

User Manual



AM-RTP-5P

AGRIMATE ROTARY TILLER / POWER WEEDER



BEFORE OPERATING THIS APPLIANCE
PLEASE READ THESE INSTRUCTIONS CAREFULLY

FORWARD

Thank you for choosing our tiller.

- This manual contains about operation and maintenance of AM-RTP-5P tillers.
- All contents in this manual are based on the latest information when the manual is printed.
- The manufacturer 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

In order to save the safety of yours and others, please pay attention to information on both this manual and tiller

- Pay attention to statements preceded by the following word.

! Danger:

Indicates a possibility of severe personal injury or death if instruction are not followed.

! Warning:

Indicates a possibility of equipment damage or personal death if instruction are not followed.

! Attention:

Indicates a possibility of equipment damage or personal injury if instruction are not followed

Damage prevention

You can see other important information are marked with "NOTICE". It means that if not work upon the instructions, it may cause broken of tiller.

Attention

- When the engine is starting, turn the shift lever to the "Neutral Position".
- Be careful when tiller is working.
- Look out the blades.
- The fuel and oil must be qualified and clean.
- Release clutch before gear shifting and slow down the engine. It is more safe when engine is slow down.
- Fuel is easy to catch fire and exploded.
- When working in paddy field or going slope, carefully using reverse gear.

Because machines are improved always, so pictures are may be different from practicality.

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SAFETY INFORMATION AND WARNING

1. Training

- a) Carefully read this manual, fully know all the controlling functions and the proper operation, learn how to quickly stop and separate the tiller.
- b) Children are not allowed to use tiller. And adults who don't learn this manual are also not allowed to use this manual.
- c) Keep working area without other people, especially children and pets.

2. Preparation

- a) Check working area, and move away all the sundries.
- b) Disengage all the clutches and place gear to neutral position before starting engine.
- c) Do not use tiller without suitable clothes and skid-proof shoes.
- d) Carefully deal with fuel which is tinder.
 - 1) Use suitable container to store fuel.
 - 2) Do not add fuel when engine is working or hot.
 - 3) Carefully add oil outdoor. Don't allow to add oil indoor.
 - 4) Wrest on fuel tank cap, and clean out spilling fuel.
- e) When engine is working, do not do any adjustment which are not allowed.
- f) Wearing eye protect glasses when preparation, working and servicing.

3. Operate

- a) Never use hand or foot to touch rotary blades when it is working
- b) When go across cobbled road, crosswalk, and road, pay more attention to the latent danger. Do not let people ride on the tiller.
- c) If tiller bumps something, stop to check. If it is broken, repair it and then start it.
- d) Be careful when working, do not fall or slip.
- e) If tiller has abnormal noise, it means that it may have problems. Stop the tiller to check reason.
- f) Stop engine before leaving, cleaning blades, servicing, adjusting and checking.
- g) When no people working on the tiller, shift gear to the neutral gear and stop the engine.
- h) Before check, clean and repair the tiller, stop engine and check if every part is stop.
- i) Do not work tiller indoor, because exhaust is poisonous.
- j) Do not work when there isn't proper equipment.
- k) Keep away from children and pets.
- l) Do not let tiller over load because of deep tilling depth and fast speed.
- m) Do not let tiller run on the slip road. Be careful when reverse.

- n) Do not let looker-on come near the tiller.
- o) Only these additional equipment allowed by manufacture can be used.
- p) Do not use tiller when weather is dark.
- q) When work on the hard land, blades may hitch the land and push tiller forward. In this condition, release the tiller and let it go itself, do not try to control it. Or else, there will be danger.
- r) Do not work on the sharp slop.
- s) When tiller go across slope, be careful and do not let tiller fall.

4. Service and store

- a) Keep tiller and its additional equipment in well working condition.
- b) Periodically check engine bolts and other bolts, make sure they are fixed well, to ensure tiller in good working condition.
- c) Tiller should be kept indoor and away from fire. Stop and cool the engine before storage.
- d) If tiller needs to be stored for a long time, this manual should be also kept as an important part.
- e) Do not try to repair the tiller unless you know the knowledge, and have proper tools.

PROFILE OF TILLER

1. Specification

AM-RTP-5P		
ENGINE	4 Stroke, petrol engine	
	POWER (kW)	4.4kW/7HP
	Displacement	212 cc
	Fuel Tank Capacity	3.6 L
TILLING MACHINE	Weight(kg)	Approx 108 kg
	Tilling width (cm)	Upto 100
	Tilling depth (cm)	Upto 30
	Transmission	Fully Gear Drive (no belt & chain)
	Gear	Gear 03 (2 Forward + 1Reverse) Neutral Position
	Blade type	"J" Shape
	Tilling Width adjustments	oneside 2 + 1 + 1 Group (1 Group each 4 blades) with side disc
	No. of total blades	32 Nos.

Specification may be changed according to improving of machines.

2. General chart



- | | |
|-------------------|-----------------|
| 1. Resistance rod | 5. Wheel |
| 2. Gear box | 6. Walking case |
| 3. Tow bar | 7. Engine |
| 4. Dust fender | 8. Handle bar |

APPLICABLE SCOPE

1. Tilling

Can be used for mountainous area, hill, paddy field, orchard, garden, vegetable field, shed and so on.

Assemble blades on both side of tilling system, and use pin to fixed blades, then can do tilling work.

2. Ditching

Take off resistance rod, can assemble ditching blade, and then can do ditching work.

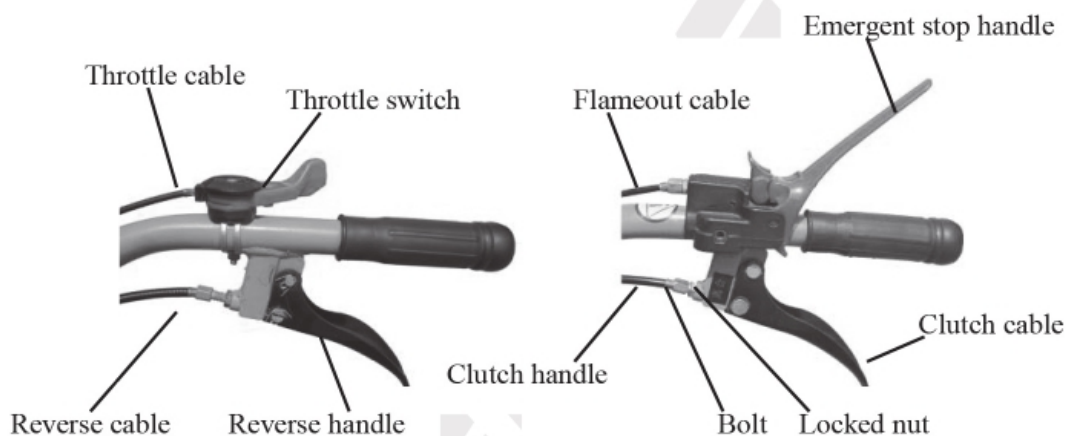
OPERATION AND USE OF TILLER

◆ 1. ASSEMBLY

1. Assembling after packing

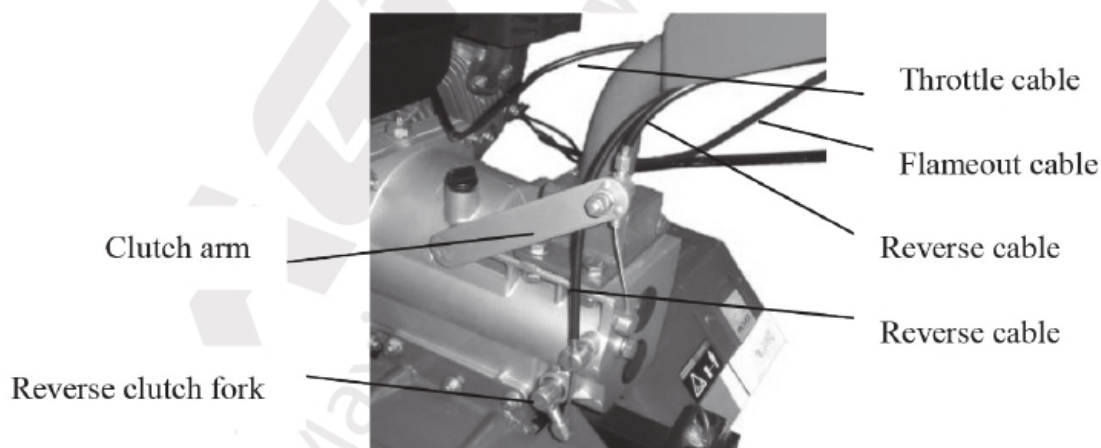
- 1.1 Fixed machine, put wheels on both side of machines, and use pin to fix wheels.
- 1.2 Handle assembling: Match gear plate on handle with gear plate on handle seat, and then adjust straight position of handle, and then use long bolt, spring washer, and locked grip to lock handle. Then use cable clip to hold clutch cable, reverse gear cable, and throttle cable on handle.

2. Assemble and adjust cable.



Drawing 2

2.1 Adjustment of clutch cable. (Drawing 2 and Drawing 3)



Drawing 3

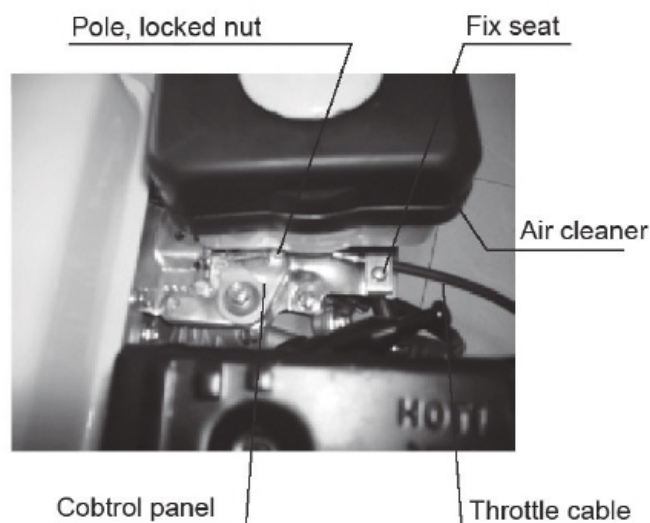
- 2.1.1 Loose locked nut.
- 2.1.2 Deasil turn bolt into shortest.
- 2.1.3 Put cable head into clutch cable seat of transmission box, and make sure that cable head is in the big hole.
- 2.1.4 Put steel wire into M8 hole of clutch arm seat, press clutch arm fork, and hang cable head on clutch cable seat.
- 2.1.5 Turn off Bolt, and hold it tightly. Loose clutch handle until spring in clutch can return handle, and then locked nut.

2.2 Adjustment of reverse cable.

- 2.2.1 Loose locked nut.
- 2.2.2 Deasil turn bolt into shortest.
- 2.2.3 Put cable head into clutch cable seat of transmission box, and make sure that cable head is in the big hole.
- 2.2.4 Anticlockwise turn reverse fork axle, and put cable through narrow slot, and make sure head into big hole of seat.
- 2.2.5 Turn off Bolt, and hold it tightly. Loose reverse handle until spring in clutch can return handle, and then locked nut.

2.3 Adjusting of throttle cable. (Drawing 4)

- 2.3.1 Turn throttle switch into max.
- 2.3.2 Put steel wire of throttle cable through wire seat and fixed seat which is on control panel.
- 2.3.3 Tight steel wire, locked screw on locked seat
- 2.3.4 Adjust fuel switch some time, until fuel rod on control panel into max.



Drawing 4

◆2.OPERATION

1. Check and add oil

1.1 Check if connections of every where if they are loosen, and fixed upon the moment need.

Name	Moment (N.m)
Flange and gasoline engine	20-25
Flange and transmission box	35-40
Transmission reverse axle locked bolt	26-40
Engine support frame and walking case locked bolt	35-40
Walking case end cover locked bolt	10.6-15
Walking case and tow bar locked bolt	50-60
Transmission box and walking case connection bolt	35-40
Tow bar	45-60
Engine bottom seat locked bolt	35-40
Handle bar fixed bolt	35-40

1.2 Check if all rod (Oil, clutch, reverse, gear shift) are flexible, and adjust them well.

1.3 Turn gear shift rod into natural.

1.4 Add oil

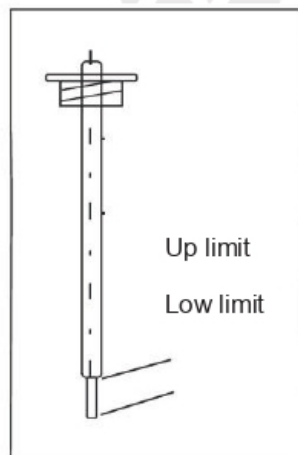
1.4.1 Add SAE10W-40 into crank case of engine, drawing 8.

1.4.2 Add Nr.20 oil into transmission box. Put tiller horizontal, take off oil ruler. And add oil through transmission box filling hole. And insert oil ruler to check oil level. If oil level is between up limit and low limit, turn off oil ruler. (Drawing 5)

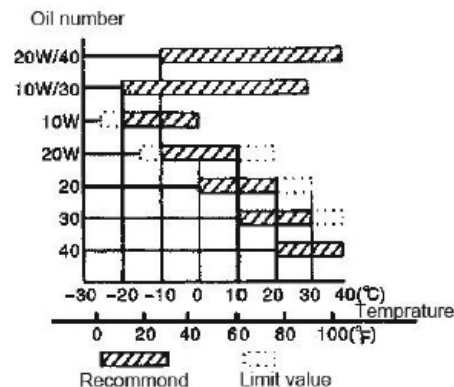
1.4.3 Add oil to air cleaner.

1.4.4 According to working condition choose different oil. (Drawing 6)

! NOTE: Gear shift rod must be at natural place



Drawing 8



Drawing 9

2. Start

Start engine according to introduction of engine operation.

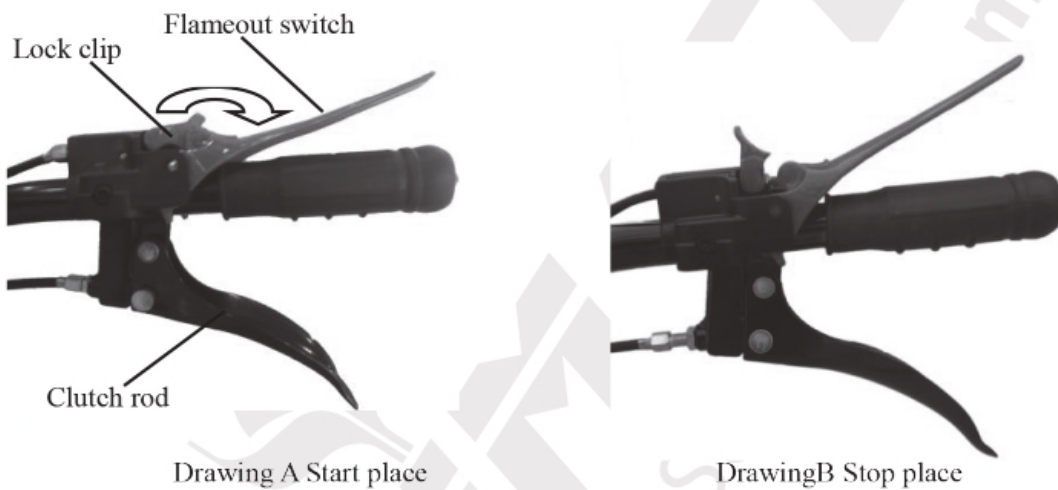
Engine should work at idling speed (1450-1750r/min) for two or three minutes.

