



NOTICE D'EMPLOI

Tracteur



TH4330FH-E4 TH4290FH-E4 TH4260FH-E4



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TO OUR CUSTOMER

Thank you very much for purchasing an ISEKI tractor.

This operator's manual provides the information necessary for operating and maintaining your tractor safely and properly. The contents are mainly composed of the following two items:

Safety instructions:	Essential items which you should observe while operating the tractor

Technical instructions: Essential items which you should observe while operating the tractor

Before starting to operate the machine for the first time, you should read this operation manual thoroughly and carefully until you are sufficiently familiar with the operation of the machine to do jobs safely and properly. The manual should be kept in a handy place so you can refer to it when required. You are advised to refer to it from time to time to refresh your understanding of the machine.

Your dealer has performed the pre-delivery service on your new machine. He will discuss with you the operating and maintenance instructions gives in this manual, and instruct you in the proper and varied applications of this machine. Call on him at any time when you have a question, or need equipment related do the use of your machine.



Paragraphs in the manual and labels on the machine which are accompanied by a caution particularly important information about safe operation to avoid accidents. You should always keep precautions in mind and follow them during operation.

Be sure to wear personnel protective equipment during operation



In some of the illustrations used in this operation manual, panels or guards may have been remove for clarify. Never operate the tractor with these panels and guards removed. If the removal of a shield is necessary to make a repair, it must be replaced before operation.

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

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SAFETY

PERSONAL SAFETY INSTRUCTIONS

Whenever you see the words and symbols below, used in this Operator's Instruction Book and on decals, you MUST take note of their instructions as they relate to personal safety.



DANGER: This symbol together with the word DANGER indicates an imminently hazardous situation that, if not avoided, will result in DEATH OR VERY SERIOUS INJURY.



WARNING: This symbol together with the word WARNING indicates a potentially hazardous situation that, if not avoided, could result in DEATH OR VERY SERIOUS INJURY.



CAUTION: This symbol together with the word CAUTION is used to indicate a potentially hazardous situation that, if not avoided, may result in MINOR INJURY.

IMPORTANT: The word IMPORTANT is used to identify special instruction or procedures which, if not strictly observed, could result in damage to, or destruction of the machine, process or its surrounding.

NOTE: The word NOTE is used to indicate points of particular interest for more efficient and convenient repair or operation.

Understand thoroughly the following precautions, always keep them in mind before, during, and after operation, and never take chances.

MAKING YOUR TRACTOR A SAFE VEHICLE

HOW TO MAINTAIN SAFETY

- Never attempt to do the following: Modification of the structure of the tractor Installation of other type engine Installation of tires of other than the original tire size. Any malfunctions or failures of the tractor due to unauthorized modification are not covered by the warranty.
- (2) This machine cannot be driven on a public road without authorization by a local government agency, etc. When transporting an unauthorized machine on a public road, load it on a truck. When traveling with an implement wider than the tractor, put red caution markers such as flags (red lamps at night) in the most visible locations on both sides of the implements, and place a "SLOW MOVING VEHICLE" sign in a place a where it is easily seen by other drivers. Operate the machine carefully keeping in mind that the implement is wider and may roll easily. If the implement can be folded, fold it beforehand. If there are road or railway crossings where the visibility is poor, you should install on the machine a mirror to give a view ahead of you so that you need not move your machine too far into the intersection.
- (3) When you travel on a road, you must turn work lights off it the law requires it.



FIG. 1-1

HOW TO BE A SAFE OPERATOR

- (1) Familiarize yourself fully with machine controls by studying the operation manual before using your machine.
- (2) Never allow persons listed below to operate the machine.
 - Persons with mental disease
 - Persons who cannot operate the machine properly because of fatigue, illness, or drowsiness from medication, etc.
 - Pregnant women
 - Young persons or children too young to legally operate the machine.
 Always be careful of your health by taking suitable rest breaks.
- (3) Wear appropriate clothing and other protective devices during operation.
 - Protection of your head Wear protective headgear such as a helmet, especially when traveling on roads or handling material above your head.
 - Protection to avoid being caught in the machine. Wear tight fitting clothing and headgear, because loose clothing or hair can get caught in the moving parts of the machine.
 - Protection from poisonous dust or gases Be sure to wear a protective device to protect the respiratory system, eyes, and skin when handling poisonous chemicals.
 - Protection of the ears
 Wear ear plugs or take suitable countermeasures to
 protect your ears when you must operate the
 machine under extremely noisy conditions.
 - Maintenance of protective devices Periodically inspect protective devices to assure that they are functioning properly. Use them at all times.

WHEN ANOTHER PERSON OPERATES YOUR MACHINE

When another person operates your machine, you must explain how to operate and instruct him or her to read this manual fully to avoid unexpected accident.



FIG. 1-2



FIG. 1-3



FIG. 1-4





BEFORE OPERATION

- (1) Set up an operation plan with sufficient time allowance. A tight plan may result in unexpected accidents when work has to be rushed.
- (2) Inspect and service the machine periodically in accordance with the instructions given in the operation manual to maintain the machine in best condition. Pay special attention to the controls, especially to the brakes and clutch, and safety measures for the machine functions properly and performs normally, the chance of an accident will be reduced greatly. If safety devices are damaged or do no work, please consult your ISEKI dealer.
- (3) Before removing a safety devices, such as a safety cover, be sure that the machine has stopped completely. Never forget to replace the removed part after servicing.
- (4) Never inject fuel while the engine is running or is still hot. Keep away from open fires an never smoke around a fuel tank or while fueling into the machine. Never use open flames for illumination when fueling the machine at night.

STARTING ENGINE AND MOVING TRACTOR

- (1) Before starting the engine indoors, make sure that there is proper ventilation because exhaust fumes contain poisonous carbon monoxide, which cause lethal poisoning.
- (2) Before starting the machine, confirm that the transmission gear has been shifted to the appropriate speed, that there is no one near the machine, and that the implement is securely installed on the machine.
 Always operate the machine from the operator's seat. Never leave the seat except in an emergency when operating the machine.
- (3) Before starting to move, pay attention to safety conditions around the machine to avoid injury to bystanders or damage to property. Never move abruptly.



FiG. 1-6



FIG. 1-7



FIG. 1-8



FIG. 1-9

WHEN TRAVELLING

- (1) When you travel on roads, ensure the differential lock is off, or the tractor may turn over.
- (2) Do not make sharp turns when operating at high speed or for transportation as the tractor may turn over.
- (3) When operating on poor footing such as a rough road, a slope, a road along a ditch or river, or undeveloped land, drive the tractor at low speeds and operate it carefully.
- (4) Do not make sharp turns on a slope. It may cause turnover of the tractor.When climbing up a hill, shift the speed change lever to the most suitable speed. Start moving the tractor as slowly as possible.While climbing up a hill, never shift speeds along the way.

When starting to move the tractor on an up-hill slope, be sure that the front wheels do not lift up. When going down a hill, drive the tractor t a slower speed that used to climb up the hill.

While going down a hill, never shift into neutral, and never try to control the speed only with the brakes; use the engine brake effectively.

- (5) When traveling on a road where one or both shoulders are slanted and which run along a ditch, look out for softened shoulders especially when the ditch is full of water and be careful not to let the machine slip sideway.
- (6) Never allow other persons to get on the machine or the implement except when the machine or the implement is provided with a seat or a platform for persons to sit or stand on, and only within the capacity specified.
 Never allow persons to get on the implement while traveling on roads.
- (7) When parking the tractor, you have to park it on hard, level ground and provide sufficient safety measures by grounding the implement, removing the key, applying the parking brakes, and chocking the wheels securely.



FIG. 1-10



FIG. 1-11



FIG. 1-12



FIG. 1-13

- (8) Keep inflammable away from the engine during operation. Especially during stationary operation do not operate the engine at high speeds so as not to set fire to grass or straw with a heated exhaust pipe or exhaust fumes.
- (9) When you have to operate the tractor at night, make sure of the location of the controls. If not, the tractor might work unexpectedly by mistake.

LOADING ONTO OR UNLOADING FROM A TRUCK

- When loading the tractor onto a truck or a trailer, turn off the truck's engine and apply the parking brakes to the truck or the trailer.
 Otherwise, the truck could move and the tractor falls to the ground.
- (2) Pay sufficient attention to the safety conditions around the tractor and have it guided by someone to assist the operation. Never allow other persons to approach the tractor, especially in front of or behind it.
- (3) When loading or unloading the machine on/off a truck, set slip-proof ramps at the same angles and drive the tractor straight at sufficiently slow speeds. Loading the tractor in reverse travel and unloading it in forward travel.
- (4) Never depress the brake pedal during loading or unloading operation, or the tractor may shift sideways, which may cause it to fall of the ramps.
- (5) If the engine stalls unexpectedly on the ramps, depress the brake pedal immediately and roll the tractor to the ground by manipulating the brake pedal. Start the engine on the ground and try again.
- (6) When the machine is loaded on the truck, stop the engine, apply parking brakes, and withdraw the stator key, chock the wheels, and rope it securely to the truck. During transportation, do not make sharp turns needlessly so as not to shift the loaded tractor.



FIG. 1-14



FIG. 1-15

(7) Use ramps with the same or better specifications mentioned below. When the machine is equipped with attachments other than those included in the specifications mentioned below, ask your ISEKI dealer for advice.

Specifications of the ramps

Length

More than 4 times the height of the platform of the truck Width (effective width) more than 35cm Capacity (one ramp) more than 1700kg Ramps should have anti-skid surfaces

- (8) Hook the ramps securely on the platform of the tractor with the top of the ramp level with the platform.
- (9) Always prepare for even the worst, by never allowing other persons near the tractor.
- (10) Drive the tractor carefully at the moment the tractor moves from the ramps onto the platform, for it changes angle abruptly.

DURING OPERATION

- (1) During operation, never allow other persons in the vicinity of the tractor, because the tractor itself or flung pieces may cause injury.
- (2) Pay attention to safety around the tractor to avoid injury to bystanders or damage to property. Especially when operating with other persons, use the horn to warn them.
- (3) When crossing a ditch or a levee or when passing through soft land, drive the tractor slowly and straight so that it dose not slip or turn over.
- (4) Do not touch dangerous parts such as rotating parts, moving parts, hot parts (muffler, radiator, or engine, etc.), or electric parts (battery terminals and other live parts), or you may be injured seriously.
- (5) If you use a trailer, use a proper one which suits your tractor. Using an improper trailer may cause serious accidents. Never attempt to haul beyond the tractor's capacity. If you have a question, please consult ISEKI dealer.
- (6) When moving the machine toward an implement for the purpose if installing the implement, never allow any one to stand in between. When installing the implement on the machine, be prepare to move away promptly in the event of an emergency. The brakes should be applied securely during installation.



FIG. 1-16



FIG. 1-17



FIG. 1-18



FIG. 1-19

(6) When moving the machine toward an implement for the purpose if installing the implement, never allow any one to stand in between. When installing the implement on the machine, be prepare to move away promptly in the event of an emergency. The brakes should be applied securely during installation.

INSPECTION AND MAINTENANCE

- When servicing the tractor or mounting or dismounting an implement, place the tractor on level, hard ground which is sufficiently illuminated, or unexpected accidents may occur.
- (2) When servicing the tractor, follow the instructions listed below:
 - Stop the engine.
 - Apply parking brakes.
 - Disengage all PTO.
 - Place all gear shift levers in neutral.
 - Remove the starter key.
 - Lower the implement fully, if equipped. If not, your hands or clothes may be caught or sandwiched between.
- (3) When servicing the tractor, use proper tools. Using makeshift tools may lead to injuries or poor servicing, which may result in unexpected accidents during operation.
- (4) The engine, muffler, radiator, etc. are very hot just after operation, so wait until they cool down sufficiently to avoid burns.
- (5) Never remove the radiator cap while the engine is hot or running. Wait until the engine cools down and then relieve the radiator pressure by releasing the radiator cap. Carelessly pouring cooling water into the heated radiator can cause serious damage to the radiator and the engine. Careless removal of the radiator cap can cause serious injury because of overheated water vapour.
- (6) Never fit unauthorized implements or attempt unauthorized modification.



FIG. 1-20

- (7) Be sure to reinstall the removed safety covers in place as exposed dangerous parts may cause serious injury.
- (8) Avoid high-pressure fluids. Escaping fluid under pressure can penetrate the skin and cause serious injury, so keep hands and body away from pin holes and nozzles ejecting such fluids. Be sure to consult your dealer about the hydraulic and fuel injection system trouble. When checking for leaks, use a piece of cardboard or wood without fail. If any hydraulic fluid is injected accidentally into the skin, it must be removed within a few hours by a doctor familiar with this type or injury.
- (9) When servicing wheels and tires, the tractor and/or implement must be supported on suitable blocks or stands Not a hydraulic jack.

Do not attempt to service a tire unless you have the proper equipment and experience to perform the job. Have the work carried out by your ISEKI dealer or a qualified repair service.

When seating tire beads onto rims, never exceed the maximum inflation specifications specified on the tire. Inflation beyond this maximum pressure may brake the bead, or even the rim, with dangerous, explosive force. If tire have deep scratches, cuts or punctures, the replaced by qualified personnel as soon as possible. Wear suitable protective clothing, gloves, eye/face protection.

STORAGE

- (1) Never cover a hot machine just after operation with a tarpaulin or the like, or the heated engine and related parts may cause a fire.
- (2) Before storing the tractor for a long period of time, disconnect the battery cables to prevent them, in case they are gnawed by a rat, from causing a short circuit, which may lead to a fire. When disconnecting the cables, disconnect the negative (-) cable first.
- (3) Safe storage of dangerous objects
 - When storing dangerous implements, take appropriate safety measures to prevent accidents by covering with tarpaulin.
 - Store fuel in a safe place with caution signs such as "PREVENT FIRE" or "INFLAMMABLE".
 - All inflammable must also be stored in a safe, fire-resistant location.



FIG. 1-21



FIG. 1-22

MAINTENANCE OF THE ELECTRIC SYSTEM

TO MAINTENACE ELECTRIC WIRING

- (1) When servicing the electric wiring, stop the engine without fail. Otherwise your hands or clothes may be caught in or sandwiched between rotating parts.
- (2) Before manipulating electric parts, be sure to disconnect the earth battery cable (-), or you may get an electric shock or be injured by sparks.
- (3) Loose electric terminals or connectors may not only lower electrical performance but also cause short circuit or leakage of electricity, which may lead to a fire. Promptly repair or replace damaged wiring.
- (4) Remove chaff of dust from the battery, wiring, muffler, or engine. Otherwise it could result a fire.

TO HANDLE THE BATTERY

- When working around the battery, avoid smoking. The battery generates explosive hydrogen and oxygen gases when it is being charged. Keep the battery away from sparks or open flames.
- (2) The battery should be inspected before starting the engine. Be careful not to touch the electrolyte when removing the vent plugs. If the battery electrolyte makes contact with the skin or clothing, wash it off immediately with water and then consult a doctor.
- (3) When replacing or inspecting the battery, stop the engine and turn the main switch off, or electrical parts may be damaged or unexpected accident may occur.



FIG. 1-23

When disconnecting the battery cables, disconnect the earth cable (-) first without fail. When connecting the battery cables, connect the positive cable (+) first. Disconnecting or connecting in wrong order may lead to a short circuit or sparks.

TO HANDLE BOOSTER CABLES

When using booster cables, pay attention to the following items for safe operation:

- (1) Before connecting cables, remove the vent plugs. This will lower the force in case of explosion.
- (2) Before connecting cables, be sure to stop the engine. Otherwise unexpected accidents may occur.
- (3) Use booster cables with sufficient electrical capacity. A cable of inadequate capacity will cause generation of heat, which may lead to a fire.

SAFETY DECALS

The labels are stuck on the tractor. You should of course read the safety instructions in the manual. But never fail to read the labels on the machine as well.

- The labels should always be clearly seen, that is, nothing should obscure them.
- When they have become dirty, wash them with soap water and wipe off with soft cloth.
- If any of them are torn or lost, order new labels from your dealer. Their codes are mentioned in "SAFETY DECALS AND THEIR LOCATION".
- A new label should be placed in the same place where the old one was located.
- When sticking on a new label, clean the place to enable the label to stick and squeeze out all air bubbles trapped under it.



FIG. 1-24



FIG. 1-25

SAFETY DECALS AND THEIR LOCATIONS

(1) Fan warning label (Code No. 1705-902-006-0)



WARNING: RISK OF ENTANGLEMENT Stay clear of the fan while it is running.

(2) Battery disconnecting label (Code No.1636-901-022-0)



WARNING: RISK OF ELECTRIC SHOCK When disconnecting the battery, detach the negative terminal first and attach the positive terminal first when connecting the battery.

(3) Belt warning label (Code No.1674-904-008-0)



WARNING: RISK OF ENTANGLEMENT Stay clear of the belt while it is running.

(4) Hot part warning label (Code No.8595-901-007-0)



WARNING: HOT SURFACES, RISK OF BURNS ON HANDS AND FINGERS Stay clear of the heated parts until they cool down sufficiently.

(5) Ether label (Code No.1674-904-002-1)



WARNING: RISK OF EXPLOSION Ether or other starting fluid should never be used to start engines equipped with glow plugs.

(6) PTO label (Code No.8654-901-002-0)



WARNING: RISK OF ENTANGLEMENT Stay clear of the PTO shaft while the engine is running.

(7) Trailer label (Code No.1674-904-004-0)



WARNING: RISK OF OVERHEATING The rear implement should be installed on the tractor with an approved drawbar or by using the lower links of the three point hitch. Use only weight not exceeding the designed capability of the tractor.

