

User Manual

AGRIMATE ROTARY TILLER **AM-MPT-1100-6D-M** (MANUAL) Power Weeder / Rotary Weeder / Cultivator



OPERATION AND MAINTENANCE MANUAL

DISCLAIMER: DUE TO CONSTANT UPGRADATION, FEATURES AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE



BEFORE OPERATING THIS MACHINE,
PLEASE READ THESE INSTRUCTIONS CAREFULLY

Something about this manual

Thank you for choosing our **Rotary Tiller/Power Weeder/Cultivator**

- This manual contains about operation and maintenance of Diesel **Rotary Tiller/Power Weeder/Cultivator**.
- All contents in this manual are based on the latest information when the manual is printed.
- The manufacture has the right to revise the manual without any prior notice and will not bear any legal responsibility.
- None parts in this manual can be copied without formal approval.
- This manual should be regarded as a part of the tillers, so it should be handed over when resold or lent.

Safety information

Safety is very important for you and others. We have written down important safety information in both manual and machine. Please read it carefully.

Safety information gives you warning that you may bring potential danger to yourself and others. The key words with “!” are put before every piece of information. These words are “danger, warning, attention”.

- Please pay attention to the meanings of the above-mentioned identifiers.

! Danger:	if you don't operate follow those indicated in the manual, serious injuries, even death will be caused.
! Warning:	if you don't operate follow those indicated in the manual, device damage and injuries will be caused.
! Attention:	if you don't operate follow those indicated in the manual, device damage and injuries may be caused.

Damage prevention

You can see other important information marked with “ATTENTION”.

! Attention:	If you don't operate as those indicated in the manual, device damage will be caused.
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Safety prevention



If Rotary Tiller/Power Weeder/Cultivator is operated follow those indicated in the manual, it will work safely and reliably. Before operating the Rotary Tiller/Power Weeder/Cultivator, please read this manual carefully. Otherwise, injuries and device damage will be caused.

ATTENTION

- When starting engine, please turn gear lever to neutral position.
- When the machine is working, please pay attention to safety!
- Be careful about the rotary blades, because they may hurt you!
- When holding the backshift bar, the gear lever must be put in the neutral position.
- Fuel and lube oil must be clear.
- When shifting the gear, you must disconnect the clutch.

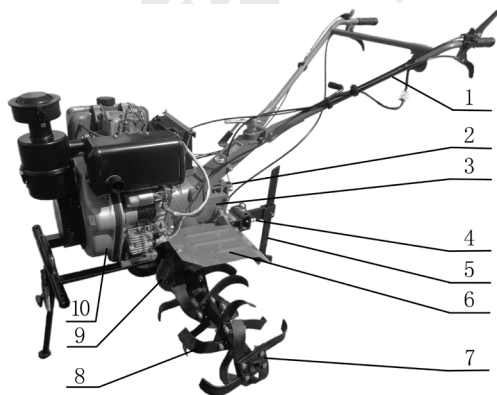
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Chapter 1 - Profile of Rotary Tiller/Power Weeder/Cultivator

Engine Specifications	
Engine Model	AM178F
Type	Single Cylinder, Vertical, Diesel Engine-4S, Air Cooled
Starting	recoil start
Fuel	Diesel
Engine Oil Capacity(Litre)	1.1
Capacity of Fuel tank (Litre)	3.5
Valve	OHV
Rated Power-kw/HP/RPM	4kw/5.4hp/3600
Displacement (cubic capacity), (cm ³)	296
Bore/Stroke (mm)	78×62
Max. speed at no load(High Idling Speed)	3680
Rated speed (rpm)	3600
Low idling speed (rpm)	1400
Speed at maximum torque (rpm)	2880
Air Cleaner	Oil bath
Engine Weight	33Kg
Transmission Specification	
Weeding-Width	1100mm
Weeding - depth	150-300mm
Gear Shifting	-1,1,0,2(H/L)
Grade of oil	SAE-15W-30
Gear Box Oil capacity (Litre)	1.8
Gear Distance(mm)	500
Productivity(mu/h)	0.8-1.5
Weight with Accessories with Engine	145Kg

General picture:



- 1 handle bar assy
- 2 safety cover
- 3 gear box assy
- 4 drag bar
- 5 shift lever
- 6 fender
- 7 rotary device components
- 8 rotary blades
- 9 running case assy
- 10 diesel engine

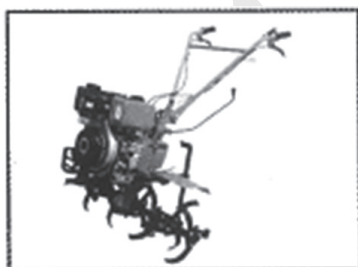
Chapter 2 - Main function of Rotary Tiller/Power Weeder/Cultivator

Weeding blades assy:

Weeding blades assy components are installed on both sides of the driving shaft of Rotary Tiller/Power Weeder/Cultivator running gear. Tighten the shaft with two bolts M8×55. Then the Rotary Tiller/Power Weeder/Cultivator can work. (Look at table2 and Picture2).

Table 2

Weeding device mode	3 groups	4 groups		
	3 blades	4 blades	3 blades	4 blades
Weeding blades	3 × 6	4 × 6	3 × 8	4 × 8
Weeding scope(mm)	765	1050		
Suitable soil	Paddy field with insufficient water; clayed soil	solid soil	Wet soil	Dry soil



Picture 2: Weeding device



Picture3: ditching device

Ditching and ridge forming

Take away shift lever, install ditching device and adjust the width and height of ditching device. (Picture3)

Short distance transportation

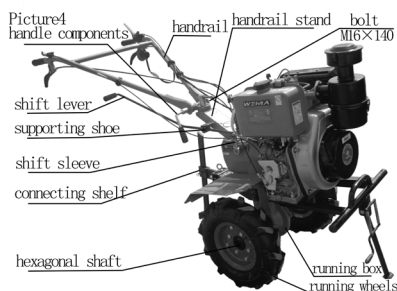
Install forearm of Rotary Tiller/Power Weeder/Cultivator case on the drag body and wheels on the driving shaft. The rated load is 250kg. At the rated speed of diesel engine, fast shift speed is about 10km/h and slow shift speed is 5km/h.

Multifunctional work

Take away the safety cover of gear box (num.2 in picture 1), n the back bolt of main shaft, the key sleeve of the shaft, then install the attaching belt pulley and coupling on the main shaft of gear box and fasten with bolts. Ordinary V-belt A-model is used for the cross section of belt pulley. The rated speed of belt pulley is 3000r/m. When it is attached with relative machine tools, auxiliary tools, you can carry out such multifunctional work: bailing, sprinkling, chemical spraying, threshing, reaping and generating power.

Chapter 3 - Operation and application of Rotary Tiller/Power Weeder/Cultivator

1. Fix the body of mini Weeder, install running wheels on both sides of hexagonal shaft and fix the wheels with 2 bolts M8×55, 2 nuts M8.
2. **Handle bar installation:** turn the two fluted discs on the handlebar to right with the fluted discs on both sides of the disc plate. Pay attention to adjust handlebar position. Connect it with auxiliary bolts M16×140 and gasket 16, then fixes the clutch cable, gun cable and backshift cable on the handlebar with wire dip.
3. **Shift lever installation:** take away the pins between the shift lever and connecting shelf to get the shift lever and adjust its direction by 180°.
4. **Mud fender installation:** install frames of both sides and protection frame components on the Rotary Tiller/Power Weeder/Cultivator. Then install protection panel of both sides and paddy field protection panel of both sides.



Picture 4 : up packing ssembly

Installation and adjustment of cables

1. clutch cable adjustment(look at picture5 and 6)
 - Unlock nuts on the screw rod.
 - Instantaneously rotate the screw rod to show the shortest part of the handle bar.
 - Thread the cable head into clutch plug behind the gear box assy and make sure the head is in the big hole of the plug.
 - Thread the steel wire-rope into the M8 hole of arm plug, and then properly press down the clutch fork arm to insert the cable head into clutch plug.
 - Rotate out the screw rod and clip it repeatedly, unlock the clutch handlebar until spring force of clutch can reposition the bar, and then fasten the nuts.
2. backshift cable adjustment(Picture5 and 6)
 - Unlock the fasten nuts on the screw rod.
 - Instantaneously rotate the screw rod to show the shortest part of the handle bar.
 - Thread the cable into the backshift shaft at the side of gear box and make sure the cable head is in the big hole of shaft.
 - Properly counterclockwise rotate the backshift fork shaft, thread the cable into the narrow slit of backshift plug through the side of the gear box and make sure the cable head is in the big hole of the plug.
 - Rotate out the screw rod and holdfast it repeatedly, unlock the backshift bar. When spring force can reposition the bar, you should fasten the nuts.

3. gun cable adjustment (look at picture7) Diagram
 - Turn gun switch to the fastest position.
 - Thread the steel wire-ropo of the gun into the pole and plug of regulation panel of the diesel engine gun.
 - Fasten the steel wire-ropo and fix the screw.
 - Adjust the gun switch repeatedly until the gun bar of the regulation panel can be in the fastest or slowest position.

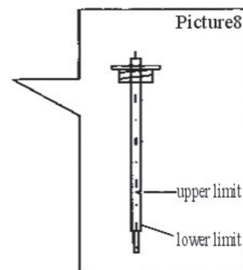
Checking and refueling

1. Check whether the connection bolts are loose or not and fasten the loose bolts according to the bolt moment in the following table3 (diesel engine bolts and nuts moment is in diesel engine instruction).

Table 03

Name	Moment(N.M)
Flange and diesel engine	20 ~25
Flange and gear box	35~40
Bolts behind the main shaft of gear box	10~12
Bolts on the backshift shaft of gear box	26~40
Bolts between the engine frame and running case	35~40
Bolts on the end cover of running gear	10.6~15
Bolts on the drag bar of running gear	50~60
Bolts between the running gear and gear box	35~40
Drag bar	45~60
Bolts on the bottom plate of diesel engine	35~40
Bolts on the handlebar frame	35~40

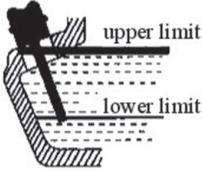
2. Check if the handlebars of the operation system (gun, clutch, shift lever, backshift) are flexible. If they are not in their positions, please adjust them.
3. Turn lever to the neutral position.
4. Refueling:
 - SAE10W-40 oil is recommended. Please refer to the picture9.
 - Refuel the gear box with oil num20. Lay down the machine, and refuel through the hole upper the gear box. Checking oil level by dipstick (attention: not rotate the oil ruler). The oil level should be in the range of the dipstick showed in the picture.



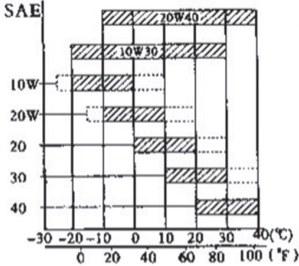
- Refuel air cleaner with oil, take away the synthetic glass cover tent below the cleaner, and refuel 0.1L num.20 oil.
- Choose diesel engine oil according to the working environment(Picture9)

lube entrance



put the diesel engine in the smooth place and check the oil level when filling; pay attention to insert the oil sticker lightly and not to rotate the sticker



upper limit
lower limit



Capacity	Model	178F
gallon		1.1(0.24)

 recommended value
 usable limit
 A.P.I classification of diesel engine maintenance lube must contain CC or CD grade
 Picture9

5. Refuel the oil tank with num.0, num.-10 or num.-20 light oil (please refer to the diesel engine instruction).

! Attention: fuel level should not exceed above the mark.

6. Make fore starting preparations according to the diesel engine instruction.

Starting(attention: the shift lever must be in the neutral position)

1. Start diesel engine according to the procedure of instruction.
2. The diesel engine should run 2 to 3 minutes at the idle speed (1500 to 2000r/m) with no-load.
3. Check if the diesel engine runs normally. If not, it should stop working and be inspected.

operation(attention: Rotary Tiller/Power Weeder/Cultivator must go through running-in before operating. Please refer to chapter4)

1. Slow gear
 - Hold the clutch bar with left hand to open the clutch.
 - pull back the shift lever with right hand, meanwhile, pay attention if it is in the slow position, then hold the right bar with right hand(attention: do not hold the backshift bar).
 - Slowly unlock the clutch bar to close the clutch. In this situation, Rotary Tiller/Power Weeder/Cultivator can run at slow gear.
 - Speed up properly with right hand, then Rotary Tiller/Power Weeder/Cultivator can run at a low speed of 5km/h.

2. Fast gear

- Hold the clutch bar with left hand to open the clutch.
- Push the shift lever to the front with right hand, meanwhile, pay attention if it is in the fast position, then hold the bar with right hand(attention: do not hold the backshift bar)
- Slowly unlock the clutch bar to close the clutch. In this situation, Rotary Tiller/Power Weeder/Cultivator can run at fast gear.
- Speed up properly with right hand, then Rotary Tiller/Power Weeder/Cultivator can run at a speed of 10km/h.

3. Back gear

- Hold the clutch bar with left hand to open the clutch.
- Adjust the shift lever to the neutral position with right hand.
- Slowly unlock the clutch bar to close the clutch, then Rotary Tiller/Power Weeder/Cultivator will step back.(attention: do not unlock the backshift bar)
- If it is unnecessary to step back, you should holdfast clutch bar slowly with left hand, then unlock the shift bar with right hand.

4. When shifting in the process of running, you should decelerate (the standard should be the continuous work of diesel engine), then close the clutch. You should change the shift until the machine stop working

5. When changing the direction, you should rotate the bar to left or right.(attention: do not mis-hold the bar, so as to avoid damaging the wheels when directing)

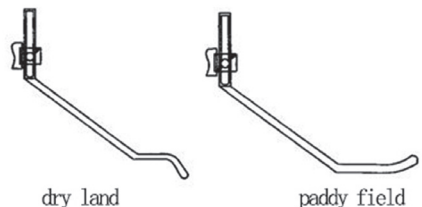
6. Stop working

- Hold the clutch bar with left hand to open the clutch.
- After adjusting the shift lever to the neutral position, you should unlock the clutch bar to make the machine stop working.
- When it necessary to stop working, the procedure should be done according to the diesel engine instruction.(attention: this work is usually done on the smooth ground.)

Connection of attaching tools

1. When rotating, you should take away the wheels, fix hexagonal sleeve of rotary device on both sides of the hexagonal shaft with boltsM8×55. Attention: there are blade units on both sides; make sure the blade cutting edge works firstly when the Rotary Tiller/Power Weeder/Cultivator runs. After the rotary blades are installed, you must install the safety panel to prevent injuries by blades. Weeding depth can be adjusted through adjusting shift lever and its included angle with the ground.(refer to table 4)

2. Weeding blades assy of paddy field: when the depth of paddy field is below 25cm, you can go Weeding with curved blades of paddy field directly. When the depth of paddy field is between 25-45 cm, you can go Weeding with rotary wheels of paddy field. table 4



3. When ditching, you should take down shift lever, install the ditcher and adjust its depth and height. After finishing these, you can do ditching work. (look at picture3)
Range of ditching scope: 14cm-40cm
Range of ditching depth: 11cm-25cm
4. Short-distance transportation
Install forearm of Rotary Tiller/Power Weeder/Cultivator case on the drug bar of running gear and install wheels on the driving shift of the running gear. After finishing these, you can transport. The rated load is 250kg. Under the rated rotary speed of diesel engine, the fast speed is around 10km/h and slow speed 5km/h.
5. Multifunctional work
Take away safety cover behind gear box, bolts behind main shaft, take key sleeve of shaft, push the belt pulley or key slot of coupling into the key, then fasten it with bolt. V-belt A-model is used for the cross section of belt pulley slot. The rated rotary speed of belt pulley is 3000r/m. when it is attached with relative machine tools, you can carry out such multifunctional work: bailing, sprinkling, chemical spraying, threshing, reaping and generating power.