Check if engine work right, if not, stop to check.

3. Operate

! NOTE: Tiller should be break-in before using, according to introduction of SECTION NINE.

3.1 Using of flameout switch.



3.1.1 Start: Turn flameout switch to the place as drawing A, and use lock clip to block switch. And start engine according to SECTION FOUR/◆3/1.

3.1.2 Work: When work, hold flameout switch. Turn lock clip back. And hold on clutch rod can change gear. Then hold on flameout switch, and release clutch rod can do tilling work.

3.1.3 When meet emergency situation, release flameout switch, engine will stop.

! WARNING: When tilling or walking, can't turn lock clip as Drawing A show.

3.2 Slow gear

3.2.1 Left hand hold on clutch rod, and meanwhile press down flameout switch to disengage clutch.

3.2.2 Right hand pull back shift gear rod, and then turn to slow gear. After shift gear, use right hand to hold handle grip.

! NOTE: When this step, don't hold reverse handle.

3.2.3 Slowly release clutch rod, then clutch will engage, and tiller can work at slow speed.

3.2.4 Turn accelerator to bigger, then tiller can work on slow gear at 5km/h.

3.3 Fast gear

3.3.1 Left hand hold on clutch rod, and meanwhile press down flameout switch to disengage clutch.

3.3.2 Right hand pull back shift gear rod, and then turn to fast gear. After shift gear, use right hand to hold handle grip.

! NOTE: When this step, don't hold reverse handle.

3.3.3 Slowly release clutch rod, then clutch will engage, and tiller can work at slow speed.

3.3.4 Turn accelerator to bigger, then tiller can work on fast gear at 10km/h.

3.4 Reverse gear

3.4.1 Left hand hold on clutch rod, and meanwhile press down flameout switch to disengage clutch.

3.4.2 Right hand pull back shift gear rod, and then turn to neutral gear. And then use right hand to hold on reverse handle.

3.4.3 Then slowly release clutch rod, then tiller can go reverse.

! NOTE: Don't release reverse handle. And before turn to reverse gear, must turn accelerator to smaller (but engine not stop, the speed is about 2000r/min). This will be more safe.

3.4.4 When no need reverse, left hand hold on clutch, and right hand release reverse handle.

3.5 When tiller is walking, don't shift gear. First turn accelerator to smaller, and then release clutch, until tiller stop walking, the shift gear.

3.6 Turning. Turning handle to left or right can turn tiller.

!NOTE: When turning, don't hold wrong handle or rod, or gears will be damaged.

3.7 Stop

3.7.1 Hold clutch rod, and meanwhile hold flameout switch to disengage clutch.

3.7.2 Turn shift gear rod to neutral, loose clutch rod, the tiller will stop working.

3.7.3 If engine need to be stopped, please see SECTION FOUR/◆3/2.

4. Connection of accessories

4.1 Tilling.

When need tilling, disassemble walking wheel, and then put blades onto both side of axle. And use pin and clip to fix. After blades are assembled, must assemble dust fender. Dust fender can protect. Tilling depth can be adjusted by deep resistance rod.

4.2 Ditching

When need do ditching work, take off deep resistance rod, adjust ditching blades height, and then can do ditching work.

Ditching width: 40cm

Ditching depth: 11-25cm

5. Using notice

! NOTE:

When working on tiller, take care if any strange noise. If strange noise, stop engine to check.

When tiller is cool, don't add heavy load. Especially new machine and machine which is after big repaired.

Take care oil in transmission box, if no oil, add.

Not allowed to pure water to cool down tiller.

When working on tiller, don't let tiller falling down.

Don't allowed tiller with blades walking on hard road.

After using, clean tiller, will prolong using life of tiller.

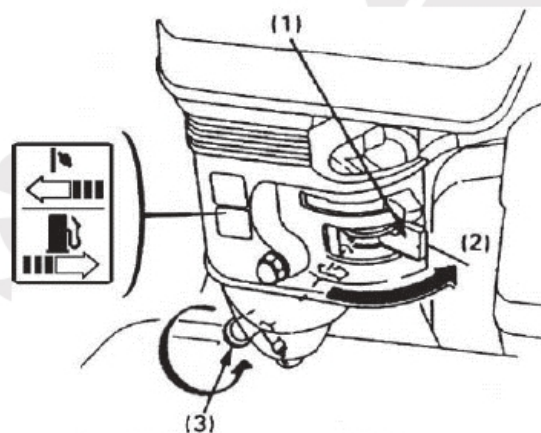
Often clean air cleaner element, and change it when need.

◆3. ENGINE OPERATION

1. How to start engine

1.1 Turn ON throttle switch and check if it is fastness.

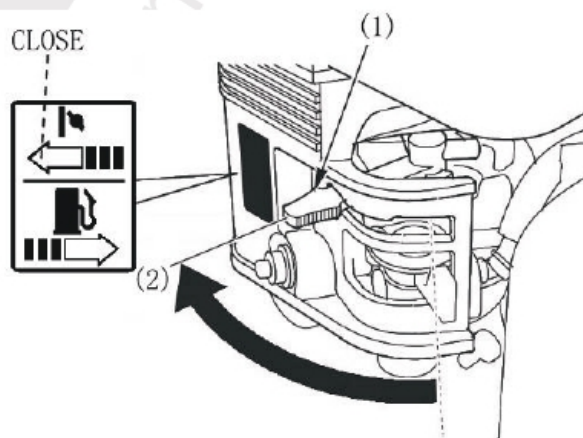
- (1) Fuel valve.
- (2) ON
- (3) Drain bolt



1.2 Close the choke valve.

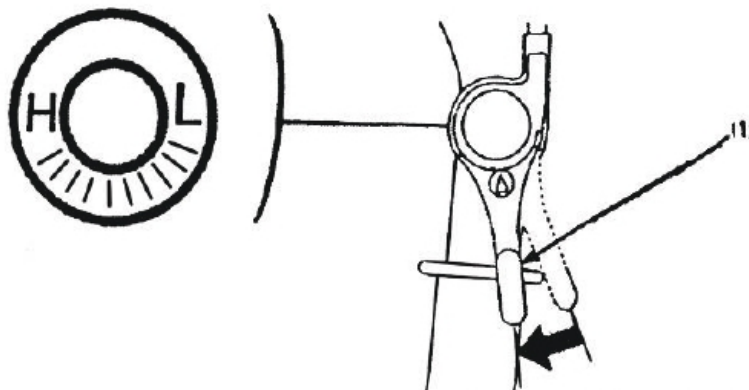
NOTICE: If engine is hot or temperature is high, there is no need to close the choke valve when start the engine.

- (1) Choke valve switch.
- (2) Close

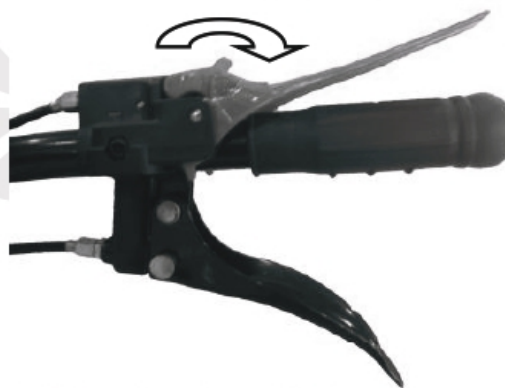


1.3 Slightly turn oil control rod to right.

(1) Oil control rod.

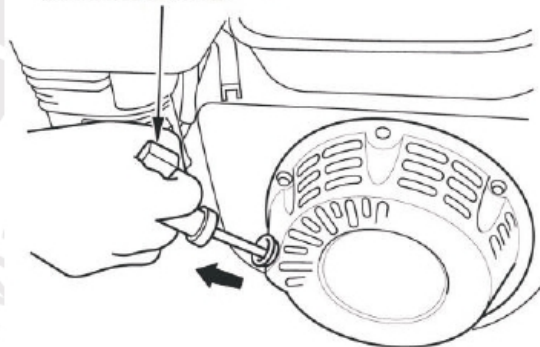


1.4 Turn flameout switch to the place as drawing show, and use locked clip to fix flameout switch.



1.5 Slightly pull recoil starter grip until feel resistance, and then put it fast.

recoil starter grip

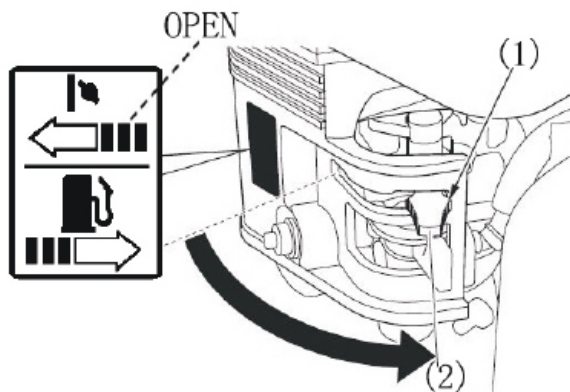


! NOTE: Don't suddenly release starter grip let it bounce back, it may broken engine. Need slowly put the grip back.

1.6 After preheating the engine, gradually move choke to OPEN position.

(1) CHOKE LEVER

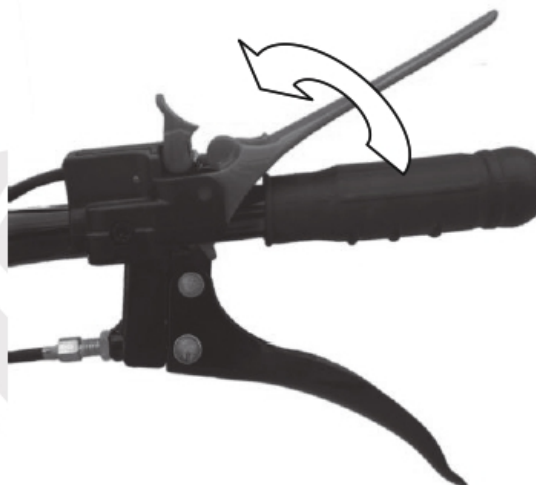
(2) OPEN



1.7 Adjust rotary speed of engine through the throttle switch (or throttle handle)

2. Stop engine

In urgent situation, turn off engine switch (flameout switch) to stop.



Usually stop engine as following way:

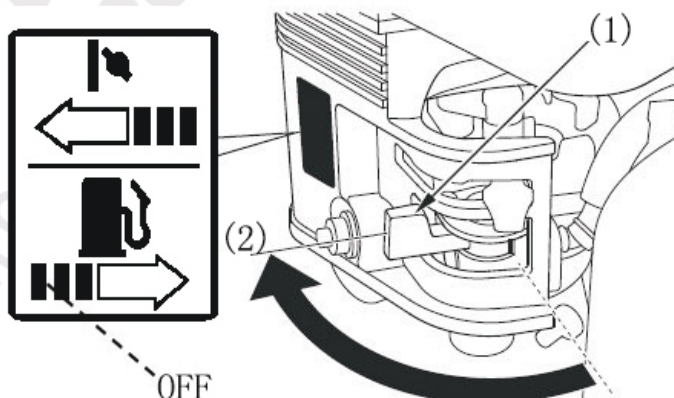
2.1 Turn throttle switch to smallest (or turn choke lever to most right).

2.2 Turn flameout switch to the position as drawing show.

2.3 Turn fuel valve to OFF.

(1) Fuel valve

(2) OFF



MAINTENANCE

◆ 1. Maintenance of engine

Do periodic maintenance to keep tiller in good working condition. Please follow the schedule below.

!WARNING: Stop engine before doing any maintenance. If the engine must run, keep the place well aeration. The exhaust contains CO.

! NOTICE: Use original spare parts or other qualified substitute. Use unqualified spare parts may damage engine.

MAINTENANCE SCHEDULE

ITEM \ PERIOD		Everyday	The 1st month or 20 hrs	Every 3 months or 50hrs	Every 6 months or 100hrs	Every year or 300hrs
Oil	Check amount	0				
	Replace		0		0	
Air cleaner element	Check	0				
	Clean			0 (1)		
Fuel strainer cup	Clean				0	
Spark plug	Clean Readjust clearance				0	
Valve clearance	Check Adjust			0		
Gear box oil	Check amount	0				
Oil box drainer	Clean					0 (2)
Clutch cable	adjust		0		0	
Oil throttle	adjust					0
Tension pulley	adjust		0		0	
Fuel pipe	adjust	Every two year (2) (It is necessary to replace)				

! NOTICE:

- (1) Check more frequently when tiller works in heavy dust circumstance.
- (2) If users neither have special tools nor know mechanical knowledge well, these maintenance should be done by dealers.

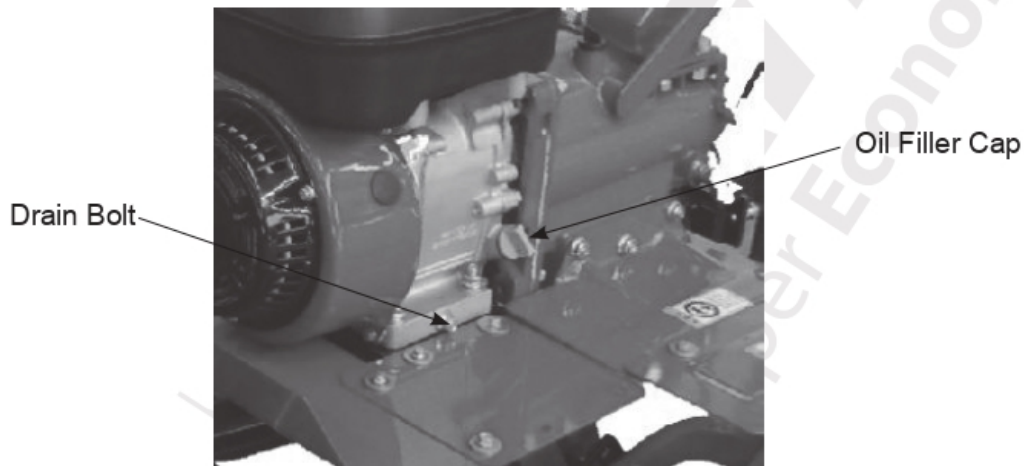
1. Change oil

Drain out oil when engine is warm.

Screw down drain bolt and loosen oil filler cap. Refill with recommended oil and check oil level.

(Drawing 7)

OIL CAPACITY : 0.6L



Drawing 7

2. Air cleaner maintenance

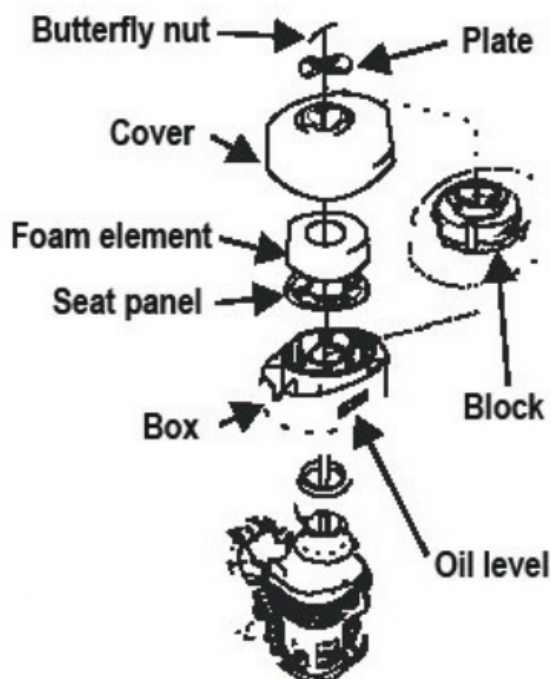
A dirty air cleaner will restrict air flowing into the carburetor. Check the carburetor regularly to prevent carburetor malfunction. Check and clean it more often if tiller works in heavy dirt area.

