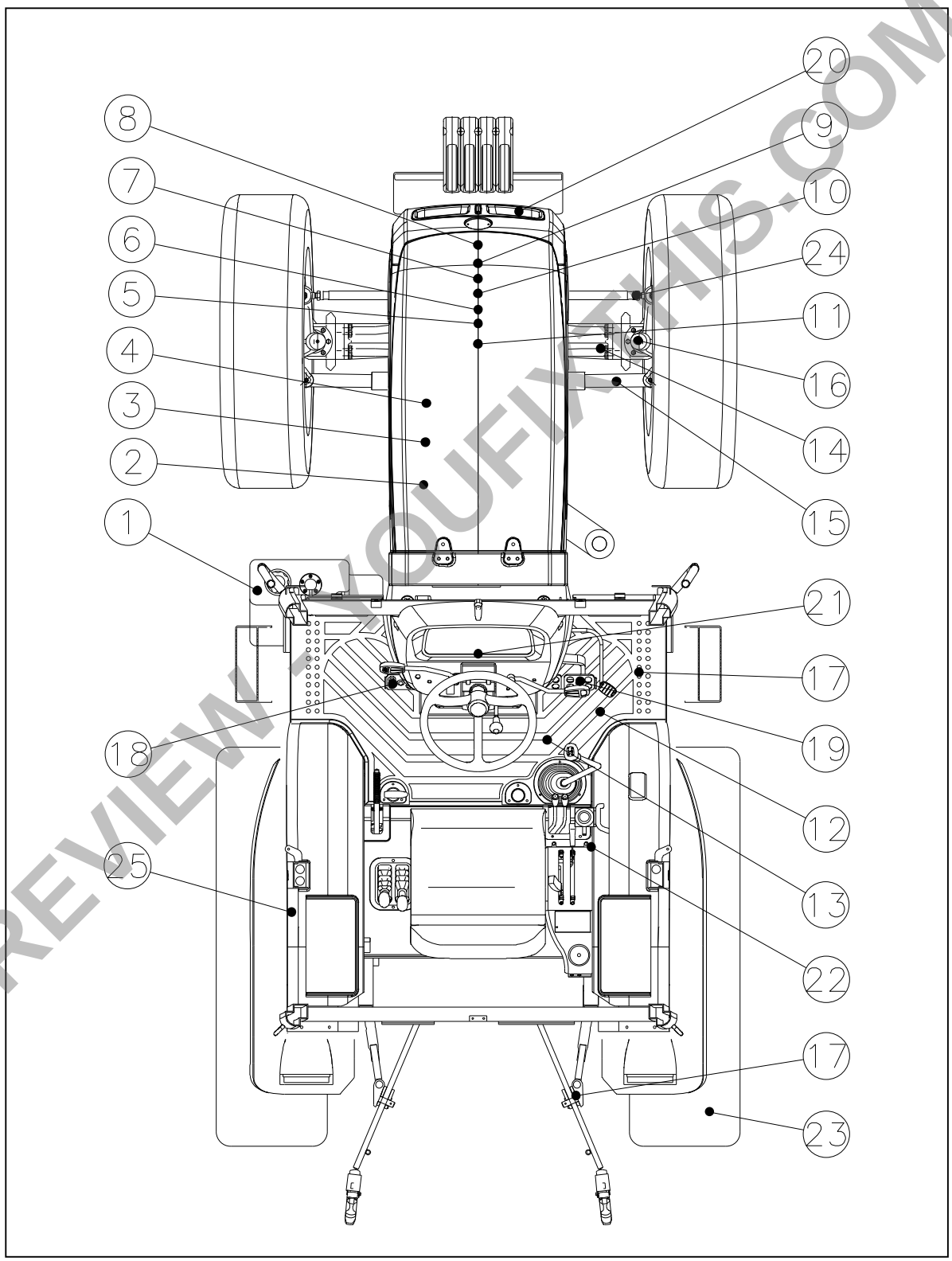
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5-1. Checking Each Part