(8) Radiator label (Code No.1674-904-003-0)



WARNING: HIGH PRESSURE STEAM AND HOT WATER

Never remove the radiator cap during or just after operation. The water in the radiator is very hot and highly pressurized, which could cause burns.

(9) Battery label

(Code No.1705-904-002-0)



- A. WARNING: RISK OF EXPLOSION Keep away from sparks or flames, which could cause explosion.
- B. WARNING: WEAR AN EYE PROTECTION DEVICE Battery electrolyte (euphoric acid) may cause blindness. Wear an eye protector to prevent contact with the eyes.
- C. WARNING: KEEP OUT OF REACH OF CHILDREN
- D. WARNING: RISK OF BURNS Battery electrolyte (sulphuric acid) may cause burns Avoid contact with skin or clothing. In case of an accident, flush affected part immediately with plenty of water.
- E. WARNING: RISK OF EXPLOSION Never use the battery with the electrolyte surface below the "LOWER" limit, or it may explode. Never replenish exceeding "UPPER" limit or electrolyte may leak out.

Maintenance free battery does not need to replenish distill water.

D. WARNING: READ OPERATION MANUAL Read the safety and operating instructions in the operation manual before operating the tractor.

Take care of handling the battery. Improper handling may lead to explosion. Never short the poles. Charge the battery in a well ventilated place.

(10)Starter warning label

(Code No.1705-902-007-0)



DANGER: RISK OF ELECTRIC SHOCK Start the engine only from the seat using the key.

(11)Operation caution label (Code No.1674-904-001-0)



- A. WARNING: BEFORE OPERATION Read the safety and operating instructions in the operation manual before operating the tractor.
- B. WARNING: BEFORE OPERATION Read the safety and operating instructions in the operation manual before operating the tractor.
- C. WARNING: RISK OF ABRUPT MOVING Before leaving the tractor unattached, apply the parking brake, lower the implement, turn off the engine and remove the starter key to avoid unexpected moving of the tractor.
- D. WARNING: RISK OF INJURY OR DAMAGE Pay attention to safety around the machine to avoid injury to bystanders or damage to properly.

- E. WARNING: RISK OF OVERTURNING Never operate the tractor on a slope of over 10 degrees, or it could overturn.
- F. WARNING: RISK OF INJURY OR DAMAGE Never allow other persons to get on the tractor or the implement.

(12)Fuel label

(Code No.1705-904-001-0)



DANGER: RISK OF EXPLOSION AND BURNS Use only diesel fuel.

Before replenishing fuel, be sure to stop the engine and wait until the engine and heated parts cool down sufficiently. Keep sparks, open flames, etc. way from the fuel tank. No smoking!

(13)Reverse label

(Code No.1674-904-007-1)



Before moving tractor to reverse direction, be sure to reduce engine speed.

(14)ROPS label (Code No.1674-904-005-0)



WARNING: RISK OF INJURY

Keep the ROPS in the upright position and fasten the seat belt at all times. Do not jump from the seat if the tractor starts to overturn, or you could be crushed under the tractor. The ROPS should usually be kept in the upright position during operation.

However, when the ROPS has to be lowered, do not wear the seat belt and operate the tractor with extreme caution.

Do not operate the tractor with a damaged or modified ROPS.

LOCATION OF SAFETY DECALS



Location of all instruction decals provided as a reference. Replace any decals that are damaged, missing or are not readable. Consult your dealer.

INTRODUCTION

FIGS. 2-1, 2-2 and 2-3: The information in this publication describes the operation, maintenance and servicing of the **TH4330, 4290 and 4260** Tractors. Every effort has been made to provide correct and concise information to you, the operator, as available at date of book publication. Your ISEKI Dealer is available should items in this book or details of your machine not be understood.

This book is supplied with each machine to familiarize the operator with proper instructions needed for operation and maintenance. Studying and adhering to these instructions will insure optimum machine performance and ·longevity. A machine that is maintained properly and operated in the intended manner will provide greater dividends than one that is neglected and/or operated in manner other than as intended. Design and servicing of this machine has been kept as simple as possible to permit maintenance operations to be carried out with tools normally available.

This book should be thoroughly read and understood prior to operation of this machine. Inexperienced operators should study contents of this publication and receive instruction from an experienced operator when possible. Your ISEKI Dealer can also assist in areas concerning machine operation and provide details concerning safe operation. it is suggested that this booklet be kept readily accessible, preferably with the machine, for future reference if questions or concerns arise. If the original book should become damaged, consult your Dealer in regards to acquiring a replacement.

Customers are strongly advised to use an official ISEKI Dealer in connection with any service problems and adjustments that may occur. The ISEKI Dealer network is specially trained and equipped for all service work and to advise customers on specific applications of the Tractor in local conditions.



CAUTION: In some of the illustrations used in this Operator Instruction Book, panels or guards may have been removed for clarity. Never operate the Tractor with these panels and guards removed. If the removal of a shield is necessary to make a repair, it MUST be replaced before operation.

CAUTION: READ THIS BOOK IN ITS ENTIRETY PRIOR TO OPERATING MACHINE. Use only ISEKI parts for repairs and/or replacement.



FIG. 2-1



FIG. 2-2



FIG. 2-3

TRACTOR IDENTIFICATION

MODEL/SERIAL NUMBERS

Each Tractor is identified by means of Tractor model and serial numbers. As a further identification, engine and chassis are provided with identification numbers.

To ensure prompt, efficient service when ordering parts or requesting repairs from authorized Dealer, record these numbers in spaces provided.

TRACTOR MIODEL







FIGS. 3-1 & 3-2: Tractor identification plate, 1, located below operator's seat on left-hand side of fender. Contains model number, machine series number and weight in addition to Tractor serial number.



FIG. 3-1

	JEKI	
MODEL TYPE	T H 4 3 3 0 F H ME4	
NO.	000011	М
製造会社 ISEK1 & C	井関農機株式会 D.,LTD. MADE IN JA	·社 PAN

FIG. 3-2

ENGINE MODEL NUMBER

ENGINE SERIAL NUMBER

FIG. 3-3: Engine model number, 1, is cast on right side of engine block, below the injection pump.

Engine serial number, 2, is stamped into cylinder block, below engine model number.

CHASSIS NUMBER



FIG. 3-4: Chassis number, 1, is stamped in right side of front frame.

NOTE: Reference to left-hand and right-hand, used throughout this book, refers to the position when seated in operator's seat and facing forward.



FIG. 3-3



FIG. 3-4

MAJOR COMPONENTS



FIG. 3-5: Identification and terminology of major components, as given in this book, are as follows;

- 1. Front Wheels
- 2. Fuel Tank Filler
- 3. Stabilizer
- 4. Lift Rod
- 5. Lower Link
- 6. Rear Wheels
- 7. Operator's Seat
- 8. Instrument Panel
 9. Steering Wheel
- 10. Fender

- 11. Reflector / Tail Light
- 12. Hood
- 13. Front Grille
- 14. Battery
- 15. Front Hitch
- 16. Engine
- 17. Foot Step
- 18. Transmission
 - 19. Front Wheel- Drive Shaft (4WD)
 - 20. Headlight

- 21. Front Axle
- 22. Front Axle Pivot
- 23. Lift Arm
- 24. Drawbar
- 25. Turn / Hazard Light
- 26. Center Housing
- 27. Lower Link Spring
- 28. Roll-Over Protective Structure (ROPS)

INSTRUMENTS & CONTROLS



FIG. 4-1

FIG. 4-1: General layout and location of controls within operator's area on Tractor. Specific use of these controls is given later in this section and also in "Operation" section of this book:

- 1. Instrument Panel
- 2. Steering Wheel
- 3. Parking Brake
- 4. Mid Power Take-Off (PTO) Selector Lever
- 5. Front Wheel Drive (4WD) Shift Lever
- 6. Slow Lowering Control Knob
- 7. Differential Lock Lever
- 8. Hydrostatic Control Lever (TH4330/4290)
- 9. Range Gear Shift Lever
- 10. Rear Power Take-Off (PTO) Selector Lever
- 11. Three-Point Hitch Position Control Lever
- 12. Hydro Forward Reverse Pedal
- 13. Hand Throttle Lever
- 14. Brake Pedals
- 15. Draft Control Lever (Accessory)
- 16. Auxiliary Hydraulic Valve Controls (Accessory)

INSTRUMENT PANEL

FIG. 4-2: Arrangement of gauges, control switches and indicators located in instrument panel. Items are detailed in the descriptions that follow:

NOTE: Instrumental panel and switches may vary from those shown.

Electric Fuel Shut-Off

Turning main switch to off stop will stop engine. This Tractor is equipped with electric engine shut-off system, consisting of a solenoid and timer to shut off fuel and stop engine.

When main switch is turned off, timer activates solenoid to shut-off fuel and hold it off for ten seconds. After ten seconds, solenoid returns to "fuel on" position.

Selecting main switch to "ON" will override timer to turn fuel on and allow engine to be immediately restarted.



FIG. 4-2

Main Switch

FIG. 4-3: Main Switch, 1, has the four following positions:

Ø	OFF	Engine and all electrical circuits off.
3	ON	Key can be removed. Power supplied to all circuits. Normal
77	GLOW	operating position.
00	GLOW	combustion chambers and assist
0	START	Starter activated. This position spring-located to "ON"

NOTE: The main switch must be turned to "ON" before any circuits will operate. PTO switch must be turn off before engine can be started.

This Tractor is equipped with an electric fuel shut-off. When main switch, 1, is turned to "start", "on", or "glow" position and range gear shift lever is placed in neutral solenoid moves the fuel linkage on injection pump to run position to start engine. When main switch is turned to "off" (stop), solenoid moves fuel linkage to off position to stop engine.

IMPORTANT: When the main switch is selected to "GLOW" position, the engine combustion chambers will be preheated and allow a cold engine to be started after several seconds.



FIG. 4-3

INSTRUMENTS & CONTROLS

Indicator Light Strip

FIG. 4-4: Indicator light strip, 2, contains several warning lights to monitor certain functions. Currently used positions (from left to right) are:

Battery Charge - Lights up when main switch is turned "ON" and will go out after engine starts, to indicate battery is being charged.

Engine Oil Pressure - Lights up if engine oil pressure is low. If the light comes on while the engine is running, shut off the engine immediately and investigate the cause.

Main (High) Beam – Illuminates when head lamps in front grill are selected to high beam position by light switch.



FIG. 4-4

Coolant Temperature Gauge

FIG. 4-5: Gauge, 3, indicates engine coolant temperature when main switch is selected to "ON".

Cold - (Extreme left) Shows too cool temperature for severe work. Allow to warm (needle in mid position) before applying heavy load.

Hot – (Extreme right) Indicates over-heating (red area on gauge). Reduce engine speed to idle, allow to run at no load several minutes, shut off engine and investigate cause (refer to "Troubleshooting").



CAUTION: Do not service hot engine. Allow to completely cool before servicing or removing radiator cap.

Tachometer

FIG. 4-6: Scale on gauge, 4, indicates engine speed in crankshaft revolutions per minute (rpm). Index is also provided to show rear PTO speed of 540 approximately 2300 engine rpm.

Hour meter in center of gauge indicates engine and tractor use to assist in maintenance intervals. The extreme right digit indicated 1/10 hour increments.



FIG. 4-5



FIG. 4-6

Fuel Gauge

FIG. 4-7: Gauge, 5, indicates level of diesel fuel in fuel tank when main switch is "ON".

NOTE: Use only clean diesel fuel and clean area to prevent dirt/water entry into fuel tank when refilling. DO NOT run out of fuel as bleeding air from the system will be required. Keep fuel tank full minimize condensation.



CAUTION: DO NOT refill fuel tank with engine running or hot. Allow cooling period. DO NOT smoke near fuel tank. Clean up any spilled fuel.

Parking Lamp Switch

FIG. 4-8: When the parking lamp switch, 6, is turned, small lamps are lighted up.

Horn & Light & Turn Switch

FIG. 4-9: With main switch "ON":

Horn Switch, 7 – Horn sill sound when center switch button is depressed.

Light Switch, 8 – Is a rotary switch with three operating positions:

OFF – Fully counterclockwise. All lights off.
1st – Low beam headlamps and rear red tail lights.
2nd – Main (high) beam headlamps and rear tail lights.

NOTE: When high beam is selected (2nd position), light indicator light strip will come on.

Turn Switch, 9 – Operate switch handle in direction Tractor is to be turned. The appropriate flashing amber warning light (fender-mounted) will operate as turn signal. Return switch to center position to cancel.

NOTE: Turn lights will not self-cancel. Select turn/hazard lights switch to center position completing turn.

Hazard Signal Switch

FIG. 4-10: Push down switch, 10, to turn on hazard lights. Both flashing amber warning lights will operate at the same time.



CAUTION: Hazard lights must be used any time Tractor is driven on public roadway. Consult local agencies for other marking requirements.



FIG. 4-7



FIG. 4-8



FIG. 4-9



FIG. 4-10

INSTRUMENTS & CONTROLS

FIG. 4-11: Turn / hazard indicator lights, 11 and 12, will operate with fender-mounted warning lights. This provides operator with easy indication of warning lights selection.

NOTE: Turn lights will not self-cancel. Select turn / hazard lights switch to center position after completing turn.



FIG. 4-11

Power Take-Off (PTO) Switch

FIG. 4-12: A push & turn type safety switch, 13, is used to engage and disengage the PTO drive system.

The switch must **first be pushed in** and then rotated clockwise to engage PTO. The switch is pushed to disengage PTO.

IMPORTANT: PTO switch is equipped with a lock-out to prevent accidental engagement of PTO on switch to unlock AND THEN, rotate switch clockwise to ON position. DO NOT FORCE SWITCH.

NOTE: PTO switch, 1, must be used in conjunction with rear and mid PTO selector lever, to left and under operator's seat, when rear and mid PTO used. Refer to "Operation" section for complete details.

When PTO control switch is "ON", the engine cannot be started. Always switch off PTO and place range gear shift lever in neutral to start engine.



WARNING: Always shut off PTO and shut off Tractor engine before servicing PTO driven implement. Allow movement and motion to stop before leaving operator's seat.



FIG. 4-12

BRAKES

Brake Pedal

FIG. 4-13: Brake pedal, 1, control the left and right wheel brakes at the same time.



CAUTION: For towing safety, the towed equipment, when fully loaded, should not exceed 1.5 times weight of towing unit.

Parking Brake

FIG. 4-14: To engage parking brakes, pull upward on parking brake lever, 2, to lock brakes in applied position.

To disengage parking brakes, push in on release button, 2, and lower lever to the released position.

IMPORTANT: Always disengage the brake before driving the tractor to prevent abnormal brake wear.



FIG. 4-13



FIG. 4-14

ENGINE SPEED CONTROL

Throttle Lever

FIG. 4-15: Throttle lever, 3, controls engine speed and will remain in position selected by the operator.

Idling speed: With hand lever is forward, engine will idle.

High speed: Engine speed increases as lever is pulled progressively rearward.

This tractor is equipped with Auto throttle system, it raises up engine speed by depressing forward direction HST pedal. Whenever it would be used, tractor dose not load any implements or trailer.

When tractor is operated with implements or trailer, set rated engine speed by hand throttle lever.



CAUTION: Always select engine speed to ensure safe operation. Reduce speed prior to turning or backing Tractor.



FIG. 4-15

INSTRUMENTS & CONTROLS

TRANSMISSION CONTROLS

TRANSMISSION SHIFT LEVER AND CONTROLS

FIG. 4-16: One shift lever is used to select a range of ground travel speed through different gear reductions within the drive train.

A hydrostatic control unit allows infinitely variable speeds, from zero to top speed, in each range.

- Range Gearshift Lever, 1 Located to the left of the operator's seat, range lever provides three major speed changes.
- Hydrostatic Control Lever (TH4330/4290), 2 Located to left of operator's seat, this lever actuates hydrostatic control unit for forward travel only. Move lever forward until desired travel speed is reached. Lever will stay in position selected. Move lever rearward to tortoise position to slow down and stop.
- Hydrostatic Control Pedals, 3 Pedals are located on right side of operator's platform to actuate hydrostatic unit in forward or reverse travel direction. Refer to details that follow.

Hydrostatic Control Pedals

FIG. 4-17: Depressing left side pedal, 4, moves Tractor forward, depressing right side pedal, 5, moves Tractor rearward. As each pedal is progressively depressed, a corresponding increase in ground speed of Tractor will be noticed in the appropriate direction.

Returning pedal towards spring-loaded center position, will slow Tractor and stop it when neutral position is reached. When pedal is completely released, Tractor should remain stopped with the pedal assembly in neutral position.

Control Lever Positions (TH4330/4290)

NOTE: Complete transmission operating information is given later in the operation section of this book.

FIG. 4-18: General view of operating positions of transmission control levers:

Range shift lever (located at rear) has "tortoise", "hare 1" and " hare 2" positions with neutral as shown. Hydrostatic control lever (shown at front) is only used for forward travel. Move lever forward until desired travel speed is obtained. Move lever rearward to slow down and stop.



FIG. 4-16



FIG. 4-17



FIG. 4-18

DIFFERENTIAL LOCK LEVER

FIG. 4-19: When differential lock lever, 1, is lowered, both rear axles are locked together to provide equal traction to the both rear wheels. This is especially important when operating in loose soil or slippery condition.

Disengage differential lock, by releasing lock lever.

IMPORTANT: Stop Tractor before engaging differential lock.



CAUTION: When differential lock is engaged, steering ability of Tractor will be greatly reduced. Disengage before attempting a turn. Do not use during transport.

