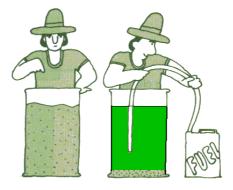
## **III. PREPARATION**

## 3-1. Fuel Oil

- Use well refined diesel light of such as automotive diesel oil.
- Keep the fuel oil free of impurities such as dust deposit and water.



## 3-2. Lubricating oil

## Choise of the proper lubricating oil is of vital importance.

- 1) Crank case & Air filter
  - Use the engine oil S.A.E No. 10W-No.50 according to atmospheric temperature.
- 2) Transmission, rotary chain case .
  - Use the gear oil S.A.E. No.90-No.140 according to atmospheric temperature.

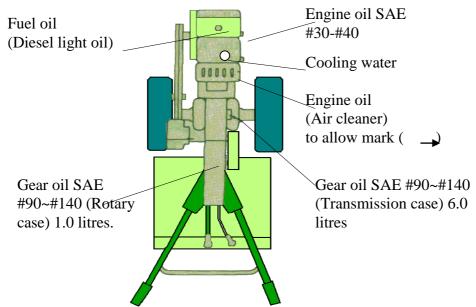


## Notice:

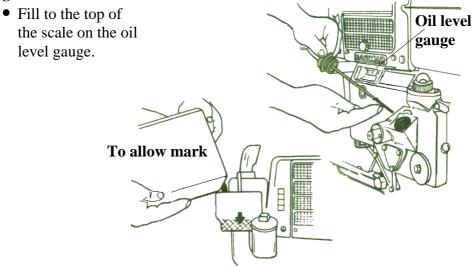
When adding lubricating oil if necessary, fill the same brand's one. Otherwise, the lubricating efficiency is getting worse extreamly.



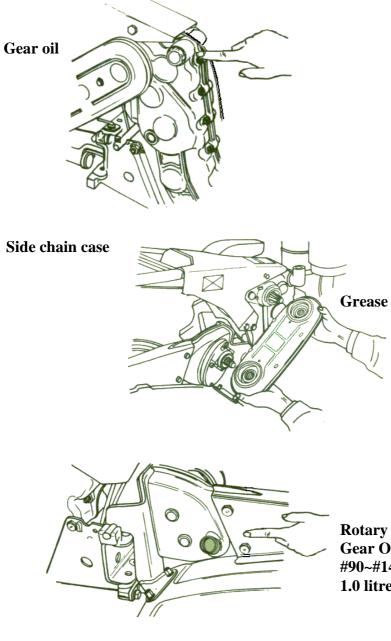
## 3-3. Feeding



#### **Engine oil**



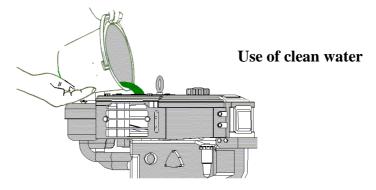
Oil feeding port Transmission gear case



Rotary case Gear Oil SAE #90~#140 1.0 litres

## **Cooling water**

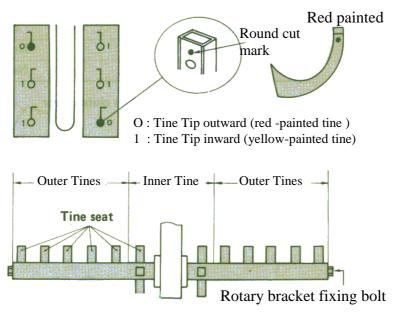
Pour the water into the top till it overflows.



## 3-4. Fitting of rotary tines

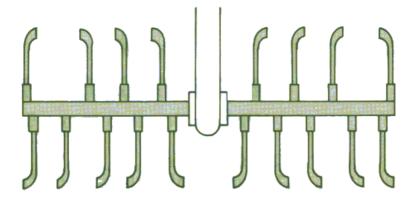
When fitting of the tine is completed, stop the engine and set the rotary change lever to the " N " position.

1) Arrangement of Inner Rotary Tines



## 2) Arrangement of Outer Rotary Tines

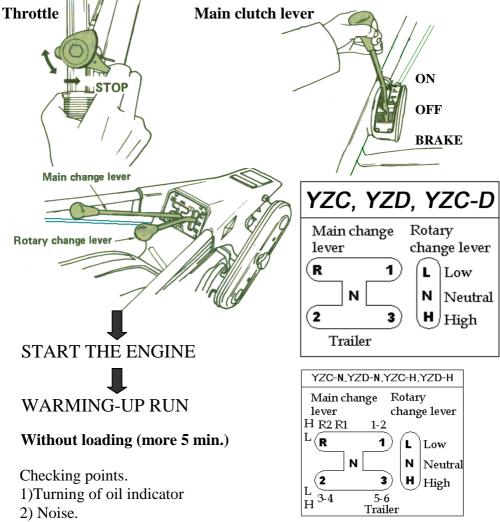
- Soil Inward Tilling
- Soil Outward Tilling No need to change the inner tines



# IV. STARTING

• Prior to start, make it a rule to check the follows.

