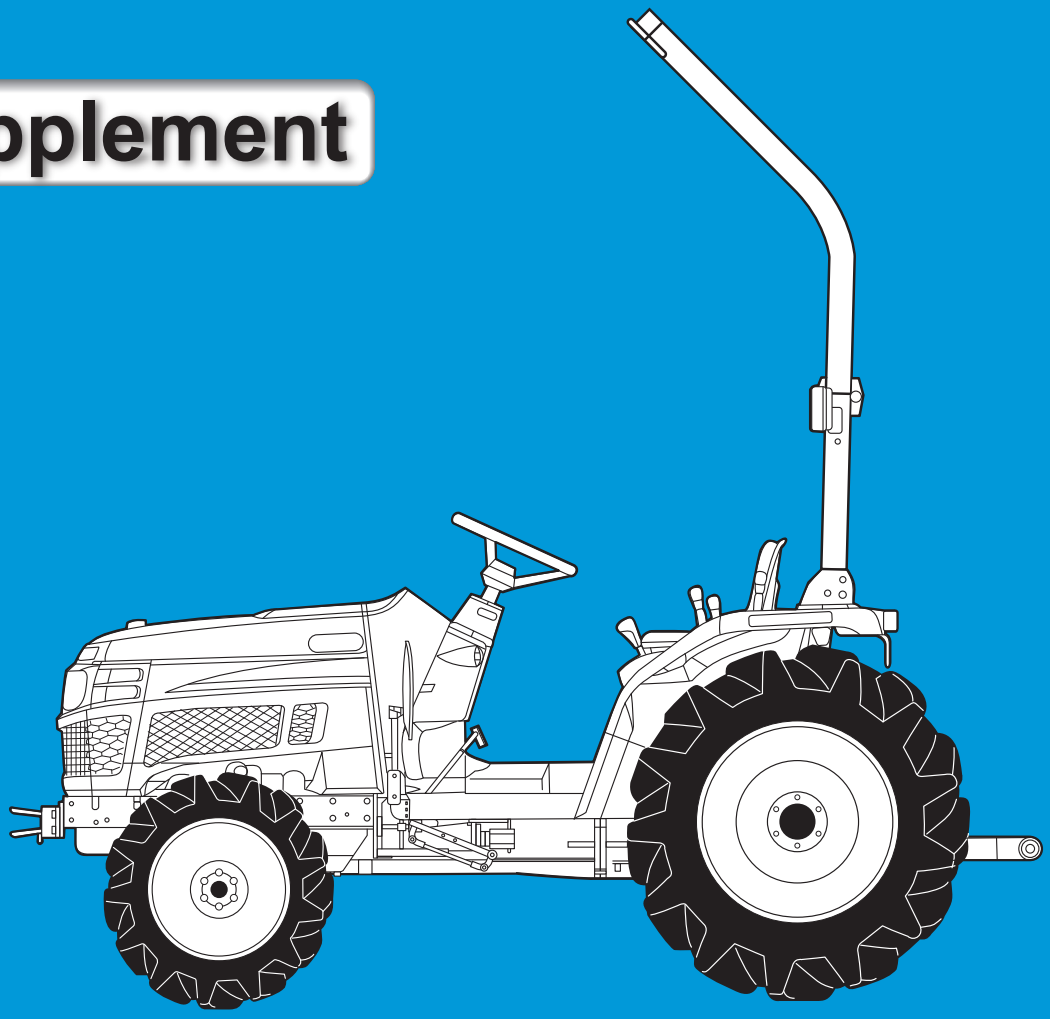
ISEKI TRACTORS

Supplement

4WD



Operation Manual

MODELS:

TH4260
TH4290
TH4330

ISEKI

TOWING

Ask your ISEKI dealer for towing Tractor as much as possible. If such cases as listed below, call your ISEKI dealer as transmissiom might be broken.

- Although the engine runs, Tractor cannot start to move.
- Unusual noise occurs.

FIG. 9: Hook up the rope to the front hitch (1). The distance between towing vehicle and Tracor should be less than 5m. Move the rage shift lever to the neutral position. Relese the parking brake lock.

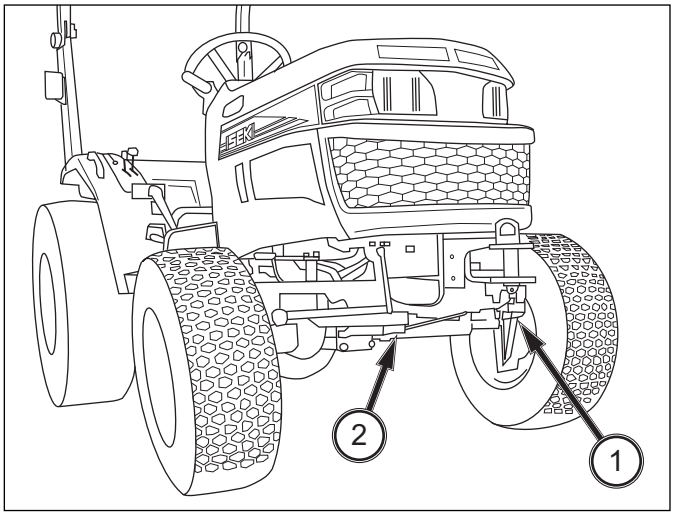


FIG. 12

JACKING

When jacking Tractor, place the tractor on level, hard ground which is sufficiently illuminated, otherwise unexpected accidents may occur. Follow the instructions listed below:

- Apply parking brakes.
- Disengage all PTO.
- Place all gear shift levers in neutral.
- Remove the starter key.
- Place the jack on level.