Attention items of using Rotary Tiller/Power Weeder/Cultivator

1. When using Rotary Tiller/Power Weeder/Cultivator, you should pay attention to the working situation and sound of every part, check if the connection is good. There mustn't be loosed connection. If there is abnormal situation, you should stop the Rotary Tiller/Power Weeder/Cultivator and check..
2. Never carry out work with heavy load if Rotary Tiller/Power Weeder/Cultivator has not been used for a long time, especially the new ones or the repaired ones.
3. Pay attention to the oil level of diesel engine and gear box. When they are insufficient, please refuel them.
4. Never cool the diesel engine in the way of water-pouring.
5. Prevent Rotary Tiller/Power Weeder/Cultivator from falling down when Weeding.
6. Never install Rotary Tiller/Power Weeder/Cultivator with rotary blades work on sand or stone to avoid damaging blades.
7. After Weeding, pay attention to clear away dirtiness on the Rotary Tiller/Power Weeder/Cultivator: mud, grass and oil stain.
8. Frequently wash the sponge in the air filter, and change oil more often.

VIII.Attentions of Operating Engine:

1. BREAK-IN OF NEW ENGINE :

If your engine has not breaking in yet, improper usage will shorten the life of engine. the initial 20 hrs is the break-in-period. The operator must obey the following items :

2. RUNNING IN FOR 5 MINS AFTER FIRST START.

Running with low speed and low load before the engine gets hot. Avoid running with high speed and full load, or low speed and no load.

3. AVOID RUNNING WITH OVERLOAD.

During break-in period, the engine can't run with full load, but can run with 3000rpm and 50% load.

4. CHANGE ENGINE OIL REGULARLY.

After working for 20hrs, change the oil when engine is still warm, otherwise it will be difficult to drain the residual oil in the engine.

IX. Oil Bath Type Air Filter:

1. Check the oil level before operating.
2. Fill oil upto upper limit. If oil is dirty, change it. Please use diesel to clean oil bath element frequently, then dip the element in the oil and squeeze out extra.

Running

WARNING

- Be sure to operate the engine in a good ventilated place in order to avoid exhaust poisoning.
- Avoid letting hands, body & clothes entangle in output shaft, belt pulley, V-type belt pulley and other moving parts, so as to prevent from getting injured.
- Stop the engine first and then maintain the movable parts and other parts around it. Make sure there are no tools and sundries in the body of the engine before operating.

Run engine for 5mins to warm up

NOTICE

- The muffler becomes very hot during and immediately after operation. Don't touch it.
- The air filter will inWeedere the air around itself when the engine works.
- Don't let the hands, body and clothes approach the air filter to avoid injury.

After the engine becomes warm, put the speed lever on necessary position to run the engine.

NOTICE

- Be sure to use the speed lever to adjust the speed of engine.
- Donot loose the speed limit screw and fuel control screw; otherwise the speed and output of engine will be abnormal.

Running

- a. If the engine gives out black smoke continuously, it is because the engine is overloaded. The belt pulley of the engine or that of the powered equipment must be adjusted.
- b. Pay attention to the following points when the engine is running:
 - i. Whether there is abnormal sound and vibration?

ii. Whether the exhaust is normal?

iii. Whether the engine gives out white or black smoke continuously?

If any of the above phenomena is detected, stop the engine immediately and contact the nearby dealer.

X. Methods of Starting the Rotary Tiller/Power Weeder/Cultivator

a. Starting by Hand:

- Open fuel switch.
- Put engine speed lever in the start position
- LockAuto-cut off switch.
- Hold recoil starter handle.
- Pull the starting handle slowly until you feel resistance, then release it slowly.
- Push the decompression lever down by hand to no compression position. It will get back automatically by itself after the engine gets started.
- Starting : hold the starting handle with two hands, pull the rope lightly until you feel the resistance, then pull the rope fast with strength.
- If it is not easy to start the engine when the weather gets cold. You could take down the refuel screw on the cylinder cover and fill in 2ml oil before starting.

Notice

Tighten the refuel screw on the cylinder cover except filling oil in order to avoid rain and dust to get in the engine and wearing or damage of the engine.

XI. Safety Instructions:

Do's...

- Do visual check before starting, every time
- Keep Rotary Tiller/Power Weeder/Cultivator Clean
- Do use recommended Fuel and Lubricants Only
- Do Check Fuel Level
- Do Check Air Intake Filter oil level
- Do Check Engine Oil and Gear Oil levels
- Do Check for any leakage
- Do Check Decompress Knob before starting
- Do Check Gear in Neutral position before starting
- Do use recommended attachments Only
- Do maintain distance (1ft) from buildings and other equipments when operating, to avoid any accidents
- Keep away from flammable materials
- Keep away from children and pets to avoid any injuries or accidents.

- Only operator with knowledge of machine and its operations must be permitted to operate Agricultural Weeder
- Must stop engine before refueling, and refuel in good ventilation place
- Must clean and spilled or over flown fuel of the Agricultural Weeder
- Let Rotary Tiller/Power Weeder/Cultivator cool down before storing indoors.

Don't's...

- Don't overflow the fuel, but also never let fuel tank run out empty
- Don't use adulterated fuel
- Don't smoke or allow flame or spark where Rotary Tiller/Power Weeder/Cultivator is refueled or where fuel is stored
- Don't inWeedere exhaust for it can contain poisonous carbon monoxide
- Don't run Rotary Tiller/Power Weeder/Cultivator without adequate ventilation
- Don't lean/tilt Diesel Weeder more than 20°, otherwise fuel may spill
- Don't cover Rotary Tiller/Power Weeder/Cultivator top so as to avoid fire
- Don't touch muffler/exhaust, as it gets hot when operating and stays hot for sometime after stopping
- Don't delay on service schedules
- Don't Operate Diesel Weeder continuously more than 2hrs.30mins for any given operation (Give break of 20mins)
- Don't make any alterations in Design, Operations and Functioning of Rotary Tiller/Power Weeder/Cultivator other than Company's recommendation.

Chapter 4 - Maintenance of Rotary Tiller/Power Weeder/Cultivator

Due to rotary situation, abrasion and load change of Rotary Tiller/Power Weeder/Cultivator, bolts will become loose and parts will be worn during the work. These changes will destroy the proper working state of Rotary Tiller/Power Weeder/Cultivator, create abnormal fitting clearance, degrade output of diesel engine, increase oil consumption, lead to the maladjustment of spare parts, increase malfunction of Rotary Tiller/Power Weeder/Cultivator. All these will seriously affect the working efficiency of Rotary Tiller/Power Weeder/Cultivator. To decrease the frequency of the above-mentioned accidents, prevention of maintenance work must be done strictly and regularly to keep the Rotary Tiller/Power Weeder/Cultivator in a good technical state and prolong its life.

Running-in of Rotary Tiller/Power Weeder/Cultivator:

1. As for running-in of Rotary Tiller/Power Weeder/Cultivator, please refer to its instruction.
2. If Rotary Tiller/Power Weeder/Cultivator is new or is just heavy repair, it should work without load for one hour. After the Rotary Tiller/Power Weeder/Cultivator works with light load for five hours, all oil in gear box and crankcase of diesel engine should be drained immediately. Afterwards, you should refuel adequate clean oil, run the Rotary Tiller/Power Weeder/Cultivator at idle speed for 3 to 5 minutes to wash it, then drain oil completely. Please refuel oil and carry out running-in for 4 hours according to the forth procedure of chapter3. By doing so, the Rotary Tiller/Power Weeder/Cultivator can work in normal condition.

Technical maintenance of Rotary Tiller/Power Weeder/Cultivator

- A. Every-time maintenance (before and after work):
 1. Listen and check if there is malfunction of every part (such as abnormal noise, overheat, loose screw and so on).
 2. Check if there is oil leakage from diesel engine, gear box and running gear.
 3. Check if the oil level of diesel engine and gear box is between the upper and lower limit of dipstick.
 4. Clean the whole machine and spare parts which are with mud, grass and oil stain regularly.
 5. Do daily record.
- B. Primary maintenance (per 150 hours)
 6. Carry out maintenance work based on all contents of every- time maintenance.
 7. Wash gear box, running gearbox and change lube oil.
 8. Check and adjust clutch, shift system and reverse gear system.
- C. Secondary maintenance (per 800 hours)
 9. Carry out maintenance work based on all contents of primary maintenance.
 10. Check all gears and bearings. If they are fretted severely, please replace them.
 11. Check other parts of Rotary Tiller/Power Weeder/Cultivator, such as: rotary blades or bolts and so on. If there is damage, please replace them.
- D. Technical inspection (per 1500-2000 hours)
 12. Take the whole machine to the specific maintenance station, to have a check. If the spare parts are severely fretted, they must be changed or repaired according to the situation.

13. Invite special technician to check friction plate and clutch.

E. As for the maintenance of diesel engine, please refer to its instruction.

Technical maintenance table of Rotary Tiller/Power Weeder/Cultivator(mark"0" indicates the maintenance contents)

Working intervals and maintenance contents	Every day	Work with Weederf load for 8 hours	Work for one month or 20 hours	Work for 3 months or 150 hours	Every year or 1000 hours	Per 2 years or 2000 hours
Check and tighten nuts, bolts	0					
Check and refuel lube	0					
Check and change lube		0 (first time)	0 (second time)	0 (third time or more)		
Check if there is oil leakage	0					
Clean mud, grass and oil stain	0					
Debug malfunction	0					
Adjust operation parts	0					
Friction plate of clutch						0
Gears and bearings					0	

Long-period storage of Rotary Tiller/Power Weeder/Cultivator

When Rotary Tiller/Power Weeder/Cultivator needs storing for a long period, the following measures should be taken to prevent tarnishing.

1. Keep diesel engine with seal according to its instruction.
2. Wash oil stain and clean dust on the machine.
3. Drain lube oil in the gear box and refuel new oil.
4. Paint pickling oil on non-aluminum parts where there is no paint.
5. Store Rotary Tiller/Power Weeder/Cultivator in the dry, safe place where there is enough aeration.
6. Properly keep the attaching tools, certificates of conformity and instruction of Rotary Tiller/Power Weeder/Cultivator.

Chapter 5 - Debugging method of Rotary Tiller/Power Weeder/Cultivator

Debugging method of bevel gear assy:

When bevel gear drives abnormally with loud noise, you should check and debug it immediately. The debugging methods are as follows:

1. Bevel gear clearance debugging of gear box(look at picture10)
 - when bevel gear assy clearance $\Delta < 0.05$, you should increase clearance between gear box and running gear box with steel gasket.
 - When bevel gear assy clearance $\Delta > 0.3$, one should adjust the range 0.05~0.10 between the bearing and gear \square shaft.
2. Bevel gear clearance assy debugging of running gear box(look at picture11)
 - when bevel gear clearance $\Delta < 0.05$, you should adjust the gasket range 0.2~0.3 to increase clearance. Meanwhile, you should change steel gasket \square and adjust gasket \square to ensure clearance of gear \square shaft is 0.05~0.15.
 - When bevel gear assy clearance $\Delta > 0.3$, you should decrease gasket \square , meanwhile, ensure clearance of gear \square shaft is 0.05~0.15; or increase gasket \square , meanwhile, ensure clearance of gear \square is 0.05~0.15.

Debugging method of backshift gear and cable

When reverse of Rotary Tiller/Power Weeder/Cultivator is abnormal, you should debug the backshift handlebar and cable. As for the method, please refer to chapter3.

! Attention:

1. Hold, unlock backshift handlebar twice to three times, which is to put into gear. If the gear is not properly adjusted, please debug it until it is well done.
2. When driving the Rotary Tiller/Power Weeder/Cultivator, please unlock backshift handlebar. After finishing this, backshift gear should return to its original position immediately, and there should not be abnormal collision noise in the gear box, otherwise, gear will be destroyed.

Debugging method of clutch cable

Due to friction plate abrasion, clutch fork abrasion, function of the clutch become poor after a period of use. Therefore, you should debug the clutch cable. As for the debugging method, please refer to chapter3.

! Attention:

1. Hold, unlock the clutch handlebar for twice to three times. This is to check working condition of clutch. If it is abnormal, you should debug the clutch.
2. If it is debugged for several times, and it is still in bad condition, it is certain that clutch fork or friction plate is fretted severely. Therefore, you should change the friction plate or clutch fork with new parts in the special maintenance station. Never move clutch randomly in case of destroying the clutch and other parts.

Debugging method of gun cable

When revolving the gun switch and finding accelerating and decelerating function of the diesel engine is not good, you should debug the gun cable. As for the method, please refer to chapter3.

! Attention:

1. Revolve the gun switches for twice or three times and check the accelerating and decelerating function of diesel engine.
2. The gun cable and connection head should be fastened with screws.

Debugging method of handle bar

Four directions of handlebar can be properly set according to one's height and Weeding requirement. The method is in the following (look at pictue12)

1. Up-and-down debugging of handle bar:
 - Unlock the handlebar elements, disengage the terminal fangs between the handlebar and handle frame
 - Set the position of handle bar according to one's height and habits.
 - Revolve the handlebar to let terminal fangs meet between the handlebar and handle frame.
2. Left-and-right debugging:
 - Unlock the nut on the handle frame. This is to unlock the terminal fangs.
 - Set handlebar to the proper position on the left or right.
 - Tighten the nut to let terminal fangs meet.

Chapter 6 - Troubleshooting

Troubleshooting of diesel engine (refer to the diesel engine instruction)

Troubleshooting of clutch (attention: never take part the clutch assy just by yourself.)

