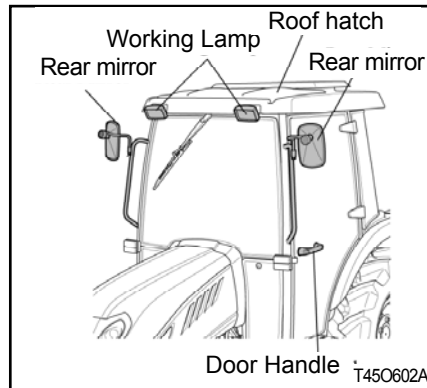
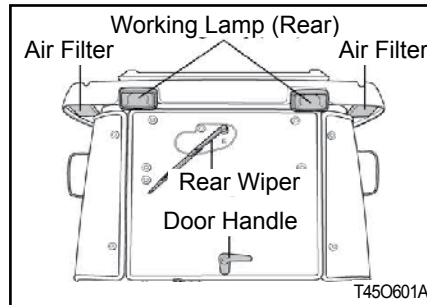
It can be provided with ventilation, heating and air-conditioning system.

It is available in the following version:

- Cab with ventilation and heating systems.
- Cab with ventilation, heating and air-conditioning systems.

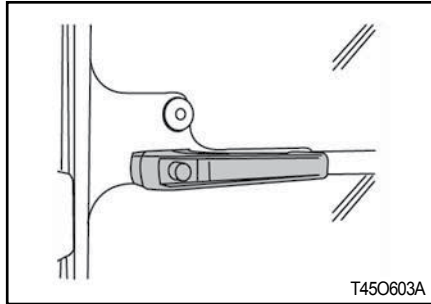
CAUTION

- The cab is in full conformity with the international standards as to the cab's soundproofing.
- Be very careful when operating in small spaces and always protect your ears whenever other working equipment is generating dangerous noise levels.



CAUTION

- Remember that steering, braking and operational performances are highly influenced by the implements mounted, the trailers transported and the ballasts applied to the tractor.
- When transporting heavy loads (Exceeding the weight of the tractor) reduce the speed under 15 Km/h (9.32 m/h).
- All the implements mounted onto the tractor must be safely secured.
- Be very careful during implement hitching and unhitching operations. When using implement supports, be sure they are suitable and sufficiently strong.

**2. INSTRUMENT AND RELATED PARTS**

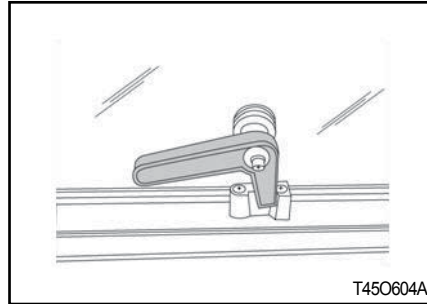
T45O603A

▶ DOORS

The doors are provided with key locks.

To open from the outside, when unlocked, depress the push button.

To open from inside, push the lever downwards.

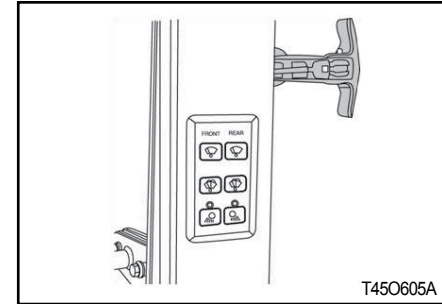


T45O604A

▶ REAR WINDOW

The rear window is fitted with central handle for opening.

When opened it is held in place by two dampers.



T45O605A

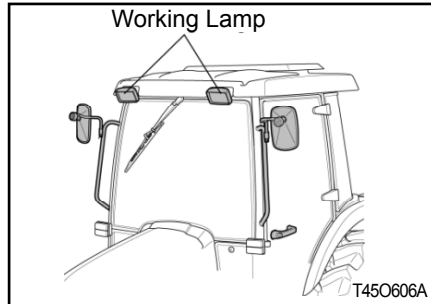
▶ SIDE WINDOW

The side window is fitted with central handle for opening.

When opened it is held in place by holder.



CABIN SYSTEM



two in the rear). They are switched on by means of the special switches on the roof console.

► REARVIEW MIRRORS

The cab is provided with rearview mirrors on both sides. They can be adjusted and folded, whenever necessary, to avoid interference with external obstacles.

The mirrors have a telescopic arm to allow positioning for maximum convenience by the user.

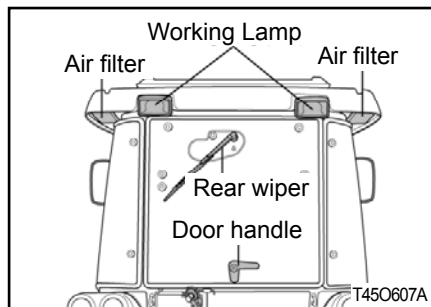
Remember that mirrors must always be positioned in compliance with road traffic regulations when driving on a public highway.

► CAB CEILING

The ceiling is padded with insulation material to block heat radiation into the cab and keep the temperature down when working in very sunny areas.

The cab platform is covered with a "firm grip" carpet in the most commonly used areas.

It is recommended to keep this carpet clear of earth, mud, etc. so that the operator may get on and off the tractor in full safety.

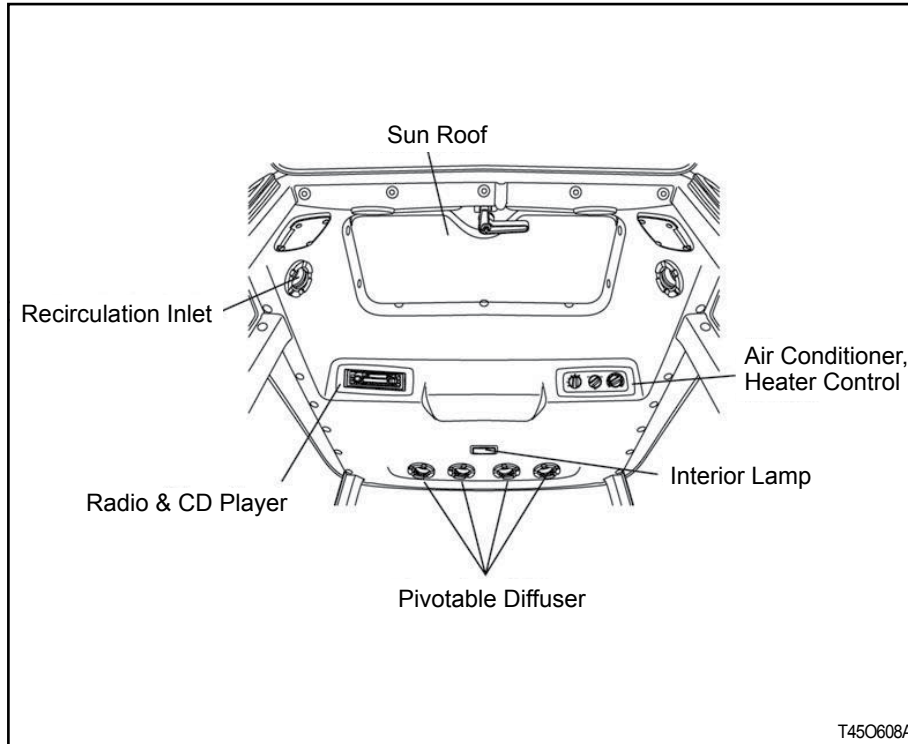


► WORKING LAMPS (FRONT AND REAR)

The working lamps are located on the cab roof (Two in the front and



3. HOW TO CONTROLS CABIN



► VENTILATION

The ventilation unit is housed in the cab ceiling.

To switch it on and adjust it, turn the electrical fan switch to the desired speed.

The cab becomes slightly pressurized when the ventilation system is in operation, so that the fresh air can enter only by way of the filter installed in the rear section of the cab roof.

The fan switch can be operated only after the ignition key is inserted.

The air flow can be regulated and directed by suitable positioning the air diffusers.

Air can be taken in fresh from outside or recirculated from within the cab by way of the relative side inlets.



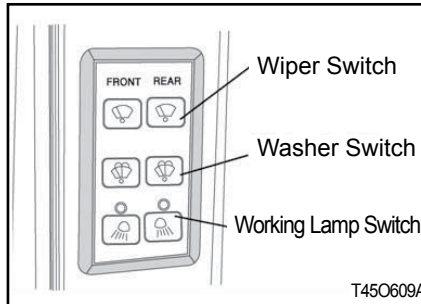
CABIN SYSTEM

► RECIRCULATION INLETS FULLY CLOSED

Air is taken in entirely from outside the cab through the rear grille and filtered through a paper element positioned behind the grille.

NOTE

- It is very important that the air diffusers never be completely closed so as to allow for a steady air flow.
To obtain a greater pressurization inside the cab, it is necessary to take the air from the outside, therefore the inside air recirculating grille should be fully closed.



► WORKING LAMP SWITCH

The front and rear working lights are "ON" when push the button. The work light indicator lamp on the instrument cluster will illuminate.

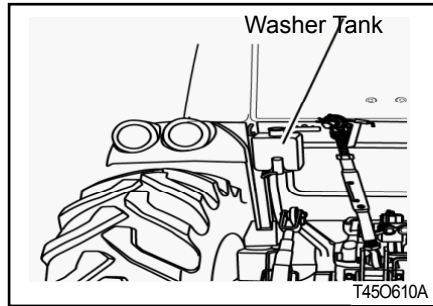
► WIPER CONTROL SWITCH

<ON SWITCH>

- The Wiper switch is ON when Push the Top button.
- The Washer switch is ON when Push the Mid-button.

<OFF SWITCH>

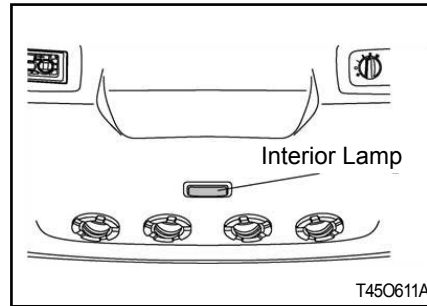
- Once again push the buttons.