!WARNING: Never use gasoline or low flash point solvent to clean air cleaner element. Or it may burnt or explode.

! NOTICE: Never run engine without air cleaner. Impurity will directly come into engine and speed up wearing..

1. Take off butterfly nut and plate, and then take out element.
2. Wash element in warm suds or high flash point solvent. Then naturally air-dry it. Dip it with farthing oil, and squeeze it to make it equably wettish. Engine may exhaust heavy smoke if it is dipped with too much oil.
3. Pour the oil in box, clean the box, and let it dry.
4. Add recommend oil into box.
5. Put back air cleaner element and plate.

OIL BATH AIR CLEANER



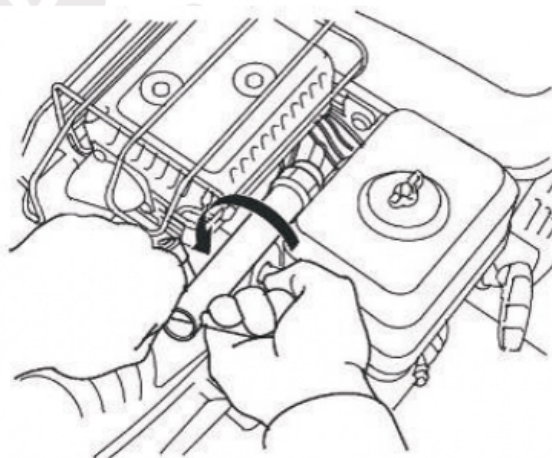
3. Spark plug maintenance

SPARK PLUG RECOMMENDED: F7TC

Spark plug clearance must be suitable, and there shouldn't be carbon deposit.

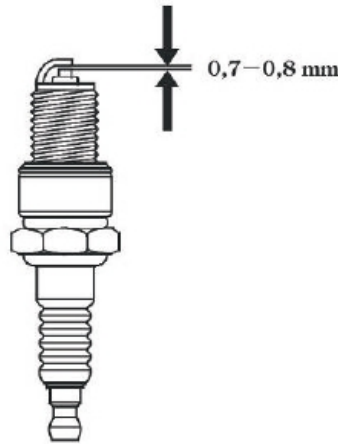
- Take off spark plug cap.

!WARNING: Do not touch muffler if the engine is just stop, because it is very hot.

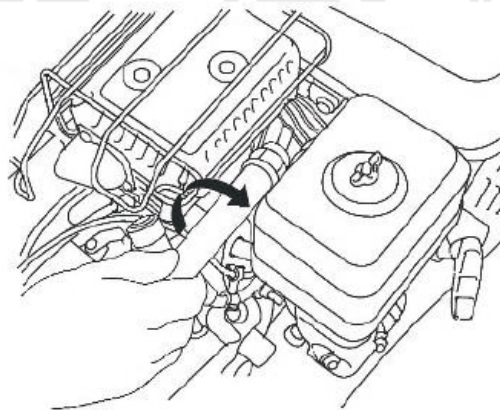


Check spark plug. If insulator has crack or default, replace it.

Measure spark plug clearance by feeler gauge. The proper clearance should be from 0.7mm-0.8mm . If the clearance need be adjusted, twist electrode to adjust it.



Put on spark plug gasket, and assemble spark plug by sleeve wrench.



After spark plug is at position, turn 1/2 turn more if it is new spark plug. If it old spark plug, turn 1/4 turn more.

! NOTE:

Spark plug must be safely fixed. If it is proper fixed, engine may become over heat or broken. Neither use spark plug with wrong heat value.

4. Adjusting of carburetor

Start engine to let it to common temperature.

When engine work at idling speed, adjust valve fix screw to arrive right idling speed.

Standard idling speed: 1600±150 r/m

◆2. Maintenance of tiller

Keeping the tiller in good condition will prolong the tiller's life, and help it arrive optimum performance whenever you wish to till your garden.

To help you properly care for the rototiller, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by a qualified mechanic.

1. Brake-in

New machine, or machine after big service need first work without load for one hour. And then work under low load for 5 hour. And drain out oil, and add clean oil. Next add fresh gasoline to clean. And then add clean oil, and then brake-in four hours. Then machine can work rightly.

2. Maintenance

- 2.1. Good maintenance is your responsibility. Poor maintenance means troubles.
 - Follow good shop practices
 - Keep service area clean and dry
 - Be sure electrical outlets and tools are properly grounded.
 - Use adequate light for the job at hand.
- 2.2. Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:
 - Carbon monoxide poisoning from engine exhaust.
 - Be sure there is adequate ventilation whenever you operate the engine
 - Never operate the engine in a closed building.
 - Let the engine and exhaust system cool before touching
 - Do not run the engine unless instructed to do so.
- 2.3. Read the instructions before you begin, and make sure you have the tools and skills required
- 2.4. To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep sparks and flames away from all fuel-related parts.
- 2.5. Frequently check tiller tines. They should be free of nicks and cracks and securely fastened in place
- 2.6. Periodically lighten all bolts, nuts, screw, and check that all parts are properly installed to make certain unit is safe to operate.
- 2.7. Where replacement parts are necessary for periodic maintenance and servicing, use only new, original replacement parts or their equivalents for repair and replacement to restore your equipment to original specifications.
- 2.8. The manufacturer and/or distributor will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.

- 2.9. A first aid kit should be kept readily accessible while performing maintenance on this equipment.

3. Maintenance sheet

Regularly service period		Every time	Every month or 20 hours	Every 3 months or 50 hours	Every half year or 100 hours	Every year or 300 hours
Use the time come first						
Drive belt tension	Check	√				
	Change	√				
Engine oil	Check level	√				
	Change		√		√	
Air filter	Check	√				
	Clean			√ (1)	√ (1)	
	Replace					√
Tiller transmission oil	Check	√				
	Replace			√		
Tire pressure	Check	√				
Tine shaft	Clean	√				
Wheel axle shaft	Lubricate			√	√	

1) Service more frequently when used in dusty area.

4. Engine long time storage

Refer to the engine manual for information on engine maintenance The engine manual provides detailed information and a maintenance schedule for performing the following tasks:

- 4.1.1. Check oil level before each time's use or after every 8 hours of operation.
- 4.1.2. Change oil after first 5-8 hours of operation. Change oil while engine is warm .Refill with new oil of recommended grade.
- 4.1.3. Check spark plug yearly or every 100 hours of operation.
- 4.1.4. Service air cleaner.
- 4.1.5. Keep engine and part dean

4.1.6 Check engine and equipment often for loose nuts and bolts and keep tightened.

Check or Fill Engine Crank case

4.2.1 Add oil according to engine manual. Do not overfill.

4.2.2. Use a clean, high quality detergent oil. Do not mix oil with gasoline oil level must be full. Check the oil level by removing oil fill plug Oil level should be up to the bottom of the fill plug opening

4.2.3. Always check oil level before starting engine. Refer to engine manual for Capacity. And type of oil to use.

5. Tiller long time storage

Follow the steps below to prepare your tiller for storage Read your engine manual for detailed instructions on preparing the engine for storage.

1. Protect wheels and axles from rust:
 - Loosen locking bolt inside wheel. Slide wheel toward machine,
 - Coat the axles lightly with axle grease
 - Move wheel back into position and lock jam nut.
 - Back off locked bolt 1/16 turn and lock jam nut.
2. Drain fuel system completely following engine manufacturer's instructions or add fuel stabilizer to prevent fuel from gumming up during extended storage period.
3. While engine is still warm, drain the oil from the engine. Refill with fresh oil the recommended grade.
4. Clean external surfaces and engine.
5. Remove spark plug, pour one ounce of SAE 30 oil into spark plug hole
6. Plug hole and pull starter cord slowly to distribute oil evenly head area
7. Take off spark plug, and store it.
8. Transport unit to a suitable storage location. If you have chosen to use a fuel stabilizer and have not drained the fuel system, follow all safety instructions and storage precautions in this manual to prevent the possibility of fire from the ignition of gasoline fumes. Take care, gasoline fumes can travel to distant sources of ignition and ignite, causing risk of explosion and fire.
9. Store the unit in an area away from human activity.
10. If there is any possibility of unauthorized use or tampering, remove the spark plug and store it in a safe place before storing the rototiller unit away. Be sure to plug the spark plug hole to prevent foreign material from entering.

◆ 3. Adjusting

1. Umbrella gear adjusting

If sure that umbrella gear has big strange noise, immediately adjust as following.

1.1 Umbrella gear clearance in transmission box. (Drawing 8)

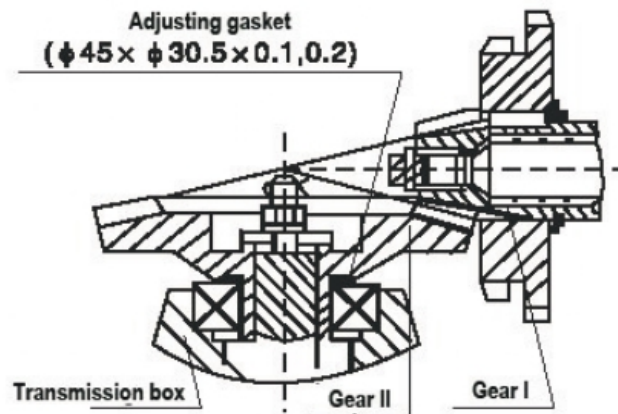
1.1.1 When vice gear side clearance $\Delta < 0.05$, should add steel gasket between transmission box and walking case.

1.1.2 When vice gear side clearance $\Delta > 0.3$, should add adjusting gasket between bearing and gear II, to make sure clearance between 0.5-0.10.

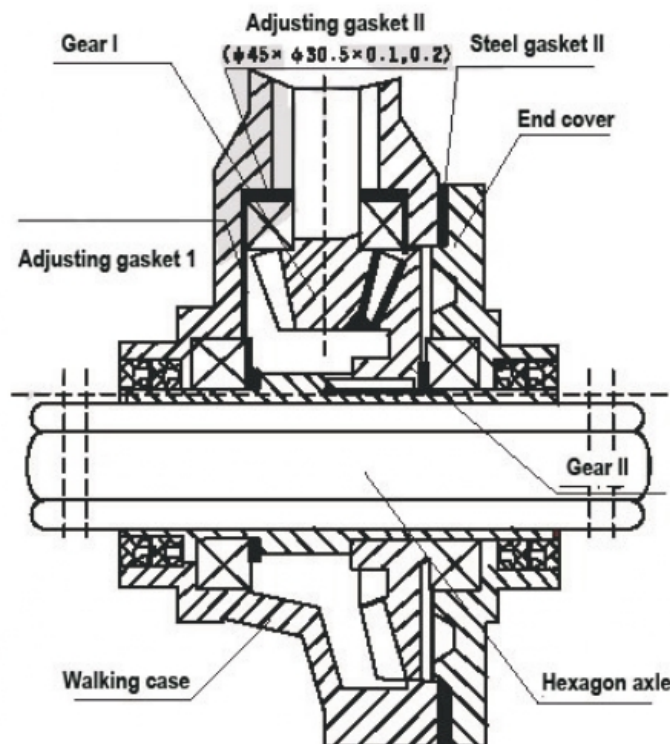
1.2 Umbrella gear clearance in walking case. (Drawing 9)

1.2.1 When vice gear side clearance $\Delta < 0.05$, should add adjusting gasket I 0.2-0.3 to make clearance bigger, and change steel gasket II and to make sure gear II clearance 0.05-0.15.

1.2.2 When vice gear side clearance $\Delta > 0.3$, should reduce adjusting gasket I, and make sure gear II clearance 0.05-0.15; or adjusting gasket II, and meanwhile make sure gear I clearance 0.05-0.15.



Drawing 8



Drawing 9

2. Reverse gear and cable adjusting

When find tiller can't reverse very well, then need adjust reverse cable according SECTION THREE.

! NOTE:

- 2.1. Hold and loose reverse handle two or three times, if find tiller still can't reverse very well. Adjust the reverse cable.
- 2.2. When tiller work, loose reverse handle, reverse gear should return. And then gear box shouldn't be noise. If any noise, gears may be broken.

3. Clutch cable adjusting

After sometime's using, because friction disk worn out, clutch fork worn out, and make clutch can't engage very well, then need adjust clutch cable according to SECTION THREE.

! NOTE:

- 3.1. Hold and loose clutch rod two or three times, if find tiller still can't engage very well. Adjust the clutch cable.
- 3.2. If adjust many times still can't solved problem, must be clutch worn out too much. Then need take machine to service center to replace clutch assy or clutch fork.
- 3.3. Don't disassemble clutch by yourself, or may be damaged clutch.

4. Throttle cable adjusting

When turn throttle lever, can't increase or decrease engine speed very well, need adjust oil throttle cable according to SECTION FOUR.

! NOTE:

- 4.1 Turn the throttle lever two or three times, to see the function.
- 4.2 Throttle cable and cable head must use screw to fasten.

TROUBLESHOOTING

1. Engine can't start and solution

When engine can't start:

- 1.1 Check if engine switch is ON?
- 1.2 Check if enough oil?
- 1.3 Check if fuel valve is ON?
- 1.4 Check if enough fuel in fuel tank?
- 1.5 Check if fuel arrive carburetor?

! WARNING: If fuel leak out, clean them complete. And the check spark plug or engine.

Leak out fuel will cause fire.

- 1.6 Check if spark plug has spark?
 - 1.6.1 Take off spark plug cap, clean dust on it. And then take off spark plug.
 - 1.6.2 Put back spark plug cap on spark plug.
 - 1.6.3 Put spark plug on any grounded point of engine, and start engine, to see if any spark in spark plug clearance.
 - 1.6.4 If no spark, please change a new spark plug.

1.6.5 If have spark, please put it back, and start engine again.

2. Clutch has problem

! NOTE: Don't disassemble clutch complete, if has problem as *, please contact with seller.