Table 6

Phenomenon	Reason	Solution
The clutch can not be opened or closed.	Malfunction of clutch handlebar	Repair or change
	Damage of clutch cable	change
	Misadjustment of clutch fork	Readjust cable or change clutch fork
	Failure welding of clutch fork shaft, arm and frame	Repair or change
	Warping or breaking of fork pins	Change clutch fork pin
	Friction plate becomes useless	Change
	Spring becomes useless	Change
	Friction plate can not contact bearing cross section of clutch cover	Put gasket behind the bearing cover
Skidding(diesel engine runs normally after unlocking the handlebar, but the main shaft of gear box does not run or runs slowly)	Burn-out of bearing in clutch	Change; refuel the gear box
	Spring becomes useless	Change
	Clutch fork shaft becomes useless	Check the jointing section between the locating bearing and pusher to make it flexible
	Maladjustment of clutch cable	Readjust clutch cable

Troubleshooting of gear-box

Table 7

Phenomenon	Reason	Solution
Fast, slow and neutral shift can not be positioned	Screws and round nuts behind the shaft become loose	Take away screws and key sleeve behind the main shaft; reinstall key sleeve and screws after tightening the round nuts
Gear can not be positioned	Auxiliary brick is severely fretted	change auxiliary brick
	Bevel gear becomes loose	Tighten the nuts
	Heavy abrasion on the hole of the arm	Change arm elements
	Spring in the main shaft becomes useless	change
	Main shaft moving: the cover screws behind the case becomes loose	Tighten the screws
	The distortion of the shift lever	Adjust the shift lever; change
Back shift can not be positioned	Abrasion of backshift fork	Readjust shift cable; change shifting fork
	Backshift cable becomes useless	Readjust cable; change cable
	Backshift shaft becomes loose	Tighten screws behind the shift shaft
	Backshift fork is seized	Check the section between backshift fork and pusher to make it flexible
Back shift gear can not be positioned	Backshift shaft becomes loose, making gear seized	Tighten the screws behind the backshift shaft
	The spring on the backshift shaft becomes useless	Change the spring
	The backshift shaft becomes curved	Change the backshift shaft

Backshift shaft becomes loose	Bolts behind the backshift shaft become loose	Tighten the bolts
	The backshift shaft and case are not well fitted	Change
Gear noise is too loud	Bevel gear shaft and backshift shaft become curved	Change
	Gears are heavily fretted	Change gear
	Bevel gear shaft and backshift shaft are not well fitted	Change
There is oil leakage of back cover on the main shaft	O-ring on the main shaft becomes useless	Change O-ring ϕ 17 \times 1.8
	Oil seal on the main shaft becomes useless	Change oil seal B25407
	O-ring on the cover becomes useless	Change O-ring ϕ 46 \times 1.8
There is oil leakage of backshift shaft	Bolts behind the backshift shaft become loose	Tighten bolts
	O-ring on the backshift shaft becomes ineffective	Change O-ring ϕ 18 \times 1.8
There is oil leakage of backshift fork shaft	O-ring becomes useless	Change O-ring ϕ 1.2 \times 2.65
There is oil leakage of clutch shift fork	O-ring becomes useless	Change O-ring ϕ 1.2 \times 2.65
There is oil leakage of shift shaft	O-ring becomes useless	Change O-ring ϕ 1.2 \times 2.65
There is oil leakage of flange	Bolts become loose	Tighten bolts
	Steel gasket is damaged	Change
There is oil leakage of case	There are hidden micro holes in the case	Weld or paint to stop leakage

Troubleshooting of running gear

Table 8

Phenomenon	Reason	Solution
Gear noise is too loud	Gear is heavily fretted or repaired improperly	Readjust or change the gear
Gear is seized	Gear installation is incorrect	Reinstall
Overheat	Lube in the case is insufficient	Refuel lube according to the requirement
	Gear side clearance is too narrow	Reinstall
	Shaft windage is too narrow	Readjust
There is oil leakage of gear box	Bolts become loose	Tighten
	Seal gasket is damaged	Change
There is oil leakage of outer-section of crankshaft	Oil seal is damaged	Change oil seal B45628
There is oil leakage of hexagonal hole in the crankshaft	The shaft sleeve is broken	Change
There is oil leakage of oil drain hole	O-ring is damaged	Change O-ring $\phi 0 \times 1.8$
	Bolts become loose	Tighten according to the requirement
There is oil leakage of the case	There are hidden micro holes in the case	Weld or paint to stop leakage

Troubleshooting of other parts

Table 9

Phenomenon	Reason	Debugging method
Rotary blades are broken	Collide with stones in the course of using	Change, pay attention not to collide with the stones in the soil
The operating cable is broken	Long period abrasion	Change

easily-damaged parts of Rotary Tiller/Power Weeder/Cultivator

Number	Name	Assy
1	Clutch cable	Handle frame assy
2	Back shift clutch	Handle frame assy
3	Gun clutch	Handle frame assy
4	Gun switch	Handle frame assy
5	Rubber handlebar	Handle frame assy
6	Rubber sleeve	Shift lever, tighten handlebar
7	Oil seal45×62×68	Gear box assy
8	Oil seal25×40×7	Transmission box assy
9	Easily-damaged parts of engine	Refer to instruction and picture of engine

Chapter 7 - Instruction table of attaching tools

Table 10

Number	Name	Unit	Usage
1	Rotary Weeding wheels of paddy field	Set	Weeding in paddy field
2	Water pumping device(centrifugal water pump3-stroke)	Set	Water pumping
3	Ditcher	Set	Ditching

Chapter 8 - Bearings of Rotary Tiller/Power Weeder/Cultivator

Table 11

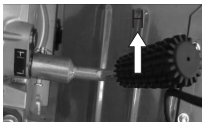




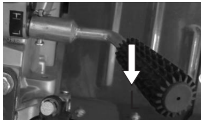
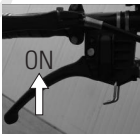
Number	Model	Name	Specification	Quantity	Remark
1	GB276-82	Radial ball bearing	6204	1	Used for main shaft
			6202	3	Used for the clutch, diesel engine
			6206	1	Used for diesel engine
			6307	1	Used for diesel engine
			6009	1	Used for crankshaft sleeve
2	GB297-84	Thrust bearing	30204	1	Used for driving bevel gear□
		Thrust bearing	32009	1	Used for crankshaft sleeve
		Thrust bearing	30206	1	Used for driven bevel gear
		Plane bearing	51104	1	Used for driven shaft
3	GB-5846-86	Needle roller bearing	K182420	2	Used for driving bevel gear□
			HK1512	1	Used for diesel engine
			7941/8	2	Used for diesel engine

Rotary Tiller/Power Weeder/Cultivator

New Six Shifts Operating Guide

1. Gear operation instruction

a. Gear schematic drawing

deputy shifting picture	gear pictures				
 deputy shifting (high)	 first gear	 neutral	 second gear	1	
 deputy shifting (low)				2	 reverse gear

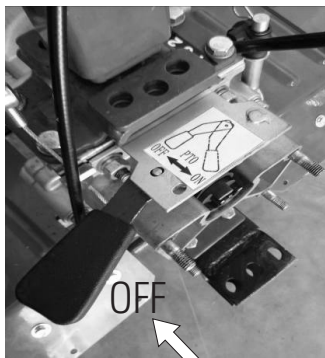
b. Gear tachometer1-1

	Shifts	-1	0	1	0	2
deputy shifting (high)	revolving speed (r/min)	83	--	83	--	145
	speed (km/h)	6.26	--	6.26	--	10.09
deputy shifting (low)	revolving speed (r/min)	24	--	24	0	42
	speed (km/h)	1.81	--	1.81	--	3.17

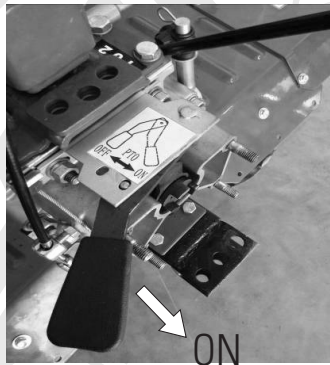
Description: speed of table 1-1 use 4.00-8 standard wheels

2. Output clutch handle instructions

clutch claw + machine operating pictures



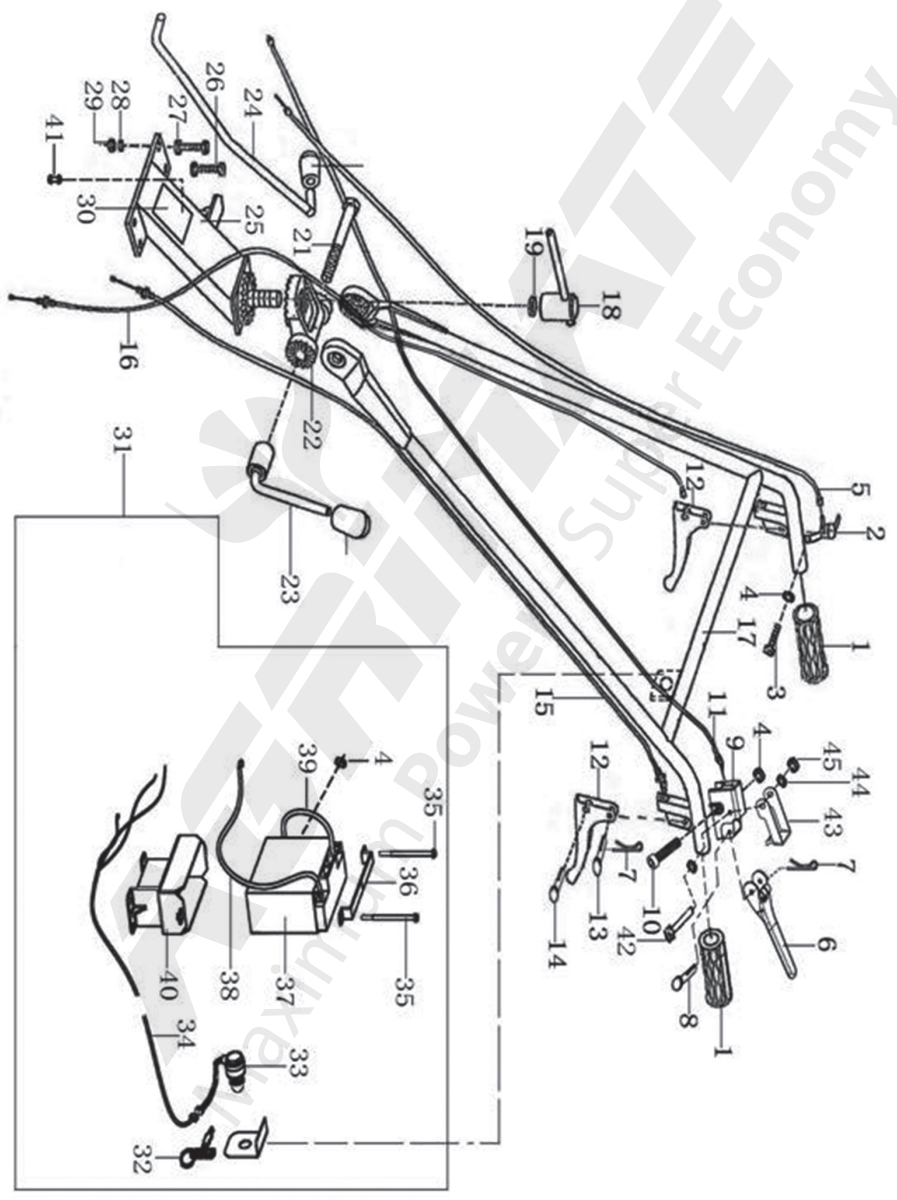
PTO output clutch release



PTO output clutch close

SPARE PARTS DIAGRAM OF AM-MPT-1100-6D

HANDLE CONTROL PARTS-A



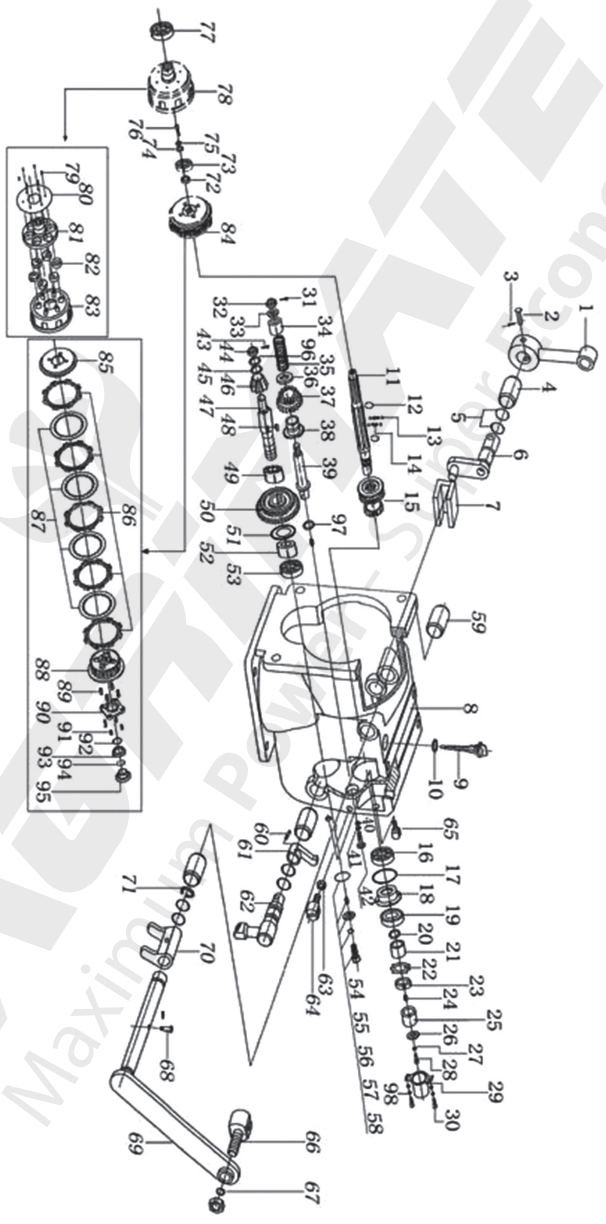
SPARE PARTS LIST OF AM-MPT-1100-6D

Parts No.	Description
AM-MPT-1100-6T-A1	Handle Grip
AM-MPT-1100-6T-A2	Shut Down Switch Comp
AM-MPT-1100-6T-A3	Bolt M6×20
AM-MPT-1100-6T-A4	Nut M6
AM-MPT-1100-6T-A5	Throttle Cable Comp
AM-MPT-1100-6T-A6	Flameout switch
AM-MPT-1100-6T-A7	Clip Φ 2
AM-MPT-1100-6T-A8	Pin 6×40
AM-MPT-1100-6T-A9	Flameout switch Seat
AM-MPT-1100-6T-A10	Bolt M6×40
AM-MPT-1100-6T-A11	Flameout switch Cable Co
AM-MPT-1100-6T-A12	Reverse Gear Or Clutch G
AM-MPT-1100-6T-A13	Pin 7×24
AM-MPT-1100-6T-A14	Pin 10×24
AM-MPT-1100-6T-A15	Clutch Cable
AM-MPT-1100-6T-A16	Reverse Gear Cable
AM-MPT-1100-6T-A17	Handle bar assy
	Handle bar assy (Electric sta
AM-MPT-1100-6T-A18	T Figure Lock Comp
AM-MPT-1100-6T-A19	Spring Washer 20
AM-MPT-1100-6T-A21	Bolt M16×150

Parts No.	Description
AM-MPT-1100-6T-A22	Tray, Gear
AM-MPT-1100-6T-A23	High And Low Lock Comp
AM-MPT-1100-6T-A24	Shift Lever
AM-MPT-1100-6T-A25	Handle Seat Comp
AM-MPT-1100-6T-A26	Bolt M10×40
AM-MPT-1100-6T-A27	Washer 10
AM-MPT-1100-6T-A28	Spring Washer 10
AM-MPT-1100-6T-A29	Nut M10
AM-MPT-1100-6T-A34	Startup Control Cord
AM-MPT-1100-6T-A35	Connecting Bolt M6×124
AM-MPT-1100-6T-A36	Accumulator Fixation Boar
AM-MPT-1100-6T-A37	Accumulator Assy
AM-MPT-1100-6T-A38	Accumulator Connecting C
AM-MPT-1100-6T-A39	Accumulator Connecting C
AM-MPT-1100-6T-A40	Base, Accumulator Assy
AM-MPT-1100-6T-A41	Screw
AM-MPT-1100-6T-A42	Cruciform slot screw M4×40
AM-MPT-1100-6T-A43	Clip
AM-MPT-1100-6T-A44	Washer 4
AM-MPT-1100-6T-A45	Flange bolt M4