► WINDSCREEN WASHER TANK

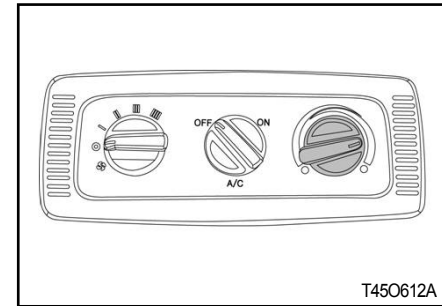
Check the level of windscreen washer fluid in the plastic reservoir located on the rear side of tractor.

During winter it is advisable to add a suitable antifreeze or methyl alcohol to the windscreen washer fluid.



► INTERIOR LAMP

Push the button to light on and push it again to light off.

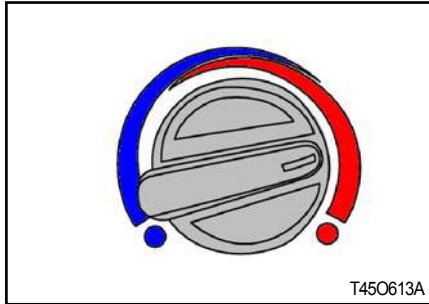


► BLOWER CONTROL SWITCH

Three position rocker switch.



CABIN SYSTEM



▶ TEMPERATURE CONTROL

Set temperature control as required, fully clockwise.

For maximum cool and fully counterclockwise for heat.

▶ AIR CON SWITCH

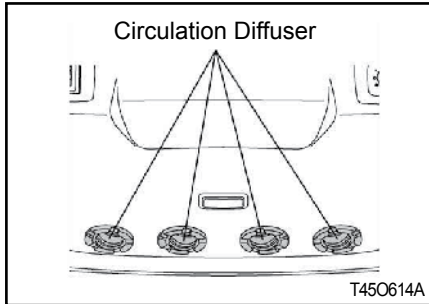
To operate the air conditioner, the blower must be on. The blower speed temperature control and all vents must be adjusted to obtain the best cooling for the ambient temperature and dust conditions.

Under normal operating conditions, and the windows and doors closed, temperatures in the cab of 6 °C to 15 °C (10 °F to 25 °F) less than the ambient temperature will occur.

When operating the air conditioner system, the moisture level is decreased.

NOTE

- During cold weather, with ambient temperature above 32 °F (0 °C) operate the air conditioner at least once per month, for a period of 10 to 15 minutes. This will lubricate the seals to prevent them becoming brittle and help prevent the loss of refrigerant from the system.
- The system is equipped with an environmentally safe refrigerant, R134a. Never recharge the air conditioning system with refrigerant other than R134a as this will result in loss of cooling and permanent damage to all air conditioning components.



► CIRCULATION DIFFUSER

With the circulation vent set in any position outside air will still be pulled into the cab.

► HEATING SYSTEM

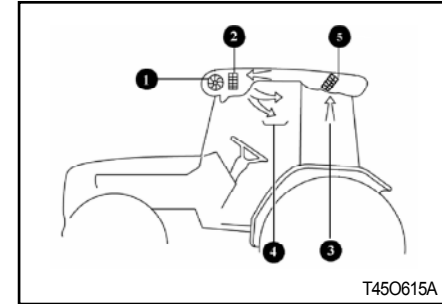
The heater is switched on and adjusted by rotating the control knob at the roof console, then switching on the blower and setting the selector at the preferred speed.

To warm the cab up quickly, the knob should be rotated fully clockwise and the blower set to speed 3.

The screen is demisted or defrosted by air directed through a slot vent. For defrost or fast demist, all other vents should be closed off.

IMPORTANT

- Ventilation is provided by a single blower unit serving both the heating system and the air conditioning system.
- After reaching the desired temperature adjust the system to suit your needs.



- ① Speed Heating Fan
- ② Electric Resistances
- ③ Recirculation Inlets
- ④ Pivotal Air Diffuser
- ⑤ Air Filter

NOTE

- For ideal system operation, the engine must run at 1,000 rpm.



CABIN SYSTEM

WARNING

- Before starting the engine, make sure the system is off (by turning off the ventilation fan) so as not to overload the battery.
- After the system at full power for a long period of time, never turn it off suddenly but let it first idle for about 20 seconds.

► SYSTEM CONFIGURATION

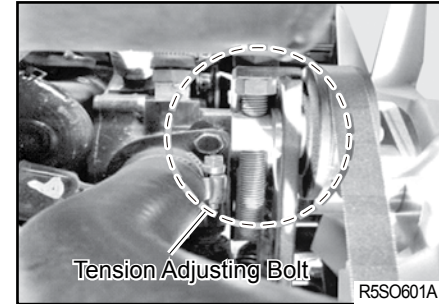
The heating system consist of two units:

1. Electric heater and blower unit installed behind roof console.
2. Power supplying set, consisting of an auxiliary alternator located front of the engine and driven by a belt directly linked to the engine pulley.

If the air does not come out from the diffusers right away as soon as the system is started, turn off immediately and identify the fault.

NOTE

- Never turn on the heating system when working in dusty environments.



► COMPRESSOR BELT ADJUSTMENT

Check the compressor belt tension regularly and adjust If required.

The correct tension is if the center of the belt is Pushed With a finger it moves in approx. 10 mm (0.39 in) as shown in the picture.

To adjust the belt, loosen or tighten the nut as shown in the picture.

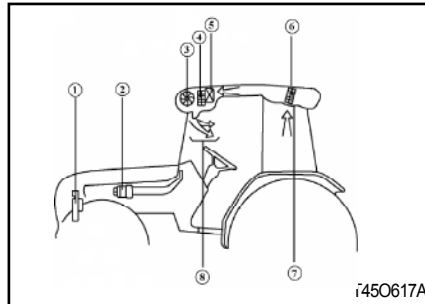


► AIR CONDITIONING SYSTEM

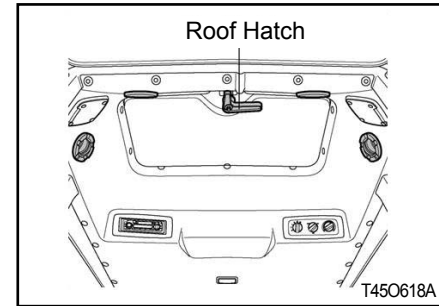
The system is designed to ensure optimum temperature inside the cab and maximum comfort and safety for the operator.

However, it is advisable to consult our specialized workshops whenever repairs or adjustments need to be performed.

Do not approach the system with open flames, as any escape from the circuit may produce a lethal gas.



- ① Alternator
- ② Compressor
- ③ Speed Fan
- ④ Electric Resistance
- ⑤ Evaporator
- ⑥ Air Filter
- ⑦ Recirculation Inlets
- ⑧ Pivotal Air Diffusers



► ROOF HATCH (IF EQUIPPED)

Ventilation-push the latch towards the front of the tractor and then push the hatch up.

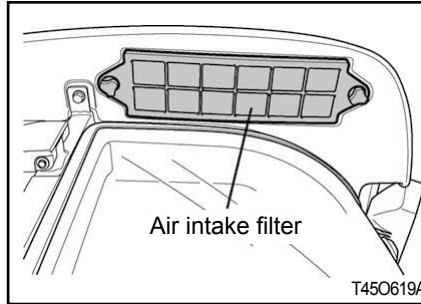
Emergency Exit-Push firmly upwards to release the support struts from the lower retainer clips.



CABIN SYSTEM

► CIRCULATION DIFFUSER

With the circulation vent set in any position outside Air will still be pulled into the cab.



► CAB AIR INTAKE FILTER

The "Paper" filter is not suitable for the treatment of pesticides and so must be replaced by an "ACTIVE CARBON" FILTER available optionally. Once the pesticide treatment is finished, it is necessary to once again replace the "ACTIVE CARBON" filter with the paper filter, since this is the only type suited for filtering foreign particles from the air.

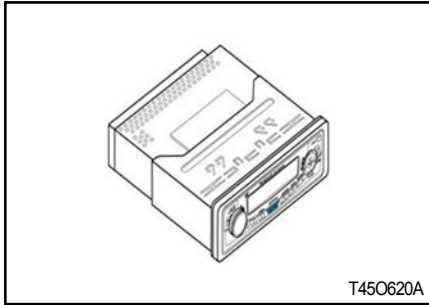
Optional "ACTIVE CARBON FILTER" is informed to parts Catalogue.

⚠ WARNING

- Cab air filters remove dust in the air, but are not capable of removing chemicals used in spraying crops or in weed control. Many chemicals used for these purposes are toxic when improperly used. And can be hazardous to operators and others in the area. Follow the instructions of manufacturers of both the equipment and the chemicals regarding prohibition of dust or spray, personal hygiene practices, and other precautions noted by the manufacturers.



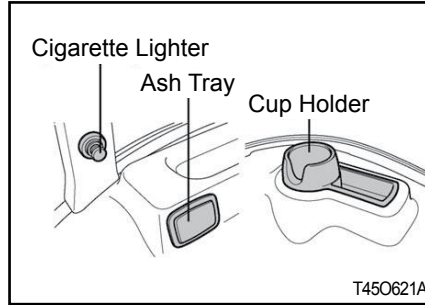
CABIN SYSTEM



T45O620A

▶ RADIO, CD PLAYER (IF EQUIPPED)

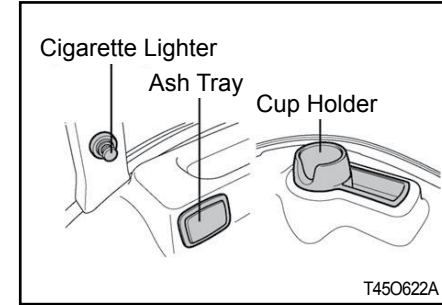
For operation refer to the Radio, CD player manufacturers instructions.



T45O621A

▶ ASH TRAY

Located at right side of near side window in cabin.



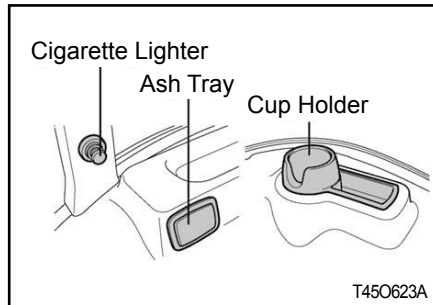
T45O622A

▶ CUP HOLDER

Put the bottles and Personal belongings.