FIG. 10: When raising the rear axle, suitable shims (1) should be wedged between the front axle and the front frame.

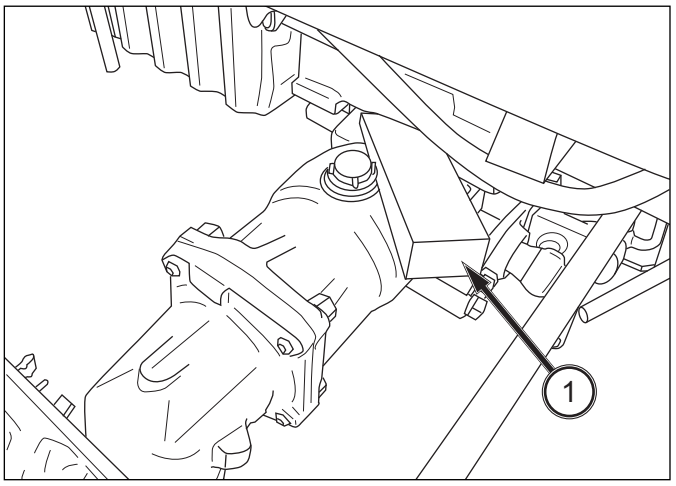


FIG. 13

FIGS. 11 & 9: When raising the rear axle, the jacking point is the front hitch (1) or the front pivot (2). For the front axle, the jacking point is the rear hitch (3).

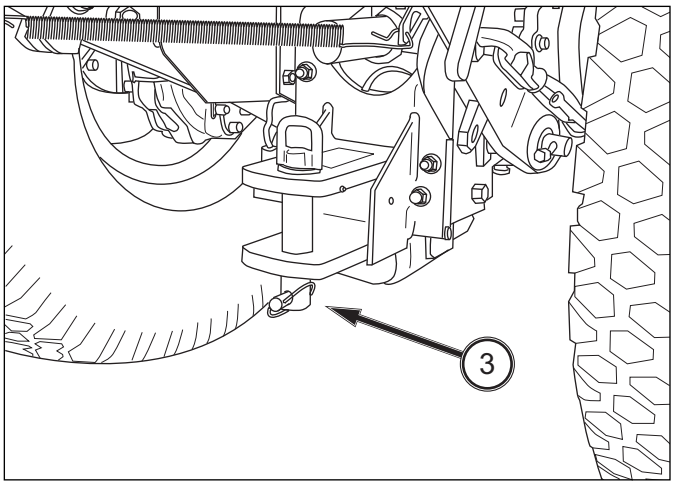


FIG. 14

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 at 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.
(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.