SPARE PARTS DIAGRAM OF AM-MPT-1100-6D

SHIFT GEAR PARTS-B



SPARE PARTS LIST OF AM-MPT-1100-6D

Parts No.	Description
AM-MPT-1100-6T-B1	Sheath, Shift rod
AM-MPT-1100-6T-B2	Pin 6×40, Shift rod
AM-MPT-1100-6T-B3	Clip
AM-MPT-1100-6T-B4	Bush Shift axes
AM-MPT-1100-6T-B5	O-ring 11.2×2.65
AM-MPT-1100-6T-B6	Shift axes
AM-MPT-1100-6T-B7	Shift fork
AM-MPT-1100-6T-B8	Shift gear box
AM-MPT-1100-6T-B9,10	Oil stick
AM-MPT-1100-6T-B11	Principal axes
AM-MPT-1100-6T-B12	Ring GB/T 895.2 25×2
AM-MPT-1100-6T-B13	Steel ball GB/T 304 SΦ6
AM-MPT-1100-6T-B14	Spring , Principal axes
AM-MPT-1100-6T-B15	Iniative gear
AM-MPT-1100-6T-B16	Axletree 6204
AM-MPT-1100-6T-B17	O-ring 45×1.8
AM-MPT-1100-6T-B18	Pushing panel
AM-MPT-1100-6T-B19	Oil seal B25×40×7
AM-MPT-1100-6T-B20	O-ring 17×1.8
AM-MPT-1100-6T-B21	Sheath, principal axes
AM-MPT-1100-6T-B22	Gasket 20
AM-MPT-1100-6T-B23	Nut M20×1.5
AM-MPT-1100-6T-B24	Key A6×6×20
AM-MPT-1100-6T-B25	Sheath, Key
AM-MPT-1100-6T-B26	Gasket 30×6.5×3

Parts No.	Description
AM-MPT-1100-6T-B27	Spring washer 6
AM-MPT-1100-6T-B28	Hex bolts M6×20
AM-MPT-1100-6T-B29	Protec cover, principal ax
AM-MPT-1100-6T-B30	Screw M6×20
AM-MPT-1100-6T-B31	Splitpin 2.5×30
AM-MPT-1100-6T-B32	Nut M12
AM-MPT-1100-6T-B33	Washer 12
AM-MPT-1100-6T-B34	Restrict cover, reverse ge
AM-MPT-1100-6T-B35	Spring
AM-MPT-1100-6T-B36	Spring seat, reverse gear
AM-MPT-1100-6T-B37	Double gear, reverse gear
AM-MPT-1100-6T-B38	Pushing plate, reverse gea
AM-MPT-1100-6T-B39	Axes, reverse gear
AM-MPT-1100-6T-B40	Washer 40*12.5*4
AM-MPT-1100-6T-B41	Spring washer 10
AM-MPT-1100-6T-B42	Bolt M10×25
AM-MPT-1100-6T-B43	Splitpin GB/T 91 2.5×2
AM-MPT-1100-6T-B44	Nut GB/T 6178 M10
AM-MPT-1100-6T-B45	Gasket
AM-MPT-1100-6T-B46	Iniative umbrella gear
AM-MPT-1100-6T-B47	Countershaft
AM-MPT-1100-6T-B48	Key A6×6×20
AM-MPT-1100-6T-B49	Ball bearing K182420

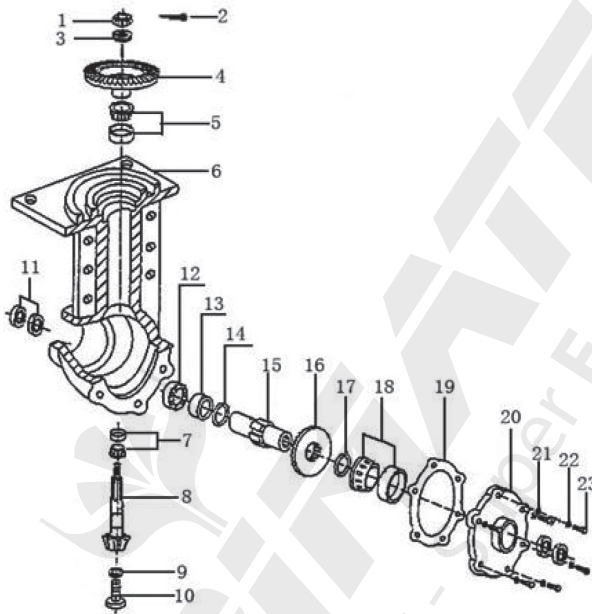
SPARE PARTS LIST OF AM-MPT-1100-6D

Parts No.	Description
AM-MPT-1100-6T-B50	Double gear, countershaf
AM-MPT-1100-6T-B51	Gasket, countershaft
AM-MPT-1100-6T-B52	Sheath, countershaft
AM-MPT-1100-6T-B53	Thrust ball bearing 51104
AM-MPT-1100-6T-B54	O-ring 25×1.8
AM-MPT-1100-6T-B56	Gasket 41×12.5×4
AM-MPT-1100-6T-B57	Spring washer 12
AM-MPT-1100-6T-B58	Bolt M12×1.25×25
AM-MPT-1100-6T-B59	Sheath 20×16×31.5
AM-MPT-1100-6T-B60	Worm column pin 5×30
AM-MPT-1100-6T-B61	Reverse gear fork
AM-MPT-1100-6T-B62	Axes, reverse gear fork
AM-MPT-1100-6T-B63	Nut M8
AM-MPT-1100-6T-B64	Seat, reverse gear cable
AM-MPT-1100-6T-B65	Seat, clutch cable
AM-MPT-1100-6T-B66	Seat, clutch cable
AM-MPT-1100-6T-B67	Spring washer 8
AM-MPT-1100-6T-B68	Pin 6×20, clutch fork
AM-MPT-1100-6T-B69	Axes, clutch fork
AM-MPT-1100-6T-B70	Clutch fork
AM-MPT-1100-6T-B71	Ring 16
AM-MPT-1100-6T-B72	Clutch washer
AM-MPT-1100-6T-B73	Axletree 6202
AM-MPT-1100-6T-B74	Gasket 8

Parts No.	Description
AM-MPT-1100-6T-B75	Sawtooth locked gasket
AM-MPT-1100-6T-B76	Flange bolt M8×20
AM-MPT-1100-6T-B77	Axletree 6207
AM-MPT-1100-6T-B78	Core comp, clutch
AM-MPT-1100-6T-B79	Screw 6
AM-MPT-1100-6T-B80	Cover, cushion
AM-MPT-1100-6T-B81	Spline plate, clutch
AM-MPT-1100-6T-B82	Cushion
AM-MPT-1100-6T-B83	Cover, clutch
AM-MPT-1100-6T-B84	Core comp, clutch
AM-MPT-1100-6T-B85	Platen
AM-MPT-1100-6T-B86	Friction piece
AM-MPT-1100-6T-B87	Driven piece
AM-MPT-1100-6T-B88	Driven plate assy
AM-MPT-1100-6T-B89	Spring
AM-MPT-1100-6T-B90	Lift slab assy
AM-MPT-1100-6T-B91	Scrc M5×20
AM-MPT-1100-6T-B92	Steel ring GB/T 895.2
AM-MPT-1100-6T-B93	Fixed sheath
AM-MPT-1100-6T-B94	Ball bearing SΦ3.5
AM-MPT-1100-6T-B95	Active Pushing cover
AM-MPT-1100-6T-B96	Gasket 16.5×10.5×2
AM-MPT-1100-6T-B97	O-ring 18×1.8
AM-MPT-1100-6T-B98	Washer

SPARE PARTS DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

TRANSMISSION CASE PARTS-C

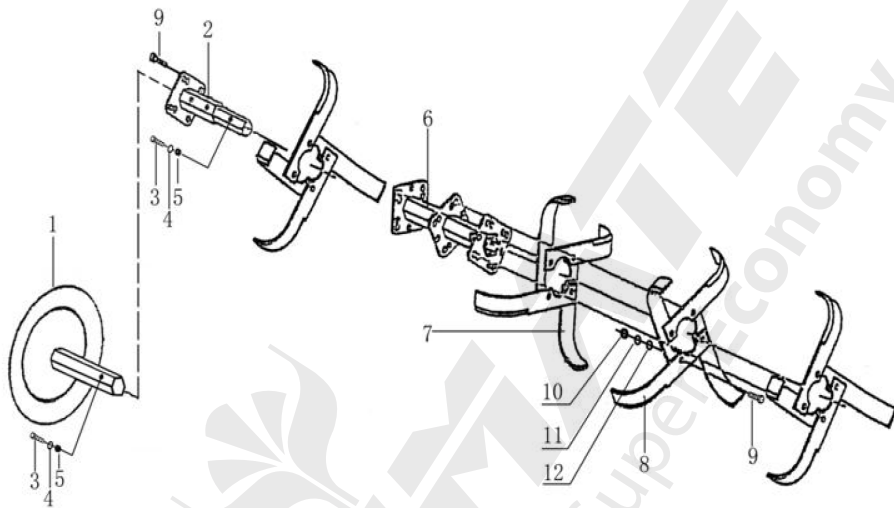


Parts No.	Description
AM-MPT-1100-6T-C1	Nut M12
AM-MPT-1100-6T-C2	Splitpin 2.5x22
AM-MPT-1100-6T-C3	Spring washer 12
AM-MPT-1100-6T-C4	Driven umbrella gear
AM-MPT-1100-6T-C5	Taper ball bearing 30206
AM-MPT-1100-6T-C6	Walking case
AM-MPT-1100-6T-C7	Taper ball bearing 30204
AM-MPT-1100-6T-C8	Umbrella gear axes
AM-MPT-1100-6T-C9	O-ring 10x2.65
AM-MPT-1100-6T-C10	Drain bolt M12x1.25x
AM-MPT-1100-6T-C11	Oil seal B45x62x8
AM-MPT-1100-6T-C12	Ball bearing 6009

Parts No.	Description
AM-MPT-1100-6T-C13	Cover, output axes
AM-MPT-1100-6T-C14	Gasket 60x45.5x0.1
AM-MPT-1100-6T-C15	Cover, flange axes
AM-MPT-1100-6T-C16	Walking umbrella gear
AM-MPT-1100-6T-C17	Gasket 60x45.5x0.5
AM-MPT-1100-6T-C18	Taper ball bearing 32009
AM-MPT-1100-6T-C19	Gasket $\delta 0.5, \delta 0.2$
AM-MPT-1100-6T-C20	Side cover, walking case
AM-MPT-1100-6T-C21	Washer 8
AM-MPT-1100-6T-C22	Spring washer 8
AM-MPT-1100-6T-C23	Hex bolt M8x30

SPARE PARTS DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

ROTARY TILLER PARTS - D

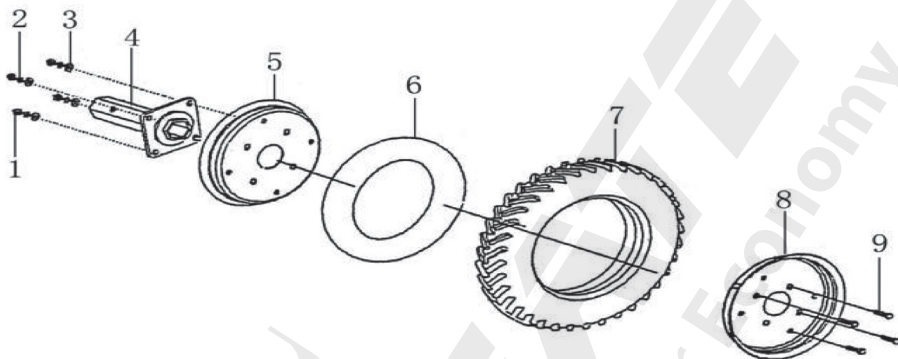


Parts No.	Description
AM-MPT-1100-6T-D1	Round plate(Optional)
AM-MPT-1100-6T-D2	Counter tube
AM-MPT-1100-6T-D3	Bolt M8×55
AM-MPT-1100-6T-D4	Spring washer 8
AM-MPT-1100-6T-D5	Nut M8
AM-MPT-1100-6T-D6	Main tube

Parts No.	Description
AM-MPT-1100-6T-D7	Blade(L)
AM-MPT-1100-6T-D8	Blade(R)
AM-MPT-1100-6T-D9	Hex bolt M10×35
AM-MPT-1100-6T-D10	Nut M10
AM-MPT-1100-6T-D11	Washer 10
AM-MPT-1100-6T-D12	Spring washer 10

SPARE PARTS DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

LAMBDOIDAL WHEEL PARTS - E

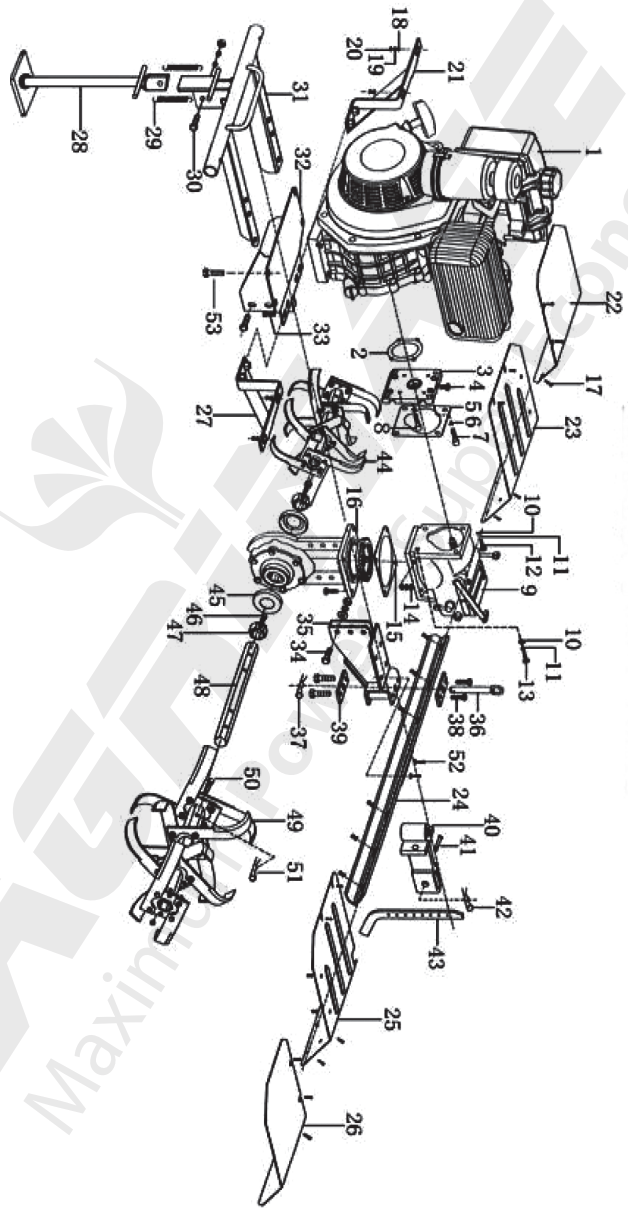


Parts No.	Description
AM-MPT-1100-6T-E1	Nut M10
AM-MPT-1100-6T-E2	Spring washer 10
AM-MPT-1100-6T-E3	Washer 10
AM-MPT-1100-6T-E4	Wheel axle
AM-MPT-1100-6T-E5	Spoke (R)