(1) Checking parts

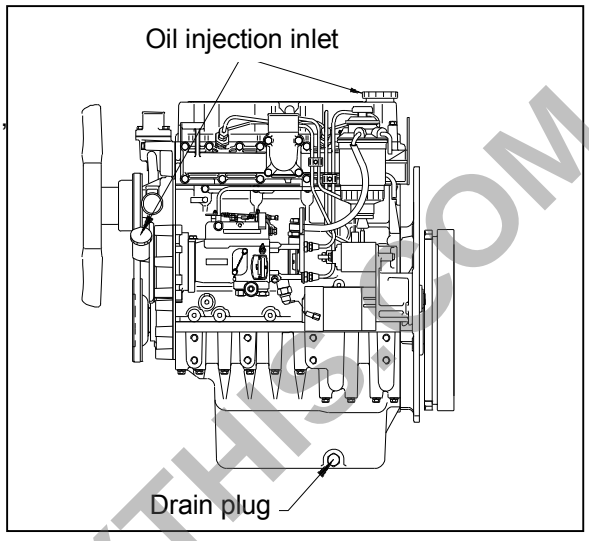


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5-8. Every 300 hour check

(1) Replacing Engine oil and Filter



① Engine oil drain

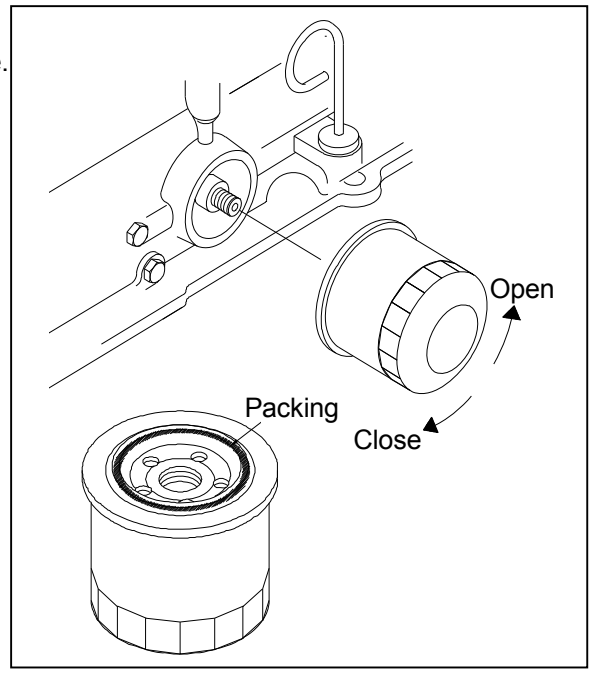
- When the engine stops and the oil has cooled down, loosen the drain plug of oil pan to drain the oil completely.

Notice	▶If you drain the engine oil while the engine is still warm, the impurities shall be drained completely.

② Engine oil filter replacement

- Disassemble the oil filter using the filter wrench.
- Remove any dirt and oil on the filter flange surface of the crank case.
- Apply engine oil to the packing of new filter.
- When assembling the new oil filter, check if the rubber packing is fixed in the groove completely.
- When assembling the oil filter to the bracket, attach it so that it can be turned by ¾~1 revolution after the packing and filter case are contacted.

③ Engine oil injection



- Attach the drain plug and tighten the normal torque. (normal torque : 4.0Kg.m(28.93ft.lbs))
- Inject the oil into oil injection inlet by normal capacity.
  Engine oil capacity **: 7.0 ℓ(1.8gal)**
- After starting the engine, check if there is oil leakage through idle operation for several minutes. If finding oil leakage, tighten the filter once again.
- After stopping the engine, check the oil level again after about 5~10 minutes.
  If the oil level is between high limit and low limit of oil level gauge, it is NORMAL.
- If a lot of metal powders are attached to the disassembled oil filter, contact your authorized dealer.

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5-11. Troubleshooting

⚠ Warning	▶ To avoid injury due to sudden start, apply parking brake and place the transmission gear in NEUTRAL position before checking and repairing.