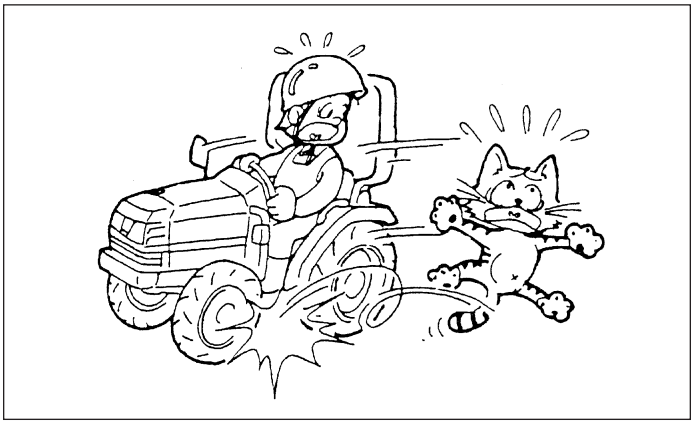


FIG. 1-10

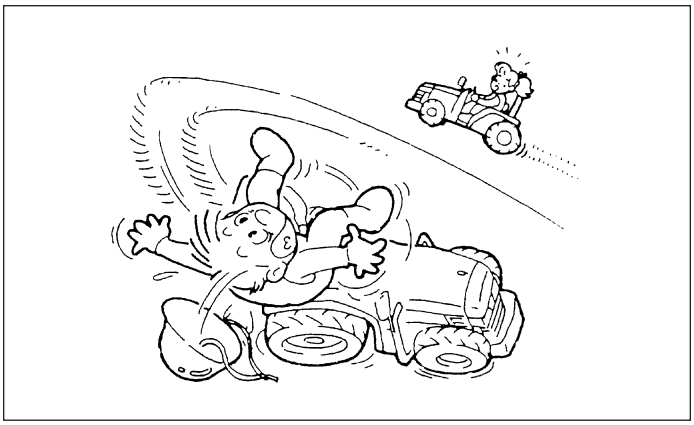


FIG. 1-11

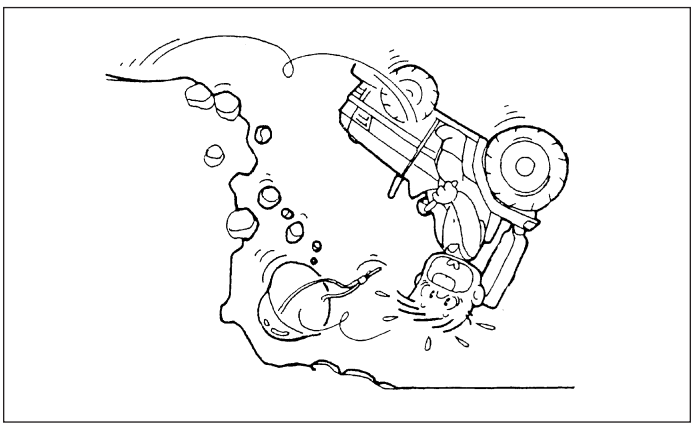


FIG. 1-12

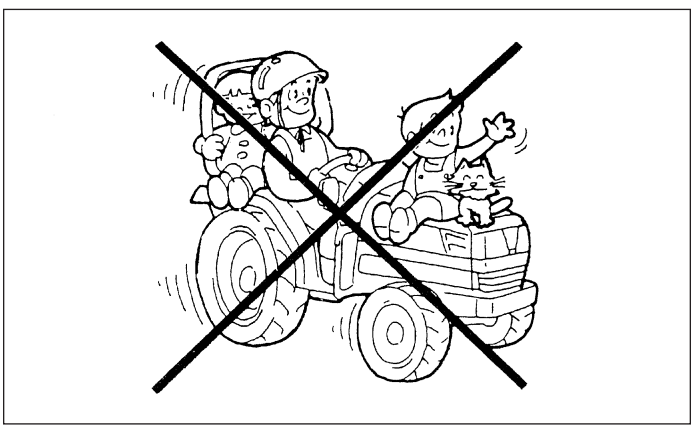
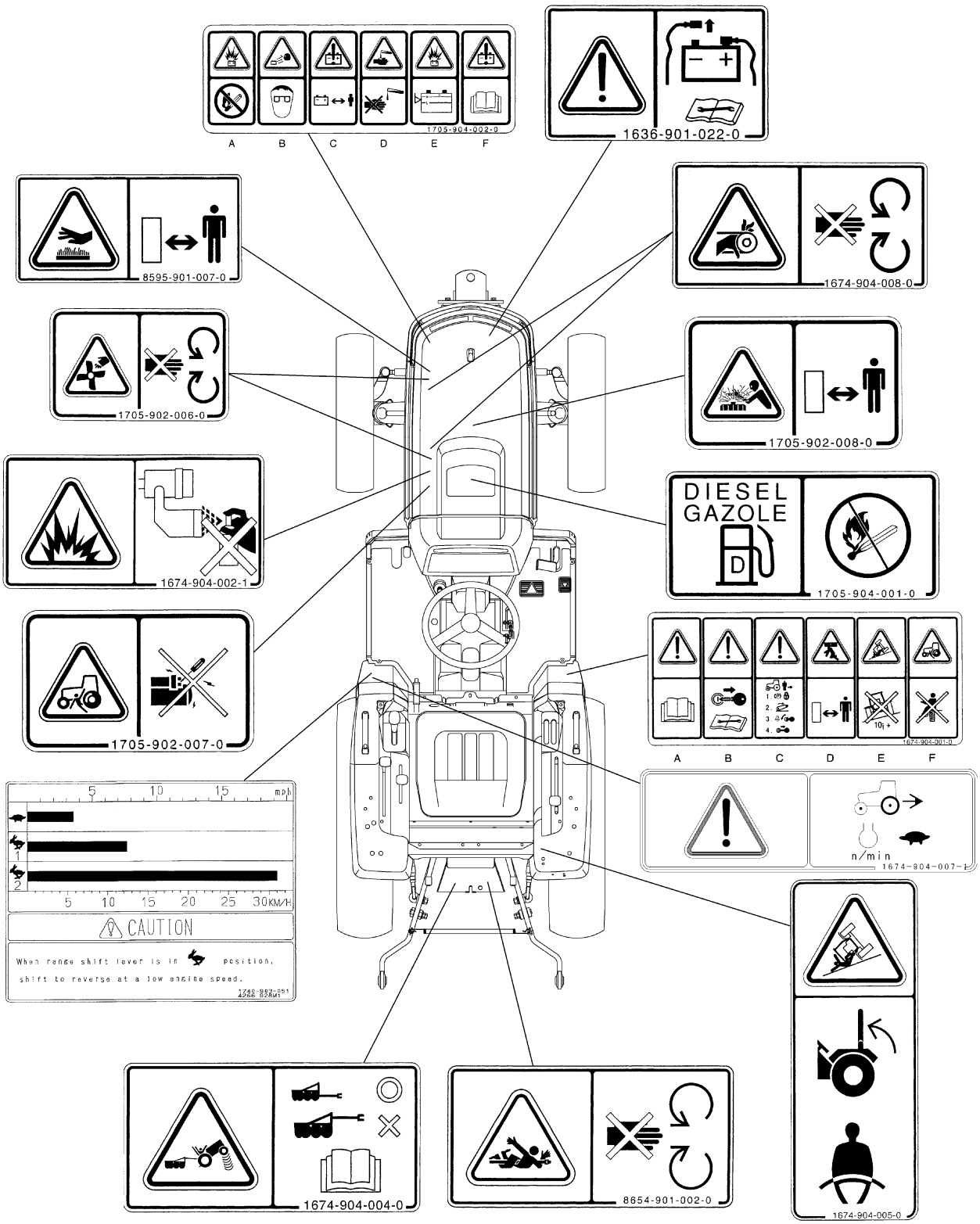