	Levers	Position		
1	Engine throttle	High-Low		
2	Main Clutch	OFF		
3	Main Change	Neutral		
4	Rotary Change	Neutral		



(Auxiliary speed control equipped )

# **V. OPERATION**

• Select the most suitable position for your soil and working condition.

	Contents		Position		
No			YZC,YCD,	YZCN/H	
			YZC - D	12CN/11	
1	Main change lever		Forward 1-3	Forward 1-6	
T	Main change level		Reverse 1	Reverse 1-2	
2	Rotary change lever		Low or Hight		
3	Side chain case		Large or Small		
4	Tail wheel adjusting ha	ndle & lever	Shallow - Deep		
5	Rotary Tine		Inward or Outward		
6	Tread (mm) 6-12 or 5.00	0-12	(526.708 or 546.688), 2 stage		
7	Stand lever		Up		

Main change lever

Rotary change lever

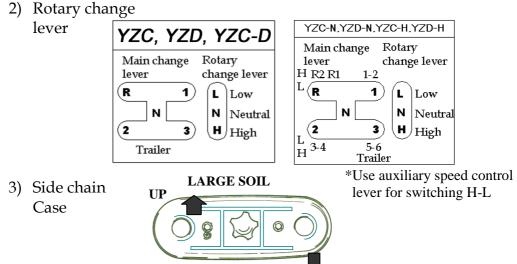
1) Main change lever

Auxiliary speed control lever (Available for -Model YZC-N/H only)

Auxiliary speed control lever (Available for Model YZC-N/H only)

High

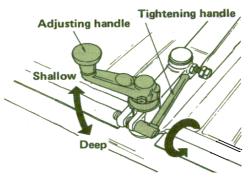
Low



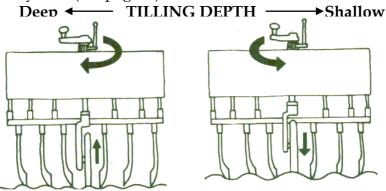
UP SMALL SOIL

## 4) Tail wheel adjusting handle & lever

The adjustment of tilling depth can be done by lowering or raising the tail wheel by means of the adjusting handle and the tightening handle.



5) Rotary tine (see page 8)

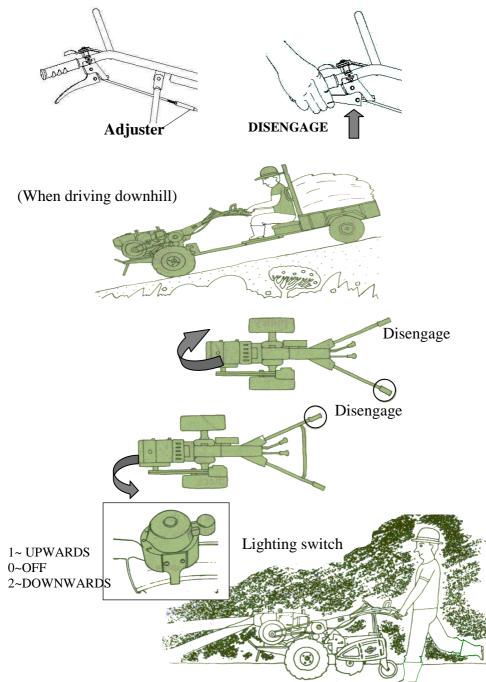


Notice :

- 1. Pay attention to the driving with 3<sup>rd</sup> forward speeds since they are high speed. (On YZC-N ,5 and 6 are high speed positions).
- 2. When driving downhill, apply the side clutch to opposite to the side to which the tiller tends to curve.
- 3. Lighting system.