Classification	Problems	Main causes	Solutions
Engine	The start motor does not turn when turning the key switch.	▲ Start safety switch is not contacted. ▲ PTO switch is not on “OFF” position. ▲ Discharge of battery ▲ Terminal loosened ▲ Key switch failure ▲ Start motor failure	▲ Depress the clutch pedal fully ▲ Place PTO switch on “OFF” position ▲ Charge or replace ▲ Tighten ▲ Repair or replace ▲ Repair or replace
	The start motor turns but the engine does not start.	▲ The battery is weak ▲ bad ground ▲ Improper viscosity of engine oil ▲ Air in fuel system ▲ Fuel filter clogged ▲ Error in engine body ▲ Fuel cock closed	▲ Charge or replace ▲ Tighten the ground ▲ Replace the oil with proper viscosity. ▲ Bleed the air ▲ Wash or replace the filter ▲ Repair ▲ Open the cock
	Engine revolution is irregular.	▲ Air in fuel system ▲ Fuel filter clogged ▲ Injection nozzle clogged ▲ Fuel leakage ▲ Irregular fuel injection	▲ Bleed air ▲ Clean or replace the filter ▲ Repair or replace ▲ Repair ▲ Repair
	Engine turns more than maximum speed.	▲ Impurities in governor	▲ Repair
	Engine stops suddenly during operation.	▲ Fuel shortage ▲ Fault of nozzle ▲ moving parts failure due to bad lubrication	▲ Add fuel and air-bleeding. ▲ Repair or replace ▲ Repair

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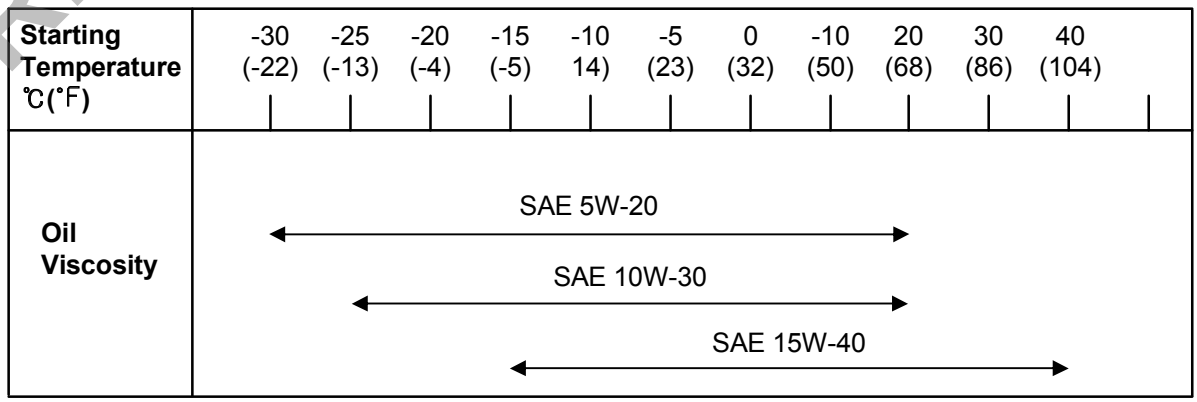
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5-2. Lubricants and Capacity

LUBRICANTS	CAPACITY	INTERNATIONAL STANDARD	RECOMMENDED ITEMS
Engine coolant (Radiator)	9.0 ℓ (2.4gal)	ASTM D5216	Soft water (50%)+ Anti-freeze (50%)
Fuel	60 ℓ(15.9gal)	ASTM D975 No.2	Low Sulfuric Diesel Fuel
Engine oil (crankcase)	7.0 ℓ (1.8gal)	API CF-4, CG-4 Winter : 10W/30 Summer : 20W/40 Spring/ Fall : SAE 15W/40, SAE 20	Case IH 5L – E175325 20L – E175326 205L – E175328
Transmission oil (common use for Hydraulic lift, hydraulic steering device)	47 ℓ(12.4gal)	API-GL4 ISO VG 46/68	Hy-Trans
Front axle oil	10 ℓ (2.6gal)	API-GL4 SAE 80W	Hy-Trans
Grease (Front axle arm holder, Steering cylinder pin, 3-point linkage)	Proper amount	NLGI 2	AkcelA EP2 365608A1

RECOMMENDED OIL VISCOSITIES

The correct engine oil viscosity grade is dependent upon ambient temperature. Refer to the chart below when selecting oil for your tractor engine.
In areas where prolonged periods of extreme temperatures are encountered, local lubricant practices are acceptable ; such as the use of SAE 5W 30 in extreme low temperatures or SAE 50 in extreme high temperatures.