Problem	Reason	Solution
Can't clutch	Clutch rod broken	Change or repair
	Clutch cable broken	Change
	Fork or gasket worn out	Change
	Fork axle, jointing fall	Change or repair
	Fork pin bent or broken	Change
	* Friction disk can't work	Change
	* Spring disk can't work	Change
	Friction disk can't contact with bearing end side	Add adjusting gasket
	Clutch broken	Change
Skid	* Spring worn out and can't work	Change
	Fork axle can't turn well	Clean
	Clutch cable don't adjust well	Adjust

3. Transmission box has problem

Problem	Reason	Solution
Each gears not right	Screw and round but at the back of main shaft is loosen.	Assemble main shaft well, and tight the bolt at back.
Can't turn to needed forward gear	Block worn out	Change
	Driving umbrella gear loosen	Tight bolt and nut
	Spring of main shaft invalid	Change
	Main shaft raid, screw of case back cover loosen	Tight
Reverse gear can't hang on	Reverse fork worn	Change
	Reverse cable can't work well	Adjust or change
	Reverse axle loose	Tight bolt at back of reverse axle
	Reverse fork block	Clean until it turn well

Reverse gear don't return	Reverse axle loose and cause gear block	Tight bolt at back of reverse axle
	Spring on reverse axle can't work	Change
	Reverse axle bend	Change
Reverse axle loosen	Bolt at back of reverse axle loosen	Tight
	Reverse axle and gear box not fixed well	Change
Gears has big noise	Umbrella axle, reverse axle bend	Change
	Gears worn out seriously	Change
	Umbrella reverse axle can't fixed well	Change
Mainshaft leak oil	Oil plug on mainshaft invalid	Change
Reverse axle leak oil	O-ring invalid	Change
Clutch fork leak oil	O-ring invalid	Change
Gear shift axle leak oil	O-ring invalid	Change
Flange connection leak oil	Bolt loosen	Tight
	Steel gasket broken	Change

4. Walking case has problem

Problem	Reason	Solution
Gear has big noise	Gears worn out or not assemble well	Change or assemble again
Gears block	Not assemble well	Assemble again
Over heat	Oil in case is little	Add oil
	Gears clearance too narrow	Assemble again
	Axle direction clearance is too small	Adjust
Transmission box connecting place leak oil	Connection bolts loosen	Tight
Oil leak out	Gasket broken	Change
Output shaft sleeve outside leak oil	Oil seal broken	Change
Output shaft sleeve inner hole leak oil	Sleeve broken	Change
Drain hole leak oil	O ring broken	Change
	Plug loosen	Tight
Case leak oil	Case has some small hidden hole	Welding or paint

5. Other problem

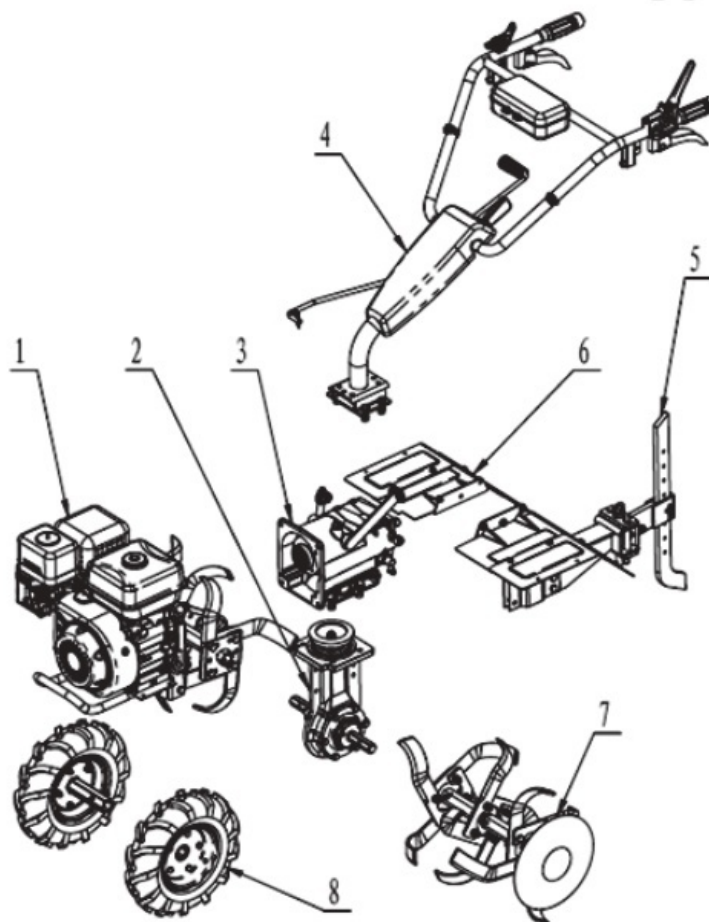
Problem	Reason	Solution
Blades broken	Hit stone or something hard	Change
Cable broken	Worn out	Change

EASILY-DAMAGED PARTS OF TILLER

Number	Name	Assy.
1	o-ring 10×2.65	Gear box assy.
2	o-ring 11.2×2.65	Gear box assy.
3	o-ring 18×1.8	Gear box assy.
4	Clutch cable	Handle frame assy.
5	Throttle cable	Handle frame assy.
6	Throttle switch	Handle frame assy.
7	Oil plug	Gear box assy.
8	Oil seal 30×42×7	Transmission box assy.
9	Rubber handlebar	Handle frame assy.
10	Engine vulnerable parts	Refer to engine manual and catalogue

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

THE MACHINE PARTS

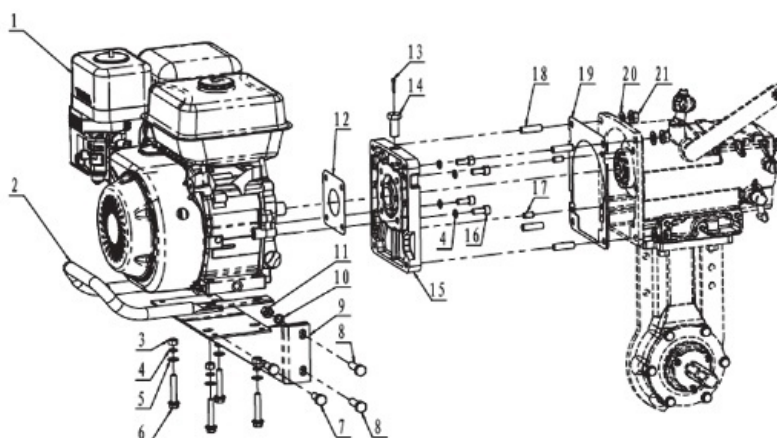


SR. No.	Part No.	Description
1	AM-RT-5P-1- A	engine support frame 、 Bumper
2	AM-RT-5P-2- B	Walking case assy.
3	AM-RT-5P-3- C	Gear box assy
4	AM-RT-5P-4- D	Handrail parts
5	AM-RT-5P-5- E	Trailer body、 connecting frame
6	AM-RT-5P-6- F	Fender parts
7	AM-RT-5P-7- G	Rotary blades parts
8	AM-RT-5P-8- H	Wheels parts

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

BUMPER, ENGINE SUPPORT FRAME AND FLANGE PARTS

A

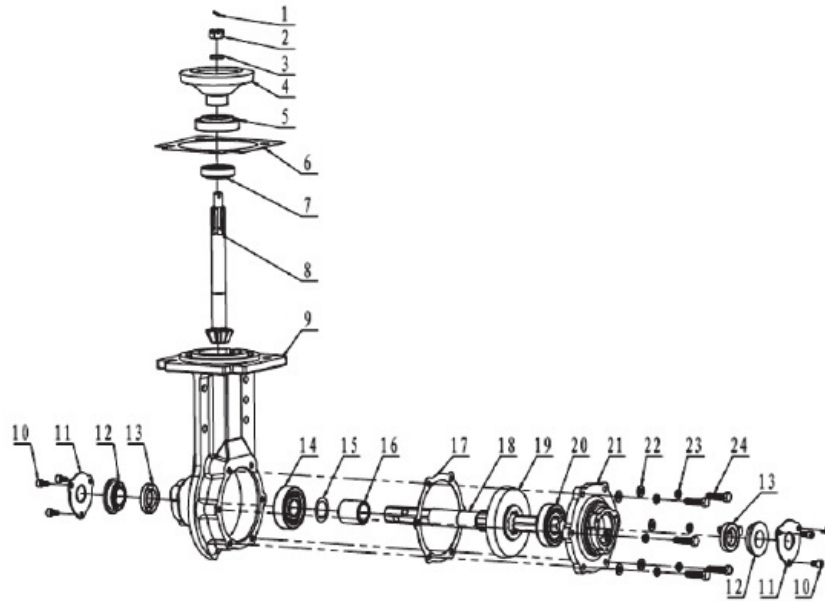


SR. No.	Part No.	Description
1	AM-RT-5P-TA-01	Gasoline Engine 170F-2 Diesel Engine 170FB
2	AM-RT-5P-TA-02	Bumper comp Bumper comp
3	AM-RT-5P-TA-03	Hex nut M8(C grade 1 type)
4	AM-RT-5P-TA-04	spring washer 8 (standard)
5	AM-RT-5P-TA-05	Washer 8(C grade)
6	AM-RT-5P-TA-06	Hex bolt with flange M8*45 (B grade,Heavy series)
7	AM-RT-5P-TA-07	Hexagon head bolts-full thread M10*30
8	AM-RT-5P-TA-08	Hexagon head bolts-full thread M10*40
9	AM-RT-5P-TA-09	Support frame, engine Support frame, engine Support frame, engine
10	AM-RT-5P-TA-10	spring washer 10 (standard)
11	AM-RT-5P-TA-11	Hex nut M10(C grade)
12	AM-RT-5P-TA-12	Flange gasket
13	AM-RT-5P-TA-13	Splitpin 2×30
14	AM-RT-5P-TA-14	Bolt M12×1.25×25
15	AM-RT-5P-TA-15	Flange Flange
16	AM-RT-5P-TA-16	screw M8x35
17	AM-RT-5P-TA-17	Pin 8x14
18	AM-RT-5P-TA-18	double end studs M10×35
19	AM-RT-5P-TA-19	Aiproof gasket,gear box
20	AM-RT-5P-TA-20	Washer 10(C grade)
21	AM-RT-5P-TA-21	Hex bolt with flange M10 (A grade)

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

WALKING CASE ASSY

B



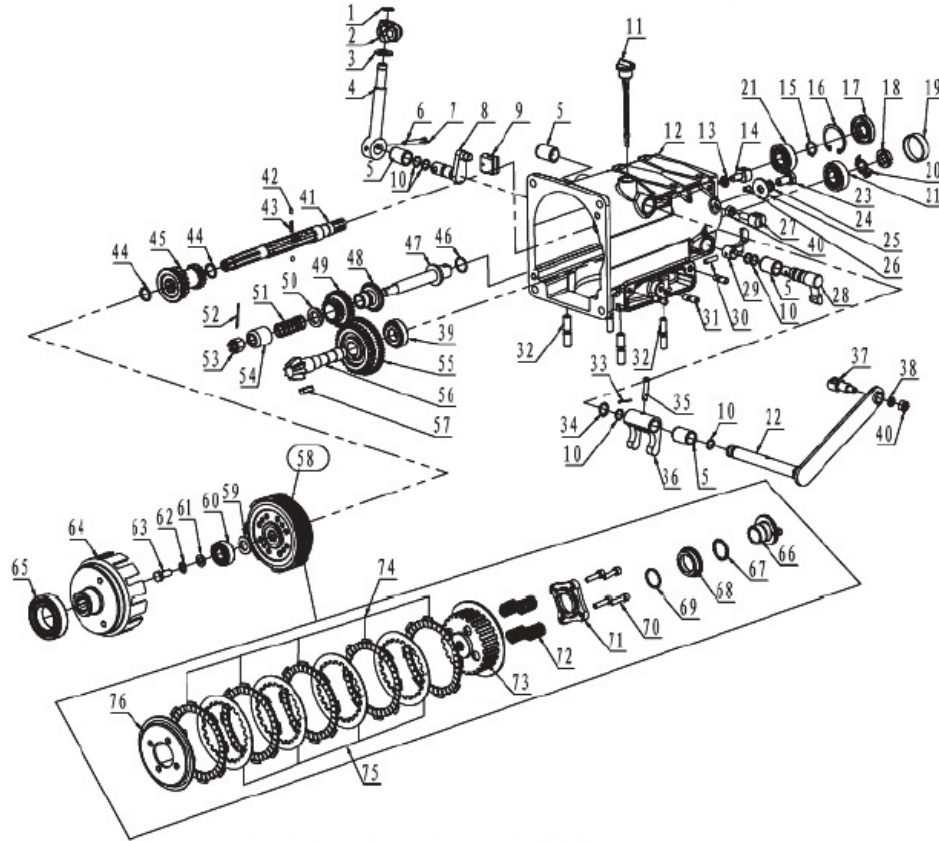
SR. No.	Part No.	Description
1	AM-RT-5P-TB-01	Splitpin 2×30
2	AM-RT-5P-TB-02	Hex Nut M12
3	AM-RT-5P-TB-03	spring washer 12
4	AM-RT-5P-TB-04	Driven umbrella gear
5	AM-RT-5P-TB-05	Taper ball bearing 30206
6	AM-RT-5P-TB-06	gasket 0.5mm gasket 0.2mm
7	AM-RT-5P-TB-07	Taper ball bearing 30204
8	AM-RT-5P-TB-08	Umbrella gear axes
9	AM-RT-5P-TB-09	Walking case
10	AM-RT-5P-TB-10	screw M6×10
11	AM-RT-5P-TB-11	oil seal block,output axes
12	AM-RT-5P-TB-12	Oil seal 25×42×9
13	AM-RT-5P-TB-13	Oil seal 25×42×7
14	AM-RT-5P-TB-14	bearing 6305

SR. No.	Part No.	Description
15	AM-RT-5P-TB-15	Adjusting gasket 0.5mm/0.2mm
16	AM-RT-5P-TB-16	Cover,output axes
17	AM-RT-5P-TB-17	Side cover gas- ket δ 0.5 Side cover gas- ket δ 0.2
18	AM-RT-5P-TB-18	Hex output axes(old) Hex output axes
19	AM-RT-5P-TB-19	Walking umbrella gear
20	AM-RT-5P-TB-20	Taper ball bearing 30305
21	AM-RT-5P-TB-21	Side cover
22	AM-RT-5P-TB-22	Washer 8
23	AM-RT-5P-TB-23	spring washer 8 (standard)
24	AM-RT-5P-TB-24	Hexagon head bolts M8×30

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

GEAR BOX ASSY

C



SR. No.	Part No.	Description
1	AM-RT-5P-TC-01	Ring 12
2	AM-RT-5P-TC-02	PTO Hinge B
3	AM-RT-5P-TC-03	Washer 12(C grade)
4	AM-RT-5P-TC-04	Sheath, Shift Rod
		Sheath, Shift Rod
5	AM-RT-5P-TC-05	sheath, clutch fork axes
6	AM-RT-5P-TC-06	Pin 6x35(B type)
7	AM-RT-5P-TC-07	Clip F
8	AM-RT-5P-TC-08	Shift Axes
9	AM-RT-5P-TC-09	Shift fork
10	AM-RT-5P-TC-10	O-ring 11.2x1.8
11	AM-RT-5P-TC-11	Oil stick
12	AM-RT-5P-TC-12	Gear box

SR. No.	Part No.	Description
13	AM-RT-5P-TC-13	Nut M8
14	AM-RT-5P-TC-14	Seat, clutch cable
15	AM-RT-5P-TC-15	Washer 17
16	AM-RT-5P-TC-16	Washer 40
17	AM-RT-5P-TC-17	oil seal 17x40x8
		oil plug
18	AM-RT-5P-TC-18	Nut M14x1.5
19	AM-RT-5P-TC-19	oil plug
20	AM-RT-5P-TC-20	Washer 14
21	AM-RT-5P-TC-21	bearing 6203
22	AM-RT-5P-TC-22	Axes, clutch fork
23	AM-RT-5P-TC-23	Hexagon head bolts- full thread M10*25 (C type)