FOUR-WHEEL DRIVE SHIFT LEVER

FIG. 4-20: Shift lever, 2 engages and disengages drive for the front axle. Lever down, the front axle (4-WD) is engaged and power is available to both front and rear axle. Lever up, the front axle (4-WD) is disengaged

IMPORTANT: Stop Tractor before engaging or disengaging four-wheel drive.

Do not use 4-WD on hard surface. Rapid wear of front tires and possible drive line damage could occur if 4-WD is operated for prolonged periods on hard surface.

REAR PTO SELECTOR LEVER

FIG. 4-21: Rear PTO (Power Take-Off) selector lever, 3 controls rear PTO on Tractor.

When lever is rearward, 540 rpm and forward, 1000 rpm rear PTO is selected.

When lever is returned to center neutral (N) position, the gear drive is disengaged.

IMPORTANT: Before moving rear PTO is selector lever, PTO switch must be turn off to disengage power to PTO drive.

MID PTO SELECTOR LEVER

FIG. 4-22: Selector lever, 4 controls engagement of mid PTO (power take-off) on tractor.

When lever is up, mid PTO is engaged. When lever is down, mid PTO is disengaged.

IMPORTANT: Mid PTO selector lever should only be engaged and disengaged after PTO switch has been turn off to disengage power to PTO drive.



CAUTION: Always shut off PTO and shut off Tractor engine before servicing PTO-driven implement. Allow all movement and motion to stop before leaving operator's seat.



FIG. 4-19



FIG. 4-20



FIG. 4-21



FIG. 4-22

INSTRUMENTS & CONTROLS

THREE-POINT HITCH

Complete operating instructions for three-point hitch are give in "Operation" section of this book.

POSITION CONTROL LEVER

FIG. 4-23: Position control lever, 1, adjusts height of three point hitch on rear of Tractor. Setting lever in a particular position will set the height respectively. Full up position is with lever fully rearward and full down position is with lever completely forward.

Lever stops, 3 and 4, can be adjusted within slot to limit implement raising / lowering.



CAUTION: Use position control lever, 1, when attaching or detaching implement. If equipped with draft control, lower draft lever, 2, fully and then use position control.

NOTE: When starting engine, ensure implement is lowered to the ground and both levers are fully forward. This reduces load on starter due to hitch trying to raise when engine is cranked.

Lowering Rate Control Knob

FIG. 4-24: Lowering rate knob, 5, adjusts "rate of drop" of three and implement. Turning knob clockwise will increase lowering time and counterclockwise will decrease lowering time. Turning knob fully clockwise will lock implement (or hitch) in raised position for transport.



CAUTION: When working near or under mounted equipment, securely block in position and turn lowering rate clockwise to "stop".

COMFORT ADJUSTMENT



CAUTION: Never make seat adjustment while Tractor is in motion. Make sure adjustment is "locked" prior to operation unit.



FIG. 4-23



FIG. 4-24

OPERATION

BREAK-IN PERIOD

Operation of Tractor within the first fifty hours can be a major factor in determining the performance and life of the engine and Tractor:

The engine may be operated at full rpm but excessive load should be avoided. If engine begins to "lug", operate in a lower gear to maintain higher engine speed.

Check coolant level and check engine, transmission and other oil levels frequently during break-in period. Watch for evidence of leakage of above fluids. Replenish levels as required and repair any leaks that may have formed.

Tighten any nuts, bolts, or screws that may have loosened and tighten as necessary. This is especially true of wheel retaining bolts. **All fasteners on this Tractor are metric.**

Be observant of brake free-play adjustment and readjust as required.

Lining materials used on brake discs "bed in" in the first few hours of operation and may necessitate the need for early and frequent re adjustment.

Keep area around fuel tank filler clean and make sure diesel fuel is of correct grade and free of contamination.

Initial engine oil and oil filter change is after first fifty hours of operation. Subsequent change interval is every one hundred hours for engine oil and filter.



CAUTION: Proper maintenance practices cannot be overemphasized. They are required for safe operation. Consult "Lubrication and Maintenance" section for full details.

STARTING

Pre-Start Inspection

Prior to daily start-up of Tractor, a few basic procedures should be followed to ensure Tractor is in operating order to insure life and dependability:

Make sure all safety shields ate in place and secured properly.

Make sure operator is instructed on correct and safe operation of Tractor and related attachments or implements.

Check coolant, engine oil and transmission oil levels and replenish as necessary.

Check fan belt tension and adjust as required. Make sure radiator, air intake screens and radiator screen are clear of debris to provide maximum engine cooling.

Check operation of clutch, brake and throttle controls. All controls must operate freely and be adjusted correctly.

Conduct a general inspection of tires, tire pressure and wheel bolt torque. Observe for external signs of leakage and correct before operating Tractor. Check steering for excessive looseness.

Check for adequate fuel supply. It is recommended fuel tank be filled following each day's use to reduce condensation and provide full tank for next use.

Check operation of lights and warning flashers. If Tractor is to be transported on public road, ensure slow-moving vehicle emblem is in place.

NOTE: Requirements may vary regarding use of warning flashers and slow moving vehicle emblem depending on locality. Check local safety codes.



WARNING: Carefully read and understand the SAFETY section of this book. Your life, and that of others, can be in danger during the starting of the Tractor.

Always start and operate the engine in a well ventilated area.

If in an enclosed area, vent the exhaust to the outside.

DO NOT modify or tamper with the exhaust system.

Normal Starting



CAUTION: Do not attempt to start Tractor unless seated in operator's seat. Do not allow anyone on Tractor except for the operator.

FIGS. 5-1&5-2: To start engine, proceed as follows:

- 1. Depress brake pedal firmly and apply parking brake lock.
- 2. Place range shift lever in neutral position.
- 3. Make sure rear PTO and mid PTO selector levers are in neutral position and PTO switch is in OFF position.



CAUTION: Operator must be seated with range shift lever and PTO levers in neutral to actuate safety switches and permit operation of starter motor.

- 4. Do not move hydrostatic pedal, it must be in neutral position.
- 5. Set three-point hitch position control lever and draft control lever (if equipped) in the down position.
- 6. Turn main switch to the left to "glow" position for 5-10 seconds.
- 7. Set hand throttle lever at half to fully open position.
- 8. Turn main switch to "on" position for 1-2 seconds, then turn to "start" position. Release switch the moment engine start.
- Once engine run smoothly, set engine speed to approximately 1500 rpm to allow engine and hydraulic system to warm for several minutes.

DO NOT LOAD COLD ENGINE.

IMPORTANT: Do not crank engine for more than 10 seconds at a time. Allow starter to cool at least 20 seconds before repeating procedure. Never turn main switch to "start" with engine running. Service damage will result.

FIG.5-3: Battery charge indicator lamp and engine oil pressure lamp in indicator light strip should go out when the engine starts. If either light remains lit, **STOP ENGINE IMMEDIATTELY** and investigate source of problem.

NOTE: If engine will not start and run after several attempts, refer to "Maintenance" section in this book and bleed any air that may be present in the fuel system.



FIG. 5-1







FIG. 5-3

Restarting Warm Engine

When restarting an engine that is still warm from previous use, the same procedure is used as with "Normal starting" except step No. 5 may be omitted. Use of glow plugs is not necessary when starting a warm engine.

Cold Weather Starting

Procedure for starting an engine in colder ambient temperatures is identical to "Normal Starting" procedure except for the following:

Longer use of glow plugs may be required. Instead of the normal 5-~0 seconds, the main switch may need to be selected to "glow" for 10-20 seconds to adequately warm engine combustion chambers.

At temperatures below 39 F (4C) use of No.1 (No. 1-D) diesel fuel is recommended due to possible "fuel gelling" characteristics of No. 2 (No. 2-D) fuel at cold ambient temperature.

The central hydraulic fluid in addition to transmission and center housing lubrication, will require additional warm-up time due to cold (thicker) oil. Refer to "Warm-Up Period" at right.

Test all controls (steering, braking, etc.) prior to operating the tractor.

NOTE: Installation of accessory engine block heater is recommended in cold weather conditions. Consult your ISEKI dealer.

IMPORTANT: Under no circumstances should ether or other starting fluid be used to start engines equipped with glow plugs. Severe engine damage will result should starting fluid contact a hot glow plug.

If, for some reason, a booster battery is required to start Tractor, ensure booster battery is connected in parallel. When using booster battery and booster cables always connect positive terminals together first Then install booster cable on booster battery negative terminal and ground final booster cable end on Tractor away from Tractor battery.

Warm Up Period

After starting a cold engine, let engine idle at slow speed to make sure all engine components are lubricated.

In colder ambient temperatures, extended warm-up will be required to also warm hydraulic fluid and lubricate driveline components.

Suggested warm-up period:

Ambient Temp.		Warm-Up
F°	C°	Time
32° & up	0° & up	5 to 10 min.
32° to 24°	0° to -10°	10 to 20 min.
24° to -2°	-10° to -20°	20 to 30 min.
-2° & less	-20° & less	30 min. or more

IMPORTANT: Improper warm-up can result in severe engine damage, hydraulic pump seizure, driveline bearing/gear damage and / or sluggish steering / breaking.



CAUTION: Make sure parking brake is securely applied and all controls are in neutral while warming unit. Do not leave unit unattended.
Operator Observations

Constant attention should be paid to the following points during operation:

Engine oil pressure lamp will come on in case of low engine oil pressure. Stop engine immediately. Battery charge lamp will come on if battery is not being charged properly. Stop engine and investigate cause.

Coolant temperature gauge needle will indicate H (hot) in case of overheated engine. Stop engine, allow to cool and investigate cause.

Fuel gauge should not be allowed to E (empty) as running out of fuel may result with need to bleed air from fuel system.



CAUTION: DO NOT attempt to service Tractor with engine running or hot. Allow to cool.

NOTE: Refer to "Troubleshooting" when defect is indicated, to assist locating problem.

Starting Circuit Operation

Tractor is equipped with a starting system to protect the operator. To permit tractor to be started (start motor to operate), ALL the following is required:

Range Gear Shift Lever in Neutral PTO control switch in OFF position.

In addition, the operator must be seated in the operator's seat. If the operator leaves the seat with; range shift lever in gear, PTO switch ON, the fuel shut-off mechanism will be activated and the engine will be stopped.



WARNING: Neutral switch system is installed for your protection. DO NOT bypass or modify the neutral start switch system. If the neutral start switch system does not operate properly as de tailed above, contact your Dealer immediately and have the system repaired.

Periodically check that the starting circuit is functioning correctly. The procedure for this is check is as follows:

- 1. Check that there are no bystanders around the tractor should it inadvertently start.
- 2. Depress the brake pedal. Attempt to start the tractor with the range shift levers in neutral and PTO control switch OFF. The tractor should start.
- Depress the brake pedal. Attempt to start the Tractor with the gears engaged and the PTO in ON position. The Tractor should NOT start.

If starting system is not working correctly it must be repaired immediately by your Dealer.

GROUND SPEED SELECTION

Hydrostatic Transmission

The hydrostatic transmission provides variable speed control in forward or reverse.

FIGS. 5-4&5-5:

Range shift lever, **1**, provides two major changes in ground speed.

IMPORTANT: STOP tractor whenever shifting the range shift lever 1.

Hydrostatic control lever (TH4330/4290), 2, is used only forward travel and provides infinitely variable speeds from "0" to top speed in a particular range. This lever allows the operator to set a constant speed for operating in large areas, road travel, etc. Lever will hold position selected and must be returned to "0" position, manually (or by carefully pushing reverse pedal, 4).

Pedal, 3, also controls forward travel speed. As pedal is progressively pushed down, a corresponding increase in ground speed will be noticed.

When released, pedal will return to neutral position selected by hydrostatic control lever. When lever is in the "0" position, pedal will return to neutral, and Tractor will stop.

Reverse travel speed is obtained by pushing pedal, 4, down. As pedal is progressively pushed down, a corresponding increase in ground speed will be noticed. When released, pedal will return to neutral position.

FIG. 5-6: Arrangement of gear with appropriate ground speeds, in order from slow to fast, are shown in the chart at right.

NOTE: Ground speed indicated at 2600 engine rpm with TH4330 and 2500 engine rpm with TH4290/4260.



FIG. 5-4



FIG. 5-5

	TH4260		TH4290		TH4330	
SHIFT	Hydrostatic		Hydrostatic		Hydrostatic	
POSITIONS	(Engine 2	2500 rpm)	(Engine 2500 rpm)		(Engine 2600 rpm)	
Tire	Turf	Agri.	Turf	Agri.	Turf	Agri.
			Forv	vard		
+	5.35	4.89	5.35	4.89	5.57	5.09
	11.52	10.54	11.52	10.54	11.98	10.96
	27.44	25.09	27.44	25.09	28.54	26.10
Max. Speed	High Idle	2750 rpm	High Idle	2750 rpm	High Idle	2810 rpm
(forward)	30.18	27.60	30.18	27.60	30.84	28.21
			Rev	erse		
-	3.75	3.42	3.75	3.42	3.90	3.56
	8.06	7.38	8.06	7.38	8.39	7.67
	19.21	17.56	19.21	17.56	19.97	18.27

FIG. 5-6

STOPPING TRACTOR

FIG. 5-7: To stop Tractor with hydrostatic transmission, move hydrostatic control lever (TH4330/4290), 1, slowly to "0" position, or, if using forward pedal, 2, and lever is located in "0" position, release pedal to stop.

Move throttle lever, 3, forward to reduce engine speed. Depress brake pedal firmly and set parking brake, 4, and move range shift lever, 5, to neutral position.



CAUTION: Never start traveling with the parking brakes applied, brake performance will be effected as they heat up.

Allow engine to idle several minutes to allow even cooling, then turn main switch to "off position" shutting off engine. Lower three-point hitch and remove key from main switch.

FIG. 5-8: Always park Tractor on level area whenever possible. If hillside parking is necessary, securely block both rear wheels as shown.



CAUTION: Before leaving Tractor unattended, make sure brakes are locked, rear mounted implement is lowered to the ground and key is removed from the ignition.



FIG. 5-7



FIG. 5-8

DIFFERENTIAL LOCK OPERATION

FIG. 5-9: Differential lock lever, 1, should only be lowered when required as steering ability is greatly reduced.

To engage differential lock, allow all rear wheel movement to stop. Lower lock lever.

To disengage differential lock, release differential lock lever. Lock lever should normally return to the "off" position;



CAUTION: DO NOT use differential lock on hard surfaces or when transporting unit. DO NOT, engage with rear wheel(s) spinning as severe damage may result.



FIG. 5-9

FOUR-WHEEL DRIVE

FIG. 5-10: Four-wheel drive models have a mechanically driven front axle. Engagement and disengagement of front drive axle is controlled by lever, 2, at front and below operator's seat.

IMPORTANT: Prior to engaging or disengaging 4WD, Tractor stopped.

FIG. 5-11: When front axle is engaged, ground speed of front tires will vary from ground speed of rear tires. This is to assist steering when four-wheel drive is selected.

For this reason, front axle must be disengaged when Tractor is transported or operated on a hard, dry surface. Failure to do so will result in rapid wear of front drive tires and possible driveline damage.

IMPORTANT: Always disengage front drive axle when operating in, conditions with minimal wheel slippage (DRY OR HARD SUR-FA CES).

If tire replacement is necessary, identical replacements must be installed to maintain correct front/rear axle ratio.



FIG. 5-10



FIG. 5-11



WARNING: PTO shafts and PTO driven implements can be extremely dangerous.

Observe the following important points:

DO NOT operate tractor without a PTO cap installed. The cap protects people from injury as well as the splines from damage.

Before attaching, adjusting or working on PTO driven implements, disengage the PTO, stop the engine and remove the key. DO NOT work under raised equipment. Before engaging a PTO-driven implement, ALWAYS carefully raise and lower the implement using Position Control. Check clearances, PTO shaft sliding range and articulation.

Ensure that all PTO safety shields are in place at all times. Ensure all PTO driven implements are in good condition and conform to current standards.

NEVER step across any driveline.

DO NOT use the tractor drawbar or the implement drawbar as a step.

NEVER use the driveline as a step.

NEVER wear loose fitting clothes.

Keep at least your height away from a rotating driveline.

Rear PTO Shaft

FIG. 5-12: A six-spline 1 3/81 (35 mm) PTO shaft, 1, is provided at rear of Tractor to provide power for mounted and other PTO driven equipment as required.

A protective cover is positioned over shaft splines when not in use.

Normal rear PTO shaft operating speed:

604 / 1092 rpm is attained at 2600 engine rpm (TH4330) 581 / 1050 rpm is attained at 2500 engine rpm (TH4290) 581 / 1050 rpm is attained at 2500 engine rpm (TH4260)

IMPORTANT: When rear PTO is used with three-point mounted equipment, it may be necessary to remove drawbar at rear of Tractor. Some types of mounted equipment, when lowered, may allow PTO shaft to contact drawbar.

FIG. 5-13: Implement drive shaft shown connected to Tractor rear PTO shaft.



CAUTION: Make sure all PTO shields are installed on Tractor and equipment. Before cleaning or adjusting Tractor or PTO driven machine, SHUT OFF ENGINE AND DISENGAGE PTO.



FIG. 5-12



FIG. 5-13

Mid PTO Shaft

FIG. 5-14: Mid PTO, 1, is forward-facing shaft located at underside of Tractor. This is installed to operate certain mid or front-mounted implements. A 1" (25.4mm) fifteen spline shaft is used.

Mid PTO cover must be installed when use of mid PTO is not required.

2080 rpm @ 2600 engine rpm (TH4330) 2000 rpm @ 2500 engine rpm (TH4290) 2000 rpm @ 2500 engine rpm (TH4260)



CAUTION: Make sure all PTO shields are installed on Tractor and equipment. Before cleaning or adjusting Tractor or any PTO driven machine, SHUT OFF ENGINE AND DISENGAGE PTO.