CABIN SYSTEM



▶ CIGARETTE LIGHTER

Push the button. Use that is return to original position.

<CHECKING THE AIR CONDITIONING SYSTEM>

1. Economic friendly refrigerant :
R134a (0.7~0.85 Kg)

The presence of air and water in the system could jeopardize its efficiency.

- The air is uselessly compressed by the compressor and no cooling effect is produced.
 - The moisture has a tendency rise to obstructions which prevent the cooling efficiency.
2. Check belt tension;
when finger pressure is applied to the mid-point between both pulleys.
 3. Condenser fins must always be duly clean using water or an air set.

<CHECKING THE AIR CONDITIONING SYSTEM CHARGE>

1. Check the refrigerant charge.
 - Run the engine at 1,500 rpm.
 - Set the air conditioning system in the coldest for 5 minutes.

⚠ CAUTION

- If the air-con. is operated with not charged.
- The lubrication in the compressor can cause the damage.

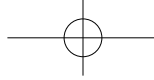
**▶ DIAGNOSING MALFUNCTIONS****1. TRACING FAULTS**

	SYMPTOM	CONDITION	CAUSE	REMEDY
1. Compressor	Abnormal sound	Inlet sound Outlet sound	• Insufficient Lub.	• Replenish
			• Belt tension release	• Adjust
			• Release the bracket	• Tighten the bolts
			• Clutch fail	• Check
	Abnormal revolution	Inlet cause	• Damaged parts	• Check, Replace
			• Slip the clutch	• Check, Replace
			• Not Lub.	• Replenish
		Outlet cause	• Belt tension released	• Adjust
	Refrigerant or	Refrigerant or oil leakage	• Sealing washer damaged	• Replace
	oil leakage		• Head bolt released	• Tighten the bolts
	• D-ring damaged		• Replace	
Excessive pressure	Low,High pressure	• Insufficient refrigerator	• Adjust	
		• Compressor	• Replace	
2. Motor	Weak from pressure or don't work	Motor is normal	• Air inlet clogged	• Remove
			• Evaporator freezing	• Controlling minimum pressure



CABIN SYSTEM

	SYMPTOM	CONDITION	CAUSE	REMEDY
2. Motor	Weak from pressure or don't work	Motor is normal	• Ventilator switch damage	• Replace the switch
			• Compressor	• Replace
		Motor is abnormal	• Motor failure	• Replace
	• Wire cut		• Replace	
	Unable to control the fan	Air leakage	• Duct leakage	• Check, Tighten
		Motor	• Air volume control switch failure	• Check, Tighten
Motor is abnormal			• Motor failure	• Replace
3. Clutch	Noise	Regular noise Irregular noise	• Interference with pulley	• Control the compressor direction
	Disengage	Engaged sometimes	• Wire defect	• Check wire
		Engaged to push with hand	• Clutch gap large	• Adjust
			• Low voltage	• Check battery
	Slip	Slip during rotation	• Malfunction	• Replace
			• Low voltage	• Check battery
			• Oil stick at clutch	• Clean
• Malfunction			• Replace	



2. HOW TO CHECK THE AIR CONDITIONING SYSTEM WITH THE NEEDLE OF HIGH LOW GAUGE

To connect with manifold pressure gauge can find the cause of air conditioning system.

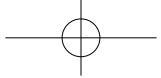
Because manifold pressure gauge is various sensibly. (Ambient Temp. is based on 30~35 °C)

CAUTION

- Operating E/G RPM 1500~2000 is must, and so to that you can check the correct cause and air conditioning. (In case below the figure of indicated pressure gauge has some clearance, confirm with approximate indicated needle data.)

3. Gauge pressure conversion

- $\text{lb/in}^2 = \text{PSI}$
- $1 \text{ kg/cm}^2 = 14,223 \text{ in}^2$ (Ex) $200 \text{ PSI} = 14 \text{ kg/cm}^2$



SPECIFICATION

1. SPECIFICATIONS 7-2



SPECIFICATION

1. SPECIFICATIONS

The specifications on the following pages are given for your information and guidance. For further information concerning your Tractor and equipment, consult your Authorized RK RK Tractor store/ Distributor.

RK Tractors policy is one of continuous improvement and the right to change prices, specifications or equipment at any time without notice is reserved.

All data given in this book is subject to production variations. Dimensions and weights are approximate only and the illustrations do not necessary show Tractors in standard condition. For exact information about any particular Tractor, please consult your RK Authorized RK Tractor store/Distributor.

ITEM	DESCRIPTION	REMARKS	
1. Engine	Type	4 Cycle, Inline, Water-cooled Diesel	
	Model	4TNV86CT-KKTF	
	No. of cylinders	4	
	Displacement	2,091 Liters	
	Bore	86 mm (3.4 in)	
	Stroke	90 mm (3.5 in)	
	Compression Ratio	19.1 / 19.2	
	Rated power (kW/rpm)	41.1/2800 rpm	Manufacturing rating
	Rated Speed	2,800 rpm	
	High idle rpm	2,950 ± 10 rpm	
	Low idle rpm	950 ±10 rpm	
	Fuel injection pump	Common Rail.	
	Cylinder sleeve	-	

7-2



SPECIFICATION



ITEM		DESCRIPTION	REMARKS
1. Engine	Air Cleaner	Dry Filter element, paper element filtering type.	
	DPF	Horizontal External type	
	Firing order	1 - 3 - 4 - 2 - 1	
	Accelerator	Hand & Foot Accelerator	
2. Electrical starting and lighting	Battery Capacity	12 Volt 80 H	
	Starter	Solenoid Engaged, Key Start with interlock , Neutral switch.	
	Alternator	12V 55A	
	Instrumentation	Water Temperature Gauge, Taco meter, Hour meter, Electrical fuel level gauge.	
	Lighting	Head lamps, side indicators, Rear parking brake & indicator light On dash board indicators for battery charging, turn signal, PTO signal, Engine oil pressure, Preheat signal.	
3. Clutch	Type	Diaphragm	
	Outer dia. X Inner dia.	Φ260 X Φ180	
4. Transmission	Type	Synchro mesh	
	No. of gears	16 forward, 16 reverse speeds with high and low selection lever with Differential Lock	
5. Steering	Hydraulic power	Power steering	
6. Power take off	Rear mounted	6 splines	
	Diameter	1 $\frac{3}{8}$ in. (35 mm)	



SPECIFICATION

ITEM		DESCRIPTION	REMARKS
6. Power take off	Standard PTO	① 540	
7. Brakes	Type	Foot operated, independent with provision of inter lock for simultaneous operation. A foot brake is fitted for parking	
	Disc Diameter	Φ183 mm (Φ in)	
	Number of lining	4 each side	
	Total brake thickness	21.1mm (in.)	
8. Hydraulic system	Type	Independent fully "Live" hydraulic pump and separate reservoir. Position controls with isolating & response control	
	Piston and cylinder Lift (At lower link top end)	1503 kg/f	
	Pump output	Main: 15.0 cc/rev (38.3 l /min) Power Steering: 7.2 cc/rev (18.8 l/min)	
	Delivery (90% efficiency)	Liter (cu.in)/mm at 2,800 rpm	
	3 Point linkage	USA: Category 1 Adjustable outside stabilizer	

※ The specifications are subject to change for improvement without notice.



SPECIFICATION



▶ MAIN SPECIFICATIONS

MODEL	RK55C / RK55SC		REMARKS
1. Engine	Maker	YANMAR	
	Model	4TNV86CT-KKTF	
	Type	4Cycle, Line, Water-cooled Diesel turbo charged	
	Output (Kw/rpm)	41.1/2,800 rpm	
	Number of Cylinder	4	
	Displacement (cc)	2,091	
	Bore and Stroke	86 X 90 mm	
	Compression ratio	19.1 / 19.2	
	Firing order	1-3-4-2-1	
	Injection pump	Direct Injection	
	Lubrication system	Forced feed API CJ-4, ACEA E-6 JASO PH-2 Grade : 10W 30	
	Cooling system	Water cooled, Forced circulation/ Fan	
	Coolant capacity	9.3ℓ	
	Air cleaner	Dry Dual Element	
	DPF	Horizontal / Side	
	Fuel	Diesel fuel / Sulfur ≤ 15 ppm	
Fuel Tank capacity	60 ℓ (15.85 US gal)		



SPECIFICATION

	MODEL	RK55C / RK55SC	REMARKS
2. Electrical	Battery	12 V 80AH	
	Starting system	Starter motor with pre-heater	
	Starter Capacity	2.0 KW	
3. Drive Train	Alternator	12V 55A	
	Transmission	Constant mesh (Synchromeshed 3rd and 4th in main shift in both forward and reverse)	
	MFWD (4WD)	Standard	
	Differential lock	Bevel gears with diff-Lock	
	Brakes	Wet disc,mechanical	
4. Clutch	Steering	hydraulic	
	Main	Dry single disc,mechanic	
5. Dimensions	PTO	Multiple wet disk	
	Overall length (mm)	3,500 (137.8")	
	Overall width (mm)	1,610 (63.4")	
	Overall Height (mm)	2,765 (108.9")	
	Wheel base (mm) (Distance between shafts)	1,935 (76.2")	
	Min. Ground Clearance (mm)	370 (14.6")	
	Front	9.5-16-8PR	
	Rear	13.6-26-8PR	

7 - 6

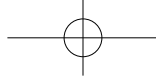


SPECIFICATION



MODEL		RK55C / RK55SC		REMARKS
5. Dimensions	Axle type	Front	Center pin	
		Rear	Central axle	
6. Implement	Operation		Hydraulic	
	Mounting method		3-Point hitch	
	Drawing method		Trailer hitch	
	3-Point hitch category		Category 1	
	Hydraulic-control		Position, draft control	

※ The specifications are subject to change for improvement without notice.