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(2) Maintenance table

No.	Checking Part	Type & Spec	Capacity & Dimension	Check period (ht)				
				Daily	50	300	600	1200
1	Fuel tank	See page 5-3	60 ℓ(15.85gal)	▲				
2	Fuel filter	Element				●		
3	Engine oil	See page 5-3	7.0 ℓ (1.84gal)	▲		●		
4	Engine oil filter	Element			★	●		
5	Engine coolant	See page 5-3	9 ℓ (2.37gal)	▲			●	
6	Radiator screen			▲	■			
7	Air cleaner	Dry		▲	■	●		
8	Battery				▲			
9	Fan belt tension		Pressed 10~12 mm (0.39 ~ 0.47in)			▲		
10	Valve clearance		0.25 mm(0.01in)				▲	
11	Nozzle injection pressure		See page 5-21				▲	
12	Hydraulic oil filter				★	●		
13	Transmission oil	See page 5-3	47 ℓ(12.41gal)		▲		●	
14	Front axle oil	See page 5-3	10 ℓ(2.64gal)		▲		●	
15	Steering cylinder	Grease	Proper amount		▲			
16	Front axle holder & Steering arm	Grease	Proper amount		▲			
17	3-Point linkage	Grease	Proper amount		▲			
18	Clutch pedal play		20~30 mm (0.78 ~ 1.18in)	▲				
19	Brake pedal play		40~50 mm (1.57 ~ 1.96in)	▲				
20	Turn signal lights, Lights, Horn			▲				
21	Instrument panel & Indicators			▲				
22	Bolts and nuts			▲				
23	Tire air pressure			▲				
24	Toe in		0~5 mm (0 ~ 0.20in)			▲		
25	Cabin air filter				■		●	

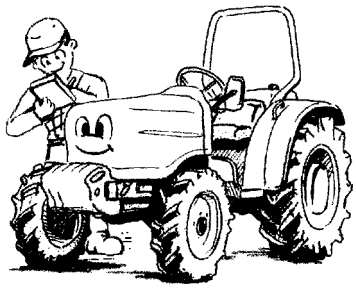
★ First replacement ● Replacement ▲ Check, Adjustment and Add ■ Cleaning

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4. Operation and Work

4-1. Engine start and stop



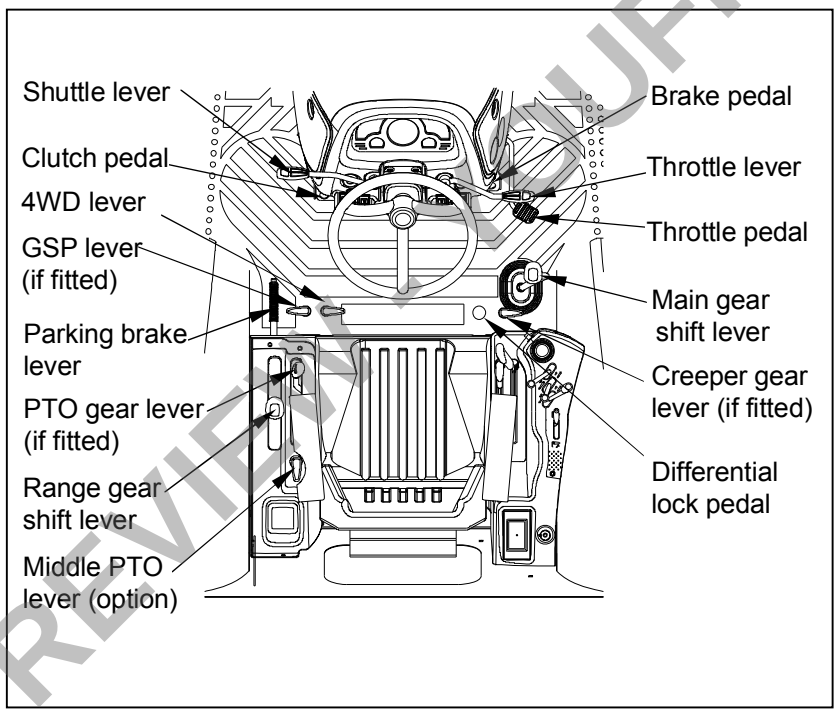
⚠ Caution	▶ Check each part before starting the engine. ▶ Check if there is some other people around before starting. ▶ Place the lever and switch in 'Neutral' or 'OFF' position.