PTO Operating Controls

FIG. 5-15: PTO and mid PTO are both controlled by PTO control switch, 2. Rear and mid PTO systems can be operated independently of each other.

To select rear PTO – **Fig. 5-16:** Make sure PTO control switch is OFF and then move rear PTO selector lever, 3, rearward to "540" position and forward to "1000" position to engage gear set inside rear housing.

To select mid PTO – **Fig. 5-17:** Make sure PTO control switch is OFF and then move mid PTO selector lever, 4, upward to engage gear set inside rear housing.

To engage PTO – Push PTO control switch, 2, and then rotate clockwise to actuate hydraulic clutch and complete the drive.

To disengage PTO – Push PTO control switch, 2, to release hydraulic clutch.

NOTE: Push knob in and then rotate switch clockwise to prevent switch damage. Do not force PTO switch to ON position.

Reduce engine rpm prior to engaging (switching on) and disengaging (switching off) PTO.

Always move PTO control switch to OFF before shifting rear and mid PTO selector levers.



FIG. 5-14



FIG. 5-15



FIG. 5-16





THREE-POINT HITCH

Three-point hitch combines Tractor and implement into one working unit. Implement position and raising are controlled hydraulically. In addition, implement weight and loads impose downward pressure at Tractor rear wheels to increase traction.

Hitch Controls

FIG. 5-18: Control quadrant, to right of operator's seat, controls the system to provide the following hitch control functions:

Position Control - Maintains hitch position at constant height in relation to the Tractor. As position control lever, 1, is moved rearward, hitch (and implement) are raised. Moving lever forward will lower hitch to selected position. Each lever setting provides a specific hitch (and implement) position.

Draft Control – When installed regulates hitch height to provide constant draft, or "pull", of ground engaging implements (plows, subsoil's etc.). Moving draft control lever, 2, forward will provide deeper implement working depth. Moving lever rearward will provide a shallower depth. As ground contours and/or soil conditions change, the system will raise or lower implement as needed to keep even load on Tractor.

CAUTION: Use position control lever, 1,



when attaching or detaching implements. Place draft control lever, 2, fully forward when using position control.

Draft control can be installed, as an accessory.

FIG. 5-19: Lowering Rate Control - Knob, 3 controls discharge rate of hydraulic oil to adjust lowering speed of hitch and implement. Turn knob clockwise to slow drop rate, counterclockwise to increase drop rate. Turning knob fully clockwise will lock implement in raised position.

CAUTION: When working on or around



mounted implements, always lower to ground prior to work. If implement must be raised, always block implement and lower links securely.



FIG. 5-18



FIG. 5-19

Rear Linkage

FIGS. 5-20: Linkage consists of several major components for implement attachment and operation:

Lower Links, 1 - Primary attaching points to lower implement pins.

Lift Rods, 2 - Connect lower links to hydraulic lift arms for raising/lowering of lower links. The lift rod connected to the right lower link has provisions for leveling the implement (side to side).

Stabilizer, 3 - Reduce side sway of implement.

Top Link, 4 - Adjustable, turnbuckle type to level implement (front to rear). Top link also provides draft load sensing for draft control.

Check Strap, **5** - Secures lower links together to prevent tire interference when hitch Is not used.

FIG. 5-21: To match varying implements, rear linkage is standardized according to spacing, pin size, etc. This enables usage of alternate implements with minimal adjustments as long as matching size or "Category" of implement is used.

This Tractor is equipped for "Category I" implements with following attaching point dimensions.

REF	Description	Dimension (Size)
A	Lower Link Width	26.8" (681 mm)
В	Lower Link Pin Diameter	0.88" (22 mm)
с	Top Link Height	18" (457 mm)2
D	Top Link Pin Diameter	0.75" (19 mm)

FIG. 5-22: Linkage provides two positions of connecting top link to Tractor.

For most implements, securing top link in upper hole, A, is satisfactory, but position may be varied to provide increased implement height during transport.

If draft control is installed, these positions are also used to adjust draft sensitivity:

Use upper hole, A, for implements with low draft, or for more sensitivity.

Use lower hole, B, for high draft implements, or for less sensitivity.



CAUTION: Secure all pins after adjustment is made. Always use pins supplied with Tractor.



FIG. 5-20



FIG. 5-21



FIG. 5-22

Attaching Implements



CAUTION: Always use POSITION CONTROL to attach / detach implements to provide precise control hitch.

FIG. 5-23: Back Tractor to implement, centering Tractor with implement hitch frame. Place draft control lever, 2 (if installed), in fully lowered position as it will not be used.

Raise or lower hitch using position control lever, 1, and align left lower link end with corresponding implement attaching pin.

Lock the brakes, shut off engine and remove key.

NOTE: Front lever stop, 3, can be set to contact position control lever in implement work position. This enables implement to be returned to identical position after hitch has been raised for turning, transporting, etc. Rear lever stop, 4, can be set to limit raising height, if required.

FIG. 5-24: Slide ball end of left lower link, 1, over implement pin and secure with lynch pin.

Adjust height of right lower link using turn buckle, 2. Attach and secure right lower link, 3, to implement with lynch pin.

Attach top link, 4, to top of implement hitch frame using pin supplied with Tractor. Rotate center barrel section of top link, to lengthen or shorten, and level implement from front to rear.

After the implement is attached, adjusted for level operation (as needed) using lift rod and top link turn buckles. Secure all adjustments.

IMPORTANT: With some three-point hitch "mounted" implements, it will be necessary to remove drawbar at rear of Tractor to permit implement to be raised and lowered without obstruction.

FIGS. 5-25: Certain implements require minimal side-play. Stabilizer, 1, at each lower link should be evenly adjusted to reduce side-play to desirable level. Do not remove all side-play as lower link damage may result. Linkage provides two positions of connecting top link to Tractor.

NOTE: The amount of side-play (stabilizer looseness) is dependent upon implement and type of operation. Normally 2" (50mm) of total side movement is desired, 1" (25mm) to each side to Tractor centerline.



FIG. 5-23



FIG. 5-24



FIG. 5-25

Using Position Control

Type of Work – Attaching / detaching implements and other operations requiring implement to be kept at constant height above ground. Also used with toll bars having flexible row units and implements equipped with gauge (support) wheels.

FIG. 5-26: Lever Positions – Draft control lever, 2 (if equipped), fully down (not used). Use position control lever, 1, to adjust hitch and implement position.

NOTE: Front lever stop, 3, can be set to contact position control lever in implement work position. This enables implement to be returned to identical position after hitch has been raised for turning, transporting, etc. Rear lever stop, 4, can be set to limit raising height, if required.

To Begin Work – Align Tractor and implement in field and move position control lever, 1, forward (toward DOWN). Adjust implement height using position control lever and sent adjustable stops, 3, and 4, as desired.

When Turning – Move position lever, 1, rearward (toward UP) to raise implement. Finish turning and return lever against stop to resume operation.

To Finish Work and Transport – Move position control lever, 1, fully rearward in quadrant.

FIG. 5-27: Lowering speed can be readjusted as necessary using lowering rate control knob, 5.

Turning lowering speed knob fully clockwise will prevent links from lowering.



CAUTION: When using mounted implements with PTO driveline, make sure:

PTO drive shaft has minimum 51 mm (2") engagement of telescoping sections, at all hitch / implement positions.

Hitch height during raising does not bind drive shaft universal joints due to extreme drive shaft angles. Limiting raising height may be required.

PTO drive is disengaged during transport.



FIG. 5-26



FIG. 5-27

OPERATION

Using Draft Control (Accessory)

Type of Work – When ground-engaging implements such as plows, subsoil's cultivators, etc. are used.



CAUTION: Do not use draft control when precise hitch positioning is required (attaching / detaching implements for example). Using draft control on non-ground engaging implements should not be attempted.

FIG. 5-28: Lever Positions – Use position control lever, 1 to raise and lower implement and use draft control lever, 2 to adjust implement working depth and system sensitivity in soil.

Position control lever 1, can also be used to prevent excessive lowering of hitch when low draft areas (sandy soil) are encountered.

NOTE: Adjustable lever stops, 3 and 4, can be set to contact position control lever in implement work or raised positions. This enables implement to be returned to identical setting after hitch has been raised for turning at field ends.

To Begin Work – Align Tractor and implement in field and move position control lever, 1, forward (to DOWN) while driving Tractor forward, lowering implement. Then adjust draft control lever, 2, until correct working depth is maintained

When Turning – Move position control lever, 1, rearward to raise implement and permit completion of turn. Return implement to work position by selecting position control lever previous position against stop.

To Finish Work and Transport – Pull position control lever rearward fully up to setting.

FIG. 5-29: Lowering speed can be readjusted as necessary with lowering rate control knob, 5. Turning lowering speed knob fully clockwise will prevent links from lowering.

NOTE: Changes in soil texture or ground speed of unit may require slight readjustment of draft control lever to maintain consistent working depth as these can have a direct influence on implement draft road.

If erratic operation is encountered, turn lowering rate control knob, 5, clockwise to slow. Lowering top link attaching location on Tractor will also decrease sensitivity.



FIG. 5-28



FIG. 5-29

Detaching Implements



CAUTION: Always use POSITION CONTROL to attach / detach implements to provide precise control of hitch.

Select a level area to detach and store the implement. Lower implement to ground by moving position control lever to DOWN. If necessary, adjust leveling crank on right lift link to level implement on ground. Shut off engine, securely lock brakes and remove key from Tractor.

Disconnect implement PTO drive shaft (as available). Detach top link from implement.

NOTE: Lengthening or shortening of top link may be required to permit disconnection from implement.

FIG. 5-30: Disconnect lower links from implement pins. Make sure lower links are connected together with spring, 1, to prevent tire interference.

Take position in operator's seat, start engine and drive Tractor clean of implement.

EXTERNAL AUXILIARY HYDRAULICS (ACCESSORY)

Auxiliary hydraulics can be Dealer-installed to operate implements requiring external hydraulic source for operation. Kits are available as single-spool (one auxiliary circuit) or two-spool (two-spool kit only).

FIG. 5-31: Control lever, 1, controls implement raising / lowering when first set of remote couplers are used. Control lever, 2, controls implement when second set of remote couplers are used (two-spool kit only).

Control lever(s) are spring-loaded to center neutral position, from normal raise or lower positions.

If levers are pushed fully forward they will hold in a detent providing a float position.

Float position is used for loader and blade operations to allow the bucket, or blade to float on top of the surface. It is also used in some implement applications.



FIG. 5-30



FIG. 5-31

OPERATION

FIG. 5-32: Remote couplers are located at rear of Tractor, above three-point hitch. Coupler set, 1, corresponds with control lever, 1, (Fig. 5-31), coupler set , 2, with control lever, 2 (Fig. 5-31).

Implement hoses must be connected to each coupler set so when respective control lever is pulled rearward, implement raises and when pushed forward, implement lowers. Male coupler tips (on implement hoses) must be compatible with Tractor couplers and must also be inserted fully and locked into Tractor couplers to operate correctly.



CAUTION: Always lower implement to ground, shut off engine and relieve system pressure (by operating control levers with engine off) before connecting or disconnecting implement hoses.

CAUTION: Make sure all hydraulic hoses, couplers and cylinders are in good condition before use. Damaged equipment is dangerous.

FIGS. 5-33&5-34: Most implements require double-acting hydraulics. Each implement cylinder will have two hoses connected to it.

When single-acting service is required (cylinder with only one hose), the inner coupler, 1, will be used and selector function, 2, located at right rear of tractor, must be turned to the left.

NOTE: For normal double-acting operation, selector function must be turned to the right.

Disconnect lower links from implement pins. Make sure lower links are connected together with spring, 1, to prevent tire interference.

Take position in operator's seat, start engine and drive Tractor clean of implement.

DRAWBAR

FIG. 5-35: Drawbar, 1, at rear of Tractor allows pull-type implements to be attached Tractor. Maximum vertical load on drawbar must not exceed 750 lbs (340kg).



CAUTION: Pulling heavy loads will require extended braking distances. Reduce travel speed.

Make sure attachment is properly secured and safety chain is used.

NOTE: When using three-point hitch, it may be necessary to remove drawbar by removing clip and pin, and sliding drawbar from bracket to improve operating clearance. This is particularly true with mounted implements using PTO drive.



FIG. 5-32



FIG. 5-33







FIG. 5-35

ROLL OVER PROTECTIVE STRUCTURE (ROPS)

FIG. 5-36: Tractor is equipped with fold-down ROPS which can be folded down and the Tractor functionally used in that condition for low clearance situations such as orchards, vineyards, barns, and chicken houses, etc. When ROPS is lowered, seat belts **must not** be worn.

Always raise ROPS into the fully erect position at the earliest possible time and then seat belts **must** be worn. ROPS must be maintained in this fully raised position at all times unless practical operation of the tractor dictates otherwise (as described above).

How to Tilt ROPS

Remove lock levers both side, 1, and tilt the ROPS rearward carefully.



FIG. 5-36



CAUTION: Do not weld, drill, bend or straighten damaged ROPS. Insure all components are in correct working order in order to provide the intended protection.

Only original bolts and pins, or equivalent replacements, must be used and tightened to the correct torque value. Make sure both "hinge" joints are properly secured.

LUBRICATION & PERIODIC MAINTENANCE

SPECIFICATIONS & CAPACITIES

Engine Oil

Use oil of the quality recommended by ISEKI or 10w-30CC grade of API classification or higher quality.

Capacity (Crankcase and Filter)

Recommended Viscosity: 25 C and Above 0-25 C Below 0 C

15W-40 may be used in ambient temperatures above -10 C.

Recommended Change Interval: Initial Oil and Filter Change Oil and Filter Change, Thereafter

Engine Coolant

Freezing Protection (Original Factory Fill) Recommended Coolant System Capacity

Fuel Tank Capacity

Fuel Recommended, Above 40 C Fuel Recommended, Below -40 C

Transmission & Differential Housing (Including Hydraulic System)

Capacity Recommended Lubricant Recommended Change Interval

Front Axle (4WD)

Capacity Recommended Lubricant Recommended Change Interval

Grease Fittings

Grease Interval (All Fittings) Recommended Grease 4.4 liters (TH4330) 3.6 liters (TH4290/4260)

SAE 30W, 10W-30 SAE 20W, 10W-30 SAE 10W, 10W-30

50 hours Every 150 hours

-34 C 50/50 mixture ethylene glycol and water 7.1 liters

30.0 liters (TH4330/4290) 23.0 liters (TH4260) No. 2 or No. 2-0 No. 1 or No. 1-D

29.0 liters Shell DONAX TD First 50 hours, every 200 hours thereafter

4.5 liters SAE 80 GL-4 First 50 hours, every 300 hours thereafter

Every 50 hours Lithium base grease No. 2

NOTE: Change intervals stated above are for normal usage. Due to adverse operating conditions, that may be experienced (extremely dusty or muddy), change intervals may need to be more frequent.

LUBRICATION / FILL POINTS

FIG. 6-1: General layout of lubrication, fill and drain locations on Tractor:

Ref.	Description	Туре
1.	Crankcase	Engine Oil
2.	Radiator	Engine Coolant
3.	Fuel Tank	Diesel Fuel
4.	Rear Housing	Hydraulic Oil
5.	Front Axle (4-WD)	Hydraulic Oil
6.	Power Steering Rod	Grease
7.	Axle Pivot Points	Grease
8.	Brake Pivots	Grease
9.	Draft Pivots (Accessory)	Grease
10.	Levering turnbuckle	Grease
11.	HST Pedal Pivot	Grease
12.	Mid PTO Lever Pivot	Grease
13.	Tie-rod End	Grease



FIG. 6-1

PERIODIC MAINTENANCE SCHEDULE

Recommended Interval, Each:

Dav	50	100	300	Year	Item To Check	Action Required	Fia. No.
Duy	hr	hr	hr	····			
					All controls, switches	Inspect and repair	-
					All fasteners, hardware	Check and tighten	-
					Hoses, fan belt, wiring	Inspect and repair	-
					Grease fittings	Lubricate	6-1
					Engine oil level	Check and replenish	6-4
	(*)				Engine oil & filter	Replace	6-6, 6-7
					Transmission oil level	Check and replenish	6-8
	(*)				Transmission oil & filter	Replace and clean	6-9 to 6-13
					Front axle oil level	Check and replenish	6-14
	(*)				Front axle oil	Replace	6-14
					Air screens & radiator	Clean of debris	6-15
					Radiator coolant level	Check and replenish	6-15
				lacksquare	Radiator coolant	Drain, flush & replace	6-16
					Fan belt tension	Check and adjust	6-17, 6-18
					Air cleaner dust ejector	Clean	6-19
					Air cleaner elements	Inspect, clean or replace	6-20, 6-21
					Fuel tank level	Fill	-
					Fuel filter sediment bowl	Inspect and clean	6-22
					Fuel filter element	Replace and bleed	6-23 to 6-25
					Battery & cables	Check, clean & tighten	6-27
					Battery condition indicator	Check and replenish	6-29
					Lights & flashers	Check and repair	-
					Brake adjustment &balance	Check and adjust	6-31, 6-32
					Tire pressure & condition	Check and adjust	6-34
					Wheel bolt torque	Check and tighten	6-35
					Front wheel alignment	Check and adjust	6-36
					Steering free-play	Check and repair	6-40
					Front axle end-float	Check and adjust	6-41

Items marked (*) indicate initial service interval only. Subsequent (later) intervals marked "0". Intervals above are for normal usage. Severe operating conditions (wet, dusty, etc.), or when previous servicing has indicated need for more frequent action, intervals may need to be more often.