Parts No.	Description
AM-MPT-1100-6T-E6	Inner tube
AM-MPT-1100-6T-E7	Outer rubber tyre 4.00-8
AM-MPT-1100-6T-E8	Spoke (L)
AM-MPT-1100-6T-E9	Hex bolt M10×30

SPARE PARTS DIAGRAM OF AM-MPT-1100-6D

JOINT PARTS - F



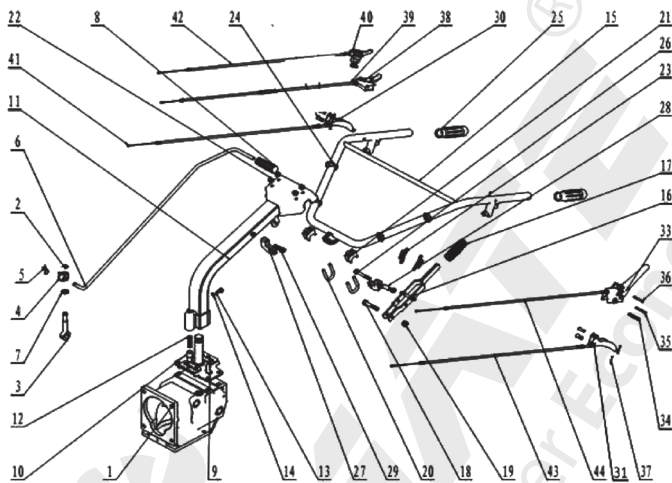
SPARE PARTS LIST OF AM-MPT-1100-6D

Parts No.	Description
AM-MPT-1100-6T-F1	Diesel engine comp
	Diesengine comp/Elect
AM-MPT-1100-6T-F2	Flange gasket
AM-MPT-1100-6T-F3	Flange
AM-MPT-1100-6T-F4	Bolt M12×1.25×25
AM-MPT-1100-6T-F5	Airproof gasket, gear box
AM-MPT-1100-6T-F6	Spring washer 8
AM-MPT-1100-6T-F7	Screw M8×30
AM-MPT-1100-6T-F8	Screw M8×25
AM-MPT-1100-6T-F9	Gear box comp
AM-MPT-1100-6T-F10	Washer 10
AM-MPT-1100-6T-F11	Spring washer 10
AM-MPT-1100-6T-F12	Bolts M10×40
AM-MPT-1100-6T-F13	Bolts M10×35
AM-MPT-1100-6T-F14	Nut M10
AM-MPT-1100-6T-F15	Core comp, clutch
AM-MPT-1100-6T-F16	Gear box comp
AM-MPT-1100-6T-F17	Bolts M6×16
AM-MPT-1100-6T-F18	Washer 6
AM-MPT-1100-6T-F19	Spring washer
AM-MPT-1100-6T-F20	Nut M6
AM-MPT-1100-6T-F21	Frame(R)
AM-MPT-1100-6T-F23	Bust cover (R)
AM-MPT-1100-6T-F24	Frame, Dust cover (Back)
AM-MPT-1100-6T-F25	Dust cover(L)
AM-MPT-1100-6T-F27	Frame(L)

Parts No.	Description
AM-MPT-1100-6T-F28	Bumper support
AM-MPT-1100-6T-F29	Spring
AM-MPT-1100-6T-F30	Falnge bolt M10×30
AM-MPT-1100-6T-F31	Bumper comp
AM-MPT-1100-6T-F32	Support frame, engine
AM-MPT-1100-6T-F33	Bolts, M8×12
AM-MPT-1100-6T-F34	Bolts, M10×55
AM-MPT-1100-6T-F35	Dragging assy
AM-MPT-1100-6T-F36	Pin with ring
AM-MPT-1100-6T-F37	Clip Φ3.5
AM-MPT-1100-6T-F38	Bolts M10×30
AM-MPT-1100-6T-F40	Connection frame
AM-MPT-1100-6T-F41	Pin 8×42
AM-MPT-1100-6T-F42	Clip Φ2
AM-MPT-1100-6T-F43	Resistance rod
AM-MPT-1100-6T-F44	Dry land blade comp(R)
AM-MPT-1100-6T-F45	Dust protect cover
AM-MPT-1100-6T-F46	Bolts M8×25
AM-MPT-1100-6T-F47	Flange fix sheath
AM-MPT-1100-6T-F48	Flange output axes
AM-MPT-1100-6T-F49	Dry land blade comp(L)
AM-MPT-1100-6T-F50	Pin 8×50
AM-MPT-1100-6T-F51	Clip Φ2
AM-MPT-1100-6T-F52	Flange bolt M10×25
AM-MPT-1100-6T-F53	Flange bolt M10×45

SPARE PARTS DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

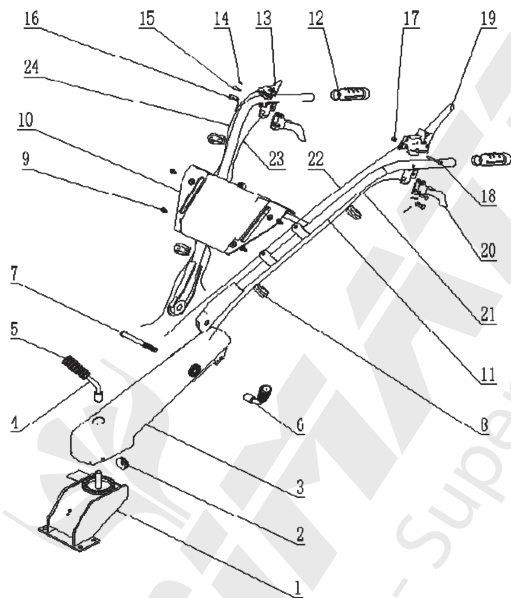
G



Parts No.	Description	Parts No.	Description
AM-MPT-1100-6T-G1	Shift Gears	AM-MPT-1100-6T-G22	Nut M8
AM-MPT-1100-6T-G2	Split ring 9	AM-MPT-1100-6T-G23	spring
AM-MPT-1100-6T-G3	Sheath, Shift rod	AM-MPT-1100-6T-G24	Clip Φ 25
AM-MPT-1100-6T-G4	PTO Higer B	AM-MPT-1100-6T-G25	Grip Φ 25
AM-MPT-1100-6T-G5	Clip F	AM-MPT-1100-6T-G26	Bolt M8x60
AM-MPT-1100-6T-G6	Shift lever	AM-MPT-1100-6T-G27	locating piece
AM-MPT-1100-6T-G7	Washer C Class 12x2.5	AM-MPT-1100-6T-G28	washer,locating piece
AM-MPT-1100-6T-G8	Handle bar	AM-MPT-1100-6T-G29	Bolt M8X35
AM-MPT-1100-6T-G9	Handle bar seat assy	AM-MPT-1100-6T-G30	Clutch Handle
AM-MPT-1100-6T-G10	Pin	AM-MPT-1100-6T-G31	
AM-MPT-1100-6T-G11	Handle bar pipe assy	AM-MPT-1100-6T-G33	WM1050 Switch assy
AM-MPT-1100-6T-G12	spring	AM-MPT-1100-6T-G34	Bolt M6x40
AM-MPT-1100-6T-G13	Lock Comp Bolt	AM-MPT-1100-6T-G35	Bolt M4x40
AM-MPT-1100-6T-G14	Washer 8x2.1	AM-MPT-1100-6T-G36	Pin 6x40
AM-MPT-1100-6T-G15	Handle bar assy	AM-MPT-1100-6T-G38	Turning Handle
AM-MPT-1100-6T-G16	Height Setting	AM-MPT-1100-6T-G39	Turning Cable
AM-MPT-1100-6T-G17	Grips,Height setting	AM-MPT-1100-6T-G40	Shut Down Switch Comp
AM-MPT-1100-6T-G18	Bolt M10x55	AM-MPT-1100-6T-G41	Reverse Gear Cable
AM-MPT-1100-6T-G19	Nut M10	AM-MPT-1100-6T-G42	Throttle Cable Comp
AM-MPT-1100-6T-G20	"U" Bolt	AM-MPT-1100-6T-G43	Clutch Cable
AM-MPT-1100-6T-G21	Handle Seat Comp	AM-MPT-1100-6T-G44	Flameout switch Cable C

SPARE PARTS DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

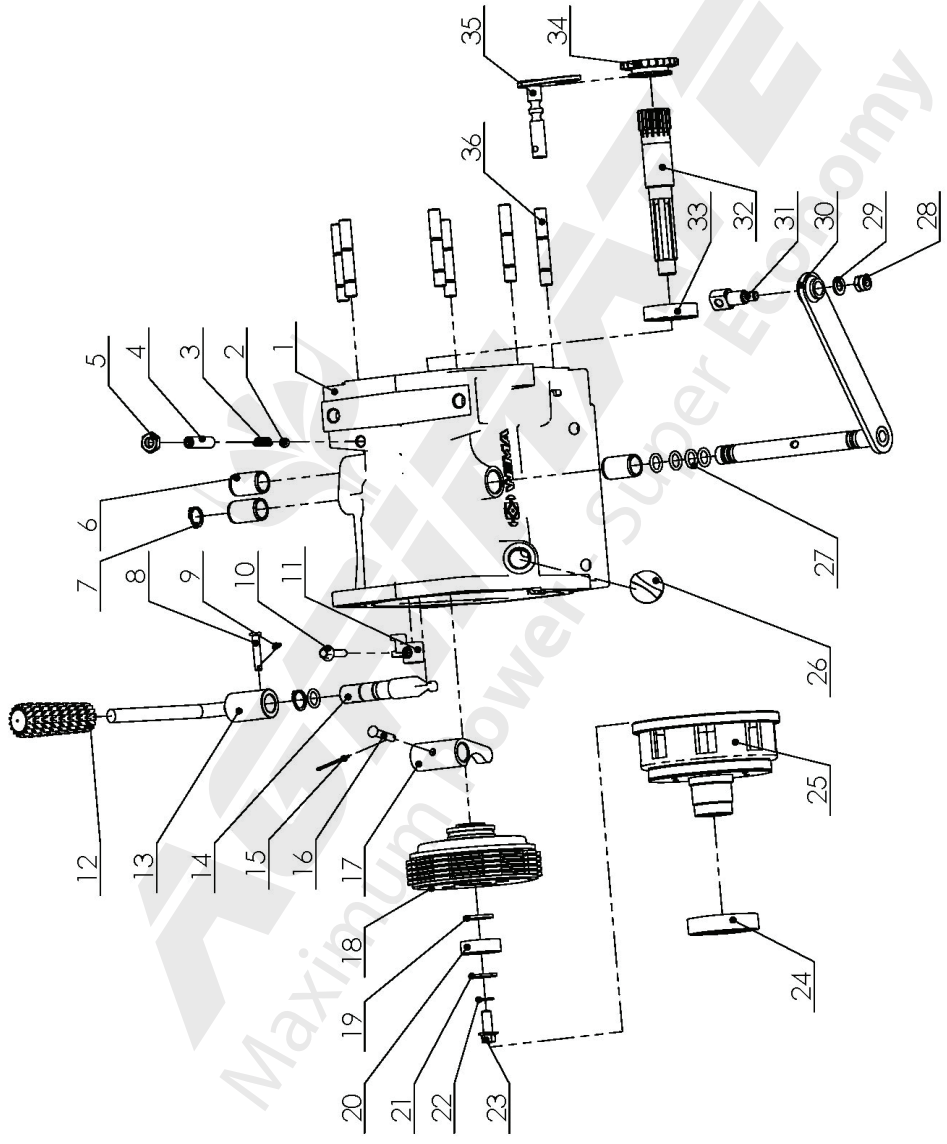
HANDLE CONTROL PARTS - H



Parts No.	Description	Parts No.	Description
AM-MPT-1100-6T-H1	Handle seat-I	AM-MPT-1100-6T-H13	Throttle Switch Comp(φ25)
AM-MPT-1100-6T-H2	Handle seat wear-proof casing	AM-MPT-1100-6T-H14	Pin 1.6x20
AM-MPT-1100-6T-H3	Handle seat -II	AM-MPT-1100-6T-H15	Pin 7x24
AM-MPT-1100-6T-H4	Locking handle-I	AM-MPT-1100-6T-H16	Cable joint 10x24
AM-MPT-1100-6T-H5	Grip	AM-MPT-1100-6T-H17	Nut M6
AM-MPT-1100-6T-H6	Locking handle-II	AM-MPT-1100-6T-H18	Srew M6x45
AM-MPT-1100-6T-H7	Hex-bolt M12X120	AM-MPT-1100-6T-H19	Flameout switch
AM-MPT-1100-6T-H8	Fixed ring	AM-MPT-1100-6T-H20	Reverse/Clutch bar
AM-MPT-1100-6T-H9	Hex-bolt M6X16	AM-MPT-1100-6T-H21	Clutch cable
AM-MPT-1100-6T-H10	Tool box	AM-MPT-1100-6T-H22	Flameout switch Cable Comp
AM-MPT-1100-6T-H11	Handle bar	AM-MPT-1100-6T-H23	Reverse gear cable
AM-MPT-1100-6T-H12	Handle Grip(φ25)	AM-MPT-1100-6T-H24	Throttle cable