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

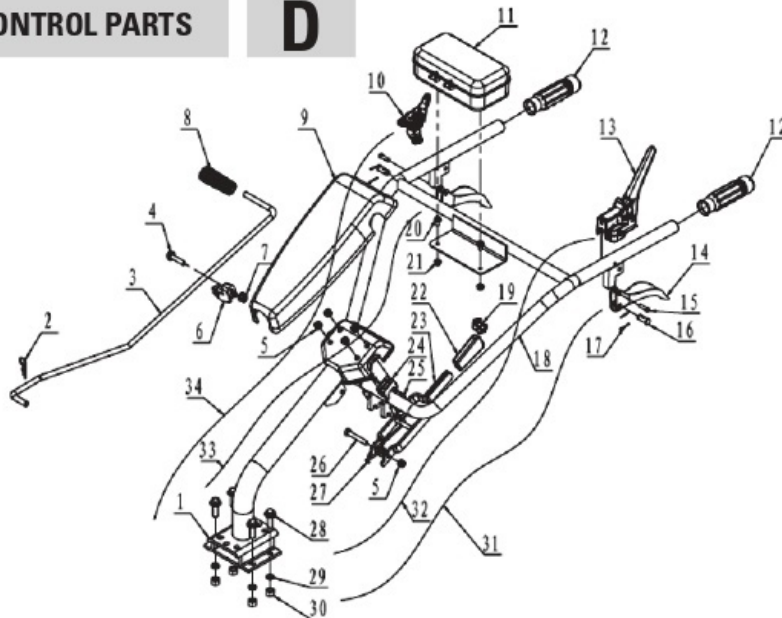
SR. No.	Part No.	Description
24	AM-RT-5P-TC-24	spring washer 10 (standard)
25	AM-RT-5P-TC-25	Washer 10 (A grade)
26	AM-RT-5P-TC-26	round pin 5x30
27	AM-RT-5P-TC-27	Seat,reverse gear cable
28	AM-RT-5P-TC-28	Axes,reverse gear fork
29	AM-RT-5P-TC-29	Rever gear fork
30	AM-RT-5P-TC-30	Hex bolt with flange M5*30
31	AM-RT-5P-TC-31	Double end studs M8*25 (C type)
32	AM-RT-5P-TC-32	Double end studs M10*45 (C type)
33	AM-RT-5P-TC-33	Splitpin 1.6x20 A type
34	AM-RT-5P-TC-34	spring washer 16
35	AM-RT-5P-TC-35	Pin 6x30 B type
36	AM-RT-5P-TC-36	Cluth fork
37	AM-RT-5P-TC-37	Seat,cluth cable
38	AM-RT-5P-TC-38	spring washer 8(standard)
39	AM-RT-5P-TC-39	Taper ball bearing 30203
40	AM-RT-5P-TC-40	Hex nut M8(1 type)
41	AM-RT-5P-TC-41	Principal axes(without output)
		Principal axes(with output)
42	AM-RT-5P-TC-42	Steel ball S 6.35
43	AM-RT-5P-TC-43	Spring ,shift lever
44	AM-RT-5P-TC-44	Ring 20 GB/T895.2
45	AM-RT-5P-TC-45	Iniative gear
		2nd generation Iniative gear
46	AM-RT-5P-TC-46	O-ring18x1.8
47	AM-RT-5P-TC-47	Axes,reverse gear
48	AM-RT-5P-TC-48	Pushing plate,reverse gear

SR. No.	Part No.	Description
49	AM-RT-5P-TC-49	Double gear,reverse gear
50	AM-RT-5P-TC-50	Spring seat,reverse gear
51	AM-RT-5P-TC-51	Spring seat,reverse gear
52	AM-RT-5P-TC-52	Splitpin 2x30
53	AM-RT-5P-TC-53	Hex nut M12 (C grade 1 type)
54	AM-RT-5P-TC-54	Restrict cover,reverse gear
55	AM-RT-5P-TC-55	Double gear,countershaft
		2nd generation Double gear,countershaft
56	AM-RT-5P-TC-56	Countershaft
57	AM-RT-5P-TC-57	Key 6x6x20
58	AM-RT-5P-TC-58	Core comp, clutch
59	AM-RT-5P-TC-59	Clutch washer
60	AM-RT-5P-TC-60	bearing 6202
61	AM-RT-5P-TC-61	Washer 8 (C grade)
62	AM-RT-5P-TC-62	Sawtooh loched gasket 8*0.8
63	AM-RT-5P-TC-63	Hexagon head bolts-full thread M8*20
64	AM-RT-5P-TC-64	Cover,clutch
		Cover,clutch
65	AM-RT-5P-TC-65	bearing 6007
66	AM-RT-5P-TC-66	Active Pushing cover
67	AM-RT-5P-TC-67	Steel ball
68	AM-RT-5P-TC-68	Fixed sheath
69	AM-RT-5P-TC-69	Ring
70	AM-RT-5P-TC-70	screw
71	AM-RT-5P-TC-71	Lift slab assy
72	AM-RT-5P-TC-72	spring
73	AM-RT-5P-TC-73	Driven plate assy
74	AM-RT-5P-TC-74	Friction piece
75	AM-RT-5P-TC-75	steel piece
76	AM-RT-5P-TC-76	Platen

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

HANDLE CONTROL PARTS

D



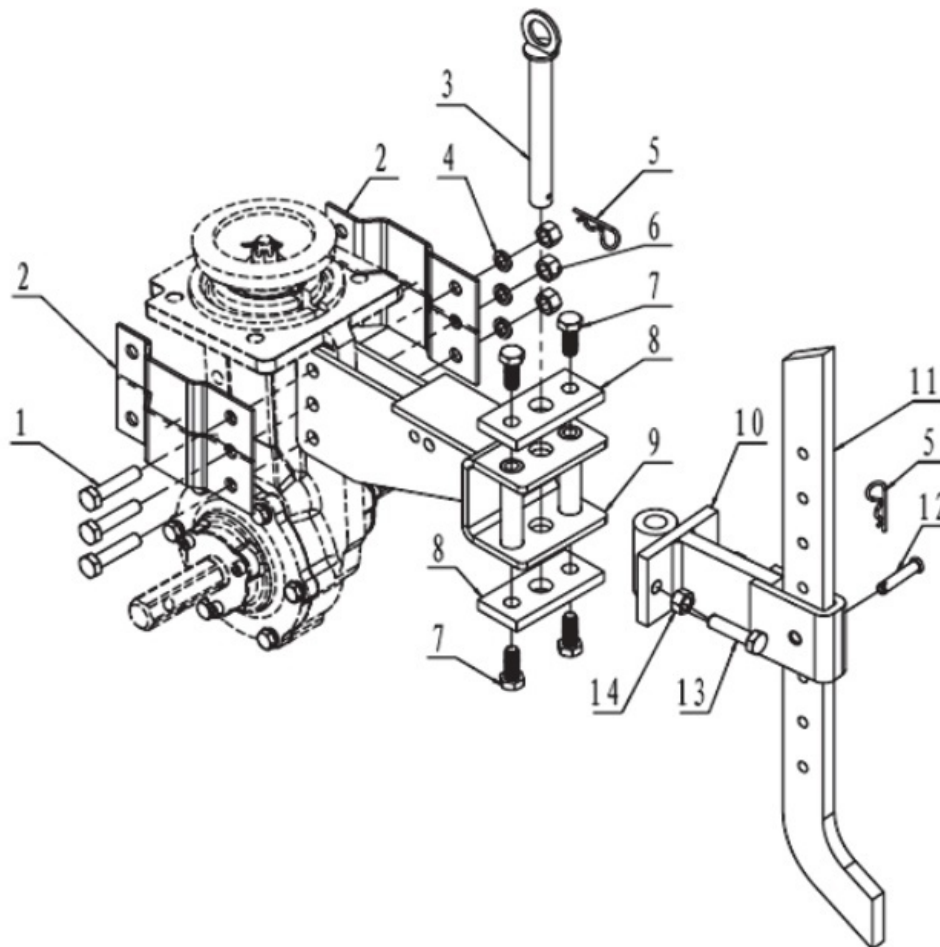
SR. No.	Part No.	Description
1	AM-RT-5P-TD-01	Handle standpipe
2	AM-RT-5P-TD-02	clip B
3	AM-RT-5P-TD-03	Shift Lever
4	AM-RT-5P-TD-04	Hex bolt with flange M8*35 (B grade, Heavy series)
5	AM-RT-5P-TD-05	hex nut M8
6	AM-RT-5P-TD-06	locating piece
7	AM-RT-5P-TD-07	hex nut with flange M8
8	AM-RT-5P-TD-08	grip ϕ 10
9	AM-RT-5P-TD-09	handle cover
10	AM-RT-5P-TD-10	Shut Down Switch Comp
11	AM-RT-5P-TD-11	Tool box
12	AM-RT-5P-TD-12	Handle Grip ϕ 25
13	AM-RT-5P-TD-13	Emergency stop handlebar, MF type
14	AM-RT-5P-TD-14	Reverse Gear/Clutch Grip
15	AM-RT-5P-TD-15	Pin 7x24
16	AM-RT-5P-TD-16	lacking cord connector
17	AM-RT-5P-TD-17	Splitpin 1.6x20
18	AM-RT-5P-TD-18	Handle bar
19	AM-RT-5P-TD-19	Clip
20	AM-RT-5P-TD-20	Hex bolt with flange M6*12 (B grade, Heavy series)

SR. No.	Part No.	Description
21	AM-RT-5P-TD-21	Hex but with flange M6(A grade)
22	AM-RT-5P-TD-22	Grips, Height setting
23	AM-RT-5P-TD-23	Height Setting
24	AM-RT-5P-TD-24	Handle support block
25	AM-RT-5P-TD-25	U-type bolt
26	AM-RT-5P-TD-26	Hex bolt M8*50
27	AM-RT-5P-TD-27	Height Setting torsional spring
28	AM-RT-5P-TD-28	Hex bolt with flange M10*30 (B grade, Heavy series)
29	AM-RT-5P-TD-29	spring washer 10 (standard)
30	AM-RT-5P-TD-30	Hex nut M10 (C grade, 1 type)
31	AM-RT-5P-TD-31	Clutch Cable
32	AM-RT-5P-TD-32	Flameout Switch Cable Comp
33	AM-RT-5P-TD-33	Reverse Gear Cable WM1000N
34	AM-RT-5P-TD-34	Throttle Cable Comp WM1000N

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

DRAGGING ASSY CONNECTION FRAME AND RESISTANCE ROD PARTS

E



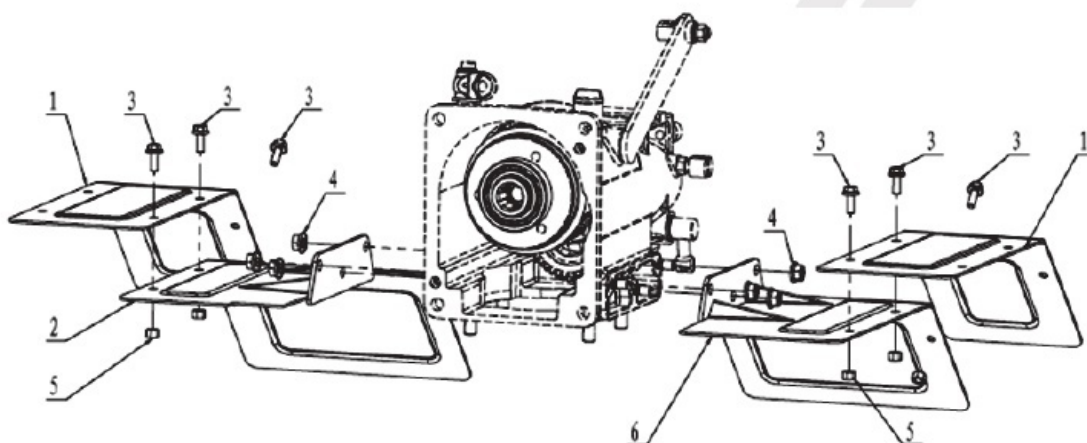
SR. No.	Part No.	Description
1	AM-RT-5P-TE-01	Hexagon head bolts-full thread M10*40
2	AM-RT-5P-TE-02	connection plate, dragging assy
3	AM-RT-5P-TE-03	Pin with ring
4	AM-RT-5P-TE-04	spring washer 10(standard)
5	AM-RT-5P-TE-05	Clip B
6	AM-RT-5P-TE-06	Hex nut M10(C grade, 1 type)
7	AM-RT-5P-TE-07	Hexagon head bolts-full thread M10*25(C grade)

SR. No.	Part No.	Description
8	AM-RT-5P-TE-08	reinforced plate, dragging assy
9	AM-RT-5P-TE-09	Dragging assy
10	AM-RT-5P-TE-10	Connection frame
11	AM-RT-5P-TE-11	Resistance rod
12	AM-RT-5P-TE-12	Pin 8x43 (B type)
13	AM-RT-5P-TE-13	Hexagon head bolts-full thread M10*35
14	AM-RT-5P-TE-14	Hex nut M10(A and B grade, 1 type)

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

FENDER PARTS

F

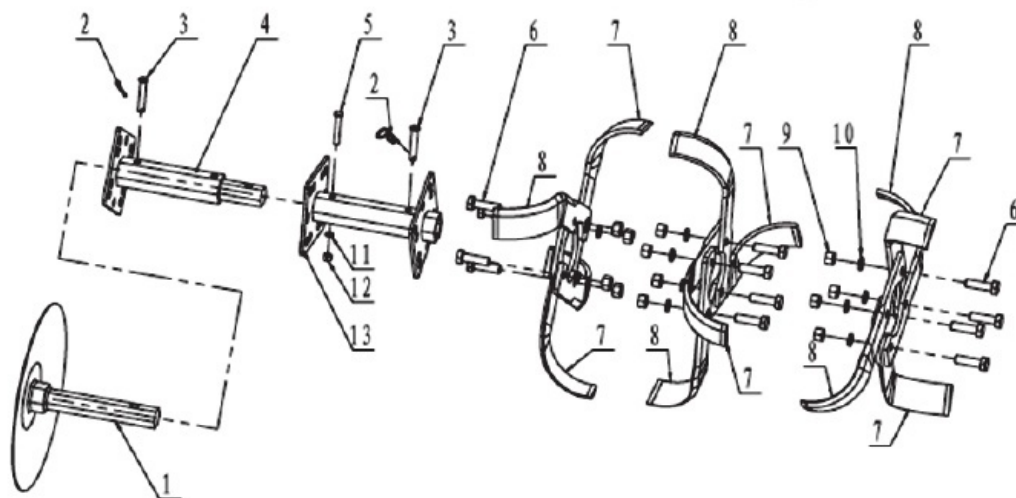


Sr. No.	Part No	Description
1	AM-RT-5P-TF-01	vice fender
2	AM-RT-5P-TF-02	fender(right)
		fender(right)
3	AM-RT-5P-TF-03	Hex bolt with flange M6*16 (B grade,Heavy series)
4	AM-RT-5P-TF-04	Hex nut with flange M8(A grade)
5	AM-RT-5P-TF-05	Hex nut M6(C grade, 1 type)
6	AM-RT-5P-TF-06	fender (left)