SERVICE ACCESS



CAUTION: Shut off engine before servicing Tractor. Engine hood side panels and front grille must be Installed and secured prior to operating unit.

To access radiator, battery and engine components, top of engine bonnet can be opened both hood side panels and front grill can be easily removed.

FIGS. 6-2 & 6-3: To open; turn locking knob, 1, one –quarter turn clockwise on top of engine bonnet, pull upward the bonnet and lock it by retaining stay, 2.

Reinstall in reverse order, engine bonnet will be necessary to push inward on locks, 1, and then turn one-quarter turn counterclockwise to secure.

FIG. 6-3:

To remove side panels; pull out locking pins, 3, pull outward on bottom edge, and then lift side panel upward to disengage and remove.

Reinstall in reverse order making sure top edge of side panel engages correctly. Push inward on bottom edge and install pins, 3, to lock.

To remove front grill; unscrew locking knobs, 4, and pull upward and outward to remove.

Reinstall in reverse order making sure front grill lower projections engage on holes



FIG. 6-2



FIG. 6-3

LUBRICATION & PERIODIC MAINTENANCE

LUBRICATION DETAILS

Grease Fittings

Lubricate all grease fittings every 50 hours of operation using M-1105 or equivalent no. 2 multipurpose lithium base grease. Clean grease gun and fittings before and after greasing to prevent contamination from dirt.

NOTE: When operating in muddy or extremely wet conditions, daily lubrication of fittings is recommended.

Engine Oil & Filter

Engine oil and filter should be changed after first 50 hours of operation and then every 150 hours thereafter.

FIG. 6-4: To Check Engine Oil Level -Tractor must be parked on level ground with engine off. Pull out dipstick, 1, and check that oil level is between upper limit, F, and lower limit, L, on dipstick. Wipe off dipstick, momentarily reinstall in engine and check oil level again.

Add oil through dipstick/filler opening as required.



WARNING: Muffler tail pipe is extremely hot just after operation, take care not to touch it to avoid burns when checking engine oil level.

FIG. 6-5: To add oil, remove filler cap, 2, and pour oil using a funnel to prevent oil from spilling.

NOTE: Add oil slowly to assist in venting air from crankcase.

FIG. 6-6: To Change Engine Oil - Operate Tractor until oil is adequately warmed. Remove drain plug, 3, from engine and allow all oil to drain. Reinstall drain plug and fill engine crankcase to upper limit on dipstick.

FIG. 6-7: To Replace Engine Oil Filter - Unscrew element, 4, from engine and discard. Make sure original filter gasket has been removed. Lubricate new gasket on replacement element with clean engine oil. Screw on new element until gasket contacts adapter and then tighten element 1/2 turn more.

Clean spilled oil and refill crankcase. Start engine, check for leaks and replenish oil level as required.



FIG. 6-4



FIG. 6-5



FIG. 6-6





Transmission Oil & Filters

Transmission oil lubricates transmission, center housing, and rear axles and also serves as hydraulic fluid. Transmission oil and filter should be changed after first 50 hours of operation and then every 200 hours thereafter.

FIG. 6-8: To Check Transmission Oil Level - Park Tractor on level ground and remove dipstick, 1. Oil level should be indicated between upper limit mark, A and end of dipstick, B.

Oil level is replenished, as necessary, by removing filler plug, 2, and adding oil through filler opening.

NOTE: Adding oil to transmission will also maintain correct oil level in center housing and rear axles.

FIG. 6-9: To Replace Transmission Oil - Remove drain plug, 3, along with second drain plug below mid PTO gearbox, and final drive plugs, 4, one each axle. Completely drain oil from system.

IMPORTANT: Completely lower three-point hitch prior to draining transmission oil.

When completely drained replace and tighten all drain plugs. Service hydraulic and hydrostatic filters, as required, and then refill with oil.

FIG. 6-10: Transmission filter, 5 must also be cleaned when oil is replaced. With oil drained. Remove retaining bolt, 6. withdraw filter from left side of rear transmission case.

Clean filter in solvent kerosene, dry thoroughly and reinstall Make sure seal is not damaged.

Apply sealant to threads on drain plug(s) and reinstall. Refill system with clean oil to level as detailed.

FIG. 6-11: Transmission oil filter, 7, with oil drained, unscrew filter from adapter (filter wrench may be required).

Clean adapter and lubricate seat on new filter. Install until filter gasket contacts adapter and tighten additional 2/3 turn, by hand. Do not use filter wrench to tighten.



FIG. 6-8



FIG. 6-9



FIG. 6-10



FIG. 6-11

LUBRICATION & PERIODIC MAINTENANCE

Air Bleeding Hydraulic System

FIGS. 6-12&6-13: When transmission oil has been replaced, it is necessary to bleed the air from the system as follows:

- Check rear transmission (hydraulic) system oil level and add as necessary.
- Place a pan under bleed plug, 1.
- Remove plug.
- Start engine and let it run for about five seconds.
- Stop engine.

Front Axle Oil

300 hours thereafter.

Screw in bleed plug, 1, with sealant.

Start Tractor and allow to idle several minutes while operating hydraulic controls. Shut engine off, lower the three-point hitch and recheck oil level. Replenish transmission oil, as necessary, through filler opening, 2 Check for leaks and correct as necessary.

IMPORTANT: Failure to bleed the hydraulic system can cause pump seizure and / or poor hydraulic system performance.



FIG. 6-12



FIG. 6-13



FIG. 6-14: To Check Oil Level - Park Tractor on level ground and then remove oil level fill plug, 2. Oil should be level with or slightly below level plug opening. Remove fill plug, 1, and add oil until oil is expressed from level plug opening. Replace level plug and fill plug.

To Change Oil - Remove drain plug, 3, from both wheel reduction units. When all oil has drained, replace drain plugs and fill housing to level plug opening. Replace level plug and fill plug.

FIG. 6-14

COOLING SYSTEM



CAUTION: DO NOT remove radiator cap when engine is hot. Rotate cap slowly to release pressure. Then cap can be safely removed.

FIG. 6-15: Cooling system is filled at factory with antifreeze solution to protect engine and radiator to -30F (-34C). Coolant level should be indicated between upper limit mark, A, and lower limit mark, B in coolant reservoir tank Check coolant protection from freezing annually.

NOTE: After adding coolant in reservoir tank, start engine and operate until thoroughly warmed so coolant is mixed.

Periodically check condition of hoses, belt and clamps and tighten or replace as necessary.

Keep radiator, radiator screen and hood screens clean to permit maximum cooling.

IMPORTANT: Use care when cleaning radiator to prevent cooing fin damage.

FIG. 6-16: Drain cock, 2, will drain coolant from cylinder block and radiator. Drain cock is located on right side of engine. Coolant should be replaced if it becomes contaminated with rust or sludge. Loosening radiator cap will assist draining.

NOTE: When coolant is replaced, flush inside of radiator and engine block with clean water.

Radiator and engine must be drained if freezing temperatures are expected and coaling system is not filled with coolant having adequate protection from freezing.

FIG. 6-17: Correct fan belt tension helps to insure adequate coolant flow through cylinder block and radiator. Belt is correctly tensioned when belt deflection is approximately 1/2" (13 mm) when thumb pressure (10 kgf) is exerted at center of belt span.



CAUTION: Due to muffler position, allow to cool before checking or adjusting fan belt tension.



FIG. 6-15



FIG. 6-16



FIG. 6-17

LUBRICATION & PERIODIC MAINTENANCE

FIG. 6-18: To adjust belt tension, loosen alternator pivot bolt, 1, and tensioning bracket bolt, 2. Pull outward on top of alternator to correctly tension belt and tighten bolt, 2, first and then tighten pivot bolt, 1.

IMPORTANT: Do not pry against alternator housing or pulley. Carefully pry against alternator mounting flange to prevent damage.

ENGINE AIR CLEANER

IMPORTAN: Never operate engine with air filters removed.

FIG. 6-19: The engine air cleaner, 1, is located above engine. To gain access remove right side panel.

The dust ejector, 2, should be squeezed to open and allow dust to drop out daily. This will reduce amount of material which collects on main filter.

To service main filter, release retaining band over air cleaner and pull air cleaner inlet tube to rear to release it from retaining hooks. Then turn the air cleaner out for servicing.

FIG. 6-20: Release clip, 3, and remove element, 4. Examine element and seals for damage and brittleness. If element is damaged in any way it must be replaced.

NOTE: Engine air filter has a seal ring. Fit it correctly when reinstalling.

FIG. 6-21: Element, 4, may be cleaned (if in serviceable condition) using following procedures:

Using compressed air not to exceed 30 psi (200kPa) from inside element, remove loose dirt, grass, chaff, etc. Be careful not to damage element pleats with air flow.

If outer element is coated with oil or soot:

1. Prepare solution of warm water and non-foaming detergent.

2. Soak element for thirty minutes.

3. Agitate element in solution until oil and soot are loosened.

4. Rinse element until rinse water is clear.

5. Allow element to completely dry. Do not dry by using compressed air or heat.

6. After cleaning (or washing) element examine for pin holes, punctures, or tears. If element paper, canister or seal show any signs of physical damage, element must be replaced.

NOTE: Replace outer element which has already been washed five times.



FIG. 6-18



FIG. 6-19



FIG. 6-20



FIG. 6-21

FUEL SYSTEM

Use only clean diesel fuel of correct grade. Introduction of water or dirt into fuel tank or other portion of fuel system can cause repeated plugging of fuel filter and possible injection pump and injector damage.

IMPORTANT: Do not tamper with injection pump or injector adjustments as doing so may render engine and / or Tractor warranty void and may cause severe engine damage. Refer to local ISEKI Dealer.

Fuel Filter

FIG. 6-22: Fuel filter assembly, 1, is located at right side of engine, and is used to strain impurities from fuel before fuel reaches injection pump. Fuel filter incorporates valve, 2 to aid in filter servicing.

Check filter bowl for accumulation of sediment or water and clean as required.

FIG. 6-22

FIG. 6-23: To replace fuel filter element or clean sediment bowl, turn fuel valve to OFF position (handle to rear) .

Carefully loosen spanner nut, 1, and remove nut, sediment bowl, 2, and "O"-ring, 4. Sediment bowl can be cleaned at this time.

Pull downward on filter element, 3, and discard. Examine small "O"-ring, 5, in filter head and replace as necessary. Install new element, pushing upward until seated.

Install sediment bowl, "O"-ring, and nut. Tighten nut and wipe up spilled fuel

FIG. 6-23

Air-Bleeding Fuel System

FIGS. 6-24&25: Fuel system should be bled of air after the following:

- Emptied fuel tank.
- Removal of fuel filter or fuel piping
- Engine has not run for extended period of time, or, engine starts and stops (or fails to start) after short period of operation.

To bleed air from fuel systems using following procedure:

- Fill fuel tank, 1, until full.
- Turn fuel filter valve, 2, to "OPEN" or (ON) positioin.
- Loosen filter air-bleeding screw, 3, and let air bubbles out.
- Loosen air-bleeding screw, 4, for fuel injection pump and let air bubbles out of the pump.

If engine still fails to start, pressure injection lines can be loosened where they attach to injectors. Turn engine over several times, until fuel spurts, out then tighten lines and stop engine.

CAUTION: Fuel emitted from injection lines is high pressure. Keep hands and face away when engine is cranked. Clean all spilled fuel following air-bleeding procedure(s).

Throttle Lever

FIG. 6-26: Hand throttle lever should remain in position selected by operator. Through normal use, friction against lever may decrease, causing lever to move out of selected position. Turn adjusting nut, 1, as required to retain throttle lever in position selected.

NOTE: Throttle lever friction adjustment is accessed by removing the steering column cover, and instrument panel.

FIG. 6-24

FIG. 6-25

FIG. 6-26

ELECTRICAL SYSTEM

Battery

FIG. 6-27: Battery, 1, is located under engine hood in front of instrument panel.

When battery removal, battery condition indicator checking or cable cleaning is necessary, open the engine hood.

Keep top of battery clean and ensure cable connections are clean and tight. Debris on battery can cause discharge of battery and possible source of fire.

DAMGER: Batteries produce explosive hydrogen gas when charged. Keep all sparks

and open flame away from battery.

When necessary to disconnect battery cables, always disconnect the grounded (-) cable first to prevent short circuits.

Batteries contain sulfuric acid electrolyte (fluid). Wear eye and face protection. If electrolyte comes in contact with skin or clothes, wash immediately. Contact physician if electrolyte is ingested or gets in eyes.

FIG. 6-27

FIG. 6-28: Tractors are shipped with battery installed. If battery replacement should become necessary, disconnect negative (-) cable, i, first and then remove positive (+) cable, 2. Loosen and remove battery securing clamp and carefully remove battery from Tractor.

When installing battery, cable, 2, connected to starter solenoid should be connected to positive (+) battery terminal first then cable, 1, grounded to Tractor frame can be connected to negative (-) battery terminal.

- NOTE: Make sure replacement battery is of identical size and equal capacity.
- IMPORTANT: Do not reverse battery cable connections as severe electrical system damage will result.

FIG. 6-28

LUBRICATION & PERIODIC MAINTENANCE

FIG. 6-29: Water need not be added to battery, the battery is of maintenance-free type.

Should battery performance be questioned, the battery should be removed and recharged from an external source following battery charger instructions. Repeated battery charging may be due to a defect in Tractor charging system and/or a defective battery.

NOTE: When charging battery from an external source, battery temperature must not exceed 125F (54C) if overheating occurs, charge rate must be reduced or halted.

To handle the battery

- (1) Water need not to be added to battery as battery is maintenance-free type.
- (2) Never close or cover vent of battery.
- (3) Battery indicator with colors shows battery condition. When checking battery, set machine in horizontal place and look indicator from top of battery.
- (4) If indicator shows clear or light green color, tap battery body to remove bubble inside indicator. Then check battery indicator.

WARNING:

Never disassemble battery.

Batteries contains sulfuric acid electrolyte (fluid).

Keep away from sparks or flames, which could cause explosion.

When charging battery from an external source;

Set charging voltage below 16v.

Set charging ampere below 1/10 (one tenth) of battery capacity.

When connecting and disconnecting battery cables, turn off power of battery charger.

If you have any question about battery, consult your dealer.

Indicator Color	Condition	Countermeasure	
Green	Charged	Usable	
Black	Discharged	Need to charge	
Clear	Low Electrolyte	Need to replace	

Starting Switches

This Tractor is equipped with a neutral-start system consisting of neutral switches and a relay. To start Tractor, ALL the following is required:

Range shift lever must be in neutral position PTO control switch must be in OFF position

NOTE: A seat safety switch is incorporated into system. The engine stops when operator leaves seat when either PTO is engaged and / or range shift lever is not in neutral.

WARNING: DO NOT bypass or modify the neutral switch system. If the neutral start system does not operate properly, consult your Dealer immediately.

FIG. 6-29

Wiring/Fuse Arrangement

CAUTION: Keep all wiring connections clean and tight. Make sure wiring is correctly secured to prevent damage.

CAUTION: DO NOT alter wiring by adding "homemade" extensions or replacements. Doing so can eliminate fuse protection and/or eliminate safety features of the system. CAUTION: Tractor is equipped with negative (-) ground system. Tractor metal parts provide many electrical connections. For this reason, all positive (+) circuits must

be insulated to prevent "grounding" or short circuits and prevent possible fire. CAUTION: DO NOT replace any fuse with a fuse

of higher amperage rating.

DO NOT use wire (or foil) to bypass fuse protection. Fire can result.

If fuses blow repeatedly, examine electrical system for "grounded" or "shorted" circuits.

FIG. 6-30: General layout and location of electrical system components and fuses:

Main Fuse Box, A - Located	l at right side	of engine.
----------------------------	-----------------	------------

Ref.	Amp	Function
1	5A	Head lamp (LH / High)
2	5A	Head lamp (RH / High)
3	5A	Head lamp (LH / Low)
4	5A	Head lamp (RH / Low)
5	10A	Position lamps
6	20A	Work lamps
7	20A	Direction indicators
0 204		Stop lamps / Cabin ®
0	204	Engine stop relay
0 104		Fuel ump / Safety switch
9	IUA	PTO / Engine stop relay
10	10A	Monitor / Alternator / Cabin (AC)
11	10A	Spare power supply (AC)

FIG. 6-30

LUBRICATION & PERIODIC MAINTENANCE

Slow-Blow Fuses, B & C – In-line fuses protect relevant circuit by melting when sustained heavy electrical load or short circuit is encountered. Feature a delayed action to prevent current disruption when brief surges are encountered.

One (40A) slow-blow fuse, B, for alternator circuit is green in color. Fuse is located on right side of engine.

One (40A) slow-blow fuse, C, for main circuit is green in color. Fuse is located on right side of engine.

NOTE: Failure of fuse, C, is usually caused from incorrect polarity (such as reserved cables when using booster battery). Failed fuse will not allow battery to be charged during normal operation.

IMPORTANT: Fuses are of specific amperage capacity for the circuit in which they are located. Do not replace fuses with unauthorized parts.

Lamps

Item	Volt.	Watt.
Headlamps	12V	45/45W
Front turn signal lamps	12V	21W
Front small lamps	12V	5W
Stop lamps	12V	21W
Tail lamps	12V	10W
Rear turn signal lamps	12V	21W
License plate lamp	12V	5W

7-pin trailer socket, D

NOTE: A special fuse is used – use only genuine ISEKI parts.

_						
$\left \right $	31	58L	L			
	54	53R	R			

BRAKE ADJUSTMENTS

FIG. 6-31: Check free-pedal of brake pedal. Correct free-play, A, is 7/8" to 1-1/8" (20 to 30 mm).

NOTE: Through use, free-play will increase and brake balance will be affected. Adjust and balance brakes before free-play is excessive.