FIG. 1-13

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.

FIG. 4-13: 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.

Power Take-Off (PTO) Switch (Hydrostatic transmission)

FIG. 4-14: 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.

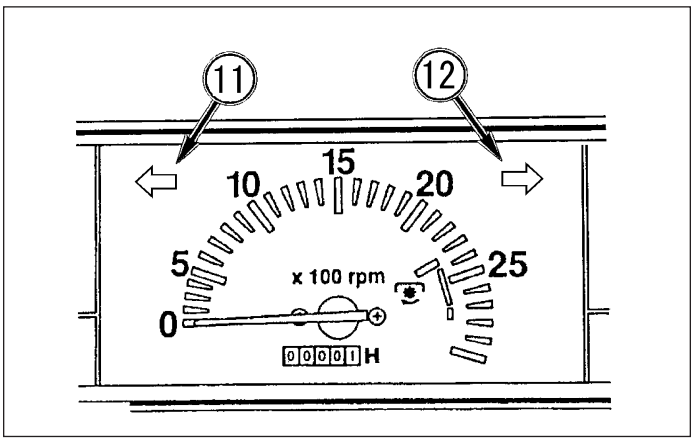


FIG. 4-13

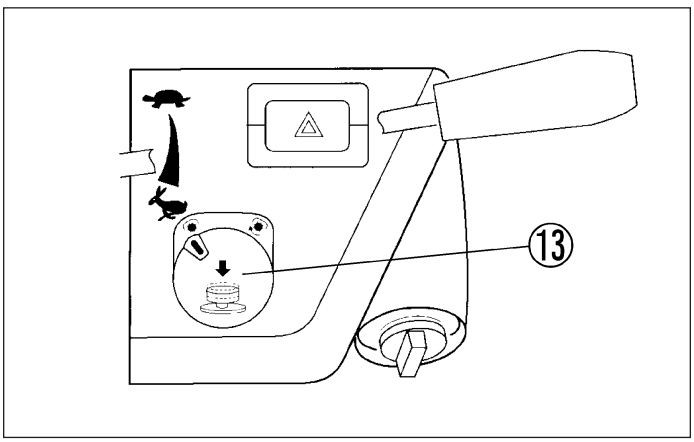


FIG. 4-14

FIG.5-4: 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.

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. 6 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 5-10 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 (4˚C) 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 either 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.

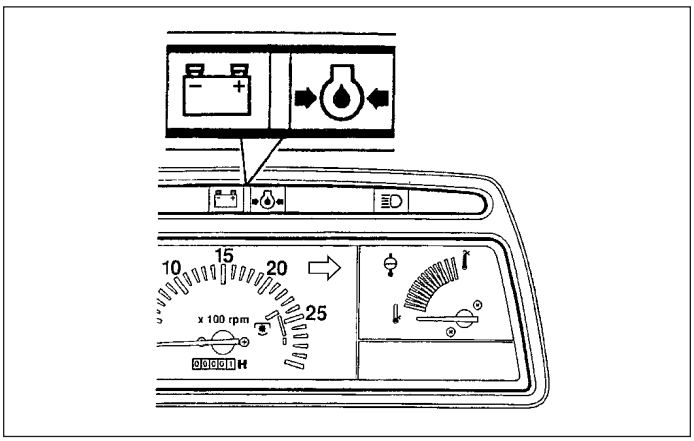


FIG. 5-4

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. 5-27: 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.