SPECIFICATION

▶ TRAVELING SPEED

Km/h (M/h)

Traveling Speed			
MODEL		RK55C / RK55SC	
Range shift	Main shift	Forward	Reverse
LL	1	0.68 (0.42)	0.58 (0.36)
	2	0.91 (0.57)	0.76 (0.76)
	3	1.38 (0.86)	1.16 (0.72)
	4	1.63 (1.01)	1.37 (0.85)
L	1	1.94 (1.21)	1.64 (1.02)
	2	2.57 (1.60)	2.17 (1.35)
	3	3.93 (2.40)	3.31 (2.06)
	4	4.64 (2.88)	3.91 (2.43)
M	1	4.05 (2.52)	3.42 (2.13)
	2	5.38 (3.34)	4.53 (2.81)
	3	8.21 (5.10)	6.92 (4.30)
	4	9.69 (6.02)	8.17 (5.08)
H	1	12.84 (7.98)	10.82 (6.72)
	2	17.03 (10.58)	14.35 (8.92)
	3	26.00 (16.16)	21.91 (13.61)
	4	30.68 (19.06)	25.86 (16.07)

※ The specifications are subject to change for improvement without notice.



TROUBLESHOOTING

1. TROUBLESHOOTING..... 8-2



TROUBLESHOOTING

1. TROUBLESHOOTING

▶ FAULT TRACING

SYMPTOM		CAUSE	REMEDY
1. Engine	Turning the main switch will not operate the starter	• Clutch not pushed in	• Push the clutch in
		• Battery flat	• Charge or replace the battery
		• Switch faulty	• RK Tractor store to repair or replace
	Starter operates but not enough to turn the engine	• Low battery	• Contact RK Tractor store for repair or replace
		• Bad earth	• Charge the battery
		• Thick oil	• Clean the earth lead and tighten
	Starter operates OK but does not start the engine	• Air in fuel system	• Drain and replace with correct oil
		• Clogged fuel filter	• Bleed the system
		• No fuel being supplied	• Clean or replace both filters
		• Glow plug disconnected or not working	• Fill tank or turn tap on
	Engine revolutions are irregular	• Contact RK Tractor store for repair.	• Contact RK Tractor store for repair.
		• Air in the fuel system	• Bleed the system
		• Faulty injector	
	The engine stops at low revolution	• Fuel pipe leak	
		• Poor fuel injection	• Contact RK Tractor store for repair
• Faulty injection pump		• Contact RK Tractor store for repair	
• Wrong valve clearance		• Contact RK Tractor store for repair	
• Wrong idle setting		• Contact RK Tractor store for repair	
The engine stops suddenly	• Faulty injector	• Contact RK Tractor store for repair	
	• Lack of fuel	• Contact RK Tractor store for repair	
	• Faulty injectors	• Fill the tank and bleed the fuel system	
	• Seized engine due to lack of oil, the wrong oil or lack of coolant	• Contact RK Tractor store for repair	



SYMPTOM		CAUSE	REMEDY
1. Engine	The engine overheats	• Lack of coolant	• Refill with coolant
		• Broken or misadjusted fan belt	• Adjust or replace
		• Clogged air filter element	• Clean or replace air filter
		• Clogged radiator	• Clean the core
		• Low oil	• Replace the oil to correct grade
	White smoking from the exhaust	• Oil level too high	• Reduce to correct quantity
		• Shortage of or faulty fuel	• Contact RK Tractor store for repair
	Reduced performance of the engine	• The injectors are clogged, carbon coated and sticking	• Contact RK Tractor store for repair
		• Low compression	
		• Leaking valve seat	• Contact RK Tractor store for repair
		• Incorrect valve gap	• Contact RK Tractor store for repair
		• Faulty timing	• Contact RK Tractor store for repair
		• Fuel shortage	• Contact RK Tractor store for repair • Fill the tank and check fuel quality
		• Clogged air cleaner	• Clean the element
	Oil warning light comes on with the engine running	• Low oil level	• Fill to correct level
		• Wrong oil	• Change to correct oil
		• Faulty light or switch	• Replace faulty part
		• Clogged oil filter	• Contact RK Tractor store for repair
Alternator light comes on with the engine running	• Wiring fault	• Contact RK Tractor store for repair	
	• Faulty alternator	• Contact RK Tractor store for repair	
	• Low water level or faulty battery	• Top up or replace	
	• Broken or loose fan belt	• Replace or adjust	



TROUBLESHOOTING

SYMPTOM		CAUSE	REMEDY
2. Clutch	The clutch slips	<ul style="list-style-type: none"> • Incorrect adjustment • Worm or burnt lining 	<ul style="list-style-type: none"> • Adjust to correct free play • Contact RK Tractor store for repair
	The clutch does not disengage	<ul style="list-style-type: none"> • Incorrect adjustment • Rusty clutch lining 	<ul style="list-style-type: none"> • Adjust to correct free play. Contact RK Tractor store for repair
3. Brake	Brake not working	<ul style="list-style-type: none"> • Incorrect free play • Worm or burnt lining • Left and right gap different 	<ul style="list-style-type: none"> • Adjust to correct free play. Contact RK Tractor store for repair
	Brake pedal not returning	<ul style="list-style-type: none"> • Faulty return spring • Lack of grease on the joints 	<ul style="list-style-type: none"> • Replace spring • Remove rust and lubricate with grease
4. Hydraulic system	Hydraulics are not lifting	<ul style="list-style-type: none"> • Engine revs. too low 	<ul style="list-style-type: none"> • Increase engine revs.
		<ul style="list-style-type: none"> • Lack of transmission Oil 	<ul style="list-style-type: none"> • Top up the oil to the correct level
		<ul style="list-style-type: none"> • Air leaking in from a pipe 	<ul style="list-style-type: none"> • Repair or replace pipe or replace O-ring on joint and tighten
		<ul style="list-style-type: none"> • Clogged suction filter 	<ul style="list-style-type: none"> • Clean and change oil
		<ul style="list-style-type: none"> • Faulty pump 	<ul style="list-style-type: none"> • Contact RK Tractor store for repair
		<ul style="list-style-type: none"> • Faulty hydraulic valve 	<ul style="list-style-type: none"> • Contact RK Tractor store for repair
	Oil leak from pipe	<ul style="list-style-type: none"> • Loose pipe joint • Cracked pipe 	<ul style="list-style-type: none"> • Tighten joint • Replace or repair pipe
			<ul style="list-style-type: none"> • The stopper has slipped down
When lifting the relief valve whistles			
For any other hydraulic problems please consult your RK Tractor store who has the correct equipment to diagnose and repair the system			



SYMPTOM		CAUSE	REMEDY
5. Steering wheel	Steering wheel shaking	• Wrong toe-in	• Adjust toe-in
		• Unequal tire pressure	• Inflate both to correct pressure
		• Loose component	• Tighten or replace if worn
	Excessive play in the steering	• Worn steering shaft	• Contact RK Tractor store for repair
• Worn components		• Contact RK Tractor store for repair	
6. Electric instruments	Flat battery	• Faulty wiring	• Repair, Reconnect or tighten as needed
		• Faulty alternator	• Contact RK Tractor store for repair
		• Faulty regulator	• Contact RK Tractor store for repair
		• Broken or loose fan belt	• Replace or adjust
	Before anything else, check the electrolyte level of the battery and the connections. Top up it required and clean and retighten the terminal		
	Dim head lights	• Low battery	• Charge or replace
		• Faulty wiring	• Repair or replace as needed
	Headlights not working	• Blown bulb	• Replace bulb
		• Blown fuse	• Replace fuse
		• Faulty contact	• Repair or replace and check the earth
Horn not working	• Faulty horn button	• Replace button	
	• Faulty wiring	• Repair or replace	
	• Faulty horn	• Replace	
Indicator not working	• Blown bulb	• Replace bulb	
	• Faulty flasher unit	• Replace unit	
	• Faulty wiring	• Repair or replace	



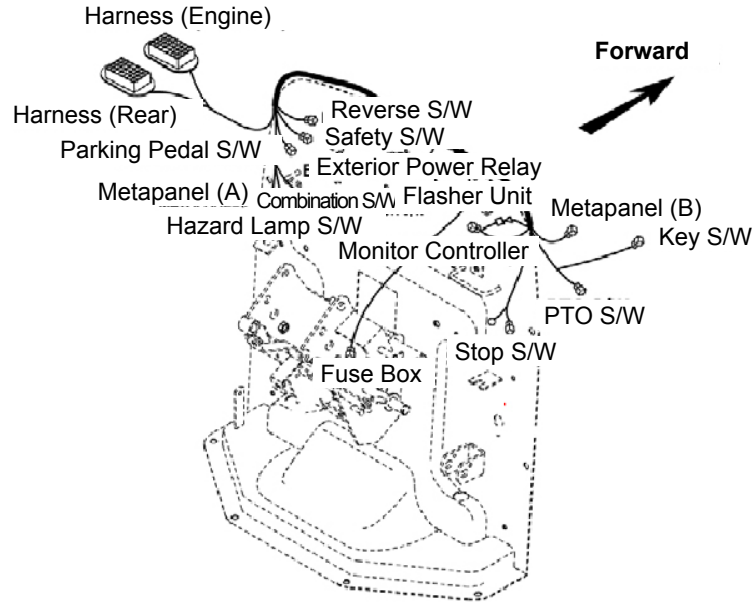
APPENDIX

- 1. ELECTRIC SYSTEM DIAGRAM..... 9-2
- 2. ROLL-BAR WIRING DIAGRAM 9-4
- 3. CABIN WIRING DIAGRAM (1) 9-5
- 4. CABIN WIRING DIAGRAM (2) 9-6
- 5. CABIN WIRING DIAGRAM (3) 9-7
- 6. DRAWING FOR FIXING POSITION OF THE FUSE.. 9-8
- 7. WIRING DIAGRAM OF THE ELECTRIC INSTRUMENT.. 9-9
- 8. TRACTOR HISTORY CARD..... 9-10
- 9. SERVICE RECORD 9-11
- 10. DAILY OPERATION LOG 9-12
- 11. PART REPLACEMENT RECORD 9-13