FIG. 6-32:

- 1. Remove and free the brake rod one side of right or left.
- 2. Adjust the brake rod that is not free earlier.
- 3. Loosen lock nut, 1 (right-hand thread), and lock nut, 2 (left-hand thread). Adjust rod using weld nut, 3, so free-play is correct for brake pedal.
- 4. Secure lock nuts against turnbuckles.
- 5. Adjust the brake rod of other side.

Make sure lock nuts are secured when brake adjustment is complete. Check operation of parking brakes after adjustment is made.

CAUTION: Brakes must be adjusted evenly to permit equal braking action at both rear wheels.

FIG. 6-33: After brake system has been adjusted, check operation of parking brake. With brake pedals latched together depress pedals fully and apply parking brake. It should have brakes locked with lever approximately in center of travel. Adjust cable, 1, at lever if necessary.

FIG. 6-32

FIG. 6-33

HYDROSTATIC ADJUSTMENTS

For adjustments of the hydrostatic linkage, see your dealer.

WHEELS & TIRES

Examine wheels and tires periodically for correct inflation pressures, tight wheel bolts, and any physical damage that may be a detriment to Tractor operation and operator safety. Correct condition prior to Tractor operation.

Tire Inflation Pressures

FIG. 6-34: Maintaining correct tire pressure will help insure tire life. If tires have deep scratches, cuts or punctures, the respective tire should be repaired or replaced by qualified personnel as soon as possible.

IMPORTANT: If necessary to replace any tire(s), ensure original tire size is used. This is particularly true on 4-WD models to ensure correct amount of front axle over-speed (or lead) is maintained.

Wheel Bolt Torque

FIG. 6-35: Periodically check all wheel bolt torques. Correct bolt torques:

Front Wheel Bolts, 1 ... 75 ft.-lbs. (102N.m) Rear Wheel Bolts, 2 ... 80 ft.-lbs. (120N.m)

CAUTION: Correct wheel bolt torque must be maintained. Installation of front mounted implements (ex; loaders, mowers) impose increased loads and require frequent checking of wheel bolts.

Front Wheel Alignment

FIG. 6-36: Correct "toe-in" dimension of front wheels (A minus B) is 0.08 to 0.24" (2-6 mm).

To adjust, loosen lock nuts, 1, and adjust tie rod length by turning turnbuckles, 2. Adjust each side evenly. Ball joints must move freely after lock nuts are tightened.

NOTE: Measure toe-in from tire center to tire center at a point halfway up on face of each tire.

Туре	Tire	Pressure
Tires	Location/Size	(PSI) kPa
10	Front 6 – 14	28 PSI (193 kPa)
AG	Rear 9.5 – 22	17 PSI (117 kPa)
тс	Front 24 x 8.50 – 12	23 PSI (159 kPa)
TURT	Rear 315 x 80D - 16	14 PSI (96 kPa)

FIG. 6-34

FIG. 6-36

Front Wheel Spacing

Tread width may be varied by using the following methods, as applicable. Tread widths are measured tire center to tire center as close to the ground as possible.

NOTE: Make certain desired setting is compatible with implements to be used to prevent clearance and interference problem.

FIG. 6-37: Front tire tread widths

Wheel turned out not recommended.

Туре	Tread Width – mm		
Tires	Α	В	С
AG	875	Not Recommended	-
Turf	-	-	980

FIG. 6-37

Rear Wheel Spacing

To reverse entire wheel and tire assembly – Raise both rear tires of Tractor. Remove bolts securing both rear wheel assemblies to rear axle hubs and switch wheel assemblies to opposite sides of Tractor.

CAUTION: Rear wheels are heavy. Use care when moving. Make sure Tractor is blocked securely.

Tighten all wheel bolts securely and recheck after short period of operation.

NOTE: Agricultural lug-type tires must always be installed so when viewed from the rear, the "V" pattern of the tread points upward.

FIG. 6-38: Rear tire tread widths for agricultural type tire.

FIG. 6-39: Rear tire tread widths turf type tire.

Type	Tread Width – mm		
Tires	1	2	
AG	Not Recommended	880	
Turf	945	965	

FIG. 6-38

FIG. 6-39

LUBRICATION & PERIODIC MAINTENANCE

Steering Free-Play

FIG. 6-40: Steering should be checked for excessive looseness, as indicated by steering wheel free- play. Maximum free-play is approximately 1-1/4" to 2-3/8" (30 to 60 mm) when measured at outside of steering wheel rim, as shown at "X". Excessive free-play can be caused by:

- · Loose or worn ball joints.
- · Worn or damaged steering column shaft / universal joints.
- · Air in steering system.
- · Worn or damaged power steering unit.

CAUTION: Excessive steering free play must be corrected before use. Contact your Dealer.

Front Axle End-Float

FIG. 6-41: Fore and aft play of front drive axle, 1, in its supports should be 0.004 - 0.012" (0.1-0.3 mm). End-float is measured with axle raised off ground.

Loosen lock nut, 2, and turn adjusting bolt, 3, as needed to achieve correct measurement. Tighten lock nut.

NOTE: Excessive end-float will cause noise. This noise will be more pronounced when using 4WD.

CLUTCH HOUSING PLUG

FIG. 6-42: Pipe plug, 1, should be removed from bottom of clutch housing once a year or when clutch slopping is apparent. Any oil leakage from engine rear crankshaft seal and / or transmission input will be indicated by oil draining though hole. Contact your dealer if oil leakage is evident.

FIG. 6-40

FIG. 6-41

FIG. 6-42

TORQUE CHART

FIG. 6-43: All fasteners should be tightened in accordance with torque chart unless a specific torque value is called out in relevant maintenance information.

	4T				7T							
	ft.–lbs.		Nm		ftlbs.		Nm					
M6	4.3	-	5.7	5.8	-	7.7	7.2	-	9.3	9.8	-	12.6
M8	9.3	-	13.0	12.6	-	17.6	18.0	-	25.2	24.4	_	34.2
M10	14.4	-	21.6	19.5	-	29.3	39.7	-	50.5	53.8	-	68.5
M12	36.1	-	43.3	48.9	-	58.7	65.0	-	7896.4	88.1	-	10707.0
M14	50.5	-	57.8	68.5	-	78.4	93.9	-	108.4	127.3	-	147.0
M16	72.2	-	86.7	97.9	-	117.5	115.6	-	130.0	156.7	-	176.3
M18	86.7	-	101.0	117.5	-	137.0	144.5	-	173.3	195.9	-	235.0
M20	107.7	-	122.8	146.0	-	166.5	173.3	-	187.8	235.0	-	254.6

STORAGE

FIG. 6-44: If Tractor is to be stored for extended periods, such as off-season nonuse, certain measures should be taken for its preservation during such periods. These measures will vary according to geographicat area and storage season.

- 1. Replace engine oil and filter. Operate at low idle five minutes to lubricate parts.
- 2. Lubricate all grease fittings and lightly oil control linkage pivots.
- 3. Detach implements.
- 4. Store Tractor in enclosed area, if possible, for protection from weather.
- 5. Block up Tractor to remove weight from tires and to protect tires from oily or damp floor.
- 6. Raise and lock three-point lift linkage in up position by turning lowering rate control knob, 1, fully clockwise.

FIG. 6-45: Step 7 - Fill fuel tank to prevent condensation from forming on inside of tank. Turn filter valve, 2, to OFF position.

- 8. Remove battery and store in cool dry place. Maintain charge during storage period.
- 9. If Tractor is stored during cold weather season insure that antifreeze is adequate. Alternatively, radiator and engine block may be drained.
- 10. Check with your diesel fuel supplier on the availability of a diesel fuel additive to place in the fuel system during storage period.
- 11. If Tractor cannot be placed in an enclosed area place it under some sort of cover and cover exhaust pipe to prevent entrance of rain or snow.
- 12. Touch up scratches with paint.

At the end of storage period:

Perform appropriate lubrication and maintenance before placing Tractor back in service. See "Lubrication and Maintenance" section.

Conduct full pre-start inspection. Make sure all controls operate correctly.

Allow engine to idle approximately 30 minutes. Check for leaks and repair as required.

FIG. 6-44

FIG. 6-45

TROUBLESHOOTING

ENGINE

Problem	Possible Cause	Remedy
Starter motor doos not	Pango shift lover not in noutral	Place range shift lover in poutral
	PTO control switch is in ON position	Turn off PTO control owitch
	Protonitor switch is in ON position	Consult your dealer
START	Discharged bettery	Consult your dealer.
	Loopo or dirty terminals	Clean and retighten accuraty
	Prokon main switch	Clear and relignen securely.
	Broken main switch Broken storter	Consult your dealer.
Startar matar anarataa hut	Discharged better	
Statter motor operates but	Discharged ballery	Charge Dattery.
not at full speed	Defective ground	Clean and tighten starter mounting
	Delective ground	Deplose with eil of proper viscosity
	Defective engine	Consult your dealer
Startar matar anarataa hut	Electric fuel nume not energing	Consult your dealer.
	Electric fuel control not operating	Consult your doalar
engine does not start.	Air in fuel evetor	Air blood fuel evetor
	Cleared fuel filter	Cloop filter
	Glogged fuel liller	Clean Intel.
	Fuel is not being supplied	Increase use of dow pluge
	Defective engine	Consult your doolor
Irregular opging rupping	Air in fuel eveter	Air blood fuel evetem
	Clagged fuel filter	All-bleed luel system.
	Clogged fuel injectors	Clean Intel.
	Clogged fuel injectors	Consult your dealer. Retighten element replace defective pipes
	Fuel interior number timing	Consult your doclor
	Fuel Injection pump timing	Consult your dealer.
)A/han decelerated engine	Delective engine	
when decelerated, engine	Molfunctioning fuel injection nump	Consult your dealer.
stops		Consult your dealer.
	Improper valve clearance	Consult your dealer.
Engine avenue ale	Detective fuel injectors	Consult your dealer.
Engine over-speeds	Defective governor	Consult your dealer.
	Incorrect nigh speed setting	Consult your dealer.
	Engine oil is getting into compustion champers	Consult your dealer.
Engine stops unexpectedly	Insufficient fuel supply	Fill tank and air-bleed fuel system.
during operation	Defective fuel injectors	
	Engine esigure due te levr er neer eil	Consult your dealer.
	Engine seizure due to low or poor oil	(if engine can be turned by pulling fan beit,
	Electric fuel numer not encycling	fuel system is most probable causes.)
	Electric fuel pump not operating	Ten un ecolorit
Engine overneats	Risullicient coolant	Adjust holt tension or replace
	Cleared arille redictor corected	Adjust beit tension of replace.
	Clogged grille, radiator screens	Clean
	Defective thermestet	Clean.
	Delective inermostat	Replace.
Exhaust fumes are white		Clean ar replace elemente
Exhaust rumes are white		Clean of replace elements.
	High engine on level	Consult your dealer
		Consult your dealer.
Exhaust fumos are teo block	Cold-funning engine	Allow to warm, check thermostal.
Exhaust rumes are too black	Fuel delivery	Consult your dealer
	Excessive fuel delivery	Consult your dealer.
	Insufficient compustion air	Chisuit your dealer. Chock clean or replace elements
Poor ongino output	Soized fuel injectors and / or earbon denosit	Consult your dealer
Poor engine output	Seizeu luei injectors and / or carbon deposit.	Consult your dealer.
	Insufficient compression of reaking valves	Consult your dealer.
	Incorrect fuel injection timing	Consult your dealer.
	Incorrect ruer injection timing	Consult your dealer.
	Cleaned air cleaner	Clean ar raplace elemente
Oil prossuro monitor is lit		Poplonich
		Replete with all of proper viscosity
during operation	Defective pressure ewitch	
	Clogged oil filter	Neplace. Poplace element contrides
	Defective oil nume	Consult your doclor
Charging monitor is lit	Defective on pullp Defective wiring	Correct loose or dirty terminale, abort aircuit
during operation		noor ground etc.
	Defective alternator	poor ground etc. Consult your doclor
	Defective allemator	Consult your dealer
	Defective regulator	Donlaco hattory
	Loose or damaged fan holt	Adjust belt tension or replace
	LOUSE OF VARIAGEU TATI DEIL	

BRAKE

Problem	Possible Cause	Remedy	
Brake do not work well or not balanced	Too much free play of pedal	Adjust free play	
	Worn or seized lining	Consult your dealer.	
Brake pedal do not return	Broken return springs	Replace broken spring.	
smoothly	Poor lubrication	Remove rust, then lubricate.	

HYDRAULIC SYSTEM

Problem	Possible Cause	Remedy		
Insufficient oil pressure	Low engine speed	Increase speed.		
	Low transmission oil	Fill to specific level		
	Intake piping is sucking air	Retighten clamps or replace cracked pipes		
		and defective O-rings.		
	Clogged oil filters	Clean or replace.		
	Defective hydraulic oil pump	Consult your dealer.		
	Defective control valve	Consult your dealer.		
	Broken cylinder	Consult your dealer.		
Leaking piping	Loose joints	Retighten.		
	Cracked pipes	Replace pipes, O-rings.		
With control lever in	Poorly adjusted rod on position	Correct rod adjustment.		
RAISE position, relief valve blows	control lever			
Three-point hitch does not	Locked lowering speed control knob	Turn counterclockwise to LOWERING		
lower	Defective control valve	Consult your dealer.		
	Broken cylinder	Consult your dealer.		
	Seized lift shaft bearing	Consult your dealer.		

STEERING SYSTEM

Problem	Possible Cause	Remedy
Steering wheel is hard to	Poorly installed steering column	Correct.
turn or turns in one direction	Air in steering hydraulic system	Air-bleed steering system.
	Improper toe-in	Correct.
	Different front tire inflation	Inflate both tires to same specified pressure.
	Loose steering or ball joints	Retighten or replace defective parts.
	Defective steering unit, pump	Consult your dealer.
Steering wheel has too much free-play	Worn steering column	Consult your dealer.
	Loose ball joints	Retighten.
	Defective steering unit	Consult your dealer.

ELECTRICAL SYSTEM

Problem	Possible Cause	Remedy
Battery cannot be charged	Blown fuse	Check fuse and replace.
	Blown fusible link, defective wiring	Check wiring and replace link.
		Correct loose, dirty terminals, short circuit,
	Loose or damaged fan belt	poor around. etc. Give belt proper tension or replace.
	Defective alternator	Consult your dealer
	Defective regulator	Consult your dealer.
Head lamps are dim	Worn steering column Loose ball joints	Charge battery, check charging system. Check ground points and terminals, clean if
		necessarv.
Particular function will not operate	Burnt bulb (as applicable)	Replace.
	Blown fuse	Check fuse and replace.
	Poor contact	Inspect ground points and terminals, clean if
		necessary.
	Defective switch	Replace as required.

HYDROSTATIC TRANSMISSION

Problem	Possible Cause	Remedy
Tractor does not move	Parking brake applied	Release.
	Too low engine rpm	Accelerate engine.
	Low transmission oil level	Fill to upper level
	Air trapped in system	Consult your dealer.
	Improper adjusted hydro pedals	Consult your dealer.
	Clogged hydraulic filter	Replace.
	Clogged suction filter	Replace.
	Defective hydrostatic unit	Consult your dealer.
Tractor creeps without hydro pedals	Stuck neutral arm	Consult your dealer.
being operated	Incorrect neutral adjustment	Consult your dealer.
	Defective hydrostatic unit	Consult your dealer.
SPECIFICATIONS

	TH4260	TH4290	TH4330
ENGINE:			
Make		lseki Diesel	
Model	E3DE-VB11	E3CF-VB22	E3CD-VB32
l ype Assiration		Indirect injection, overnead valve	
Displacement	1430 cc	1463 cc	1498 cc
Number of Cylinders	1400 00	3	1400 00
Bore	85 mm	86 mm	87 mm
Stroke		84 mm	
Engine Horsepower (Gross) (Net)	25.3 HP (18.9 kW) @ 2500 rpm 24.0 PS (17.7 kW) @ 2500 rpm	28.4 HP (21.2 kW) @ 2500 rpm 28.0 PS (20.6 kW) @ 2500 rpm	33.0 HP (24.6 kW) @ 2600 rpm 32.0 PS (23.5 kW) @ 2600 rpm
Firing Order		1-3-2	
Compression Ratio	21.5 to 1	21.7	to 1
Low Idle Speed High Idle Speed	2650-2750 rpm	2650-2750 rpm	980-1020 rpm 2760-2860 rpm
Valve Clearance (Cold) : Intake	2030-2730 ipin	0.35 mm	2700-2000 1011
Exhaust		0.35 mm	
Air Cleaner		Dual stage, dry element	
Engine Cooling		Liquid, forced circulation	
Cold Starting Aid		Glow plugs (3)	
TRANSMISSION: HYDROSTATIC Type ; Primary Range		Infinite Control 3 speeds constant mesh	
Gear Speeds		3 gears forward, 3 reverse	
Clutch		None	-1.
Brakes	M	echanically actuated sealed wet di	ISK
POWER TAKE-OFF (PTO) : Type		Independent, engine driven	
Control		Electro-hydraulic control	
	Hyd	raulically engaged, multi-plate wet	disk
Rear PTO; Snaπ		35 mm diameter, six spline	
Engine Speed @ engine rpm	581/1050 (@2500 rpm	604/1092 @2600 rpm
Mid PTO; Shaft	25.4 mm diameter, fifteen spline		
Output		Clockwise rotation	
Mid PTO Speed @ engine rpm	2000 @ :	2500 rpm	2080 @ 2600 rpm
HYDRAULICS:			
Steering System; Type		Hydrostatic (power)	
Pump Maximum Output	9.8.1/min a	t 2500 rpm	10.2 l/min at 2600 rom
Pressure	9.0 Milli a	11772 kPa	10.2 min at 2000 ipin
Main Hydraulic System; Pump		Engine-mounted gear pump	
Maximum Output	28.0 l/min	at 2500rpm	29.2 l/min at 2600rpm
Pressure		Relief valve setting 14715 kPa	
Rear Linkage; Type		Three-point hitch	
Size		Category 1 Resition (ORT droft control)	
Lift Capacity		1100 kg measured at ball ends	
		650 kg measured at 24" behind	
		5	
ELECTRIAL SYSTEM:			
System Voltage		12 volt, negative (-) ground	
Battery cca @ 0 F (-18)		582 cca	
Charging	40 am	p alternator with internal regulator/	rectifier