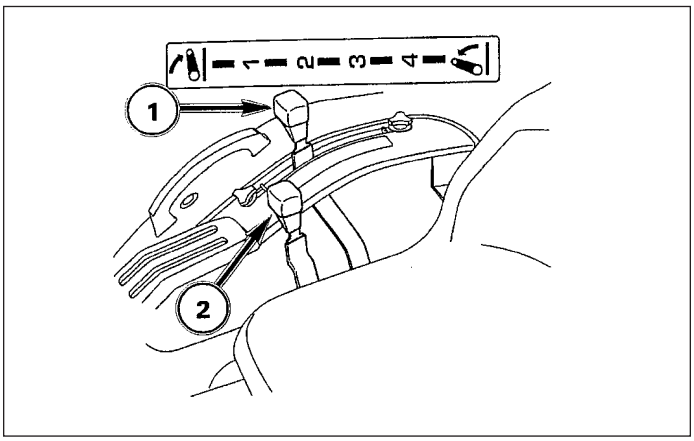


FIG. 5-27

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. 5-28: 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.

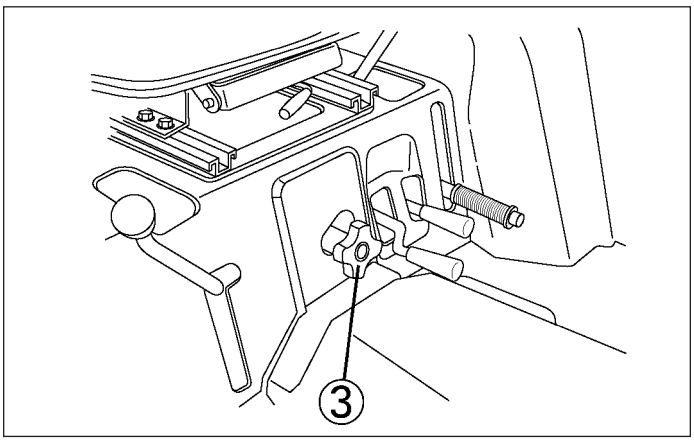


FIG. 5-28

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.

LUBRICATION / FILL POINTS
(Hydrostatic Transmission)

FIG. 6-2: General layout of lubrication, fill and drain locations on Tractor:

Ref.	Description	Type
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.	Auto Accelerator Pivot	Grease
13.	Tie-rod End	Grease