SPARE PARTS DIAGRAM OF AM-MPT-1100-6D

SIX SHIFT GEARS PARTS-FRONT - A

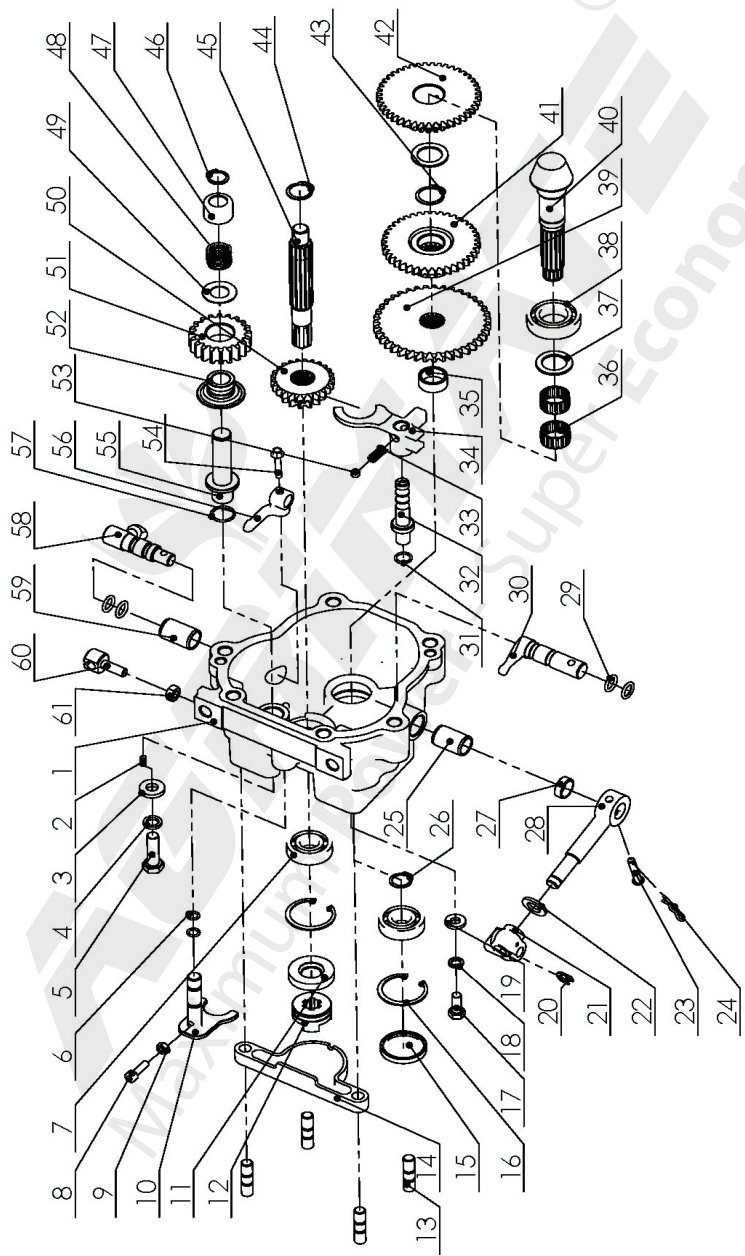


SPARE PARTS LIST OF AM-MPT-1100-6D

Parts No.	Description	Parts No.	Description
AM-MPT-1100-TGB-A1	Gearbox,Front	AM-MPT-1100-TGB-A19	Gasket 15.5×26×2.6,clutch
AM-MPT-1100-TGB-A2	ø8 steel ball	AM-MPT-1100-TGB-A20	Ball bearing 6202
AM-MPT-1100-TGB-A3	Gear-Shifting spring	AM-MPT-1100-TGB-A21	Washer Φ8
AM-MPT-1100-TGB-A4	Hexagon srew M10X35	AM-MPT-1100-TGB-A22	Serrated lock washers Φ8
AM-MPT-1100-TGB-A5	Hexagon thin nuts M10	AM-MPT-1100-TGB-A23	Hexagon flange bolts M8X20
AM-MPT-1100-TGB-A6	Bush 16×20×30	AM-MPT-1100-TGB-A24	Ball bearing 6007
AM-MPT-1100-TGB-A7	Shaft circlip Φ16	AM-MPT-1100-TGB-A25	Clutch housing assembly
AM-MPT-1100-TGB-A8	Pin 6X32	AM-MPT-1100-TGB-A26	dipstick
AM-MPT-1100-TGB-A9	Clip F	AM-MPT-1100-TGB-A27	O ring 11.2x2.65
AM-MPT-1100-TGB-A10	Hexagon flange bolts M6X30	AM-MPT-1100-TGB-A28	Hexagon nuts M8
AM-MPT-1100-TGB-A11	Subtransmission Allocated block	AM-MPT-1100-TGB-A29	Flat Washer Φ8
AM-MPT-1100-TGB-A12	Damping grip Φ12	AM-MPT-1100-TGB-A30	Clutch fork shaft
AM-MPT-1100-TGB-A13	Subtransmission lever	AM-MPT-1100-TGB-A31	Movable seat, clutch cable
AM-MPT-1100-TGB-A14	Gear-shifting rocker 2	AM-MPT-1100-TGB-A32	Input shaft
AM-MPT-1100-TGB-A15	Cotter 2X28	AM-MPT-1100-TGB-A33	Ball bearing 6005
AM-MPT-1100-TGB-A16	Pin 6X30	AM-MPT-1100-TGB-A34	A Spindle gear A
AM-MPT-1100-TGB-A17	Clutch fork	AM-MPT-1100-TGB-A35	Subtransmission fork
AM-MPT-1100-TGB-A18	Core comp, clutch	AM-MPT-1100-TGB-A36	Stud bm=1.5d M10X60

SPARE PARTS DIAGRAM OF AM-MPT-1100-6D

GEARBOX-END COVER - B



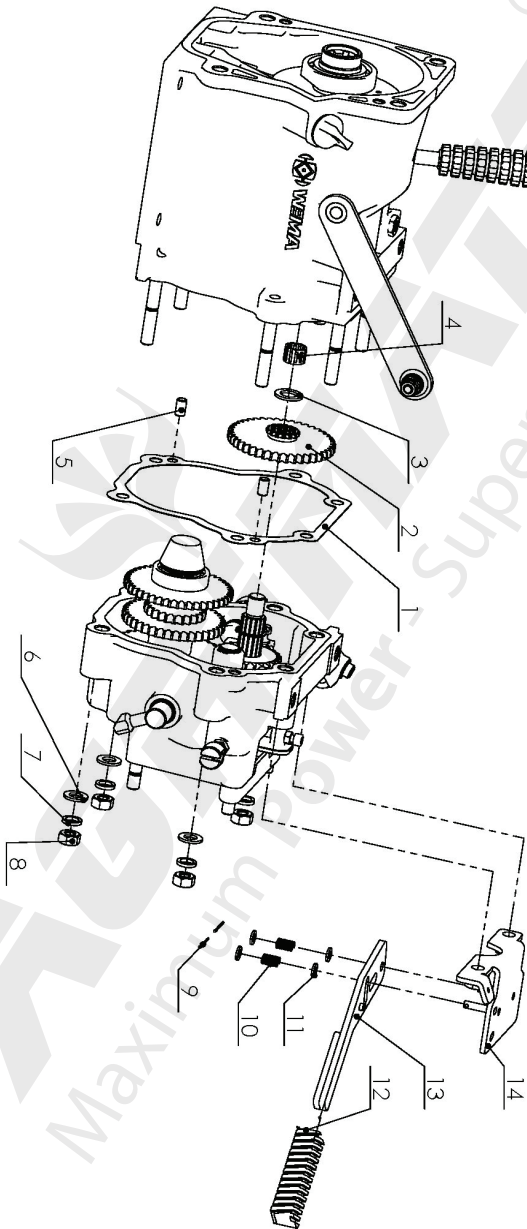
SPARE PARTS LIST OF AM-MPT-1100-6D

Part No.	Description
AM-MPT-1100-TGB-B1	End cover
AM-MPT-1100-TGB-B2	Cylindrical pin 5X10
AM-MPT-1100-TGB-B3	Washer 10.5×22×4
AM-MPT-1100-TGB-B4	Spring washer Φ10
AM-MPT-1100-TGB-B5	Hexagon bolt M10X40
AM-MPT-1100-TGB-B6	ring 1.8x8.0 2
AM-MPT-1100-TGB-B7	Ball bearing 6203
AM-MPT-1100-TGB-B8	Hexagon head screw M6X20
AM-MPT-1100-TGB-B9	Hex nuts M6
AM-MPT-1100-TGB-B10	Output fork
AM-MPT-1100-TGB-B11	Lip seal TC17x40x8
AM-MPT-1100-TGB-B12	Output clutch finger
AM-MPT-1100-TGB-B13	Stud bm=1.5d M10x25
AM-MPT-1100-TGB-B14	Plastic cover, Clutch
AM-MPT-1100-TGB-B15	Oil plug 40X6
AM-MPT-1100-TGB-B16	Hole circlip Φ40
AM-MPT-1100-TGB-B17	Hex head bolts M8X20
AM-MPT-1100-TGB-B18	Spring washer Φ8
AM-MPT-1100-TGB-B19	Flat washer 8x18x3
AM-MPT-1100-TGB-B20	Collar Φ9
AM-MPT-1100-TGB-B21	hinge B
AM-MPT-1100-TGB-B22	Flat washer Φ12
AM-MPT-1100-TGB-B23	Pin 6×32
AM-MPT-1100-TGB-B24	Clip F
AM-MPT-1100-TGB-B25	Bush 16×20×30
AM-MPT-1100-TGB-B26	Shaft circlip Φ17
AM-MPT-1100-TGB-B27	Restrict cover
AM-MPT-1100-TGB-B28	Sheath, Shift rod
AM-MPT-1100-TGB-B29	O ring 11.2x2.652
AM-MPT-1100-TGB-B30	Gear-shift rocker
AM-MPT-1100-TGB-B31	O ring 11.8x1.8
AM-MPT-1100-TGB-B32	Gear-shift fork shaft
AM-MPT-1100-TGB-B33	Gear-shift spring

Part No.	Description
AM-MPT-1100-TGB-B34	Gear-shift fork
AM-MPT-1100-TGB-B35	Spacer 20.5×25×11.5
AM-MPT-1100-TGB-B36	Ball bearing KT22×26×13
AM-MPT-1100-TGB-B37	Adjusting washer 22×32×2
AM-MPT-1100-TGB-B38	Ball bearing 6005
AM-MPT-1100-TGB-B39	Slow-speed gear, Countershaft
AM-MPT-1100-TGB-B40	Countershaft
AM-MPT-1100-TGB-B41	Fast-speed gear, Countershaft
AM-MPT-1100-TGB-B42	A Double gear ,Countershaft
AM-MPT-1100-TGB-B43	Shaft circlip Φ22
AM-MPT-1100-TGB-B44	Shaft circlip Φ20
AM-MPT-1100-TGB-B45	Spindle
AM-MPT-1100-TGB-B46	Shaft circlip Φ16
AM-MPT-1100-TGB-B47	Restrict cover, reverse gear
AM-MPT-1100-TGB-B48	Spring,reverse gear
AM-MPT-1100-TGB-B49	Abrasion resistant washers 16.5×30×1
AM-MPT-1100-TGB-B50	Double gear ,principal axes
AM-MPT-1100-TGB-B51	Reverse gear
AM-MPT-1100-TGB-B52	Pushing plate, reverse gear
AM-MPT-1100-TGB-B53	Φ8 steel ball
AM-MPT-1100-TGB-B54	Hexagon flange bolts M5X25
AM-MPT-1100-TGB-B55	Axles, reverse gear
AM-MPT-1100-TGB-B56	Reverse gear fork
AM-MPT-1100-TGB-B57	O ring 18x1.8
AM-MPT-1100-TGB-B58	Axles, reverse gear fork
AM-MPT-1100-TGB-B59	Bush 16×20×31.5
AM-MPT-1100-TGB-B60	Seat, reverse gear cable
AM-MPT-1100-TGB-B61	Hex nuts M8

SPARE PARTS DIAGRAM OF AM-MPT-1100-6D

CO-BOX COMPONENTS - C

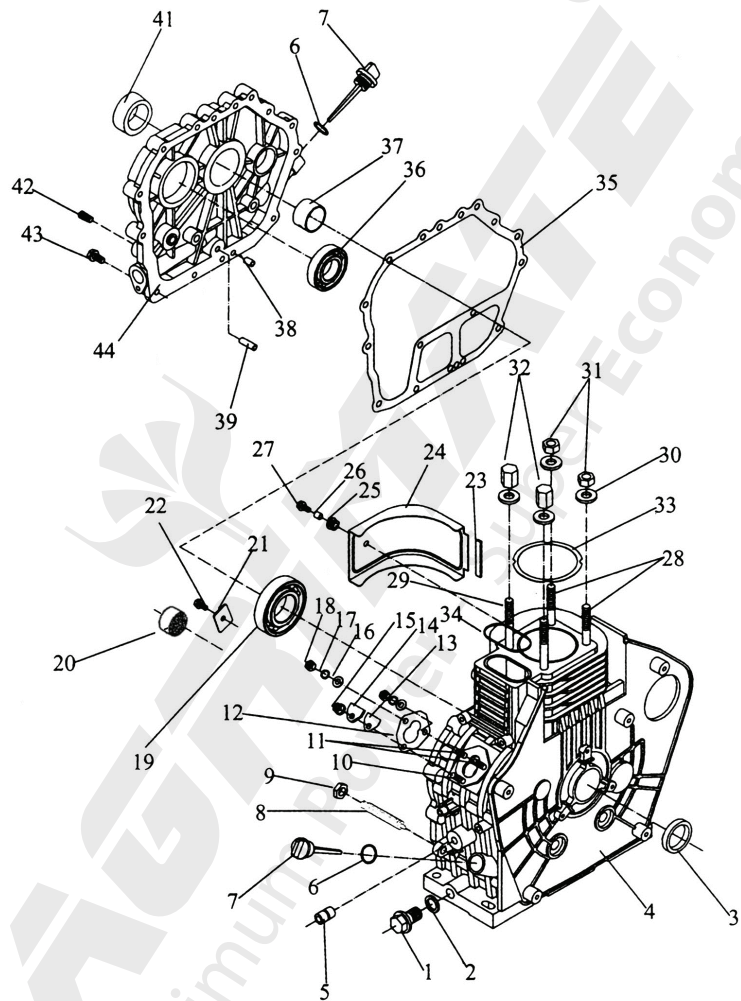





SPARE PARTS LIST OF AM-MPT-1100-6D

Parts No.	Description
AM-MPT-1100-TCB-C1	Gasket, End cover 1
AM-MPT-1100-TCB-C2	Gear B, Principal axles 1
AM-MPT-1100-TCB-C3	Abrasion resistant washer 14.5×23×2
AM-MPT-1100-TCB-C4	Ball bearing K14×18×13
AM-MPT-1100-TCB-C5	Locating pin $\Phi 8 \times 14$
AM-MPT-1100-TCB-C6	Flat washer $\Phi 10$
AM-MPT-1100-TCB-C7	Spring washer $\Phi 10$
AM-MPT-1100-TCB-C8	Hexagonal nut M10
AM-MPT-1100-TCB-C9	Pin 1.5×20
AM-MPT-1100-TCB-C10	Spring, Output clutch
AM-MPT-1100-TCB-C11	Flat washer $\Phi 6$
AM-MPT-1100-TCB-C12	Height adjusting grip
AM-MPT-1100-TCB-C13	Lever, Output- clutch
AM-MPT-1100-TCB-C14	Frame, Output- clutch

ENGINE PART DIAGRAM OF AM-MPT-1100-6D

CRANKCASE ASSY - A



<p>178FS</p>  <p>1</p>	<p>178FGET</p>  <p>1-1</p>	<p>178FG</p>  <p>42-1</p>
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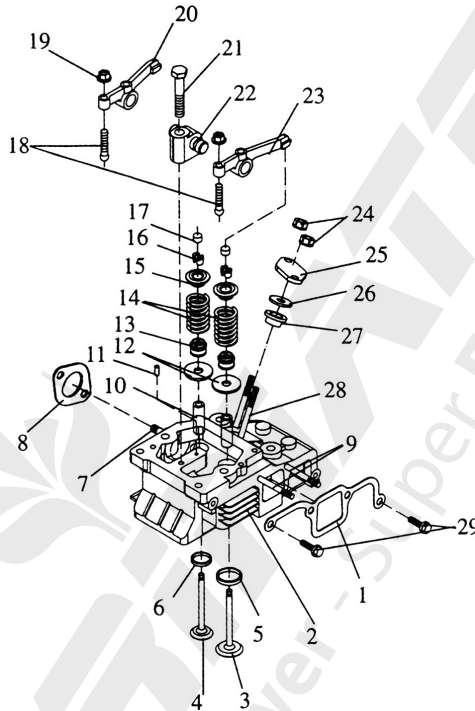
ENGINE PARTS LIST OF AM-MPT-1100-6D

Part No.	Description
AM-1100-178F-A1	Drain Plug/Crankshaft Plug
AM-1100-178F-A2	Oil Plug Seal Assy
AM-1100-178F-A3	Oil Seal Sg30*45*8
AM-1100-178F-A4	Cylinder Block.(Manual)
	Cylinder Block.(Key start)
AM-1100-178F-A5	Needle Bearing/ Hk081410
AM-1100-178F-A6	O-Ring 24*2.4
AM-1100-178F-A7	Oil Filler Gap
AM-1100-178F-A8/9	Fuel Controller
AM-1100-178F-A10	Stud AM6*30
AM-1100-178F-A11	Stud AM6*40
AM-1100-178F-A12	Fuel InjectionPumpGasket
AM-1100-178F-A13	Seal Gasket
AM-1100-178F-A14	Seal Plate
AM-1100-178F-A15	Nut M6
AM-1100-178F-A16	Washer 6
AM-1100-178F-A17	Spring Washer 6
AM-1100-178F-A19	Ball Bearing 6307/P5
AM-1100-178F-A20	Needle Bearing HM1512
AM-1100-178F-A21	Retainer
AM-1100-178F-A22	Bolt M8*16
AM-1100-178F-A23	Cushion Blocking