TH4330,4290,4260

SPECIFICATIONS

	TH4260	TH4290	TH4330
CAPACITIES:			
Engine Crankcase with Filter		3.6 liters	4.4 liters
Transmission		29.0 liters	
Fuel Tank	23.0 liters		30 liters
Cooling system		7.1 liters	
Front Drive Axle		4.5 liters	
TREAD WIDTH SETTINGS:			
Front 4WD			
Ag. Tires		875 mm	
Turf Tires		980 mm	
Rear 4WD			
Ag. Tires		880 mm	
Turf Tires		945 mm, 965 mm	
MAXIMUM AXLE LOADING:			
Front Axle		875 kg	
Rear Axle		1000 kg	

SPECIFICATIONS

GENERAL DIMENSIONS



		TH42	60	TH42	290	TH4	330
			Hydrostatic				
	Reference	Turf 4WD	Agri. 4WD	Turf 4WD	Agri. 4WD	Turf 4WD	Agri. 4WD
		Front: 24 x 8.50 - 12	Front: 6 - 14	Front: 24 x 8.50 - 12	Front: 6 - 14	Front: 24 x 8.50 - 12	Front: 6 - 14
		Rear: 315/80D - 16	Rear: 9.5 - 22	Rear: 315/80D - 16	Rear: 9.5 - 22	Rear: 315/80D - 16	Rear: 9.5 - 22
	Height of						
A1	Steering Wheel	1370 mm	1420 mm	1370 mm	1420 mm	1370 mm	1420 mm
	Overall Height						
A2	ROPS	2410 mm	2455 mm	2410 mm	2455 mm	2410 mm	2455 mm
	Oursenally Miledale	1000	4405	1000	1105	1000	1105
в	Overall width	1260 mm	mm 6811	1260 mm	mm corr	1260 mm	mm 6811
с	Overall Length	2920 mm					
D	Wheelbase		1665 mm				
-	Min. Ground						
-	Clearance	190 mm	230 mm	190 mm	230 mm	190 mm	230 mm
	Turning radius						
-	w/o brake	5600 mm					
-	Weight	980 kg	990 kg	985 kg	995 kg	990 kg	1000 kg
	Weight	000 kg	000 Ng	000 Kg	000 kg	555 kg	1000 kg

	Agri. Tire		Turf Tire	
		Dimension		Dimension
	Tire size	diameter x width	Tire size	diameter x width
Front	6 - 14	653 mm x 155 mm	24 x 8.50 - 12	614 mm x 216 mm
Rear	9.5 - 22	995 mm x 223 mm	315/80D - 16	910 mm x 316 mm

ASSEMBLY & PRE-DELIVERY INSPECTION

ASSEMBLY

IMPORTANT: Do not commence assembly of this Tractor until reading these instructions completely and carefully.

NOTE: For certain lubrication, adjustments, etc., refer to appropriate section of this booklet. All nuts, bolts, etc., on these Tractors are METRIC dimensions.

Tractor is shipped in individual container. The Tractor will be partially disassembled to make container as compact as possible. Wheels, fenders, ROPS, steering wheel, lift linkage, drawbar, and some attaching hardware will be removed.

Larger items will be fastened in container and remainder of items will be shipped in sundry boxes also in container.

Certain areas of Tractor may be covered with thin film of protective wax. It may be removed by steam cleaner and detergent solution during assembly.

Tractor will arrive with battery installed.

To assemble and pre-deliver the Tractor, proceed as follows:



CAUTION: Be observant of components (wheels, fenders, ROPS, etc.) that may be attached to, or held in position by container panels.

- 1. Remove wheels, fenders, and sundry boxes from container.
- 2. Disassemble container.
- 3. Inspect Tractor for damage and any evidence of coolant, fuel or lubricant leaks.
- 4. Inspect and remove all hardware securing Tractor to lower crate panel.

5. Left Fender:

- a. Remove tie strap holding control levers.
- b. Install and secure fender to floor pan and rear upright supports.
- c. Secure PTO lever bracket and transmission control lever guide (quadrant) to inside fender surface. Install with three bolts with lock washers and flat washers. Install one extra washer on each of the rear inside bolts.
- d. Install knobs on control lever(s).

6. Right Fender:

- a. Remove tie strap holding control lever(s) for shipping.
- b. Install and secure fender to floor pan and rear upright.
- c. Secure hydraulic control lever guide, (quadrant) to inside fender surface. Install using three bolts with lock washers and flat washers. Install one extra washer on each of the rear inside bolts.
- d. Install knobs on control lever(s).

ASSEMBLY & PRE-DELIVERY INSPECTION

7. **Front Bumper** – Install front bumper and secure with four bolts supplied in sundry box.

8. **Rear Lights** – Install red lights at rear of fenders. The hardware and wiring retainer straps are installed on the light for shipment.

After attaching light, attach electrical connectors to connectors located at fender and ROPS support.

Green wire with white stripe will attach to red wire with black stripe. Black ground wire will attach to orange wire with black stripe.

9. **Warning Flashers** – Install amber turn / warning lights to fenders as follows:

- a. Remove nut, internal lock washer and ground wire from light.
- b. Insert bolt with center wire down through hole in ROPS bracket and reinstall ground wire, internal lock washer and nut. Tighten nut.
- c. There are three wires, with single connectors, coming out at top rear of ROPS, support. Two wires are the same length. They attach to wires from warning / flasher light. Male and female couplers prevent improper installation.
- d. The remaining connector is used if a work light or radio is installed.

10. **Seat** – Remove bolts from seat frame and install seat using same hardware.

11. **Three-Point Hitch** – Three-point hitch is partially assembled, with lift links attached at the top to the lift shaft and away chains attached to the lower links.

- a. Attach lower links to Tractor attaching points and secure with lynch pins. Lower links will flare out ward t rear and retaining rings for spring will locate at underside.
- b. Connect clevis end of check chains to axle brackets and secure with clevis pin and cotter pin.
- c. Remove bolts at lower end of lift links and attach lift links to identical positions on lower links using bolts, lock washers and nuts removed. Lift link with turnbuckle adjustment is located on right side.

IMPORTANT: Bolts should be installed with heads to outside (nuts on inside) of lift link, to prevent tire interference during operation.

- d. Connect top link to anchor point on Tractor using 19 mm x 220 mm pin and lynch pin. Lock nut on top link barrel will locate to rear. Store top link implement pin (19 mm x 86 mm) and clip in rear end of top link.
- e. Connect spring to retaining rings at underside of lower links.

12. **Drawbar** – Install drawbar fully into bracket at rear of Tractor and secure with pin and clip provided.

13. Front Wheels -

- a. Carefully raise and block front of Tractor.
- b. Install wheel / tire assemblies and secure using bolts and lock washers. Tighten to 75 ft-lbs. (102 Nm).
- c. Remove blocking and lower front of Tractor.

14. Rear Wheels -

- a. Carefully raise and block rear of Tractor at each side to prevent pivoting of front axle.
- b. Install wheel / tire assemblies and secure using lock washers and bolts. Tighten to 80 ft-lbs. (120 Nm).

15. **Steering Wheel** – After wheels have been installed, place front wheels in a straight forward position.

- a. Remove cotter pin, nut and flat washer from steering wheel shaft.
- b. Use a screw driver or flat blade to pry between steering wheel and cap to remove cap.

IMPORTANT: Don't use a punch through hole in steering wheel to remove cap. It will separate the emblem from cap.

TH4330,4290,4260

PRE-DELIVERY INSPECTION

- Check that engine oil level is correct.
- Check that coolant level is correct.
- Check fan belt tension, 1/2" (10 mm) deflection, when subjected to a force of thumb pressure.
- Check that transmission oil level is correct.
- Install a sufficient amount of No.2 diesel fuel to complete pre-delivery service.
- Ensure clean and tight cable connections at battery. Battery must be securely mounted.
- Check air cleaner, element, hoses, and clamps for correct installation.
- Check brake pedal linkage for correct free-travel.
- Check steering and brake linkage cotter pins and lock nuts for secure installation.
- Check filter element and, all connections and clamps for hydraulic pump and filter.
- On 4-WD models, check oil level in front drive axle. Place fuel filter shutoff valve in the "ON" position. Take up position in operator's seat and engage parking brake.
- Place all shift levers in neutral.
- Place rear PTO and mid PTO selector levers in neutral.

NOTE: Engine will not start unless range shift lever is selected to neutral, rear PTO, and mid PTO selector lever are in neutral.

- Set throttle lever at half to full throttle and turn main switch counterclockwise 5-10.
- Turn main switch clockwise to "ON". Oil pressure and alternator warning lights will illuminate. Hold in "ON" position 1-2 seconds.

- Turn main switch to "START" to crank the engine. Release key to "ON" position the moment engine starts. Check that warning lights go out.
- Allow engine to warm up to operating temperature at about 1500 rpm.
- Operate Tractor to confirm it operates smoothly at all speeds including four-wheel drive (if so equipped).
- Operate PTO to see that it functions properly.
- Check that all lights and instruments operate properly.
- Check brakes for balanced operation.
- Check warm engine low idle speed, 850-900 rpm.
- Check warm engine high idle speed, 2500-2750 rpm.
- Set throttle lever at idle, shut off engine and check Tractor for coolant, lubricating oil or fuel leaks.
- Check that safety start system functions correctly.
- Lubricate all fittings.
- Check tire inflation pressures.
- Check front wheel toe-in.
- Test anti-freeze to see that it is adequate for local climate condition.

NOTE: Factory fill is set to -30 F(-34 cent-degrees).

- Check to see that all safety decals and safety switches are in place.
- Clean and polish sheet metal as necessary.
- Fill fuel tank to prevent moisture accumulation.
- Review this Operator's Manual with the customer when delivering or demonstrating Tractor..

ISEKI TRACTOR

FACTORY RECOMMENDED NEW TRACTOR PRE-DELIVERY INSPECTION CHECK LIST ISEKI

USER'S NAME	AREA	DATE
DEALER	ADDRESS	
TRACTOR MODEL	SERIAL NO	
ENGINE SERIAL NO	COUNTRY	

THIS PRE-DELIVERY INSPECTION CHECK LIST IS PROVIDED TO IDENTIFY THE ITEMS CHECKED AND NECESSARY ADJUSTED BY THE DEALER PRIOR TO DELIVERY OF THIS MACHINE.

Inpsected the following and adjusted if necessary.

ENGINE

□ Radiator filled with solution

- □ Cooling system connections
- □ Fan and alternator belt tension
- □ Engine oil
- All oil drain plugs
- □ Oil pressure
- □ Engine RPM(idle)
- □ Tyre inflation
- □ Front wheel hub bolts
- Rear wheel hub bolts
- \Box Torque all chassis bolts
- □ Transmission oil
- \Box Front reduction case
- □ Brake pedal free-play
- □ Clutch pedal free-play

- □ Engine RPM(full throttle)
- □ Governor performance
- □ Electrical connections
- \Box Service air cleaner
- \Box Air cleaner connections
- \Box Fuel line connections
- □ Injection pump oil

CHASSIS

- □ Hydraulic system performance
- Drive test
- Lubricate all grease fittings
- □ Power-assisted steering operation(if equipped)
- □ Front axle oil(4-WD)
- □ Front axle operation(4-WD)
- □ Operation manual with tractor

Explained the following to the owner.

- □ Operation manual
- □ Safety and safety start system
- □ Instruments and controls
- □ Breaking in the new tractor
- Power take-off operation
- Lubrication and maintenance schedule
- □ Explain use of Rollover Protective Structure (ROPS)

□ Fuel system servicing and cleanliness

- Draining of engine and radiator
- □ Air cleaner service
- □ Tyre care
- □ Wheel tread adjustment
- □ Storage

FACTORY RECOMMENDED NEW TRACTOR PRE-DELIVERY INSPECTION CHECK LIST ISEKI

USER'S NAME	AREA	DATE
DEALER	ADDRESS	
TRACTOR MODEL	SERIAL NO.	
ENGINE SERIAL NO	COUNTRY	

THIS PRE-DELIVERY INSPECTION CHECK LIST IS PROVIDED TO IDENTIFY THE ITEMS CHECKED AND NECESSARY ADJUSTED BY THE DEALER PRIOR TO DELIVERY OF THIS MACHINE.

Inpsected the following and adjusted if necessary.

ENGINE

□ Radiator filled with solution

- □ Cooling system connections
- □ Fan and alternator belt tension
- □ Engine oil
- All oil drain plugs
- □ Oil pressure
- □ Engine RPM(idle)
- □ Tyre inflation
- Front wheel hub bolts
- □ Rear wheel hub bolts
- □ Torque all chassis bolts
- □ Transmission oil
- □ Front reduction case
- □ Brake pedal free-play
- □ Clutch pedal free-play

- □ Engine RPM(full throttle)
- □ Governor performance
- □ Electrical connections
- □ Service air cleaner
- □ Air cleaner connections
- □ Fuel line connections
- □ Injection pump oil

CHASSIS

- □ Hydraulic system performance
- Drive test
- □ Lubricate all grease fittings
- □ Power-assisted steering operation(if equipped)
- □ Front axle oil(4-WD)
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Explained the following to the owner.

- □ Operation manual
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- □ Instruments and controls
- □ Breaking in the new tractor
- □ Power take-off operation
- Lubrication and maintenance schedule
- Explain use of Rollover Protective Structure (ROPS)

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- □ Fuel system servicing and cleanliness
- □ Draining of engine and radiator
- □ Air cleaner service
- □ Tyre care
- U Wheel tread adjustment
- □ Storage

WIRING DIAGRAM



INSTRUMENT PANEL

COMBINATION SWITCH

WIRING DIAGRAM

Je soussigné :		Yasuhiro Kondo	
0.1.	Marque déposée par le constructeur :	ISEKI	
0.2.	Modèle : Version(s) :	TH4 TH4330FH	
0.2.1. 0.3.	Dénomination commerciale : Numérotation dans la série du type:	ISEKI TH4330FH	
0.3.1.	Plaque du constructeur (emplacement et mode de fixation) :	Collée en dessous du siège du conducteur sur le tablier	
0.3.2.	Emplacement de la frappe à froid :	sur le côté droit du support d'essieu avant	
0.4. 0.5.	Catégorie de tracteur : Nom et adresse du constructeur :	T2 ISEKI & CO., LTD. 700, Umaki-cho, Matsuyama-shi, Ebimo kon, Japon	
0.6.	Emplacements de la plaque d'homologation : Sur le châssis du tracteur, la numérotation dans	en dessous du siège du conducteur sur le tablier TH32S 010352	
	la série du type commence au n° : - Numéro d'homologation du modèle :	e13*74/150*2001/3*0091*02	
	- Date :	22 JUIN 2005	
	Le tracteur peut être enregistré à titre définitif, sans nécessiter d'autres homologations, pour la conduite à :	droite	
	Fait à :	ville de MATUYAMA, préfecture de EHIME, Japon 30 JUIN 2005	

Date :

Signature



Fonction :

.Kono

General manager of quality control dept

1. CARACTERISTIQUES GENERALES DU TRACTEUR

1.1. 1.1.3.	Nombre d'essieux et de roues : Roues motrices :	2 essieux, 4 roues 2 ou 4 (Arrière permanentes, avant débrayables)
1.1.4.	Essieux freinés :	Essieu arrière
1.4.	Cabine de conduite réversible :	non
	Tracteur conçu pour la conduite à :	droite
1.6.	Genre :	TRA
	Carrosserie :	Agricole
2.	MASSES ET DIMENSIONS	
2.1.1. 2.2.1.	Poids à vide en ordre de marche : Poids total autorisé en charge :	1110 kg 1875 kg

2.2.2. Répartition de ce poids entre les essieux :

avant : 875 kg arrière : 1000 kg

2.2.3.1. Masses maximales techniquement admissibles

sur chaque essieu :

Essieu n°	Pneus (dimensions)	Capacité de charge	Masse maximum Techniquement admissible	Charge verticale admissible maximum au point d'attelage
1	24X8.5-12	1100kg	875 kg	500 ka
2	315/80D-16	1370 kg	1000 kg	500 kg
2.3.	Contrepoids: (masse totale, matière	, nombre de	Poids total : 90 Kg, Ma	tière: fonte
	composants) :		Nombre de composan	ts : 6
2.4.	Poids maximum remorquable :			
2.4.1.	Sans freins :		SUUU Kg	
2.4.2.	Avec systeme de freinage separe :		sans objet	
2.4.3.	Avec freins a inertie :		3000 Kg	
2.4.4.	Avec assistance au freinage . Deide total roulant autoricó :		sans objet	
2.4.5.	Polius total rould it autorise .		4075 KY	
2.4.0.	Hauteur du point d'attelage au-dess	ue du eol		
2.4.0.1.	Maximum ·	us uu soi	300 mm	
24612	Minimum ·			
2462	Distance par rapport au plan vertica	l passant	280 mm	
2	par l'axe de l'essieu arrière :	puodant		
2.5.	Empattement :		1665 mm	
2.6.	Voies mini/maxi :		Essieu 1: 980 mm	
			Essieu 2: 945 mm	
2.7.1.	Longueur :		2925 mm	
2.7.2.	Largeur :		1260 mm	
2.7.3.	Hauteur :		2350 mm	