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

ROTARY BLADES PARTS

G

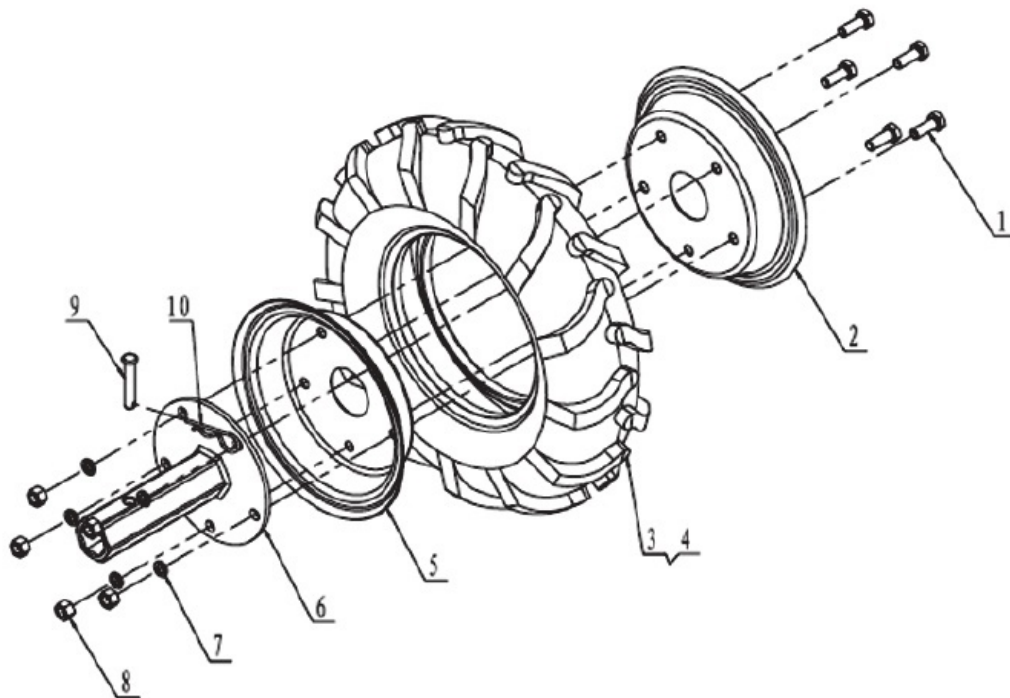


Sr. No.	Part No	Description
1	AM-RT-5P-TG-01	Discs (Optional)
2	AM-RT-5P-TG-02	Clip B
3	AM-RT-5P-TG-03	Pin 8×43 (B type)
4	AM-RT-5P-TG-04	Counter tube 2+1
5	AM-RT-5P-TG-05	Hexagon head bolts-full thread M6*40
6	AM-RT-5P-TG-06	Hexagon head bolts-full thread M10*35
7	AM-RT-5P-TG-07	Blade (R)
8	AM-RT-5P-TG-08	Blade (L)
9	AM-RT-5P-TG-09	Hex nut M10(C grade,1 type)
10	AM-RT-5P-TG-10	spring washer 10 (standard)
11	AM-RT-5P-TG-11	spring washer 6 (standard)
12	AM-RT-5P-TG-12	Hex nut M6 (C grade 1 type)
13	AM-RT-5P-TG-13	Main tube

TRANSMISSION DIAGRAM & SPARE PARTS OF AM-RTP-5P

WHEELS PARTS

H

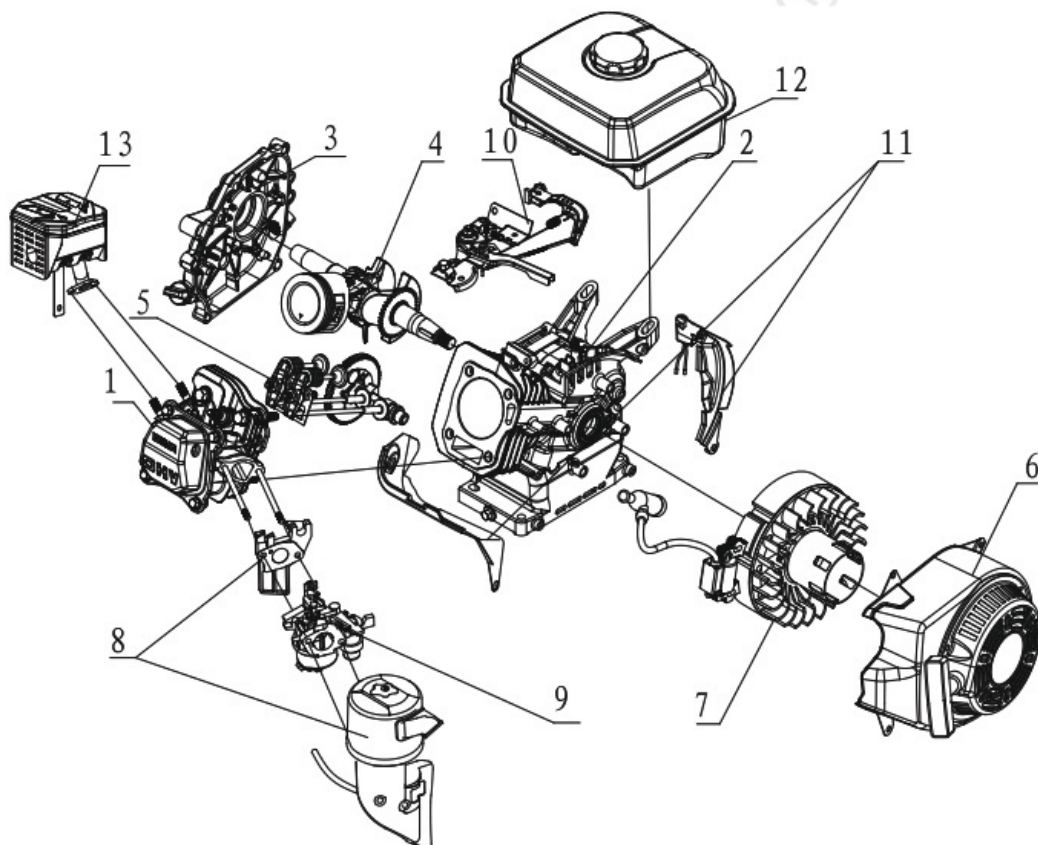


Sr. No.	Part No	Description
1	AM-RT-5P-TH-01	Hexagon head bolts-full thread M8*22
2	AM-RT-5P-TH-02	Spoke (outer side with hole),3.5-6 wheel
3	AM-RT-5P-TH-03	Outer rubber wheel, 3.5-6 wheel
4	AM-RT-5P-TH-04	Inner tube, 3.5-6 wheel
5	AM-RT-5P-TH-05	Spoke (inner side), 3.5-6 wheel
6	AM-RT-5P-TH-06	spring washer 8(standard)
7	AM-RT-5P-TH-07	Wheel axle/black
8	AM-RT-5P-TH-08	Hex nut M8(C grade,1 type)
9	AM-RT-5P-TH-09	Pin 8×43 (B type)
10	AM-RT-5P-TH-10	Clip B

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

ENGINE ASSY

EA



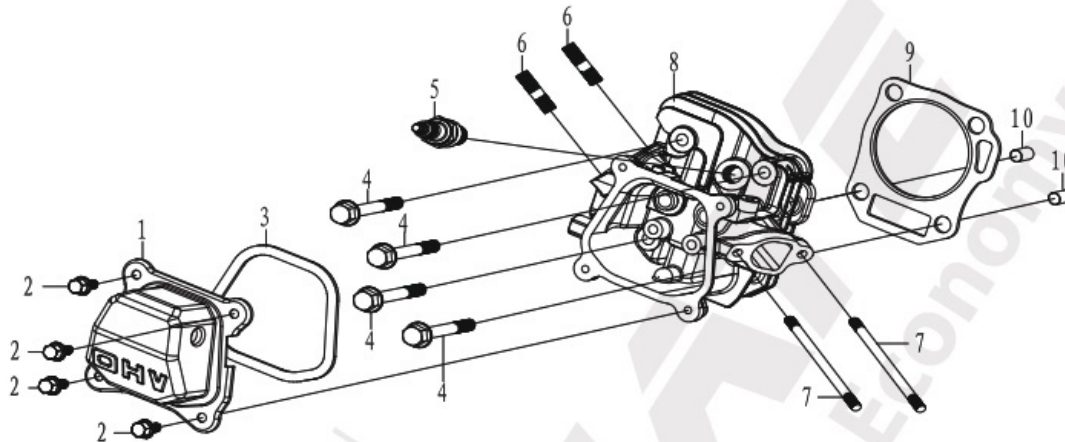
Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EA-01	HEAD ASSY
2	AM-RT-5P-EA-02	CRANKCASE ASSY
3	AM-RT-5P-EA-03	CRANKCASE COVER ASSY
4	AM-RT-5P-EA-04	CRANK-CONNECTING ROD ASSY
5	AM-RT-5P-EA-05	VALVE TRAIN ASSY
6	AM-RT-5P-EA-06	STAR ASSY
7	AM-RT-5P-EA-07	FLYWHEEL AND IGNITION ASSY

Sr. No.	PART NO.	DESCRIPTION
8	AM-RT-5P-EA-08	INLET ASSY
9	AM-RT-5P-EA-09	CARBURETOR CIRCUIT ASSY
10	AM-RT-5P-EA-10	THROTTLE CONTROL ASSY
11	AM-RT-5P-EA-11	WIND DEFLECTOR
12	AM-RT-5P-EA-12	FULE OIL ASSY
13	AM-RT-5P-EA-13	EXHAUST ASSY

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

HEAD ASSY

EB

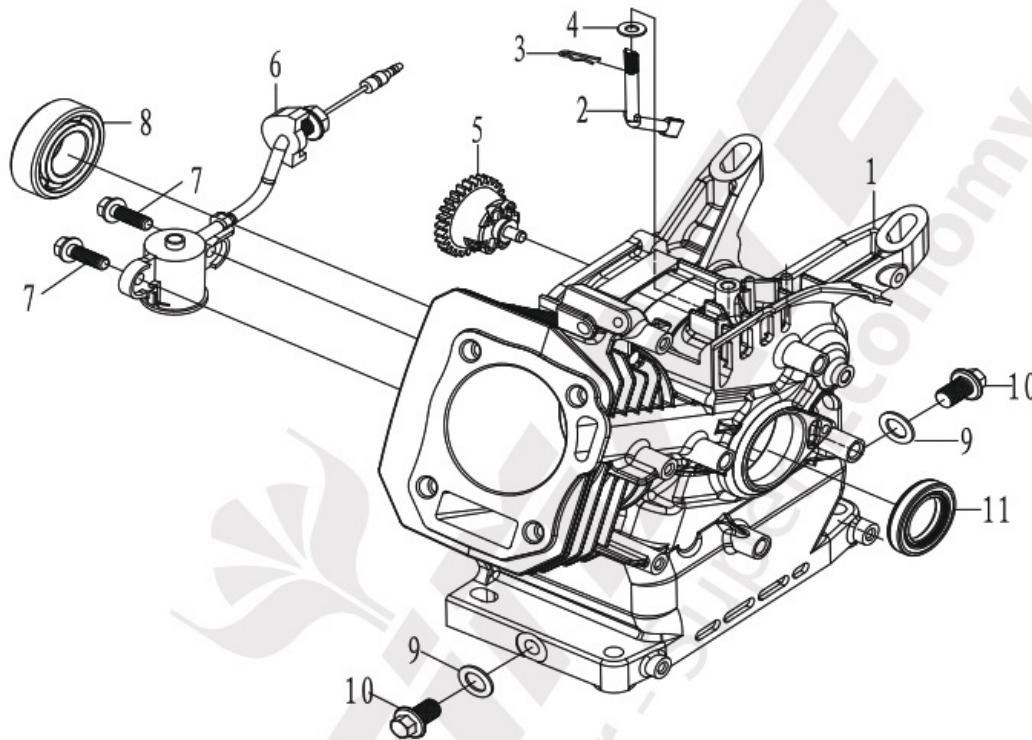


Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EB-01	HEAD COVER
2	AM-RT-5P-EB-02	BOLT GB/T5789 M6×16
3	AM-RT-5P-EB-03	GASKET,HEAD COVER
4	AM-RT-5P-EB-04	BOLT GB/T5789 M8×60
5	AM-RT-5P-EB-05	PLUG, SPARK F7TC
6	AM-RT-5P-EB-06	BOLT, STUD, M8×35
7	AM-RT-5P-EB-07	BOLT, STUD, M6×113
8	AM-RT-5P-EB-08	CYLINDER HEAD ASSY
	AM-RT-5P-EB-08	CYLINDER HEAD ASSY
9	AM-RT-5P-EB-10	GASKET, CYLINDER HEAD
	AM-RT-5P-EB-10	GASKET, CYLINDER HEAD
10	AM-RT-5P-EB-12	PIN, DOWEL $\phi 10 \times 16$

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

CRANKCASE ASSY

EC

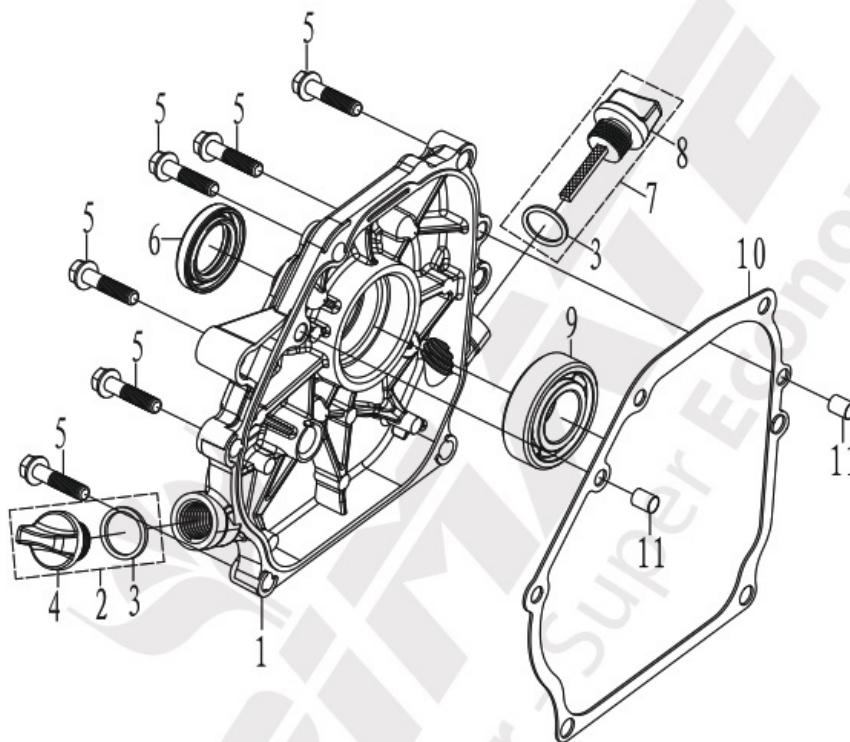


Sr. NO.	PART NO.	DESCRIPTION
1	AM-RT-5P-EC-01	CRANKCASE COMP
	AM-RT-5P-EC-01	CRANKCASE COMP
2	AM-RT-5P-EC-02	GOVERNOR ARM SHAFT
3	AM-RT-5P-EC-03	LOCKER,GOVERNOR ARM SHAFT
4	AM-RT-5P-EC-04	PLAIN WASHER $\phi 6 \times \phi 13 \times 1$
5	AM-RT-5P-EC-05	GOVERNOR KIT
6	AM-RT-5P-EC-06	OIL SENSOR
7	AM-RT-5P-EC-07	BOLT M6 \times 16
8	AM-RT-5P-EC-08	BEARING 6205
9	AM-RT-5P-EC-09	PLAIN WASHER $\phi 10 \times \phi 16 \times 1.5$
10	AM-RT-5P-EC-10	BOLT, DRAIN PLUG M10 \times 15
11	AM-RT-5P-EC-11	OIL SEAL $\phi 25 \times \phi 41.25 \times 6$