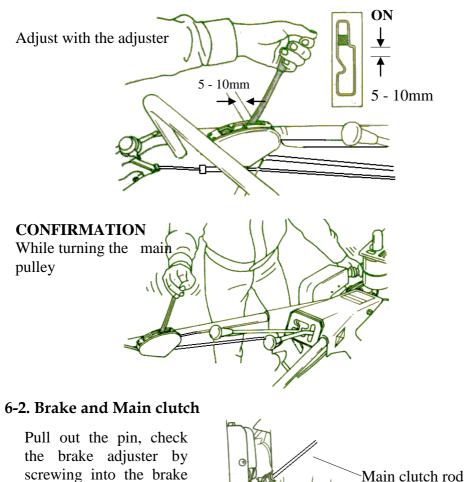


## Side clutch lever



## VI. ADJUSTMENTS

## 6-1. Main clutch

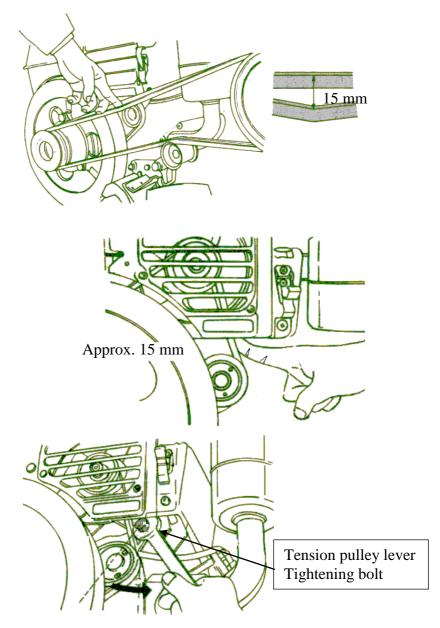


Main clutch adjuster

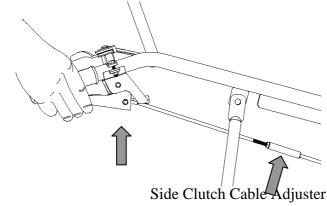
Brake spring

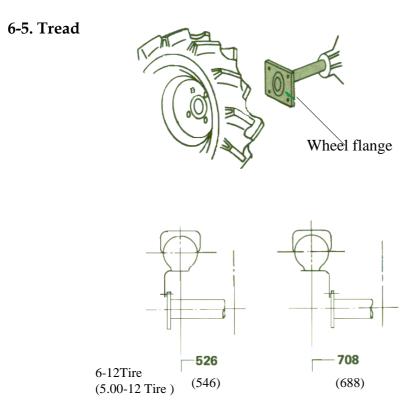
spring.

6-3. V-belts



## 6-4. Side Clutches



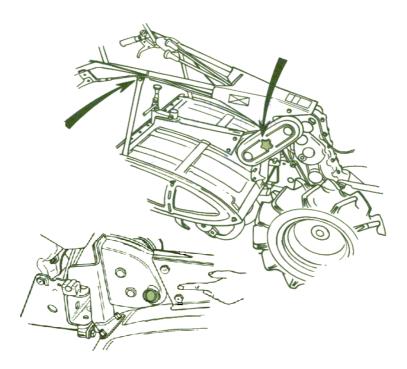


## 6-6. Attaching and detaching of rotary section



## **Detaching procedure**

- 1. First of all, stop the engine. Then adjust the height of the tail wheel so that the clearance between rotary tines and ground should be at 1-2 mm.
- 2. Set the rotary change lever in either L or H position. Touch the front frame to the ground.
- 3. Loosen the knob bolt of the side chain case completely.
- 4. Rotate the rotary shaft to direction of tillage and remove the side chain case.
- 5. Loosen the tightening bolt, at the front of rotary case.
- 6. Remove the bolts, nuts and washers on the handle stay.
- 7. Push the steering handle downward. Then remove the fitting bars from hitch and push the tiller forwards. This will detach the rotary section.



## Attaching procedure

This procedure is the reverse of the detaching procedure described above.

- 1. Lengthen the depth adjusting shaft of tail wheel in order to incline the rotary section toward the forth.
- 2. Pull the tiller toward the back and put the fitting bars on to the hooks of hitch.
- 3. Tighten the bolts at the front of rotary case.
- 4. After the tiller is in level, attach the side chain case. In this case, match the splines rotating the rotary shaft by hand.
- 5. Tighten the knob blot of the side chain case.