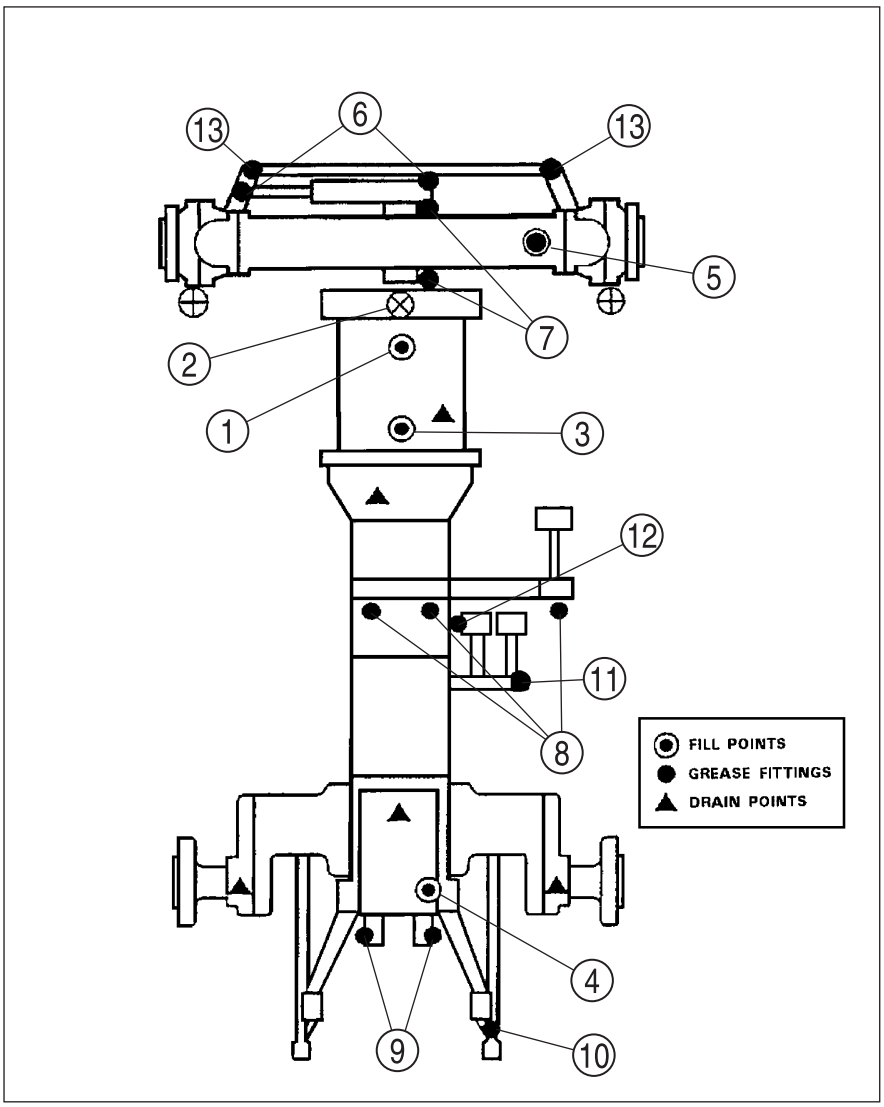


FIG. 6-2

Air-Bleeding Fuel System

FIGS. 6-28 & 6-29: 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. 6-30: 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.

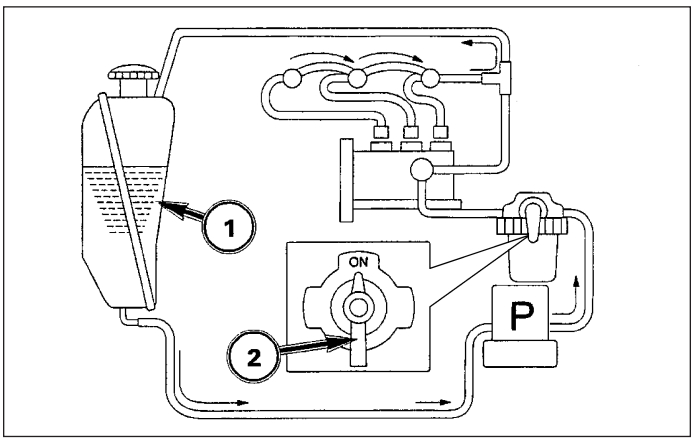


FIG. 6-28

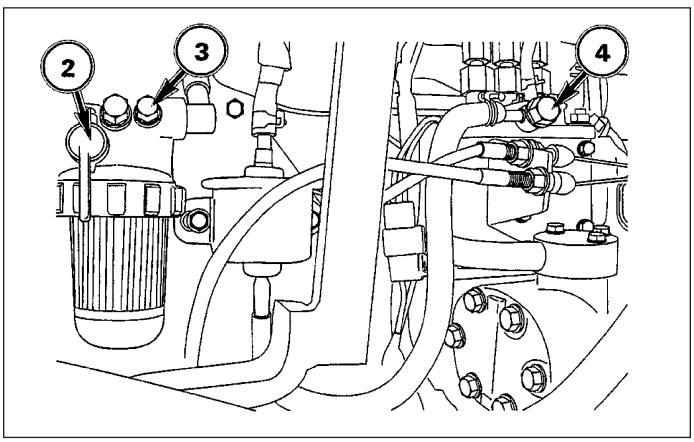


FIG. 6-29

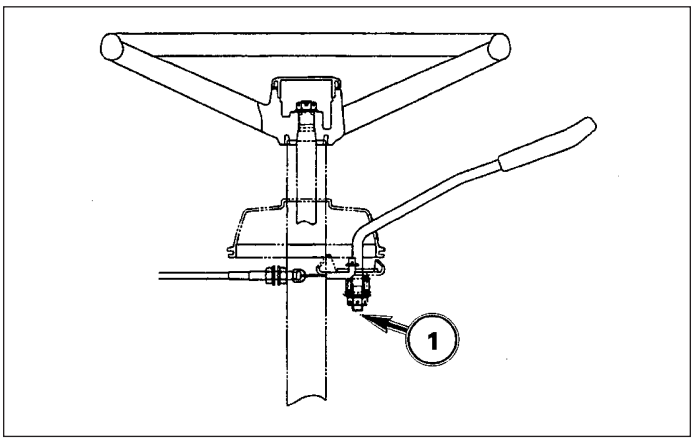


FIG. 6-30

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. 6-44: Front tire tread widths.

Front Tire type (Mechanical)	Tread Width (mm)	
	A	B
Ag.Tires	960	Not Recommended
Turf Tires	1067	Not Recommended
Wide Turf Tire	1115	Not Recommended
Narrow Agri. Tire	960	Not Recommended
Oversize Agri. Tire	990	Not Recommended

Front Tire type (Hydrostatic)	Tread Width (mm)	
	A	B
Ag.Tires	880	Not Recommended
Turf Tires	980	Not Recommended
Wide Turf Tire	985	Not Recommended