(1) Engine start

1. Sit in the parking brake

2. Place the main gear shift, range gear shift lever, shuttle lever in Neutral and PTO switch in "OFF" position.

3. Pull the throttle lever to the middle position of full throttle.



4. Turn the key switch to "ON" and check if engine oil pressure indicator, battery charging indicator, cold start aid indicator is 'ON'.

5. Wait until cold start aid indicator is 'OFF'. (about 10 seconds)

6. Depress the clutch pedal fully and turn the key switch to "START" position. After the engine has started, if releasing the key switch, the key returns to "ON" position automatically.

7. Check if engine oil pressure indicator, battery charging indicator is OFF.
If any of these lights is ON, stop the engine immediately and check.

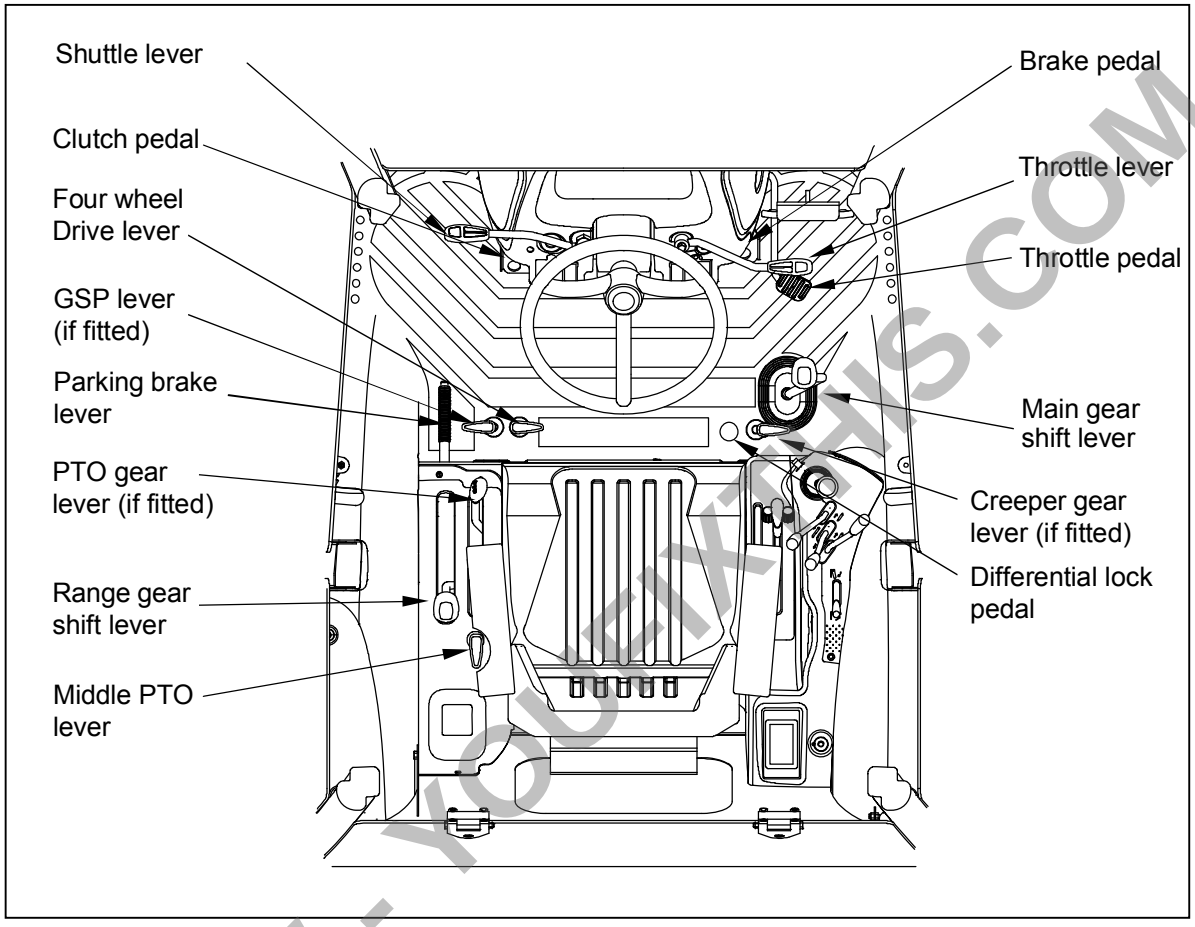
8. Run engine a few minutes to allow engine oil and transmission oil to warm up.