APPENDIX

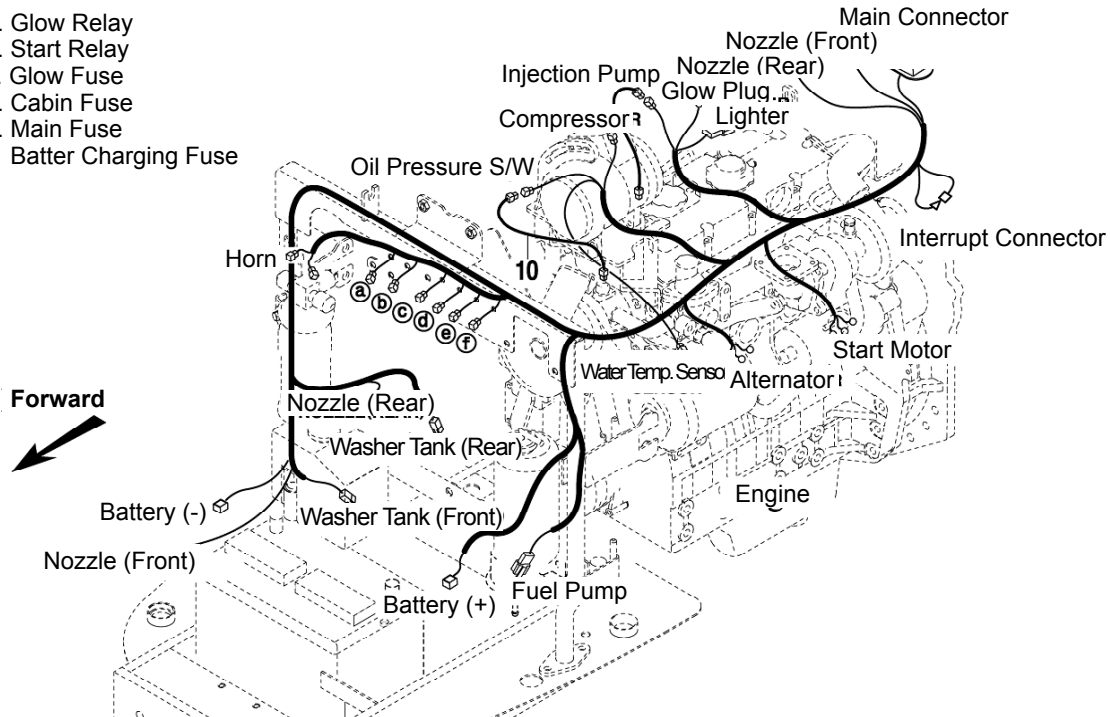
1. ELECTRIC SYSTEM DIAGRAM



T450901A



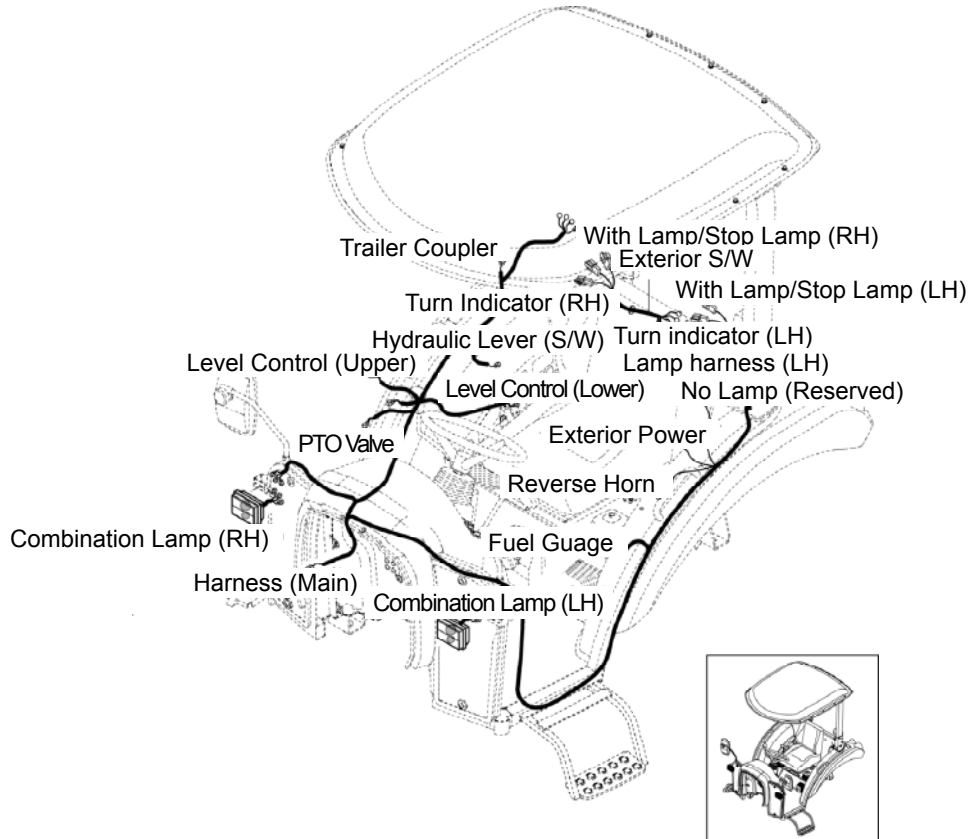
- a. Glow Relay
- b. Start Relay
- c. Glow Fuse
- d. Cabin Fuse
- e. Main Fuse
- f. Batter Charging Fuse





APPENDIX

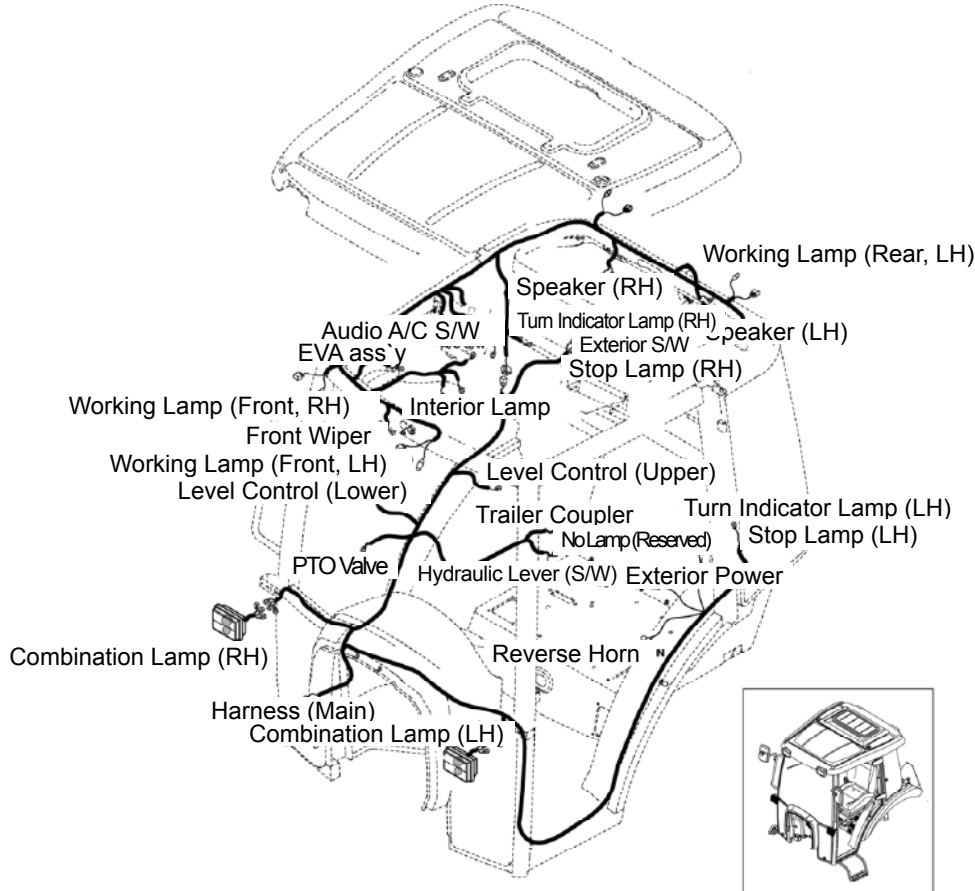
2. ROLL-BAR WIRING DIAGRAM



T450903A



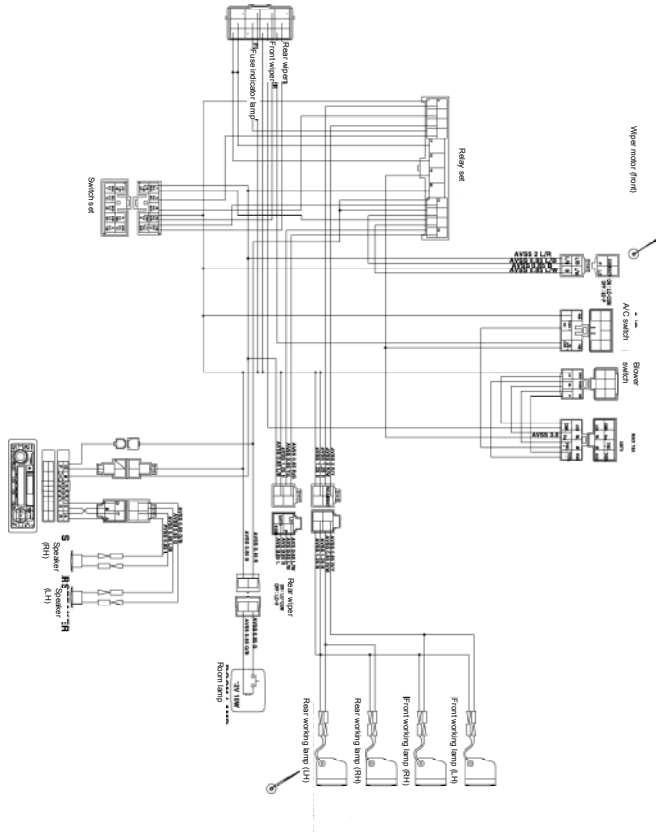
3. CABIN WIRING DIAGRAM (1)





APPENDIX

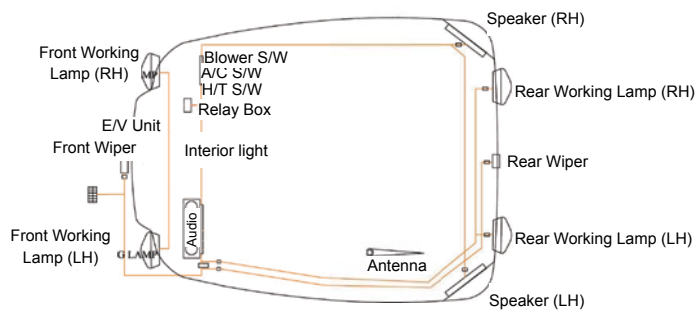
4. CABIN WIRING DIAGRAM (2)