Part No.	Description
AM-1100-178F-A24	Governor
AM-1100-178F-A25	Vibration Isolation Cushion Block
AM-1100-178F-A26	Shrath
AM-1100-178F-A27	Bolt M6*20
AM-1100-178F-A28	Cylinder Head Stud/ M9*87
AM-1100-178F-A29	Cylinder Head Stud/ M9*104.5
AM-1100-178F-A30	Washer
AM-1100-178F-A31	Cylinder Head Nutshort
AM-1100-178F-A32	Cylinder Head Nut (Long)
AM-1100-178F-A33	Cylinder Head Shim
AM-1100-178F-A34	Cylinder Head Ring
AM-1100-178F-A35	Crank Case Gasket
AM-1100-178F-A36	Ball Bearing 6206/P5
AM-1100-178F-A37	Main Bearing
AM-1100-178F-A38	Pin 8*12
AM-1100-178F-A39	Oil Indicator
AM-1100-178F-A41	Oil Seal SG30*45*10
AM-1100-178F-A42	Plug
AM-1100-178F-A42-1	Oil Pressure Sensor
AM-1100-178F-A43	Bolt M8 * 33.5
AM-1100-178F-A44	Crank Case Cover

ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

CYLINDER HEAD ASSY - B

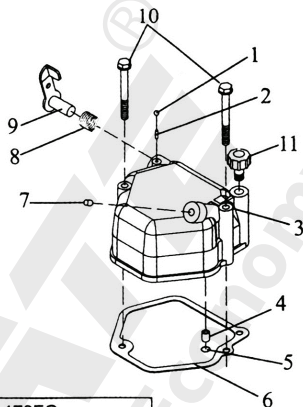


Part No.	Description
AM-1100-178F-B1	Air Intake Gasket
AM-1100-178F-B2/5/6/10	Cylinder Head
AM-1100-178F-B3	Intake Valve
AM-1100-178F-B4	Exhaust Valve
AM-1100-178F-B7	Stud AM8*32
AM-1100-178F-B8	Silencer Gasket
AM-1100-178F-B9	Stud AM6*72
AM-1100-178F-B11	Pin 4*8
AM-1100-178F-B12	Valve Spring Washer
AM-1100-178F-B13	Valve Conduit Oil Seal
AM-1100-178F-B14	Spring Retainer

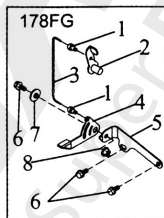
Part No.	Description
AM-1100-178F-B15	Rock Arm Assy
AM-1100-178F-B16	Cotter
AM-1100-178F-B17	Valve Adjusting Plate
AM-1100-178F-B18	Arm Assy
AM-1100-178F-B21	Bolt M8*45
AM-1100-178F-B24	Nut M6
AM-1100-178F-B25	Nozzle Retainer
AM-1100-178F-B26	Spacer Washer
AM-1100-178F-B27	Spacer
AM-1100-178F-B28	Stud AM6*60
AM-1100-178F-B29	Bolt M6*25

ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

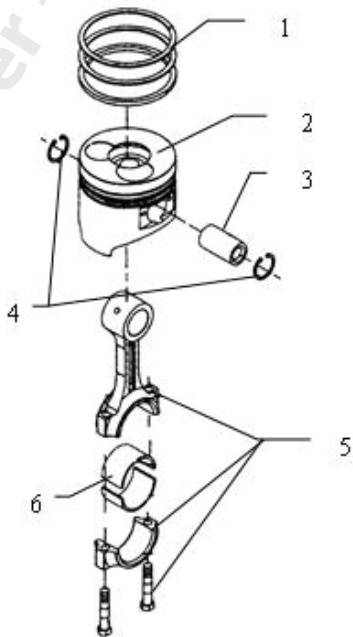
CYLINDER HEAD COVER - C



Part No.	Description
AM-1100-178F-C3	Bonnet Assy
AM-1100-178F-C6	Bonner Gasket
AM-1100-178F-C10	Bolt M6*55



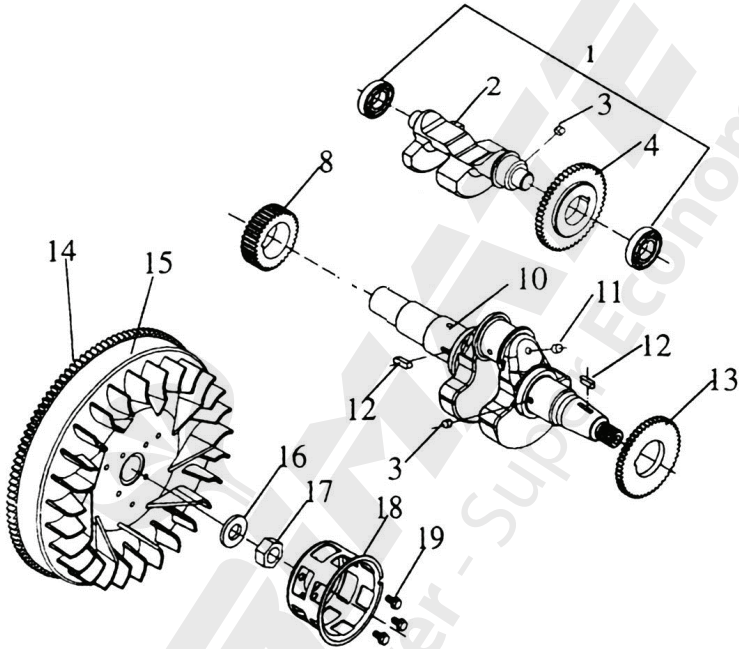
PISTON + CONNECTING ASSY - D



Part No.	Description
AM-1100-178F-D1	Ring Set
AM-1100-178F-D2	Piston
AM-1100-178F-D3	Piston Pin
AM-1100-178F-D4	Washer 21
AM-1100-178F-D5	Connecting Rod Assy
AM-1100-178F-D6	Crank Pin Bearing

ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

CRANKSHAFT + FLYWHEEL - E

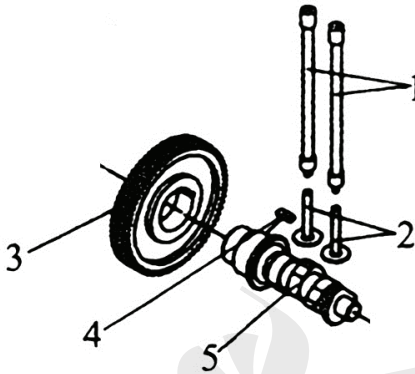


Part No.	Description
AM-1100-178F-E1	Ball Bearing 6202/P5
AM-1100-178F-E2	Balancer Shaft
AM-1100-178F-E3	Key 5×7
AM-1100-178F-E4	Timing Gear Of Balance Shaft
AM-1100-178F-E8	Crankshaft Timing Gear
AM-1100-178F-E10	Crank Shaft
AM-1100-178F-E11	Steel Ball
AM-1100-178F-E12	Key 5×12

Part No.	Description
AM-1100-178F-E13	Drive Gear Of Balance Shsft
AM-1100-178F-E14	Flywheel Ring Geat
AM-1100-178F-E15	Fly Wheel
AM-1100-178F-E16	Fly Wheel Nut Washer
AM-1100-178F-E17	Fly Wheel Nut
AM-1100-178F-E18	Starter Pulley
AM-1100-178F-E19	Bolt M6*12

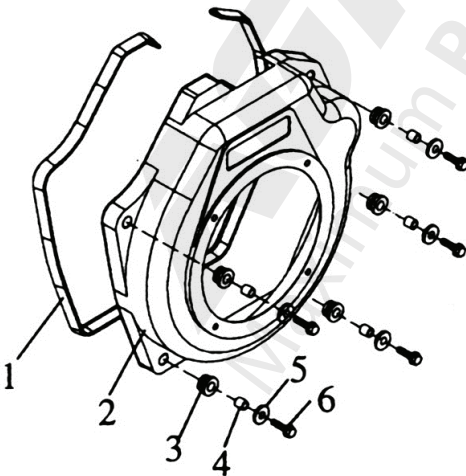
ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

CAMSHAFT ASSY - F



Part No.	Description
AM-1100-178F-F1	Valve Rod Assy
AM-1100-178F-F2	Valve Tappet
AM-1100-178F-F3	Camshaft Timing Gear
AM-1100-178F-F4	Key 5*14
AM-1100-178F-F5	Camshaft

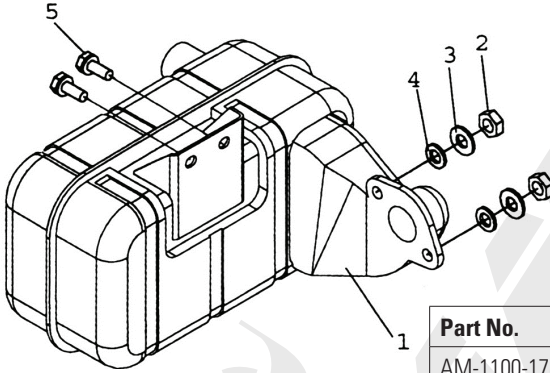
FAN COVER - G



Part No.	Description
AM-1100-178F-G1	Shock Absorber Seat
AM-1100-178F-G2	Fan Case Welded Assy
AM-1100-178F-G3	Shock Absorber
AM-1100-178F-G4	Collar10*10
AM-1100-178F-G5	Washer 6
AM-1100-178F-G6	Bolt M6*25

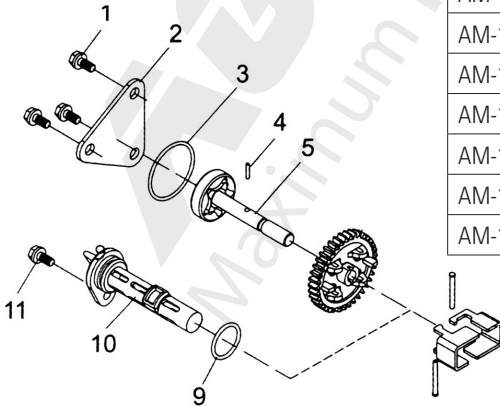
ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

MUFFLER ASSY - H



Part No.	Description
AM-1100-178F-H1	Silencer Assy
AM-1100-178F-H2	Nut 8
AM-1100-178F-H3	Spring Washer 6
AM-1100-178F-H4	Washer 8
AM-1100-178F-H5	Bolt M6*14

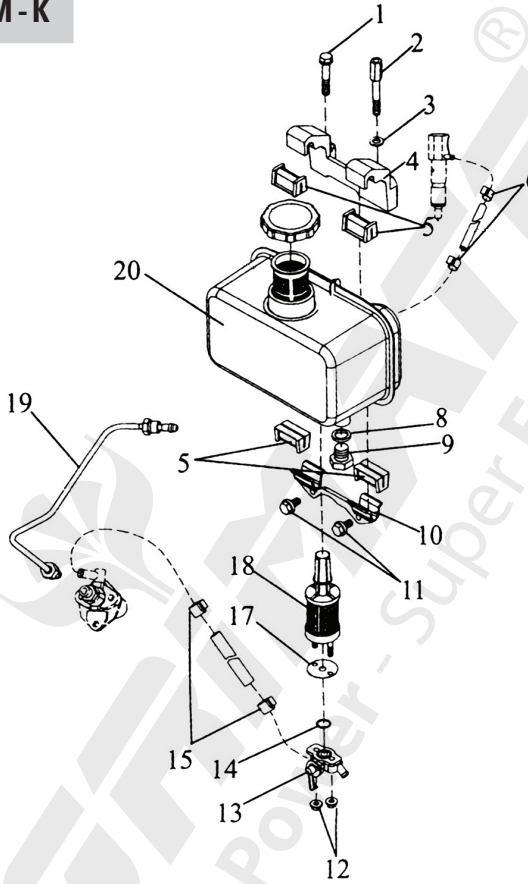
LUBRICATING SYSTEM - J



Part No.	Description
AM-1100-178F-J1	Bolt M6*12
AM-1100-178F-J2	Oil Pump Cover
AM-1100-178F-J3	O-Ring 34.8*1.8
AM-1100-178F-J4	Pin 3*16
AM-1100-178F-J5	Oil Pump Assy
AM-1100-178F-J6	Oil Pump Gear
AM-1100-178F-J9	O-Ring 242.4
AM-1100-178F-J10	Oil Filter Assy
AM-1100-178F-J11	Bolt M6*14

ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

FUEL SYSTEM - K

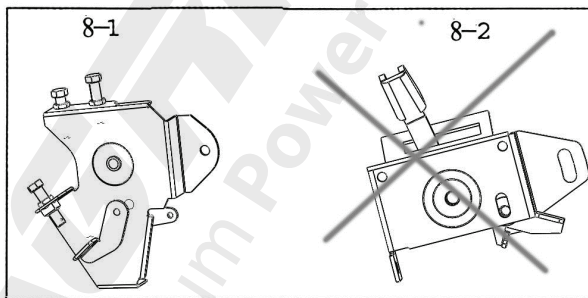
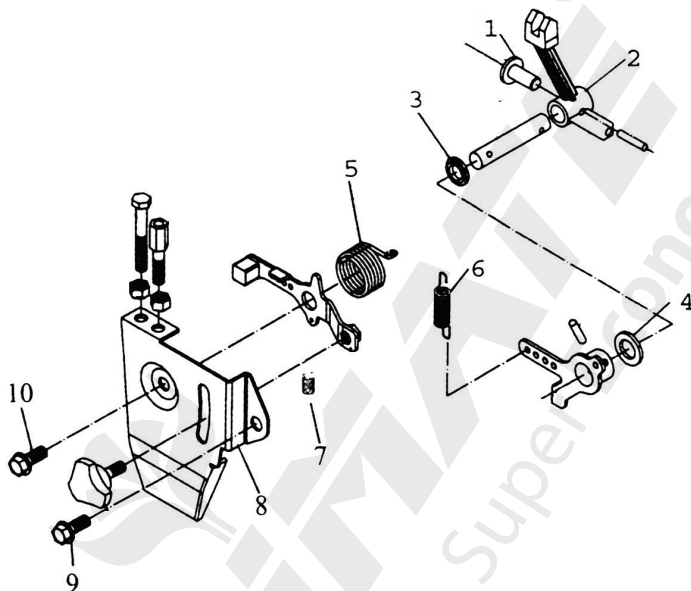


Part No.	Description
AM-1100-178F-K1	Bolt M8×45
AM-1100-178F-K2	Upper Stay Bolt
AM-1100-178F-K3	Washer 8
AM-1100-178F-K4	Upper Stay
AM-1100-178F-K5	Fuel Tank Damper
AM-1100-178F-K6	Fuel Return Pipe Assy
AM-1100-178F-K8	Fuel Tank Plug Seat
AM-1100-178F-K9	Fuel Tank Plug
AM-1100-178F-K10	Lower Stay Assy
AM-1100-178F-K11	Bolt M6*14