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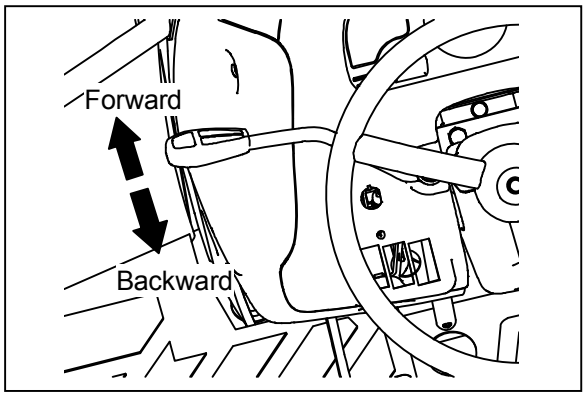
3-2. Operating levers and pedals

Important to owner, read carefully



(1) Shuttle lever

- This is used to select forward/reverse.
- If you push the lever forward, it runs forward and if you pull the lever back, it runs backward.
- Before backing up, lower the engine rpm and check behind you, before you back up.



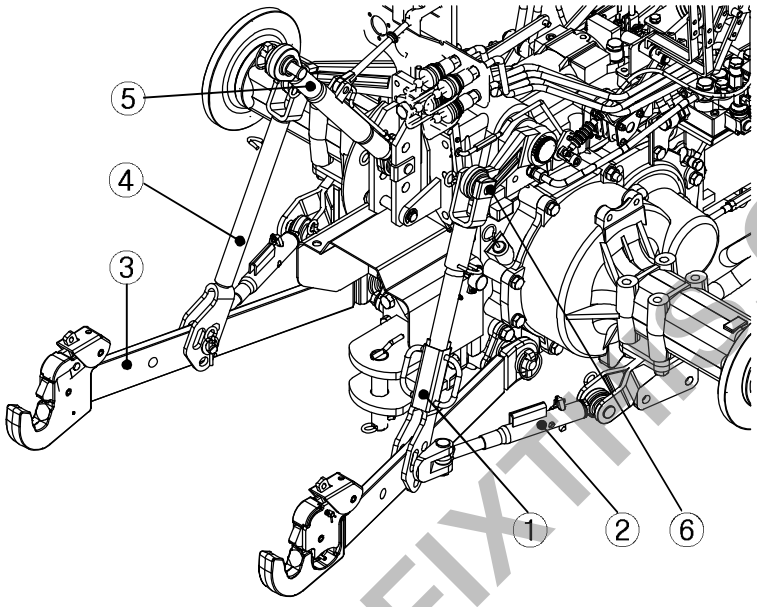
⚠ Caution	▶ The operation of shuttle lever must be done after the tractor has stopped completely. Don't operate shuttle lever while the tractor is moving. It may cause a damage of synchronizer rings gears. (Sychro-shuttle)

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4-4. Attaching equipment

(1) 3-point linkage

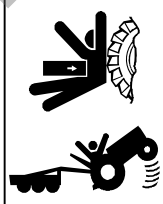


1. Lift rod (RH) 3. Lower link 5. Upper link
2. Stabilizer 4. Lift rod (LH) 6. Lift rod pin

● When running without attaching implements, carry out the followings.
1. Fix upper link(5) to the fastening hook of auxiliary hydraulic pipe bracket.
2. Connect stabilizer(2) to lower link(3) so that the lower link is not moved to the left or right side

● When working without using 3-point linkage like trailer working, remove the 3-point linkage as below.
1. Remove upper link(5).
2. Draw lift rod pin(6). (left, right)
3. Detach the fixed part of stabilizer(2). (left, right)
4. Detach the fixed part of lower link(3). (left, right)

※ 3-point linkage must be fixed on the suitable position according to the weight of implements to be attached.