ENGINE DIAGRAM & SPARE PARTS OF AM-RT-5P

CRANKCASE COVER ASSY

EC-A

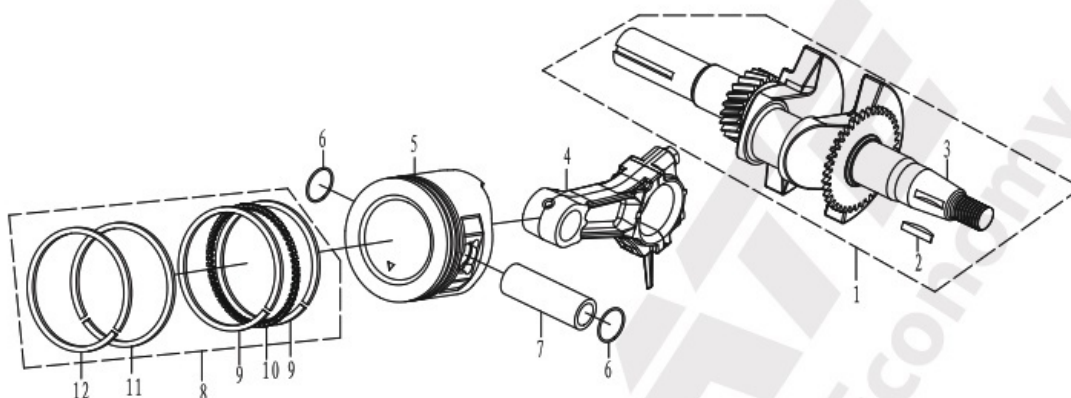


Sr. NO.	PART NO.	DESCRIPTION
1	AM-RT-5P-EC-A01	COVER, CRANKCASE
2	AM-RT-5P-EC-A02	OIL FILLER PLUG ASSY
3	AM-RT-5P-EC-A03	DIPSTICK SEALING RING
4	AM-RT-5P-EC-A04	OIL FILLER PLUG
5	AM-RT-5P-EC-A05	BOLT M8×32
6	AM-RT-5P-EC-A06	OIL SEAL
7	AM-RT-5P-EC-A07	DIPSTICK ASSY
8	AM-RT-5P-EC-A08	DIPSTICK
9	AM-RT-5P-EC-A09	BEARING GB/T276/6205
10	AM-RT-5P-EC-A10	GASKET, CASE COVER
11	AM-RT-5P-EC-A11	PIN, DOWEL, φ 8×14

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

CRANK-CONNECTING ROD ASSY

ED



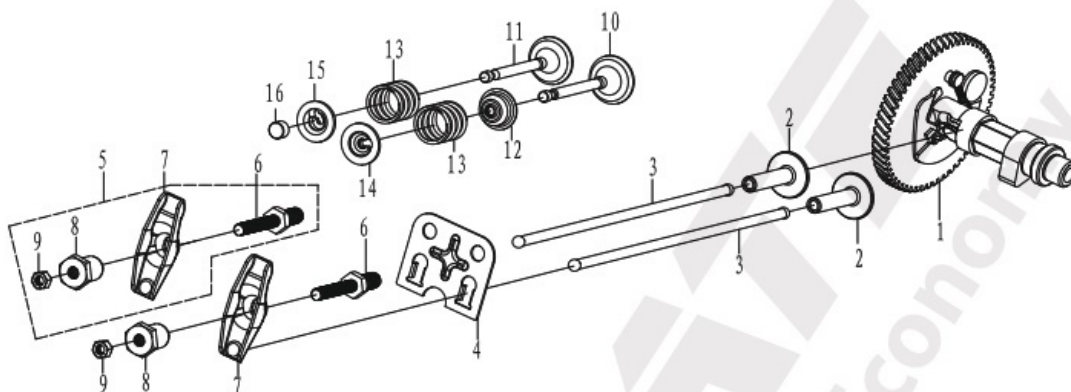
Sr. NO.	PART NO.	DESCRIPTION
1	AM-RT-5P-ED-01	CRANK SHAFT ASSY
		CRANK SHAFT ASSY
2	AM-RT-5P-ED-02	SPECIAL WOODRUFF KEY
3	AM-RT-5P-ED-03	CRANK SHAFT
		CRANK SHAFT
4	AM-RT-5P-ED-04	CONNECTING ROD ASSY
		CONNECTING ROD ASSY
5	AM-RT-5P-ED-05	PISTON
		PISTON
6	AM-RT-5P-ED-06	CLIP, PISTON PIN

Sr. NO.	PART NO.	DESCRIPTION
7	AM-RT-5P-ED-07	PIN, PISTON
8	AM-RT-5P-ED-08	PISTON RING ASSY
		PISTON RING ASSY
9	AM-RT-5P-ED-09	FILM LOOP
		FILM LOOP
10	AM-RT-5P-ED-10	BUSH RING
		BUSH RING
11	AM-RT-5P-ED-11	GAS RING TWO
		GAS RING TWO
12	AM-RT-5P-ED-12	GAS RING ONE
		GAS RING ONE

ENGINE DIAGRAM & SPARE PARTS OF AM-RT-5P

VALVE TRAIN ASSY

EE

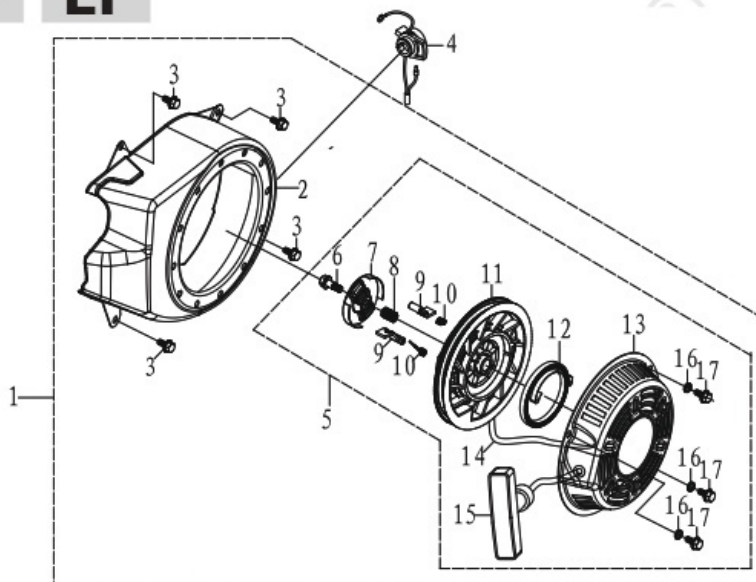


Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EE-01	CAMSHAFT ASSY
		CAMSHAFT ASSY
2	AM-RT-5P-EE-02	LIFTER, VALVE
		LIFTER, VALVE
3	AM-RT-5P-EE-03	ROD, PUSH
4	AM-RT-5P-EE-06	PLATE, PUSH ROD GUIDE
5	AM-RT-5P-EE-07	ARM ASSY, VALVE ROCKER
6	AM-RT-5P-EE-08	BOLT, PIVOT
7	AM-RT-5P-EE-09	ARM, VALVE ROCKER
8	AM-RT-5P-EE-10	ADJUSTING NUT, VALVE
9	AM-RT-5P-EE-11	NUTT, PIVOT LOCKING
10	AM-RT-5P-EE-12	VALVE, INLET
11	AM-RT-5P-EE-13	VALVE, EXHAUST
	AM-RT-5P-EE-14	VALVE, EXHAUST
12	AM-RT-5P-EE-15	VALVE SEAL
13	AM-RT-5P-EE-16	SPRING, VALVE
14	AM-RT-5P-EE-17	INTAKE VALVE SPRING SEAT
15	AM-RT-5P-EE-18	EXHAUST VALVE SPRING SEAT
16	AM-RT-5P-EE-19	ADJUSTER, EX. VALVE

ENGINE DIAGRAM & SPARE PARTS OF AM-RT-5P

STAR ASSY

EF

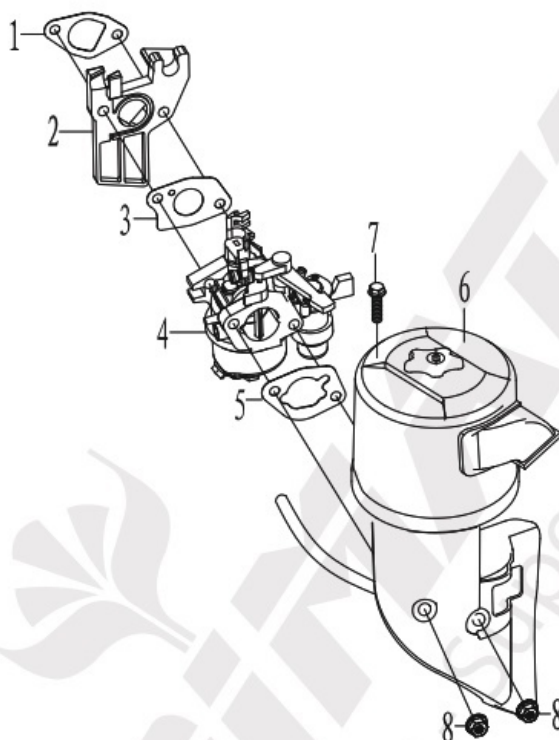


Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EF-01	RECOIL STARTER ASSY
2	AM-RT-5P-EF-02	WIND SCOOPER
3	AM-RT-5P-EF-03	BOLT GB/T16674.1/M6*12
4	AM-RT-5P-EF-04	SWITH ASSY,ENGINE STOP
5	AM-RT-5P-EF-05	STARTER COMP, RECOIL
6	AM-RT-5P-EF-06	CENTER POSITION BOLT
7	AM-RT-5P-EF-07	RATCHET, GUIDE
8	AM-RT-5P-EF-08	CENTER POSITION SPRING
9	AM-RT-5P-EF-09	RATCHET, STARTER
10	AM-RT-5P-EF-10	SPRING, RETURN
11	AM-RT-5P-EF-11	REEL, RECOIL STARTER
12	AM-RT-5P-EF-12	SPRING, STARTER RETURN
13	AM-RT-5P-EF-13	STARTER COVER COMP, RECOIL
14	AM-RT-5P-EF-14	ROPE, RECOIL STARTER
15	AM-RT-5P-EF-15	HANDLE, STARTER
16	AM-RT-5P-EF-16	RECOIL STARTER ASSY 6
17	AM-RT-5P-EF-17	BOLT M6×10

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

INLET ASSY

EG

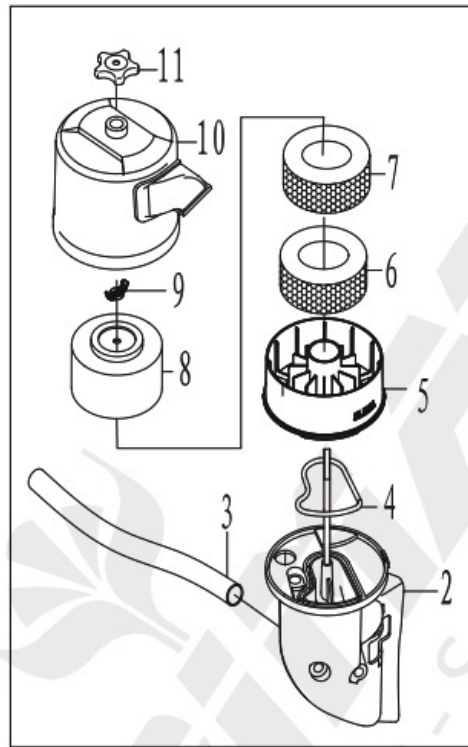


Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EG-01	AIR INTAKE WASHER
2	AM-RT-5P-EG-02	INSULATOR
3	AM-RT-5P-EG-03	PACKING, CARBURETOR
4	AM-RT-5P-EG-04	CARBURETOR
5	AM-RT-5P-EG-05	GASKET, AIR CLEANER
6	AM-RT-5P-EG-06	AIR CLEANER ASSY
7	AM-RT-5P-EG-07	BOLT GB/T5789/M6*22
8	AM-RT-5P-EG-08	NUT GB/T6177/M6

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

AIR FILTER ASSY

EH

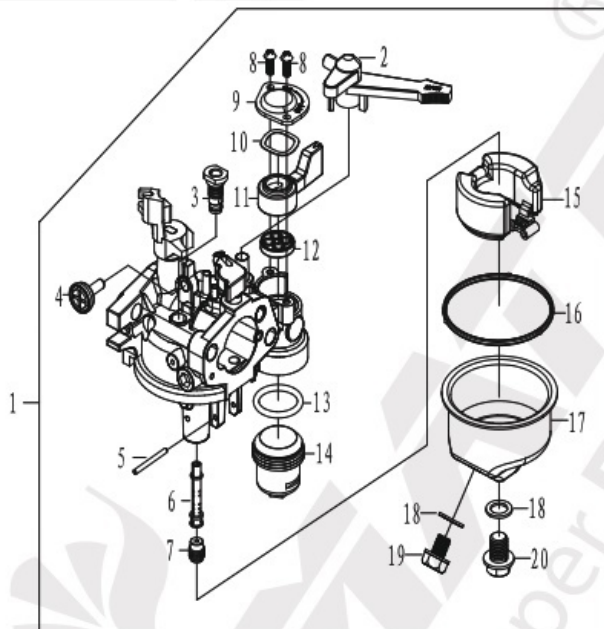


Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EH-01	AIR CLEANER ASSY
2	AM-RT-5P-EH-02	AIR CLEANER CASE
3	AM-RT-5P-EH-03	WASTE GAS PIPE
4	AM-RT-5P-EH-04	PACKING
5	AM-RT-5P-EH-05	BELOW COVER,AIR CLEANER
6	AM-RT-5P-EH-06	SPENGE ELEMENT, AIR CLEANER
7	AM-RT-5P-EH-07	SPENGE ELEMENT, AIR CLEANER
8	AM-RT-5P-EH-08	COVER,SEAL
9	AM-RT-5P-EH-09	BUTTERFLY NUT
10	AM-RT-5P-EH-10	COVER,AIR CLEANER
11	AM-RT-5P-EH-11	HANDWHEEL

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

CARBURETOR CIRCUIT ASSY

EI



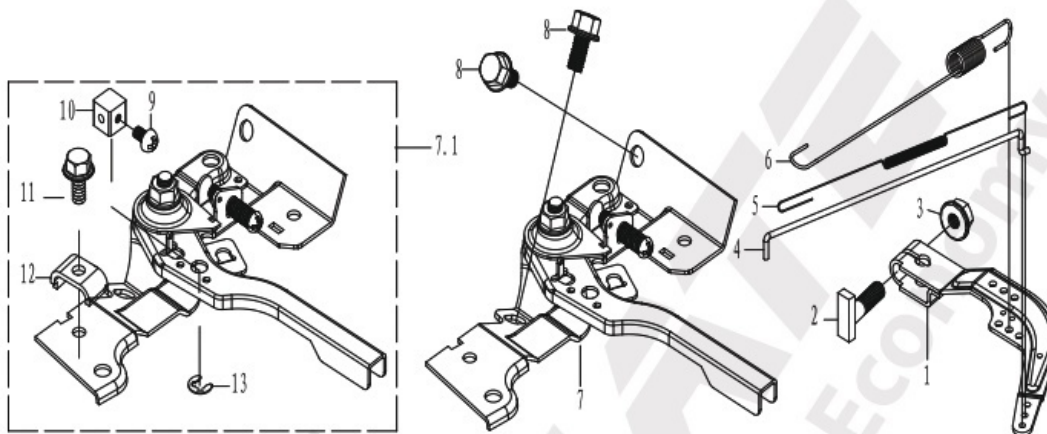
Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EI-01	CARBURETOR
		CARBURETOR
2	AM-RT-5P-EI-02	CHOKE PLATE HANDLE
3	AM-RT-5P-EI-03	IDLE HOLE COMPONENT
4	AM-RT-5P-EI-04	JET SET, PILOT
5	AM-RT-5P-EI-05	PIN
6	AM-RT-5P-EI-06	NOZZLE, MAIN
		NOZZLE, MAIN
7	AM-RT-5P-EI-08	JET, MAIN
	AM-RT-5P-EI-09	JET, MAIN
8	AM-RT-5P-EI-10	SCREW
9	AM-RT-5P-EI-11	FUEL SWITCH COVER PLATE