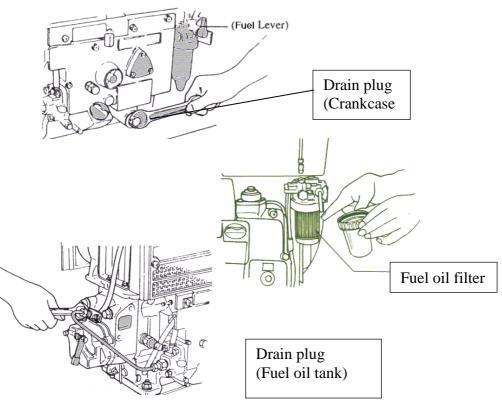
# VII. AFTER OPERATION

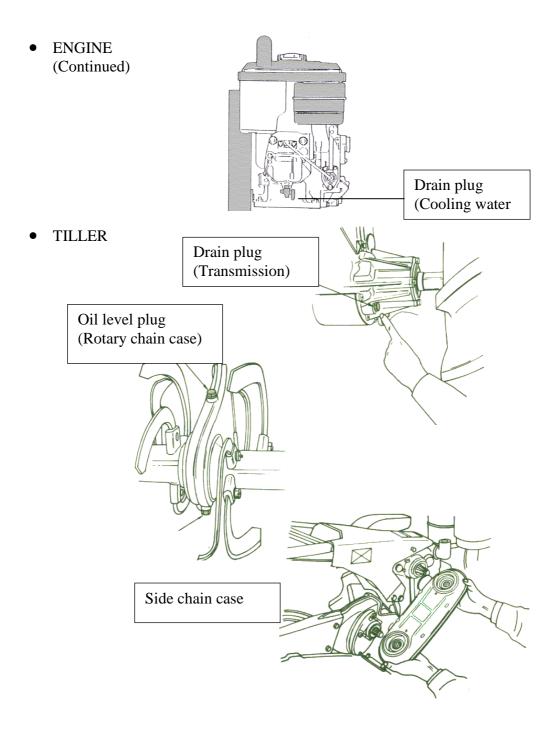
## 7-1. Stopping

• Post operation maintenance greatly life of the tiller

Contens	Procedure	Remarks			
Throttle lever	Stop	Do not use the decompression lever			the /er
Main clutch lever	OFF				
Main change lever	Neutral				
Rotary change lever	Neutral				
Stand	Put down				

- 7-2. Draining (Lubrication & Fuel oil & cooling water)
- ENGINE





## 7-3. Storage

Contents	Procedure	Remarks
Throttle lever	Stop	Intake & Exhaust Valves are both closed tightly
Fly wheel	T.D.C	
Main clutch lever	OFF	
Main change lever	Neutral	
Rotary change lever	Neutral	
Stand	Put down	
Rubber tire	Dry out	Place a wooden board under the tires.
Cooling water	Drain off	
F.O.tank cock	Shut	

- 1) Wash off soil and mud from the machine and then wipe dry with a dry cloth.
- 2) Check bolts and nuts for looseness and retighten them if necessary.
- 3) Check for damaged parts and repair when necessary.



## VIII. MAINTENANCE

#### 8-1. Engine

	Description	Daily	Every 100 Hrs	Every 200 Hrs	Every 300 Hrs	Remark
Cooling Water	Checking and feeding	•				
	Checking and feeding	•				
	Changing (F.O.tank)		•			
Fuel oil	F.O.inlet strainer cleaning				•	
	F.O.outlet strainer cleaning				•	
	Checking and feeding	•				
	L.O.intake filter		•			
Lubricati-	Checking and feeding (Crankcase, Air cleaner)	•				
on Oil	Cleaning of air cleaner element		•			
	Cleaning of oil circulation indicator		•			
	Changing (Crankcase)		•			
Cooling fan belt	Checking and tightening	•				
	Checking and tightening (Major parts)	•				
Others	Adjusting intake & exhaust valves clearence				•	
	Checking (Fuel injection system)				•	

- Should be cleaned often according to the degree of dust deposit.
- Renew the lubricating oil of the crank case after first 25 Hrs of Service.

## 8-2. Tiller

Inspection and Service Item		Time			
		Before Using	During Running	After Using	Remarks
	Checking and servicing of da- maged or mis- sing parts	•	•	•	Pay particular attention to missing pins and screws
	Checking and servicing of loose engine mounting bolts	•	•	•	Check daily
Exterior of Tiller	Checking and servicing of loose rotary tine mounting bolts	•	•	•	Check daily
	Checking and retightening of other screws and fasteners	•	•	•	Check daily
	Cleaning exte- rior	•	•	•	Check daily
	Manual lubri- cation of each part	•	•	•	Gear oil
Lubrica- ting Oil	Inspecting, top- ping up and changing oil in main trans- mission case, rotary case,etc.	•	•	•	Gear oil
Greasing	Inspecting and changing grease side chain case	•		•	Grease

Inspection and Service Item		Time			
		Before Using	During Running	After Using	Remarks
Greasing	Spline part of rotary shaft	•		•	Use chassis grease
	Spline part of side chain case	•		•	Use chassis grase
	Tail wheel a- djusting screw	•		•	Use chassis grase
	Checking and adjusting me- shing of clutch	•		•	
Main clutch	Checking clutch adjusting parts	•		•	Check the clearence is as specified
	Cleaning clutch interior	•			
	Checking and servicing main transmission lever	٠		•	
Operation System	Checking andservicing side clutch	•		•	
	Checking and servicing brake	•		•	
Rotary Section	Cleaning ro- tary cover and rotary bracket	٠	•	•	

Inspection and Service Item			Time		
		Before	During	After	Remarks
		Using	Running	Using	
	Adjusting V-belt	•			
	tension	•		•	
	Checking tire	•		•	
	pressure				
Others	Adjusting				
Oulers	engine throttle	•		•	
	lever				
	Checking and				
	servicing tail			•	
	wheel				

• Renew the gear oil of the transmission, rotary chain case after first 30 Hrs or Service and there after at intervals of 200 Hrs of work.



# PART LIST