3. MOTEUR

3.1.1. 3.1.2. 3.1.3. 3.1.6.	Marque : Dénomination : Identification : Description générale : - allumage : -alimentation :	ISEKI E3CD-B10 poinçonné sur le côté gauche du bloc moteur allumage par compression injection indirecte
3.1.7. 3.2.1.6. 3.2.1.7. 3.6.	-cycle : Carburant : Nombre et disposition des cylindres : Cylindrée : Puissance nominale :	quatre temps gazole 3 cylindres en ligne 1498cm ³ 23.5 kW / 2600 tr/min
3.6.1.	Puissance à la prise de force :	19.4 kW / 605 et 1090 tr/min (vitesse nominale prise de force)
4.	TRANSMISSION	
4.5. 4.7.	Boîte de vitesse Nombre de rapports - avant : - arrière : Vitesse maximum théorique :	3 1 28.3 Km/h (Pneus 315/80D-16)
4.7.1.	Vitesse maximum réelle :	26.1 Km/h (Pneus 315/80D16)
7.	DIRECTION	
7.1.	Туре :	assistée
8.	FREINAGE	
8.11.4.1. 8.11.4.2.	Sortie hydraulique simple voie : Sortie hydraulique double voie :	sans objet sans objet
10.	STRUCTURE DE PROTECTION EN C	AS DE RETOURNEMENT, SIEGE, PLATE-FORME
10.1.	Cadre/cabine - marque : - marque d'homologation :	sans objet
10.1.3.	Arceau de sécurité : -type : - marque : - marque d'homologation :	arrière rabattable ISEKI SV1 e13 0053
10.3.2.	Siège(s) passager	sans chiet
10.4. 10.4.1. 10.4.3.	Plate-forme : -Dimensions : -Charge techniquement admise :	sans objet
11.	FEUX ET VOYANTS LUMINEUX	
11.2.	Appareils en option :	-Feux de route -Feu tournant véhicule lent

12.	DIVERS	
12.2.	Accouplement mécanique entre le tracteur et la remorque :	Crochet
12.2.1. 12.2.2. 12.2.3. 12.2.4. 12.3.	Modèle : Marque : Marque(s) d'homologation : Charge horizontale maximum : Charge verticale maximum : Relevage hydraulique (attelage 3 points) :	TRH-1740B ISEKI ST e13 0024 3500 kg 500 kg Oui
13.	NIVEAU SONORE EXTERIEUR	
40.4	Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase :	74/151/EEC Annexe 4, modifié par 98/38/EC
13.1. 13.2. 14.	a l'arret : en mouvement : NIVEAU SONORE AUX OREILLES DU	75.5 dB (A) 79.6 dB (A)
	Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase :	77/311/EEC modifié par 97/54/EC et 2000/63/EC : 84.8 dB(A)
15.	EMISSIONS D'ECHAPPEMENT	
	Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase :	2000/25/EC et77/537/EEC modifié par 97/54/EC (Fumées)
15.1.	Résultats des tests CO : HC : Nox : Particules en suspension : Fumée :	2.37 g/kWh 0.05 g/kWh 5.49 g/kWh 0.493 g/kWh 1.8 m ⁻¹
15.2.	Résultats des tests CO : NOx : NMHC : CH ₄ : Particules en suspension :	S.O.
16.	CHEVAUX-FISCAUX OU CLASSE(S) FISCALES France :	6 ch
17.	REMARQUES	· · · · ·

Je soussigné :		Yasuhiro Kondo
0.1.	Marque déposée par le constructeur :	ISEKI
0.2.	Modèle : Version(s) :	TH4 TH4290FH
0.2.1. 0.3.	Dénomination commerciale : Numérotation dans la série du type:	ISEKI TH4290FH
0.3.1.	Plaque du constructeur (emplacement et mode de fixation) :	Collée en dessous du siège du conducteur sur le tablier
0.3.2.	Emplacement de la frappe à froid :	sur le côté droit du support d'essieu avant
0.4. 0.5.	Catégorie de tracteur : Nom et adresse du constructeur :	T2 ISEKI & CO., LTD. 700, Umaki-cho, Matsuyama-shi, Ebime kan Japon
0.6.	Emplacements de la plaque d'homologation :	en dessous du siège du conducteur sur le tablier
	Sur le châssis du tracteur, la numérotation dans la série du type commence au n° : - Numéro d'homologation du modèle :	TH28S 010039
	- Date :	13 FEVRIER 2004
	Le tracteur peut être enregistré à titre définitif, sans nécessiter d'autres homologations, pour la conduite à :	droite
	Fait à :	ville de MATUYAMA, préfecture de EHIME, Japon

Date :

Signature



Fonction :

23 FEVRIER 2004

Kone

General manager of quality control dept

1. CARACTERISTIQUES GENERALES DU TRACTEUR

1.1.	Nombre d'essieux et de roues :	2 essieux, 4 roues
1.1.3.	Roues motrices :	2 ou 4 (Arrière permanentes, avant débrayables)
1.1.4.	Essieux freinés :	Essieu arrière
1.4.	Cabine de conduite réversible :	non
	Tracteur conçu pour la conduite à :	droite
1.6.	Genre :	TRA
	Carrosserie :	Agricole
2.	MASSES ET DIMENSIONS	
2.1.1.	Poids à vide en ordre de marche :	1115 kg
2.2.1.	Poids total autorisé en charge :	1875 kg
0 0 0		

2.2.2. Répartition de ce poids entre les essieux :

avant : 875 kg arrière : 1000 kg

2.2.3.1. Masses maximales techniquement admissibles

sur chaque essieu :

Essieu n°	Pneus (dimensions)	Capacité de charge	Masse maximum Techniquement admissible	Charge verticale admissible maximum au point d'attelage
1	6-14	900 kg	875 kg	500 kg
2	9.5-22	1380 kg	1000 kg	500 kg
2.3.	Contrepoids: (masse totale, matière	, nombre de	Poids total : 90 Kg, Ma	tière: fonte
	composants) :		Nombre de composan	ts : 6
2.4.	Poids maximum remorquable :			
2.4.1.	Sans freins :		3000 kg	
2.4.2.	Avec systeme de freinage separe :		sans objet	
2.4.3.	Avec freins a inertie :		3000 kg	
2.4.4.	Avec assistance au freinage :		sans objet	
2.4.5.	Polas total roulant autorise :		4875 Kg	
2.4.6.	Position du point d'attelage :			
2.4.0.1.	Maximum :	us du soi	265 mm	
2.4.0.1.1.	Minimum:		365 11111	
2.4.0.1.2.	Distance par rapport au plan vortica	Ingegant	280 mm	
2.4.0.2.	Distance par rapport au pian vertical passant nar l'axe de l'essieu arrière :		200 mm	
2.5.	Empattement :		1665 mm	
2.6.	Voies mini/maxi :		Essieu 1: 875 mm	
			Essieu 2: 880 mm	
2.7.1.	Longueur :		2925 mm	
2.7.2.	Largeur :		1120 mm	
2.7.3.	Hauteur :		2395 mm	

3. MOTEUR

3.1.1. 3.1.2. 3.1.3. 3.1.6.	Marque : Dénomination : Identification : Description générale : - allumage : -alimentation :	ISEKI E3CF-B10 poinçonné sur le côté gauche du bloc moteur allumage par compression injection indirecte
3.1.7. 3.2.1.6. 3.2.1.7. 3.6.	-cycle : Carburant : Nombre et disposition des cylindres : Cylindrée : Puissance nominale :	quatre temps gazole 3 cylindres en ligne 1463cm ³ 20.6 kW / 2500 tr/min
3.6.1.	Puissance à la prise de force :	17.0 kW / 605 et 1090 tr/min (vitesse nominale prise de force)
4.	TRANSMISSION	
4.5. 4.7.	Boîte de vitesse Nombre de rapports - avant : - arrière : Vitesse maximum théorique :	3 1 30.5 Km/h (Pneus 9.5-22)
471	Vitesse maximum réelle :	27.9 Km/h (Pneus 9.5-22)
7.	DIRECTION	27.5 Kill/II (I 11605 5.5-22)
7.1.	Туре :	assistée
8.	FREINAGE	
8.11.4.1. 8.11.4.2.	Sortie hydraulique simple voie : Sortie hydraulique double voie :	sans objet sans objet
10.	STRUCTURE DE PROTECTION EN C	AS DE RETOURNEMENT, SIEGE, PLATE-FORME
10.1.	Cadre/cabine - marque : - marque d'homologation :	sans objet
10.1.3.	Arceau de sécurité : -type : - marque : - marque d'homologation :	arrière rabattable ISEKI SV1 e13 0053
10.3.2.	Siège(s) passager	
10.4. 10.4.1. 10.4.3.	- Nombre : Plate-forme : -Dimensions : -Charge techniquement admise :	sans objet
11.	FEUX ET VOYANTS LUMINEUX	
11.2.	Appareils en option :	-Feux de route -Feu tournant véhicule lent

12.	DIVERS	
12.2.	Accouplement mécanique entre le tracteur et la remorque :	Crochet
12.2.1. 12.2.2. 12.2.3. 12.2.4. 12.3.	Modèle : Marque : Marque(s) d'homologation : Charge horizontale maximum : Charge verticale maximum : Relevage hydraulique (attelage 3 points) :	TRH-1740B ISEKI ST e13 0024 3500 kg 500 kg Oui
13.	NIVEAU SONORE EXTERIEUR	
40.4	Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase :	74/151/EEC Annexe 4, modifié par 98/38/EC
13.1. 13.2	a l'arret : en mouvement :	75.5 dB (A) 79.6 dB (A)
14	NIVEAU SONORE AUX OREILLES DU	
	CONDUCTEUR Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase :	77/311/EEC modifié par 97/54/EC et 2000/63/EC : 85.1 dB(A)
15.	EMISSIONS D'ECHAPPEMENT	
	Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase :	2000/25/EC et77/537/EEC modifié par 97/54/EC (Fumées)
15.1.	Résultats des tests	
		sans objet sans objet
	Nox :	sans objet
	Particules en suspension :	sans objet
15.2	Fumee : Résultats des tests	2.2 m ⁻ sans objet
10.2.	CO :	
	NOx :	
	Particules en suspension :	
16.	CHEVAUX-FISCAUX OU CLASSE(S) FISCALES	
47	France :	6 ch.
17.	KEINIAKQUES	

Je soussigné :		Yasuhiro Kondo
0.1.	Marque déposée par le constructeur :	ISEKI
0.2.	Modèle : Version(s) :	TH4 TH4260FH
0.2.1. 0.3.	Dénomination commerciale : Numérotation dans la série du type:	ISEKI TH4260FH
0.3.1.	Plaque du constructeur (emplacement et mode de fixation) :	Collée en dessous du siège du conducteur sur le tablier
0.3.2.	Emplacement de la frappe à froid :	sur le côté droit du support d'essieu avant
0.4. 0.5.	Catégorie de tracteur : Nom et adresse du constructeur :	T2 ISEKI & CO., LTD. 700, Umaki-cho, Matsuyama-shi, Ebimo kon, Japon
0.6.	Emplacements de la plaque d'homologation :	en dessous du siège du conducteur sur le
	Sur le châssis du tracteur, la numérotation dans la série du type commence au n° :	TH26S
	- Numéro d'homologation du modèle :	e13*2001/3*0091*00
	- Date :	13 FEVRIER 2004
	Le tracteur peut être enregistré à titre définitif, sans nécessiter d'autres homologations, pour la conduite à :	droite
	Fait à :	ville de MATUYAMA, préfecture de EHIME, Japon

Date :

Signature



Fonction :

23 FEVRIER 2004

Kone

General manager of quality control dept

1. CARACTERISTIQUES GENERALES DU TRACTEUR

1.1.	Nombre d'essieux et de roues :	2 essieux, 4 roues
1.1.3.	Roues motrices :	2 ou 4 (Arrière permanentes, avant débrayables)
1.1.4.	Essieux freinés :	Essieu arrière
1.4.	Cabine de conduite réversible :	non
	Tracteur conçu pour la conduite à :	droite
1.6.	Genre :	TRA
	Carrosserie :	Agricole
2.	MASSES ET DIMENSIONS	
2.1.1.	Poids à vide en ordre de marche :	1100 kg
221	Poids total autorisé en charge :	1875 ka

- 2.2.1. Poids total autorisé en charge :2.2.2. Répartition de ce poids entre les essieux :
 - 1875 kg avant : 875 kg
 - arrière : 1000 kg
- Masses maximales techniquement admissibles 2.2.3.1.

sur chaque essieu :

Essieu n°	Pneus (dimensions)	Capacité de charge	Masse maximum Techniquement admissible	Charge verticale admissible maximum au point d'attelage
1	6-14	900 kg	875 kg	500 kg
2	9.5-22	1380 kg	1000 kg	500 kg
2.3.	Contrepoids: (masse totale, matière	, nombre de	Poids total : 90 Kg, Ma	tière: fonte
	composants) :		Nombre de composan	ts : 6
2.4.	Poids maximum remorquable :			
2.4.1.	Sans freins :		3000 kg	
2.4.2.	Avec systeme de freinage separe :		Sans objet	
2.4.3.	Avec freins a inertie :		3000 Kg	
2.4.4.	Avec assistance au freinage :		sans objet	
2.4.5.	Polas total roulant autorise :		4875 Kg	
2.4.6.	Position du point d'attelage :			
2.4.0.1.	Maximum :	us du soi	265 mm	
2.4.0.1.1.	Minimum:		305 11111	
2.4.0.1.2.	Distance par rapport au plan vortica	Ingegant	280 mm	
2.4.0.2.	pistance par rapport au pian vertical passant nar l'axe de l'essieu arrière :		200 mm	
2.5.	Empattement :		1665 mm	
2.6.	Voies mini/maxi :		Essieu 1: 875 mm	
-	-		Essieu 2: 880 mm	
2.7.1.	Longueur :		2925 mm	
2.7.2.	Largeur :		1120 mm	
2.7.3.	Hauteur :		2395 mm	

3. MOTEUR

3.1.1. 3.1.2. 3.1.3. 3.1.6.	Marque : Dénomination : Identification : Description générale : - allumage : -alimentation :	ISEKI E3CE-B03 poinçonné sur le côté gauche du bloc moteur allumage par compression injection indirecte
3.1.7. 3.2.1.6. 3.2.1.7. 3.6.	-cycle : Carburant : Nombre et disposition des cylindres : Cylindrée : Puissance nominale :	quatre temps gazole 3 cylindres en ligne 1429cm ³ 17.7 kW / 2500 tr/min
3.6.1.	Puissance à la prise de force :	14.6 kW / 580 tr/min (vitesse nominale prise de force)
4.	TRANSMISSION	
4.5. 4.7.	Boîte de vitesse Nombre de rapports - avant : - arrière : Vitesse maximum théorique :	3 1 30.5 Km/h (Pneus 9.5-22)
4.7.1.	Vitesse maximum réelle :	27.9 Km/h (Pneus 9.5-22)
7.	DIRECTION	
7.1.	Туре :	assistée
8.	FREINAGE	
8.11.4.1. 8.11.4.2.	Sortie hydraulique simple voie : Sortie hydraulique double voie :	sans objet sans objet
10.	STRUCTURE DE PROTECTION EN CAS DE RETOURNEMENT, SIEGE, PLATE-FORME	
10.1.	Cadre/cabine - marque : - marque d'homologation :	sans objet
10.1.3.	Arceau de sécurité : -type : - marque : - marque d'homologation :	arrière rabattable ISEKI SV1 e13 0053
10.3.2.	Siège(s) passager	sans chiet
10.4. 10.4.1. 10.4.3.	Plate-forme : -Dimensions : -Charge techniquement admise :	sans objet
11.	FEUX ET VOYANTS LUMINEUX	
11.2.	Appareils en option :	-Feux de route -Feu tournant véhicule lent

12.	DIVERS	
12.2.	Accouplement mécanique entre le tracteur et la remorque :	Crochet
12.2.1. 12.2.2. 12.2.3. 12.2.4. 12.3.	Modèle : Marque : Marque(s) d'homologation : Charge horizontale maximum : Charge verticale maximum : Relevage hydraulique (attelage 3 points) :	TRH-1740B ISEKI ST e13 0024 3500 kg 500 kg Oui
13.	NIVEAU SONORE EXTERIEUR	
13.1. 13.2.	Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase : à l'arrêt : en mouvement :	74/151/EEC Annexe 4, modifié par 98/38/EC 75.5 dB (A) 79.6 dB (A)
14	NIVEAU SONORE AUX OREILLES DU	
	CONDUCTEUR Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase :	77/311/EEC modifié par 97/54/EC et 2000/63/EC : 84.1 dB(A)
15.	EMISSIONS D'ECHAPPEMENT	
	Numéro de directive de base et amendement le plus récent en vigueur en matière d'homologation. Pour une directive comportant deux ou plus de phases d'application, indiquer la phase :	2000/25/EC et77/537/EEC modifié par 97/54/EC (Fumées)
15.1.	Résultats des tests CO : HC : Nox : Particules en suspension : Fumée :	2.37 0.05 5.49 0.493 2.2 m ⁻¹
15.2.	Résultats des tests CO : NOx : NMHC : CH ₄ : Particules en suspension :	sans objet
16.	CHEVAUX-FISCAUX OU CLASSE(S) FISCALES	C ab
17.	REMARQUES	o cn.



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