T450905A



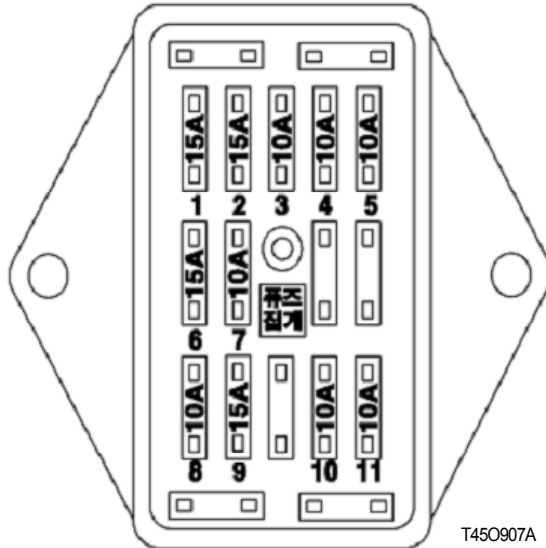
5. CABIN WIRING DIAGRAM (3)





APPENDIX

6. DRAWING FOR FIXING POSITION OF THE FUSE

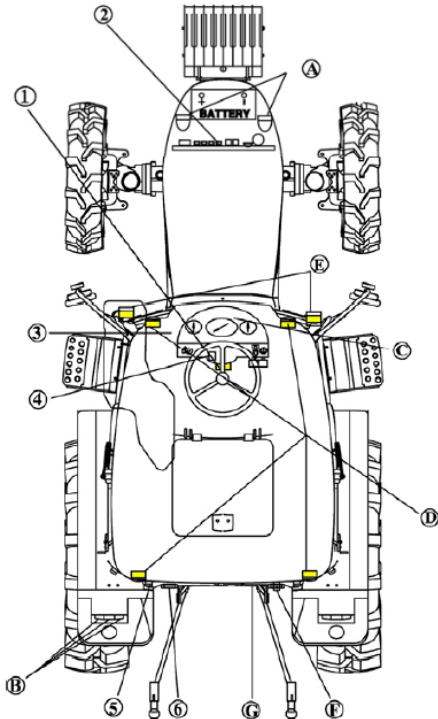


T450907A

1. Panel
2. Light, Horn
3. Working Light
4. Stop Lamp
5. Turn Signal
6. Controller
7. Engine Stop
8. Fuel Pump
9. Coupler
10. Auto Rolling
11. Quick Turn



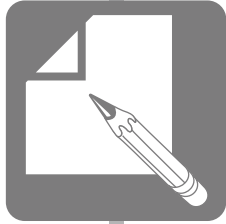
7. WIRING DIAGRAM OF THE ELECTRIC INSTRUMENT



①	Fuse Box
②	Slow Blow Fuse
③	Units for direction Signal Relay for the power
④	PTO Monitor
⑤	Coupler for the power max rated ampere
⑥	Coupler for the trailer

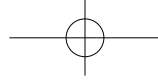
A	Head Lamp	12V 55W
B	Direction Signal Lamp	12V 21W
	Stop Lamp Back Light	21/5W
C	Meta Panel Light	12V 3.4W
D	Working Lamp	12V 35W
E	Direction Signal Lamp	12V 21W
	Side Lamp	21V 5W
F	Back Lamp	12V 20W
G	Number Plate Lamp (EU)	12V10W

T45O908A



INDEX

1. INDEX.....10-2



INDEX

A

ABOUT THIS MANUAL	1-3
ADJUSTING THE BRAKES	5-21
ADJUSTING THE CLUTCH	5-20
ADJUSTING THE THROTTLE LEVER	5-22
ADJUSTING TOE-IN	5-22
ADJUSTMENT METHOD	5-21
ADJUSTMENT OF LOWER LINK	3-28
ADJUSTMENT OF THE LIFT LINK ON THE LOWER LINK ...	3-29
ADJUSTMENT OF THE TOP LINK	3-27
AIR CLEANING SYSTEM	5-29
AIR CON SWITCH	6-8
AIR CONDITIONER COMPRESSOR BELT ADJUSTMENT	5-24
AIR CONDITIONING SYSTEM	6-11
ALTERNATOR AND FAN BELTS INSPECT/ADJUST/ REPLACE	5-24
ALTERNATOR INSPECT	5-23
ALWAYS USE SAFETY LIGHTS AND DEVICES	2-5
ANTI FREEZE	5-19
APPENDIX	9-1
ASH TRAY	6-13
AVOID HIGH-PRESSURE FLUIDS	2-6

B

BATTERY CHARGING	4-7
BATTERY DISCONNECT	2-8
BATTERY MAINTENANCE	5-22
BLEEDING THE FUEL SYSTEM	5-12
BLOWER CONTROL SWITCH	6-7
BRAKE	5-4
BRAKE AREA / CLUTCH AREA	5-20
BRAKE PEDAL	3-14

C

CAB AIR INTAKE FILTER	6-12
CAB CEILING	6-4
CABIN SYSTEM	6-1
CABIN WIRING DIAGRAM (1)	9-5
CABIN WIRING DIAGRAM (2)	9-6
CABIN WIRING DIAGRAM (3)	9-7
CHANGING ENGINE OIL	5-13
CHANGING OIL IN THE FRONT AXLE	5-15
CHANGING THE COOLANT	5-18
CHANGING THE OILS IN THE TRACTOR	5-13
CHANGING THE TRANSMISSION OIL	5-14
CHECK DURING DRIVING	4-6
CHECKING ENGINE COOLANT	5-2



INDEX



CHECKING HOSES AND LINES	5-25	DIFF-LOCK PEDAL	3-17
CHECKING THE WIRING HARNESS AND FUSES	5-25	DO NOT WELD, DRILL OR STRAIGHTEN THE ROPS	1-8
CHECKS AND SERVICE	5-2	DO'S AND DON'T'S	2-22
CIGARETTE LIGHTER	6-14	DO'S-FOR BETTER PERFORMANCE	2-22
CIRCULATION DIFFUSER	6-9	DON'TS-FOR SAFE OPERATION	2-23
CIRCULATION DIFFUSER	6-12	DOORS	6-3
CLEANING AND CHANGING FILTERS	5-16	DPF REGENERATION SWITCH	3-10
CLEANING THE RADIATOR	5-19	DRAFT CONTROL LEVER	3-20
CLUTCH	5-5	DRAW BAR TYPE	3-26
CLUTCH & BRAKES	5-30	DRAWING FOR FIXING POSITION OF THE FUSE	9-8
CLUTCH CUT-OFF ARM	3-13	DRIVER'S SEAT	3-18
CLUTCH PEDAL	3-13	DRIVING DOWNHILL	4-6
COMPRESSOR BELT ADJUSTMENT	6-10		
COOLING SYSTEM	5-31	E	
CUP HOLDER	6-13	ELECTRIC SYSTEM DIAGRAM	9-2
		ELECTRICAL	5-5
D		EMERGENCY EXITS	2-9
DAILY OPERATION LOG	9-12	EMISSION SYSTEM WARRANTY	11-5
DAMAGE OF THE ROPS	1-8	ENGINE	5-30
DECALS MOUNTING LOCATION	2-24	ENGINE COOLING WATER	4-7
DESCRIPTION	1-5	ENGINE OIL	5-2
DESCRIPTION OF TRACTOR CONTROLS	3-1	ENGINE OIL FILTER	5-16
DETACHING THE LOADER	5-5	ENGINE SYSTEM	5-31
DIAGNOSING MALFUNCTIONS	6-15	ENGINE WARRANTIES	11-2



INDEX

E

EXTERIOR HYDRAULIC LEVER (OPTIONAL).....3-21

F

FALLING OBJECT PROTECTIVE STRUCTURE (FOPS) ...2-13

FAN BELT ADJUSTMENT5-23

FAULT TRACING.....8-2

FILLING DIAGRAM & CAPACITY TABLE5-9

FOOT OPERATED ACCELERATOR.....3-14

FOR DAILY OR SHORT TERM STORAGE5-27

FOR SLIDING SEAT1-9

FRONT AXLE5-20

FRONT WHEEL DRIVE LEVER.....3-18

FUEL5-4

FUEL5-12

FUEL FILTER5-16

FUEL GAUGE4-7

FUEL GAUGE3-4

FUEL SAVING TIPS5-29

FUEL SYSTEM.....5-30

G

GAP ADJUSTMENT5-20

GENERAL INFORMATION.....1-1

GENERAL INFORMATION.....5-2

GENERAL SAFETY INFORMATION.....2-24

GREASING THE TRACTOR5-20

H

HANDLE FUEL SAFELY AVOID FIRES2-5

HAZARD LAMP SWITCH.....3-5

HEAD LAMP, TURN SIGNAL SWITCH AND HORN3-3

HEATING SYSTEM6-9

HOUR METER3-3

HOW TO ADJUST THE SEAT1-9

HOW TO CONTROLS CABIN.....6-5

HYDRAULIC OIL FILTER AND ENGINE OIL FILTER
CARTRIDGE5-18

I

INDEX10-1

INSTALLING LOADER5-5

INSTRUMENT AND RELATED PARTS.....6-3

INSTRUMENT AND SWITCHES.....3-2

INTERIOR LAMP.....6-7

INTRODUCTION & DESCRIPTION.....1-4



INDEX



J

JOYSTICK LEVER 3-23

K

KEEP RIDERS OFF TRACTOR 2-4

L

LIFT ROD 5-20

LONG-TERM STORAGE 5-28

LOWER LINK (IF EQUIPPED EXTENDABLE TYPE 3-28

LOWERING SPEED CONTROL KNOB FOR THE 3
POINT HITCH 3-21

LUBRICANTS 5-10

LUBRICATION & MAINTENANCE 5-1

M

MAIN FUSES 5-26

MAIN GEAR LEVER 3-15

MAIN SPECIFICATIONS 7-5

MAIN SWITCH (KEY SWITCH) 3-3

MAINTENANCE AND ADJUSTMENT SCHEDULE 5-6

MAJOR FEATURES 6-2

MOUNTING AND DEMOUNTING IMPLEMENTS 2-17

MOUNTING IMPLEMENT 3-29

N

NORMAL BRAKING AND PARKING 4-5

O

OIL PRESSURE LIGHT 4-6

OPENING METHOD OF EACH COVER 5-11

OPENING METHOD OF HOOD 5-11

OPENING THE SIDE COVER 5-11

OPERATING THE 3 POINT LINKAGE (TPL) 3-25

OPERATING THE HYDRAULICS 3-20

OPERATION 4-1

OPERATION OF THE DIFF LOCK 4-6

OPERATION THE CONTROLS 3-12

OPERATOR PROTECTIVE STRUCTURE (OPS) 2-13

OTHER MAINTENANCE 5-24

OWNER ASSISTANCE 1-6

P

PANEL INSTRUMENT LAMP 3-5

PARK TRACTOR SAFELY 2-4

PARKING BRAKE LEVER 3-14

PART REPLACEMENT RECORD 9-13

PARTS 1-2



INDEX

P

PERIODICAL CHECK AND SERVICE TABLE	5-6
PIVOT METAL	5-20
POSITION CONTROL	3-20
PRACTICE SAFE MAINTENANCE	2-6
PRECAUTION TO AVOID TIPPING	2-4
PRE-START CHECKS	5-2
PREVENT ACID BURNS	2-7
PREVENT BATTERY EXPLOSIONS	2-7
PROTECTION CHILDREN	2-3
PTO CONTROL SWITCH	3-7
PTO GEAR SELECTION LEVER	3-19
PTO ON/OFF SWITCH	3-7