Warning	▶Before attaching/detaching implements, place PTO switch in 'OFF' position and PTO gear lever in 'Neutral' ,and apply the parking brake.
	▶When attaching/detaching implements, make sure to assemble and tighten the connecting parts correctly.
	▶if the tractor is used to tow heavy loads, always use the approved drawbar or hitch to avoid injury. Never connect to lower link or upper link of 3-point linkage. If not, it may cause tipping or turnover.
	▶DO NOT connect the implements that require more power than can be generated by your tractor.
	▶Never stand between implement and tractor when backing up.

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1. General Notices for Safety

1-1. Before using the tractor



※ Read this Operator's manual carefully, before using the tractor, to understand fully.

◆ General information for right use

- Your tractor is designed and manufactured to be **used for agriculture**. Do not use the product for improper purpose out of the intention of manufacturer, and follow the safety instructions provided by this Operator's manual.
- Especially, read Chapter 1 "**General Notices for Safety**" thoroughly and **never modify or change** the driver's protection device or safety device without permission, **never use tractor without safety** devices or operate in violation of traffic rules, etc. (Do not remove seat belt or safety frame (Roll bar) or PTO shield)
- After using first 50hours, perform "**First 50 hour check**" and periodic regular check. (*See page 5-4*)
- The manufacturer will not be responsible for the damage or safety problems caused by maintenance or repair with non-genuine parts. It must be requested to **use the genuine parts**.
- When cleaning the tractor by using high pressurized water, do not inject water directly to the electronic parts, wiring, air intake pipe, hot engine or muffler inside bonnet.
- Maintenance and repair of the tractor is performed by **skilled technical experts with the proper tools** authorized by the manufacturer.
- For damage or accidents caused by the miss use or operation in violation of these rules, the manufacturer will not have any responsibility and warranty.
- Keep this Operator's manual for future reference at hand (on the tractor).

◆ Safety Mark Description

- In the places where the cautions in usage are required, the marks such as "**DANGER", "WARNING", "CAUTION"** are found.
- You should comply with the description marked on the decals attached on the product or the contents marked with safety mark in this Operator's Manual..

Danger	**Danger** – This indicates a fatal dangerous situation that may cause a serious injury or death if not avoided.
Warning	**Warning –** This indicates a potential dangerous situation that may cause a serious injury or death if not avoided.
Caution	**Caution –** This indicates a potential dangerous situation that may cause a light injury or damage to the properties if not avoided.
Notice	**Notice –** This indicates the instructions for right use for the safety of persons or products.

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		MAXXFARM60
WEIGHT	Frame Type	2165kg (4773 lb)
	Cabin Type	2370kg (5225 lb)
	Bumper	33kg (72.8 lb)
	Front weight	20kg (44.1 lb) x 4
ENGINE	Model	S4QT
	Type	4-stroke, vertical, water cooling
	No. of cylinder	4
	Diameter x stroke	88 x 103mm (3.46 x 4.05 in)
	Displacement	2505cc (152.86in3)
	Rated speed	2600 rpm
	Maximum speed	2750 rpm
	Engine power	38.3kW / 2600rpm
FUEL INJECTION PUMP	Type	Distribution type
	Speed regulation	Centrifugal
	Fuel filter	Replaceable cartridge type
	Air cleaner	Dry
	Injection order	1-3-4-2
LUBRICATION SYSTEM	Type	Forced circulation
	Pump	Trochoid gear pump
	Filter	Replaceable cartridge type
COOLING SYSTEM	Pump	Centrifugal type
	Temperature control	Thermostat
CLUTCH	Type (MAIN / PTO)	Dry single disk / Wet multiple disk
	Operation (MAIN / PTO)	Pedal / Electric-hydraulic
	Return system (MAIN / PTO)	Diaphragm / Coil spring

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