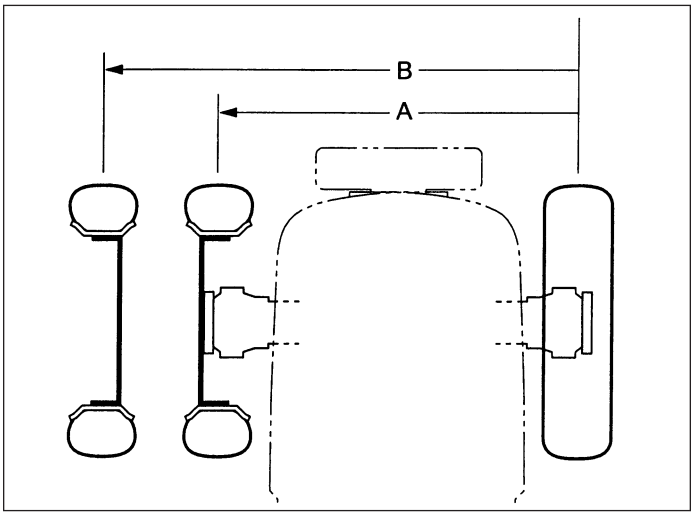


FIG. 6-44

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. 6-45: Rear tire tread widths.

Front Tire type (Mechanical)	Tread Width (mm)	
	A	B
Ag.Tires	1096	Not Recommended
Turf Tires	946	966
Wide Turf Tire	931	980
Narrow Agri. Tire	880	Not Recommended
Oversize Agri. Tire	940	Not Recommended

Front Tire type (Hydrostatic)	Tread Width (mm)	
	A	B
Ag.Tires	875	Not Recommended
Turf Tires	945	Not Recommended
Wide Turf Tire	1040	Not Recommended

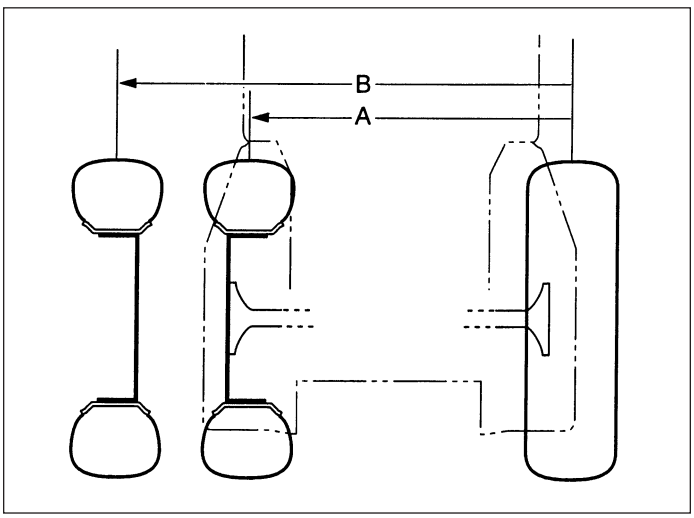
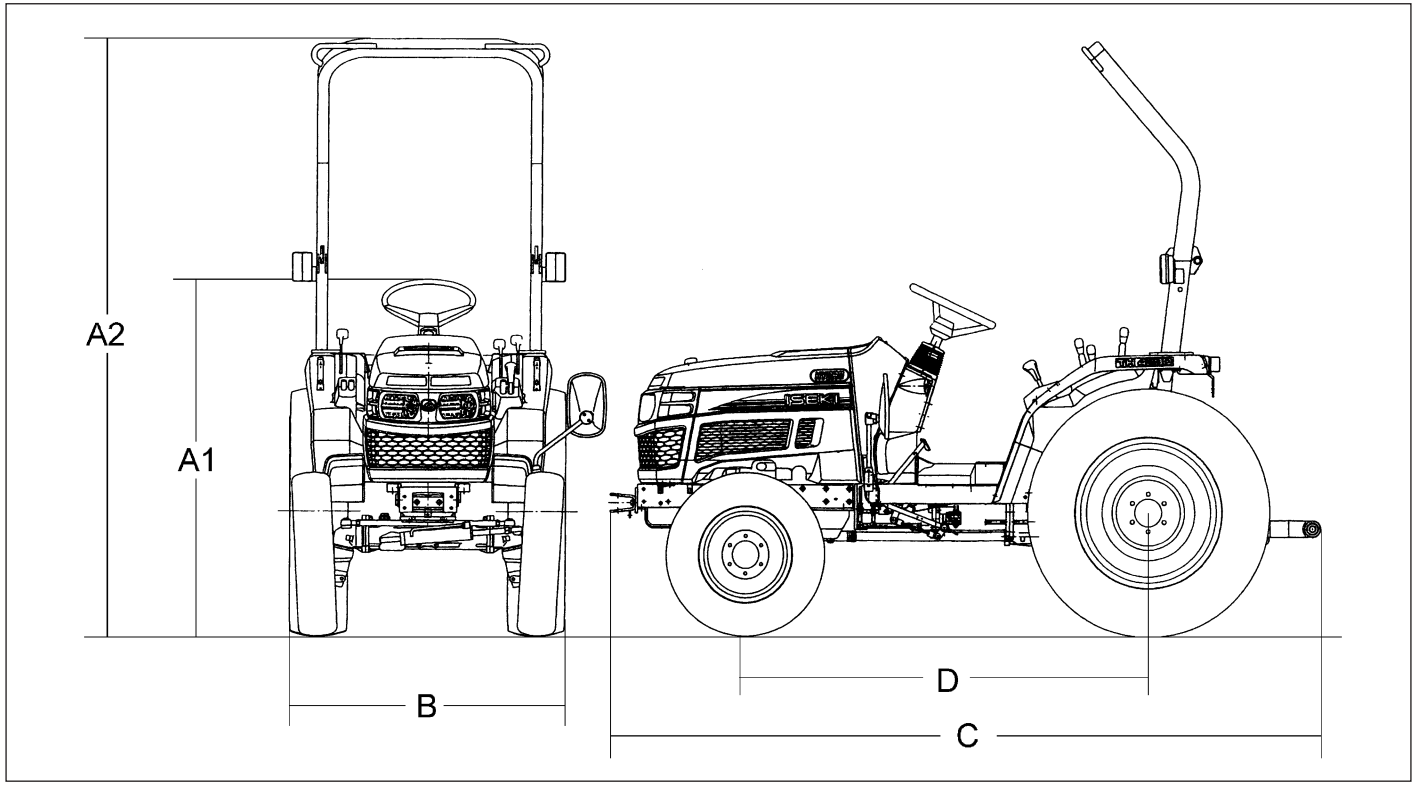