R

RADIO, CD PLAYER (IF EQUIPPED)	6-13
READ SAFETY INSTRUCTION	2-2
REAR WINDOW	6-3
REARVIEW MIRRORS	6-4
RECIRCULATION INLETS FULLY CLOSED	6-6
RECOGNIZE SAFETY INFORMATION	2-2
RECOMMENDED TRANSMISSION OIL	5-11
REMOTE HYDRAULIC CONTROL VALVE COUPLER CONNECTING AND DISCONNECTING	3-22

REPLACING FUSES	5-26
RE-USE AFTER LONG TERM STORAGE	5-29
ROLL OVER PROTECTIVE STRUCTURES (ROPS)	1-7
ROLL-BAR WIRING DIAGRAM	9-4
ROOF HATCH (IF EQUIPPED)	6-11
ROPS (ROLL OVER PROTECTIVE STRUCTURES)	1-7
RK WARRANTY	11-9

S

SAFE OPERATION OF YOUR TRACTOR	2-15
SAFETY IMPLEMENT FOR JOYSTICK LEVER	3-24
SAFETY INSTRUCTIONS	2-2
SAFETY PRECAUTIONS	2-1
SAFETY PRECAUTIONS WHEN USING THE LOADER	2-10
SAFETY SIGNS	2-24
SAFETY STARTER SWITCH	2-9
SAFETY TIPS DURING MAINTENANCE	2-16
SERVICE	1-2
SERVICE PRIOR TO DAILY AND SHORT TERMS STORAGE	5-27
SERVICE RECORD	9-11
SERVICE TRACTOR SAFELY	2-8
SERVICING THE AIR CLEANER	5-24
SHUTTLE SHIFT LEVER	3-15



INDEX



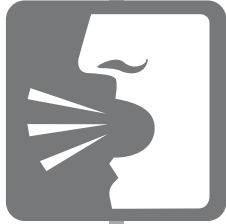
SIDE WINDOW	6-3	TOWING SAFELY	2-12
SIGNAL WORDS.....	2-2	TRACK ADJUSTMENT	4-9
SPECIFICATION	7-1	TRACTOR AN INTRODUCTION	1-4
SPECIFICATIONS.....	7-2	TRACTOR HISTORY CARD	9-10
STARTING THE ENGINE.....	4-2	TRACTOR IDENTIFICATION.....	1-2
STAY CLEAR OF ROTATING SHAFTS	2-5	TRACTOR RUNAWAY	2-9
STEERING	5-4	TRAILER SOCKET (SEVEN TERMINAL ELECTRICAL SOCKET TYPE).....	4-8
STOPPING THE ENGINE	4-3	TRANSMISSION OIL	5-3
STORAGE	5-27	TRAVELING SPEED	7-8
STORING ENGINE IN OPERABLE CONDITION FOR 3 MONTHS OR MORE	4-4	TROUBLESHOOTING	8-1
SUB GEAR LEVER (LINEAR SHIFT LEVER).....	3-16	TROUBLESHOOTING	8-2
SWING DRAW BAR TYPE.....	3-25		
SYSTEM CONFIGURATION.....	6-10	U	
		UNIVERSAL SYMBOLS	2-28
T		UPHILL STARTS ON A STEEP SLOPE	4-5
TACHOMETER.....	3-4	USE OF HAZARDOUS SUBSTANCES	2-14
TELESCOPIC STABILIZERS ADJUSTMENT	3-27	USE OF ROPS AND SEAT BELT	2-3
TEMPERATURE CONTROL	6-8	USE OF THE TRACTOR WITH THE ROPS LOWERED CAN CAUSE FATAL INJURIES	1-7
THROTTLE LEVER (HAND THROTTLE)	3-13		
TIGHT TURNS IN THE FIELD.....	4-4	V	
TILT LEVER.....	3-19	VENTILATION	6-5
TIRE PRESSURE.....	5-4		



INDEX

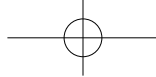
W

WARMING UP	4-3
WARMING UP IN COLD WEATHER	4-3
WARRANTY	11-1
WARRANTY OF THE PRODUCT	1-2
WATER TEMPERATURE WARNING LAMP	3-4
WINDSCREEN WASHER TANK	6-7
WIPER CONTROL SWITCH	6-6
WIRING DIAGRAM OF THE ELECTRIC INSTRUMENT	9-9
WORK IN VENTILATED AREA	2-8
WORKING LAMP SWITCH	6-6
WORKING LAMPS (FRONT AND REAR).....	6-4



WARRANTY

- 1. ENGINE WARRANTIES.....11-2
- 2. EMISSION SYSTEM WARRANTY11-5
- 3. RK WARRANTY.....11-9



WARRANTY

1. ENGINE WARRANTIES

ENGINE LIMITED WARRANTY

▶ WHAT IS COVERED BY THIS WARRANTY?

ENGINE warrants to the original retail purchaser that a new **ENGINE** TNV common rail series industrial engine will be free from defects in material and/or workmanship for the duration of the warranty period.

Note: **ENGINE** engines may be equipped with external components including, but not limited to: wiring harnesses, electrical devices, control panels, radiator, air filters, fuel/ or exhaust systems that are supplied and/or installed by manufacturers other than **ENGINE**. For warranty information on such external components, please contact the machine or component manufacturer directly or see your authorized **ENGINE** dealer or distributor.

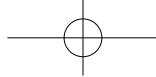
This warranty is provided in lieu of all other warranties, express or implied. **ENGINE** specifically disclaims

any implied warranties of merchantability or fitness for a particular purpose, except where such disclaimer is prohibited by law. If such disclaimer is prohibited by law, then implied warranties shall be limited in duration to the life of the express warranty.

▶ HOW LONG IS THE WARRANTY PERIOD?

The **Engine** standard limited warranty period runs for a period of twenty-four (24) months or Two-thousand(2000) engine operation hours, whichever occurs first. An extended limited warranty of thirty-six(36) months or three thousand(3000) engine operating hours, whichever occurs first, is provided for these specific parts only: the cylinder block, cylinder head, crankshaft forging, connecting rods, flywheel, flywheel housing, camshaft, timing gear, and gear case. The

warranty period for both the Standard limited warranty and the extended limited warranty (by duration or operation hours) begins on the date of delivery to the original retail purchaser and is valid only until the applicable warranted duration has passed or the operation hours are exceeded, whichever comes first.



WHAT THE ENGINE OWNER MUST DO:

If you believe your **ENGINE** engine has experienced a failure due to a defect in material and/or workmanship, you must contact an authorized **ENGINE** industrial engine dealer or distributor within thirty (30) Days of discovering the failure, You must provide proof of ownership of the engine, proof of the date of the engine purchase and delivery, and documentation of the engine operation hours. Acceptable forms of proof of delivery date include, but are not limited to: the original warranty registration of sales receipts or other documents maintained in the ordinary course of business by Engine dealers and/or distributors, indicating the date of delivery of the **ENGINE** product to the original retail purchaser, This information is necessary to establish whether the Engine product is still within the warranty period. Thus, **ENGINE**

strongly recommends you register your engine as soon as possible after purchase in order to facilitate any future warranty matters.

You are responsible for the transportation of the engine to and from the repair location as designated by **ENGINE**.

▶ TO LOCATE AN AUTHORIZED ENGINE INDUSTRIAL ENGINE DEALER OR DISTRIBUTOR:

You can locate your nearest authorized Engine industrial engine dealer or distributor by visiting the **ENGINE** Co., Ltd. Website at:

<http://www.Engine.co.jp> (The Japanese language page will be displayed.) For English language “click” on “English Page.”)

- “click” on “Network” in the website heading to view the “Engine Worldwide Network”.
- Choose and “Click” on the desired

product group.

- “Click” on the Icon closest to your region.
- “Click” on the desired country or associate company to locate your nearest authorized **ENGINE** Industrial engine dealer or distributor.

You may also contact **ENGINE** by clicking on “Inquiry” in the website heading and typing in your question or comment.

What **ENGINE** will DO:

Engine warrants to the original retail purchaser of a new Engine engine that Engine will make

such repairs and/or replacements at **ENGINE**'s option, of any part(s) of the **ENGINE** product covered by this warranty found to be defective in material and/or workmanship. Such repairs and/or replacements will be made at a location designated by **ENGINE** at no cost to the purchaser for parts or labor.



WARRANTY

WHAT IS NO COVERED BY THIS WARRANTY?

This warranty does not cover parts affected by or damaged by any reason other than defective materials or workmanship, including, but not limited to, accident, misuse, abuse, "Acts of God," neglect, improper installation, improper maintenance, improper storage, the use of unsuitable attachments or parts, the use of contaminated fuels, the use of fuels, oils, lubricants, or fluids other than those recommended in your **ENGINE** Operation Manual, unauthorized alterations or modifications, ordinary wear and tear, and rust or corrosion. This warranty does not cover the cost of parts and/or labor required to perform normal/scheduled maintenance on your **ENGINE**. This warranty does not cover consumable parts such as, but not limited to, filters, belts, hoses, fuel injector, lubricants and cleaning fluids. This warranty does not cover the

cost of shipping the product to or from the warranty repair facility.