Part No.	Description
AM-1100-178F-K12	Nut 6
AM-1100-178F-K13	Fuel Tank Gock Assy
AM-1100-178F-K14	O-Ring 13.2*1.8
AM-1100-178F-K15	Fuel Pipe Assy
AM-1100-178F-K17	Fuel Filter Gasket
AM-1100-178F-K18	Fuel Filter Assy
AM-1100-178F-K19	Fuel Injec. Pipe Assy
AM-1100-178F-K20	Fuel Tank Assy
AM-1100-178F-K21	Fuel Tank Gap Assy

ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

SPEED CONTROL SYSTEM - L

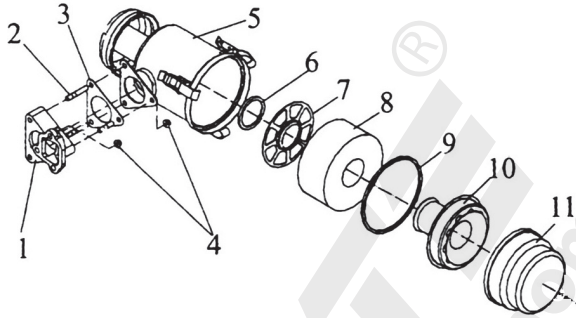


Part No.	Description
AM-1100-178F-L1	Tappet 25.5
AM-1100-178F-L2	Lever Fork
AM-1100-178F-L3	Oil Seal 8×14×4
AM-1100-178F-L4	Lever Washer
AM-1100-178F-L5	Return Spring

Part No.	Description
AM-1100-178F-L6	Governor Spring
AM-1100-178F-L7	Fine Spring
AM-1100-178F-L8-1	Control Lever Assy
AM-1100-178F-L9	Nut M6×12
AM-1100-178F-L10	Nut M6×25

ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

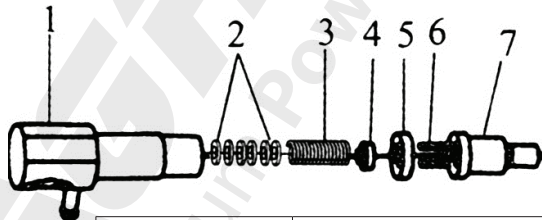
AIR CLEANER - M



Part No.	Description
AM-1100-178F-M1	Intake Pipe/ Integration
AM-1100-178F-M2	Nut M6×12
AM-1100-178F-M3	Air Cleaner Gasket
AM-1100-178F-M5	Air Filter Connecting Disc
AM-1100-178F-M6	Toghtenig Bolt Of Air Cleaner

Part No.	Description
AM-1100-178F-M7	Washer I
AM-1100-178F-M8	Air Filter Case
AM-1100-178F-M9	O-Ring
AM-1100-178F-M10	Air Cleaner Element Assy
AM-1100-178F-M11	Air Flter Sump

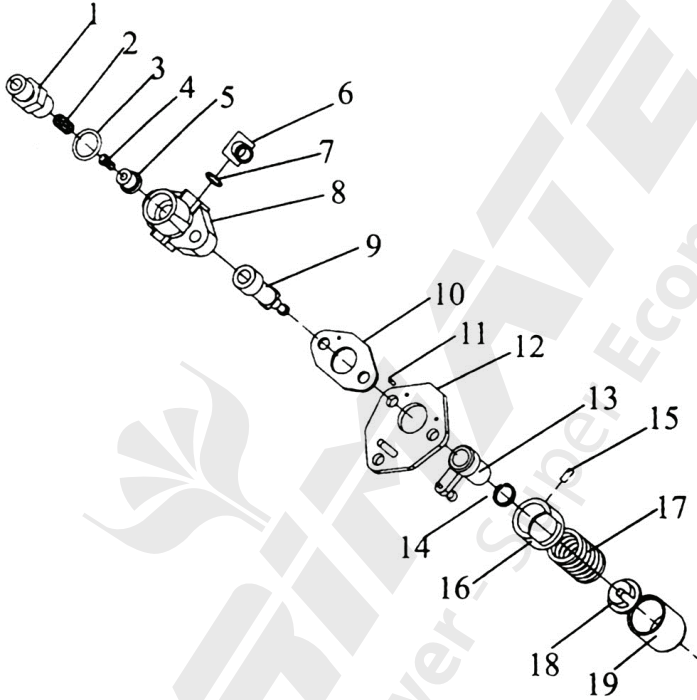
FUEL INJECTOR - N



Part No.	Description
AM-1100-178F-N1	Fuel Iniection Vaive Block
AM-1100-178F-N2	Washer
AM-1100-178F-N3	Volt-Adjustment Spring
AM-1100-178F-N4	Mandril
AM-1100-178F-N5	Intermediate Block
AM-1100-178F-N6	Locating Pin
AM-1100-178F-N7	Nozzle

ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

FUEL INJECTION PUMP - P

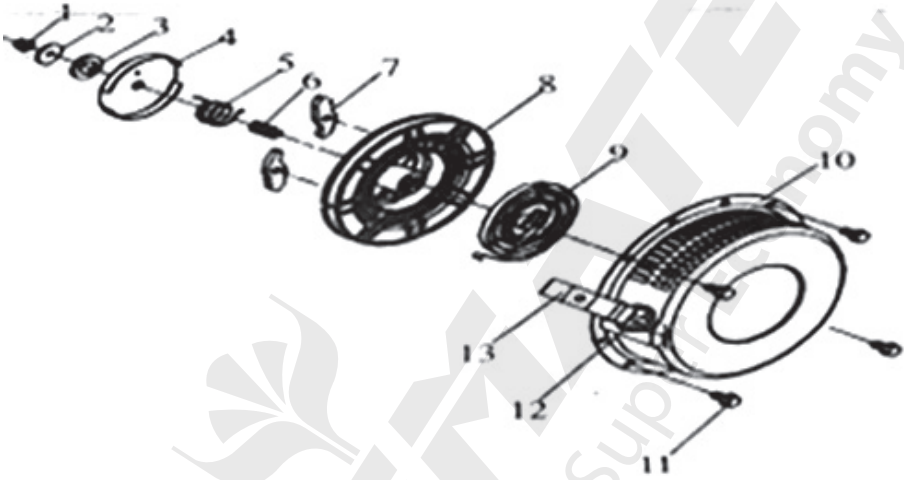


Part No.	Description
AM-1100-178F-P1	Fuel Delivery Valve Forcing Holder
AM-1100-178F-P2	Fuel Delivery Valve Spring
AM-1100-178F-P3	Fuel Delivery Valve Sheet Gasket
AM-1100-178F-P4	Fuel Delivery Valve Core
AM-1100-178F-P5	Fuel Delivery Valve Seat
AM-1100-178F-P6	Fuel Pipe Weldment Assy.
AM-1100-178F-P7	O-Ring
AM-1100-178F-P8	Fuel Block
AM-1100-178F-P9	Plunger

Part No.	Description
10	Washer
11	Pin 2x6
12	Fuel Connecting Plate
13	Fuel Limiting Sheath Weldment Assy
14	Steel Clip
15	Pin 3x8
16	Support
17	Spring
18	Spring Holder
19	Tappet

ENGINE PART DIAGRAM & PARTS LIST OF AM-MPT-1100-6D

RECOIL STARTER ASSY - Q



Part No.	Description
AM-1100-178F-Q1	Nut M8
AM-1100-178F-Q2	Friction Plate
AM-1100-178F-Q3	Friction Reel
AM-1100-178F-Q4	Spring Cover
AM-1100-178F-Q5	Return Spring
AM-1100-178F-Q6	Compression Spring
AM-1100-178F-Q7	Ratchet

Part No.	Description
AM-1100-178F-Q8	Starter Reel
AM-1100-178F-Q9	Spiral Spring
AM-1100-178F-Q10	Outer Case Assy
AM-1100-178F-Q11	Bolt M6 X8
AM-1100-178F-Q12	Starter Rope
AM-1100-178F-Q13	Starter Handle

INSPECTION & MAINTENANCE

For safety use, make sure the machine is cleaned every three-months. Before working, make sure to inspect the filter and the nozzle, and ensure there is no impurity. After working, make sure there is no water in the pump and the hose.

If the machine needs to be repaired in the guarantee period, please return the machine to the shop. You need to provide the certificate of purchase in order to repair or get the substitute.

Before Packing, the machine should be cleaned, then use closed packaging, packaging should be firm. Store the machine in dry place.

For transportation safety. The machine should comply with ISTA.



Meaning of crossed - out wheeled dustbin:

Do not dispose of electrical machines as unsorted municipal waste, use separate collection facilities.

If electrical machines are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old machines with new ones, the retailer is legally obligated to take back your old machine for disposals at least free of charge.

Warranty Card

CUSTOMER COPY



Date _____

Purchaser's Name & Address

Product Name

AM-MPT-1100-6D-M (MANUAL) Rotary Tiller / Power Weeder / Rotary Weeder / Cultivator

Product Serial No.

Invoice / DN No.

Date of Delivery

Dealer's Office Seal

Dealer Sign _____

Customer Sign. _____

I/We accept the terms and conditions of Warranty as in the Warranty Card.

Warranty Card

DEALER'S COPY



Date _____

Purchaser's Name & Address

Product Name

AM-MPT-1100-6D-M (MANUAL) Rotary Tiller / Power Weeder / Rotary Weeder / Cultivator

Product Serial No.

Invoice / DN No.

Date of Delivery

Dealer's Office Seal

Dealer Sign _____

Customer Sign. _____

I/We accept the terms and conditions of Warranty as in the Warranty Card.

Warranty Card

COMPANY COPY



Date _____

Purchaser's Name & Address

Product Name

AM-MPT-1100-6D-M (MANUAL) Rotary Tiller / Power Weeder / Rotary Weeder / Cultivator

Product Serial No.

Invoice / DN No.

Date of Delivery

Dealer's Office Seal

Dealer Sign _____

Customer Sign. _____

I/We accept the terms and conditions of Warranty as in the Warranty Card.

1. **LIMITED WARRANTY PERIOD** : For a period of six months from the date of Sale / delivery of the product which ever is earlier. 2. **LIMITED WARRANTY OBLIGATION** : Replacement of defective part(s) by authorized dealer are free of charges. If found defective by reasons of defective material / poor workmanship, parts will be replaced and there will be no value re-imbursalment. 3. **TERMS & CONDITIONS** : a. Claims under warranty will be accepted on submission of Warranty Card duly filled and stamped by authorized dealer together with the original purchase document. : b. Shipping / transportation / Incidental charges incurred in replacing defective parts under warranty shall be borne by the purchaser.

WARRANTY null & void if

- (i) Lack of maintenance, (ii) Incorrect use of the machine or tampering, (iii) Use of non-genuine spare parts, (iv) Usage of acids, solvents, or any flammable materials, (v) Non-usage of filter water / clear water / soft water & using water above 40°C temperature, (vi) While using the pressure washers to draw water which is contaminated with dust & solvents (eg. paint thinners, gasoline, oil, etc.), (vii) Repair done by unauthorized service people, (viii) Those parts subject to wear & tear due to normal operations and plastic parts, rubber items etc, (ix) Loose connections, faulty electrical fixtures & fluctuations in power supply.
4. Should any failure occur during or after the warranty period, customer does not have the right to interrupt payment / price discount.
5. Incidental or consequential damages like inconvenience commercial loss, loss of tie, mental agony etc.
6. Loss of any nature due to operation or non-operation is not covered under warranty.
7. All free service are at Dealer's service point only.
8. Warranty ceases if service is not done periodically.
9. The attached card should be completed and returned to Ratnagiri Impex Pvt. Ltd. for registration immediately after sale / delivery.
10. The warranty is void unless you register the warranty card with Ratnagiri Impex Pvt. Ltd.
11. The decision of Ratnagiri Impex Pvt. Ltd., in settling the warranty is final in all respects.
12. All disputes are subject to Bangalore Courts Jurisdiction

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ratnagiri
impex
BRINGING YOU THE FUTURE - NOW

1st Free Service Coupon

ISO 9001-2015
CERTIFIED COMPANY

FREE SERVICE COUPON (30 Days / 20 hrs (Which ever is earlier))

Model
AM-MPT-1100-6D-M (MANUAL)
Rotary Tiller / Power Weeder / Rotary Weeder / Cultivator

Serial Number

PDI Date Service No.

Purchase bill no. Date

Dealer's Office Seal

Dealer Signature.....

Customer Signature.....

Conditions: Operations listed have been performed to my entire satisfaction without any labour charges. Only consumables were charged.

agriculture horticulture sericulture plantations forestry garden health care

WARRANTY AND FREE SERVICE COUPON



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impex
BRINGING YOU THE FUTURE - NOW

2nd Free Service Coupon

ISO 9001-2015
CERTIFIED COMPANY

FREE SERVICE COUPON 60 Days/100 hrs (Which ever is earlier)

Model
AM-MPT-1100-6D-M (MANUAL)
Rotary Tiller / Power Weeder / Rotary Weeder / Cultivator

Serial Number

PDI Date Service No.

Purchase bill no. Date

Dealer's Office Seal

Dealer Signature.....

Customer Signature.....

Conditions: Operations listed have been performed to my entire satisfaction without any labour charges. Only consumables were charged.

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WARRANTY AND FREE SERVICE COUPON



ratnagiri
impex
BRINGING YOU THE FUTURE - NOW

3rd Free Service Coupon

ISO 9001-2015
CERTIFIED COMPANY

FREE SERVICE COUPON 90 Days/200 hrs (Which ever is earlier)

Model
AM-MPT-1100-6D-M (MANUAL)
Rotary Tiller / Power Weeder / Rotary Weeder / Cultivator

Serial Number

PDI Date Service No.

Purchase bill no. Date

Dealer's Office Seal

Dealer Signature.....

Customer Signature.....

Conditions: Operations listed have been performed to my entire satisfaction without any labour charges. Only consumables were charged.

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WARRANTY AND FREE SERVICE COUPON



Small Maintenance. Big Savings.



Small Maintenance. Big Savings.



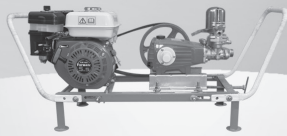
Small Maintenance. Big Savings.

Do's & Don'ts

- Always read the instruction manual supplied along with the equipments and understand the correct installation and operating procedures before attempting to use the equipments.
- It is important to use the personal protection equipments such as head helmet with visor, ear defenders, goggles, safety gloves, cut resistant shoes, trousers and jackets while operating potentially dangerous machines.
- Avoid untrained persons using the equipments. Children must not be allowed to handle these equipments.
- Always use genuine spares and accessories in repairs and usage to derive maximum life of the equipments.
- Always keep the equipments in good working condition to minimize loss of output as well as to reduce the pollution and save the environment.
- Do not use the machine within range of persons unless they wear protective clothing.
- Do not operate the machine when fatigued or under the influence of alcohol or drugs.
- For more query kindly contact for our Service Center/Dealer/ franchise

Agrimate Army For Pest Control

ANY WHERE - ANY TIME - ANY CROP




AGRIMATE[®]
Maximum Power - Super Economy

RATNAGIRI IMPEX PVT., LTD.
Annapurna House, #1/1G, 7th Cross, New Guddadahalli
Mysore Road, Bangalore - 560 026
Customer Care: 1800-425-3036
Email: info@ratnagiriimpex.com



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www.ratnagiriimpex.com

AN ISO 9001:2015 CERTIFIED COMPANY