FIG. 6-45

GENERAL DIMENSIONS (Mechanical Transmission)



	Reference	TH4260					TH4290				
		Agri. Tire Front: 6 - 14 Rear: 12.4 - 16	Turf Tire Front: 24 x 8.50 - 12 Rear: 315/80D - 16	Wide Turf Tire Front: 26 x 12.00 - 12 Rear: 13.6 - 16	Narrow Agri. Tire Front: 6 - 14 Rear: 9.5 - 22	Oversize Agri. Tire Front: 7 - 14 Rear: 9.5 - 24	Agri. Tire Front: 6 - 14 Rear: 12.4 - 16	Turf Tire Front: 24 x 8.50 - 12 Rear: 315/80D - 16	Oversize Turf Tire Front: 26 x 12.00 - 12 Rear: 13.6 - 16	Narrow Agri. Tire Front: 6 - 14 Rear: 9.5 - 22	Oversize Agri. Tire Front: 7 - 14 Rear: 9.5 - 24
A1	Height of Steering Wheel	1395 mm	1370 mm	1405 mm	1415 mm	1440 mm	1395 mm	1370 mm	1405 mm	1415 mm	1440 mm
A2	Overall Height ROPS	2375 mm	2350 mm	2400 mm	2395 mm	2420 mm	2425 mm	2400 mm	2435 mm	2445 mm	2470 mm
B	Overall Width	1410 mm (rear wheel)	1340 mm (front wheel)	1480 mm (front wheel)	1225 mm (winker)	1260 mm (front wheel)	1410 mm (rear wheel)	1340 mm (front wheel)	1480 mm (front wheel)	1225 mm (winker)	1260 mm (front wheel)
C	Overall Length	2920 mm									
D	Wheelbase	1665 mm									
-	Min. Ground Clearance	225 mm (under mid PTO case)	200 mm (under mid PTO case)	250 mm (under mid PTO case)	245 mm (under mid PTO case)	270 mm (under mid PTO case)	225 mm (under mid PTO case)	200 mm (under mid PTO case)	250 mm (under mid PTO case)	245 mm (under mid PTO case)	270 mm (under mid PTO case)
-	Turning diameter w/o brake	5600 mm									
-	Weight (with ROPS)	980 kg	970 kg	995 kg	975 kg	985 kg	955 kg	940 kg	955 kg	950 kg	960 kg
-	Weight (with mid PTO)	935 kg	925 kg	950 kg	930 kg	940 kg	945 kg	935 kg	960 kg	940 kg	950 kg
-	Weight (with ROPS & mid PTO)	985 kg	975 kg	1000 kg	980 kg	990 kg	995 kg	985 kg	1010 kg	990 kg	1000 kg

	Agri. Tire		Turf Tire		Wide Turf Tire		Narrow Agri. Tire		Oversize Agri. Tire	
	Tire size	Dimension diameter x width	Tire size	Dimension diameter x width	Tire size	Dimension diameter x width	Tire size	Dimension diameter x width	Tire size	Dimension diameter x width
Front	6 - 14	653 mm x 155 mm	24 x 8.50 - 12	614 mm x 216 mm	26 x 12.00 - 12	660 mm x 310 mm	6 - 14	653 mm x 155 mm	7 - 14	690 mm x 173 mm
Rear	12.4 - 16	955 mm x 284 mm	315/80D - 16	910 mm x 273 mm	13.6 - 16	1009 mm x 355 mm	9.5 - 22	994 mm x 230 mm	9.5 - 24	1050 mm x 243 mm