► WARRANTY LIMITATIONS:

The foregoing is Engine's only obligation to you and your exclusive remedy for breach of Warranty. Failure to follow the requirements for submitting a claim under this warranty may result in a waiver of all claims for damages and other relief. In no event shall Engine or any authorized Industrial engine dealer or distributor be liable for incidental, special or consequential damages.

Such consequential damages may include, but not be limited to, loss of revenue, loan payments, cost of rental of substitute equipment, insurance coverage, storage, lodging, transportation, fuel mileage, and telephone costs. The limitations in this warranty apply regardless of whether your claims are based on

breach of contract, tort (including negligence and strict liability) or any other theory. Any action arising hereunder must be brought within one (1) year after the cause of action accrues or it shall be barred. Some states and countries do not allow certain limitations on warranties or for breach of warranties. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state and country to country. Limitations set forth in this paragraph shall not apply to the extent that they are prohibited by law.

► WARRANTY MODIFICATION

Except as modified in writing and signed by the parties, this warranty is and shall remain the complete and exclusive agreement between the parties with respect to warranties, superseding all prior agreements, written and oral, and all other communications between the



2. EMISSION SYSTEM WARRANTY

parties relating to warranties. No person or entity is authorized to give any other warranty or to assume any other obligation on behalf of **ENGINE**, either orally or in writing.

► QUESTIONS:

If you have any questions or concerns regarding this warranty, please call or write to the nearest authorized Engine industrial engine dealer or distributor or other authorized facility.

ENGINE CO., LTD. LIMITED EMISSION CONTROL SYSTEM WARRANTY – USA ONLY

► YOUR WARRANTY RIGHTS AND OBLIGATIONS:

[CALIFORNIA]

The California Air Resources Board (CARB), the Environmental Protection Agency (EPA) and **ENGINE Co., Ltd.** hereafter referred to as **ENGINE**, are pleased to explain the emission control system warranty on your industrial compression-ignition engine. In California, model year 2000 or later off-road compression-ignition engines must be designed, built and equipped to meet the state's stringent anti-smog standards. In all states, 1998 and later non-road compression-ignition engines must be designed, built and equipped to meet the United States EPA emissions standards. **ENGINE** warrants the emission control system on your engine for the periods

of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system, the air induction system, the electronic control system, EGR(Exhaust Gas Recirculation) system and Diesel Particulate Filter. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, **ENGINE** will repair your non-rod compression-ignition engine at no charge to you including diagnosis, parts and labor.

► MANUFACTURER'S WARRANTY PERIOD:

The model year 1998 or later certified and labeled non-road compression-ignition engines are warranted



WARRANTY

for the periods listed below. If any emission-related part on your engine is found to be defective during the applicable warranty period, the part will be replaced by **ENGINE**.

If your engine is certified as	And its maximum Power is	And its rated speed is	Then its warranty period is
Variable speed or Constant speed	kW<19	Any speed	1,500 hours or two (2) years whichever comes first. In the absence of a device to measure the hours of use, The engine has a warranty period of two(2) years.
Constant speed	19 < kW < 37	3,000rpm or higher	1,500 hours or two (2) years whichever comes first. In the absence of a device to measure the hours of use, The engine has a warranty period of two(2) years/
Constant speed	19 < kW <37	Less than 3,000rpm	3,00hours of five (5) years whichever comes first. In the absence of a device to measure the hours of use, the Engine has a warranty period of five(5) years.
Variable speed	19 < kW <37	Any speed	3,000 hours or five (5) years whichever comes first. In the absence of a device to measure the hours of use, the engine has a warranty period of five (5) years.
Variable speed or Constant speed	kW > 37	Any speed	3,000 hours or (5) years whichever comes first. In the absence of a device to measure the hours of use, The engine has a warranty period of five (5) years.



▶ WARRANTY COVERAGE:

This warranty is transferable to each subsequent purchaser for the duration of the warranty period. Repair or replacement of any warranted part will be performed at an authorized **ENGINE** industrial engine dealer or distributor.

Warranted parts not scheduled for replacement as required maintenance in the operation manual shall be warranted for the warranty period. Warranted parts scheduled for replacement as required maintenance in the operation manual are warranted for the period of time prior to the first scheduled replacement. Any part repaired or replaced under warranty shall be warranted for the remaining warranty period.

During the warranty period, **Engine** is liable for damages to other engine components caused by the failure of any warranted part during the warranty period.

Any replacement part which is functionally identical to the original equipment part in all respects may be used in the maintenance or repair of your engine, and shall not reduce **ENGINE**'s warranty obligations.

Add-on or modified parts that are not exempted may not be used, The use of any non-exempted add-on or modified parts shall be grounds for disallowing a warranty.

[WARRANTED PARTS]

This warranty covers engine components that are a part of the emission control system of the engine as Delivered by Engine to the original retail purchaser, Such components may include the following:

- Fuel injection system
- Electronic control system
- Cold start enrichment system

- Intake manifold
- Turbocharger systems
- Exhaust manifold
- EGR system
- Positive crankcase ventilation system
- Hoses, belts, connectors and assemblies associated with emission control systems
- Exhaust gas after treatment (Diesel Particulate Filter (DPF))

Since emissions-related parts may vary slightly between models, certain models may not contain all of These parts and other models may contain the functional equivalents.

▶ EXCLUSIONS:

Failures other than those arising from defects in material and/or workmanship are not covered by this warranty. The warranty does not



WARRANTY

extend to the following: malfunctions caused by abuse, misuse, improper Adjustment, modification, alteration, tampering, disconnection, improper or inadequate maintenance or use Of non-recommended fuels and lubricating oils; accident-caused damage, and replacement of expendable Items made in connection with scheduled maintenance. **ENGINE** disclaims any responsibility for Incidental or consequential damages such as loss of time, inconvenience, loss of use of equipment/engine Or commercial loss.

[Owner's Warranty Responsibilities]

As the engine owner, you are responsible for the performance of the required maintenance listed in Your owner's manual. Engine recommends that you retain all documentation, including receipts, covering maintenance on your non-road compression-ignition engine, but **EN-**

GINE cannot deny Warranty solely for the lack of receipts, or for your failure to ensure the performance of all scheduled maintenance.

ENGINE may deny your warranty coverage of your non-road compression-ignition engine if a part has Failed due to abuse, neglect, improper maintenance or unapproved modifications.

Your engine is designed to operate on diesel fuel only. Use of any other fuel may result in your engine no Longer operating in compliance with applicable emissions requirements.

You are responsible for initiating the warranty process. You must present your engine to a **ENGINE** dealer As soon as a problem exists. The warranty repairs should be completed by the dealer as expeditiously as

Possible. If you have any questions regarding your warranty rights and responsibilities, or would like In-

formation on the nearest **ENGINE** dealer or authorized service center, you should contact **ENGINE** America Corporation.

Website: (www.Engine.com)

E-mail: CS.support@Engine.com

Toll free telephone number:
1-800-872-2867, 1-855-416-7091



3. RK WARRANTY

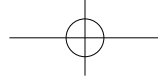
WARRANTY

All products manufactured and supplied by RK have been designed and manufactured in compliance with all laws and regulations concerning agricultural equipment. If maintained and used in accordance with the inspections, regular maintenance and usage guidelines specified in the user's manual, this product is guaranteed to always safely maintain its optimum state and performance, as well as being guaranteed as follows.

1. Scope of Warranty

※ (Tractor Non-Rental & Non-Commercial)

If the agricultural equipment which you purchased is maintained and used normally in accordance with the inspections, regular maintenance and usage guidelines in the user's manual provided by our company, our company shall provide repairs and replacement at our expense for any parts which are revealed by technical analysis during the warranty period below to be defective due to a flaw in the materials or manufacturing.



WARRANTY

※ (Tractor Rental & Commercial)

If the agricultural equipment which you purchased is maintained and used normally in accordance with the inspections, regular maintenance and usage guidelines in the user's manual provided by our company, our company shall provide repairs and replacement at our expense for any parts which are revealed by technical analysis during the warranty period below to be defective due to a flaw in the materials or manufacturing.

2. Warranty Period and Relevant Parts

The warranty period is applied as of the date upon which the agricultural machine was provided to the end user. The warranty period is considered to have ended when either the usage period or usage time expires.

- ① 36 months or 2000 hours of use from the date of purchase for the engine (excluding fuel devices and electronic components) and power transmission devices.
Power transmission devices refer to the interrupter, transmission, brakes, differential and reduction gear. Engines which have been replaced for free are guaranteed for 12 months.
- ② 24 months or 1500 hours for parts other than those listed in Section ① (not including consumables.) Replaced parts are guaranteed for 3 months or less; they are seen as expiring at the end of the regular warranty period.



COVERAGE

This Limited warranty is limited to RK repairing or replacing, at RK's option, warranted parts by an authorized RK RK Tractor store at no charge for either the parts or services. Parts replaced under this Limited Warranty are only warranted for the balance of the warranty period.

1. RK shall have no obligation or liability under this warranty.

- (1) for normal maintenance or operation services for Products, including but not limited to, providing lubricants, fuel, tune-up inspection or adjustments.
- (2) for any consumable parts when such parts are replaced as a part of normal maintenance or operating services.
- (3) to any exclusions and limitations contained in the Limited Warranty.

2. Options, accessories, attachments installed by RK Tractor stores which are not manufactured by RK will not be warranted in any way by RK. For information about the warranty or to obtain warranty service on such parts, RK Tractor stores should contact the manufacturer directly



WARRANTY

3. The Limited Warranty is exclusive and in lieu of all other warranties, whether written, Oral, express or implied, including any warranty of merchantability or fitness for particular purpose.

The liability of RK under this warranty is expressly limited to the provisions in the Limited Warranty and in no event shall RK incur any liability (including liability for general, special, incidental or consequential damages, or economic or moral loss, arising out of any failure of the Products) which is not expressly assumed by RK under this warranty.

RK