Sr. No.	PART NO.	DESCRIPTION
10	AM-RT-5P-EI-12	WASHER
11	AM-RT-5P-EI-13	FUEL SWITCH HANDLE
12	AM-RT-5P-EI-14	FUEL SWITCH SEAL
13	AM-RT-5P-EI-15	SEDIMENT BOWL SEAL
14	AM-RT-5P-EI-16	SEDIMENT BOWL
15	AM-RT-5P-EI-17	FLOAT SET
16	AM-RT-5P-EI-18	CHAMBER SET,FLOAT
17	AM-RT-5P-EI-19	WASHER
18	AM-RT-5P-EI-20	GASKET
19	AM-RT-5P-EI-21	BOLT, DRAIN PLUG
20	AM-RT-5P-EI-22	BOLT

ENGINE DIAGRAM & SPARE PARTS OF AM-RT-5P

THROTTLE CONTROL ASSY

EJ

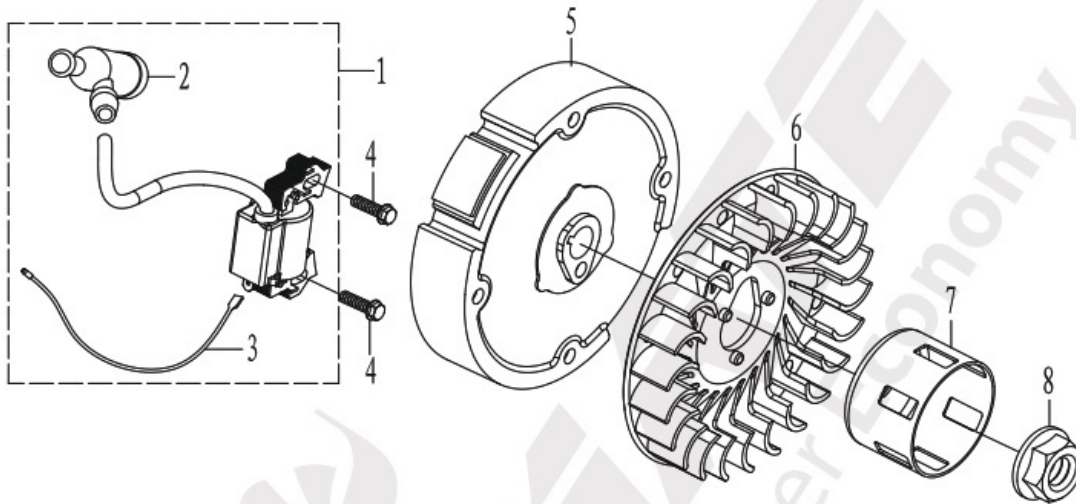


Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EJ-01	ARM, GOVERNOR
2	AM-RT-5P-EJ-02	T-SHAPE BOLT
3	AM-RT-5P-EJ-03	NUT M6
4	AM-RT-5P-EJ-04	TIE ROD
5	AM-RT-5P-EJ-05	FINE ADJUSTMENT SPRING
6	AM-RT-5P-EJ-06	GOVERNING SPRING
7	AM-RT-5P-EJ-07	CONTROL ASSY
8	AM-RT-5P-EJ-08	BOLT M6×12
9	AM-RT-5P-EJ-10	SCREW M4×6
10	AM-RT-5P-EJ-11	WIRE TERMINAL
11	AM-RT-5P-EJ-12	BOLT M5×16
12	AM-RT-5P-EJ-13	PRESS LINE BOARD
13	AM-RT-5P-EJ-14	SPLIT WASHER

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

FLYWHEEL AND IGNITION ASSY

EK



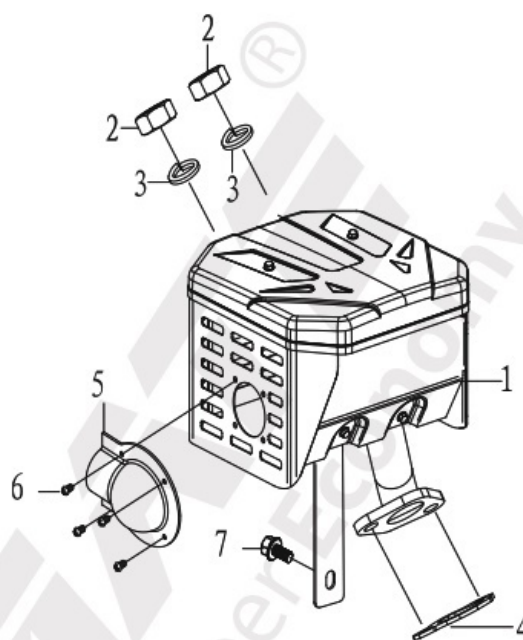
Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EK-01	IGNITION
2	AM-RT-5P-EK-02	CAP, IGNITION
3	AM-RT-5P-EK-03	CORD, STOP SWITCH
4	AM-RT-5P-EK-04	BOLT M6 × 22
5	AM-RT-5P-EK-05	FLYWHEEL
6	AM-RT-5P-EK-06	FAN, COOLING
7	AM-RT-5P-EK-07	PULLEY, STARTER
8	AM-RT-5P-EK-08	NUT M14 × 1.5

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

EXHAUST ASSY

EL

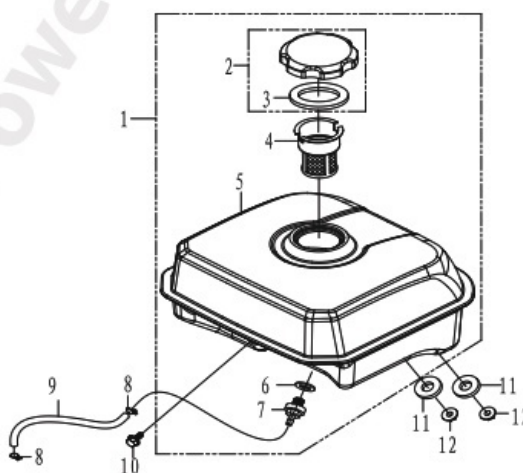
Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EL-01	MUFFLER COMP
2	AM-RT-5P-EL-02	NUT M8
3	AM-RT-5P-EL-03	SPRING WASHER 8
4	AM-RT-5P-EL-04	AIR EXHAUST WASHER
5	AM-RT-5P-EL-05	GUIDING COVER
6	AM-RT-5P-EL-06	SCREW ST4.2×5
7	AM-RT-5P-EL-07	BOLT M6×12



FUEL OIL ASSY

EM

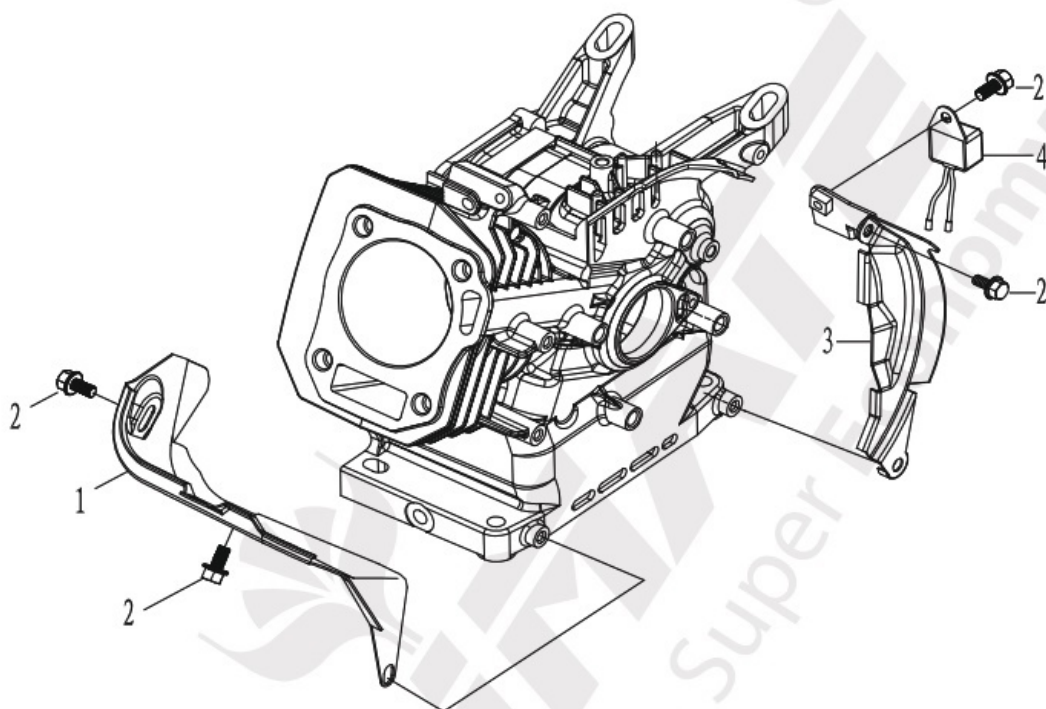
Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EM-01	TANK FUEL COMP.
2	AM-RT-5P-EM-02	CAP COMP, FUEL FILLER
3	AM-RT-5P-EM-03	PACKING, FUEL FILLER
4	AM-RT-5P-EM-04	FILTER FUEL
5	AM-RT-5P-EM-05	FUEL TANK
6	AM-RT-5P-EM-06	PACKING
7	AM-RT-5P-EM-07	JOINT, FUEL TANK
8	AM-RT-5P-EM-08	CLIP, TUBE
9	AM-RT-5P-EM-09	TUBE, FUEL
10	AM-RT-5P-EM-10	BOLT M6 × 25
11	AM-RT-5P-EM-11	WASHER
12	AM-RT-5P-EM-12	NUT M6



ENGINE DIAGRAM & SPARE PARTS OF AM-RT-5P

WIND DEFLECTOR

EN

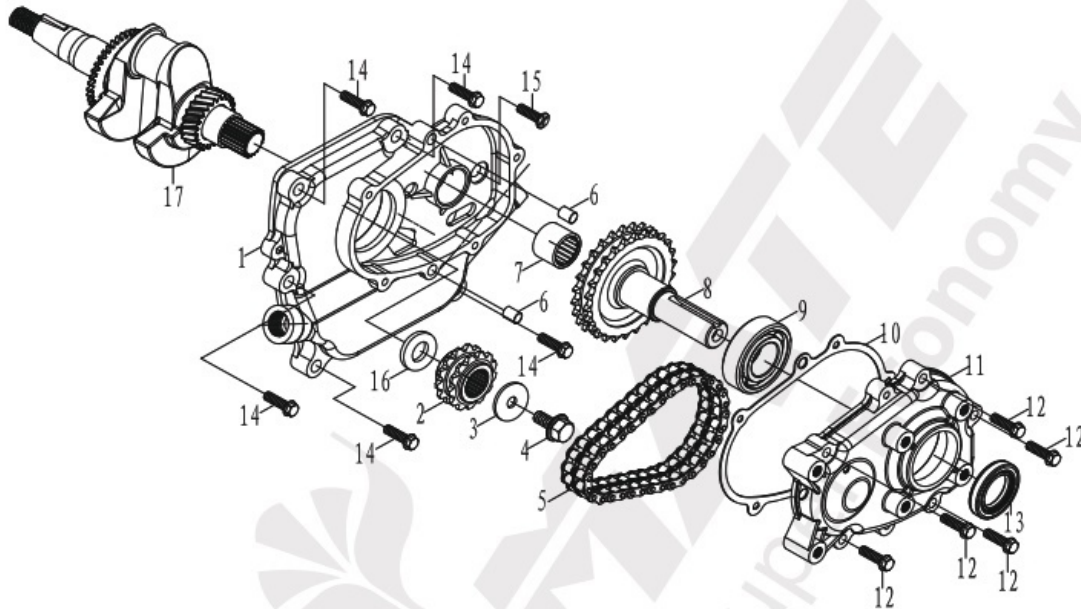


Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EN-01	WINDSHIELD
2	AM-RT-5P-EN-02	BOLT M6×12
3	AM-RT-5P-EN-03	SHROUD COMP
4	AM-RT-5P-EN-04	BREAKER-PROTECTIVE

ENGINE DIAGRAM & SPARE PARTS OF AM-RTP-5P

REDUCTION ASSY

EO



Sr. No.	PART NO.	DESCRIPTION
1	AM-RT-5P-EO-01	CRANKCASE COVER ASSY
2	AM-RT-5P-EO-02	DRIVE SPROCKET WHEEL
3	AM-RT-5P-EO-03	WASHER $\phi 8 \times \phi 28 \times 3$
4	AM-RT-5P-EO-04	BOLT M8×30
5	AM-RT-5P-EO-05	CHAIN COMP 06B-2×34L
6	AM-RT-5P-EO-06	PIN, DOWEL $\phi 8 \times 14$
7	AM-RT-5P-EO-07	BEARING HK2016
8	AM-RT-5P-EO-08	DRIVEN SPROCKET WHEEL
9	AM-RT-5P-EO-09	BEARING 6205/P6

Sr. No.	PART NO.	DESCRIPTION
10	AM-RT-5P-EO-10	PACKING
11	AM-RT-5P-EO-11	COVER, REDUC-TION GEARBOX
12	AM-RT-5P-EO-12	BOLT M6×22
13	AM-RT-5P-EO-13	OIL SEAL $\phi 25 \times \phi 41.25 \times 6$
14	AM-RT-5P-EO-14	BOLT M8×32
15	AM-RT-5P-EO-15	SCREW M8×25
16	AM-RT-5P-EO-16	WASHER $\phi 20.5 \times \phi 39 \times 3$
17	AM-RT-5P-EO-17	CRANK SHAFT ASSY
	AM-RT-5P-EO-18	CRANK SHAFT ASSY

INSPECTION & MAINTENANCE

For safety use, make sure a three-month clean the machine. Before working, make sure inspect the filter and the nozzle, make sure there is no impurity. After working, make sure there is no water in the pump and the hose.

If the machine need 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 Packaging, The machine should be cleaned, then use closed packaging, packaging should be firm. Storage the machine in dry.

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.

Contact you local government for information regarding the collection systems available.

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



Purchaser's Name & Address

Product Name

AM-RTP-5P AGRIMATE ROTARY TILLER/POWER WEEDER

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



Purchaser's Name & Address

Product Name

AM-RTP-5P AGRIMATE ROTARY TILLER/POWER WEEDER

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



Purchaser's Name & Address

Product Name

AM-RTP-5P AGRIMATE ROTARY TILLER/POWER WEEDER

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-imbursement. 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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12. All disputes are subject to Bangalore Courts Jurisdiction

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 minimise 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.
- To reduce the risk of injury, close supervision is necessary when a machine is used near children. Equipment shall not be used by children or untrained person.
- Disconnect from the battery power supply before carrying out user maintenance.

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