

USER MANUAL

INTERCULTIVATOR/POWER WEEDER

AM-MPTC-2620-DGB-9D

ELECTRIC START WITH FULL GEAR SYSTEM



INTRODUCTION

Dear Sir/ Madam,

Thank you for choosing Agrimate product. You are the proud owner of high technology & durable machine. Trust that our Franchisee/Dealer installed the product & installed the product and explained you about the usage & service instructions. Please visit our autorised dealer for your future requirement of our other equipments, genuine spares, accessories and services. Service coupons are attached with this manual and you can avail free service to keep your machine fit always to use on demand.

About Ratnagiri,

We import and market of high quality of agriculture wide range of equipments which we are selling through our authorised franchisee or dealer network.

For further details, Please visit our website www.agrimart.in. & Give a missed call to 7393 938 938.

TECHNICAL SPECIFICATIONS

MODEL	AM-MPTC-2620-DGB-9D
Engine	186FD+
Displacement	456CC
Tilling Width (mm)	900-1000
Tilling Depth (mm)	100
Ditching Width (mm)	310
Ditching Depth (mm)	100
No. of Gears	4 Forward/4 Reverse

Safety Precautions

1Safety Usage Instructions

- 1.1 Before using the machine, the operator should carefully read the user manual and follow the requirements stated therein for the initial running-in, adjustment and maintenance.
- 1.2 Before using the machine, please pay attention to the following points:
 - 1.2.1 Check if the engine crankcase and transmission are leaking oil; inspect the oil quantity and quality in the engine crankcase and transmission, and replenish or replace with clean new oil in time; check if all lubrication areas are well lubricated.
 - 1.2.2 When refueling, make sure to add clean fuel to the fuel tank. The fuel should be added when the internal combustion engine has stopped and the area is well-ventilated. Be careful not to allow the fuel to come into contact with hot surfaces, electrical components or rotating parts. Do not add too much fuel to prevent overflow. Check if the fuel has overflowed or leaked. If fuel spills, it must be wiped dry before starting the machine. After refueling, cover the fuel tank cap and tighten it. No smoking is allowed at the refueling site, storage site and working area to prevent fires.
 - 1.2.3 Check whether all the fasteners of the machine are securely fastened; whether there are any looseness, rubbing, or jamming phenomena in each operating part; and whether the rotation direction is consistent with the indicated direction.
 - 1.2.4 Check whether there are reliable safety protection devices, safety signs and markings for exposed rotating and moving parts.
 - 1.2.5 Check the engagement condition of the clutch, and inspect whether there are cracks, deformations or excessive wear on the working components such as the ditching blades and the clutch.
 - 1.2.6 If any abnormal phenomenon occurs, it should be eliminated before conducting the trial-run. The trial-run should be free from rubbing, abnormal sounds and obvious vibrations. The rotational speed should comply with the regulations and no over-speed operation is allowed. When replacing safety-related components, it should be done in accordance with the requirements of the user manual or under the guidance of professional maintenance personnel.

- 1.3 Minors and those who have not well been trained on the operation rules of the farm machine are not allowed to operate.
- 1.4 Operators are not allowed to operate the equipment under the influence of alcohol, or when they are ill or overly fatigued.
- 1.5 During operation, the operator must fasten their clothes and cuffs. Those with long hair should also wear a protective cap.
- 1.6 When the machine is in operation, it is not allowed to modify any parts that may affect the safety and operation of the agricultural management machine on its own. It is forbidden to dismantle or arbitrarily shorten the protective covers of each part. Operators should concentrate their attention on operating the machine.
- 1.7 The agricultural machine can be started only after confirming safety. After the cold start, it is not allowed to perform heavy-load operations immediately, especially for new machines or those that have undergone major repairs.
- 1.8 It is not allowed to operate the machine equipped with an operation blades on cement, stone slabs or gravel piles. During the operation, be careful to avoid colliding with hard objects such as stones, to prevent damage to the operation blade.
- 1.9 During the operation, it is necessary to pay attention to the working conditions and sounds of each part, and check whether the connections of all parts are normal. No looseness is allowed. If any abnormal sounds or other abnormal situations occur, the power should be immediately cut off and the machine should be stopped for inspection. Faults should not be eliminated while the machine is running.
- 1.10 Prevent the agricultural machinery from tipping over during operation.
- 1.11 When farming, pay close attention to whether there is any oil leakage in the transmission, internal combustion engine and other parts. If there is, immediately cut off the power and stop the machine for inspection. Do not use open flames to prevent fires. Timely eliminate the faults to avoid environmental pollution and affect food safety.
- 1.12 When clearing weeds and mud, the power supply should be cut off first. Wait until the machine stops, then proceed with the clearing. It is not allowed to use hands or iron rods and other items to clear the obstructions on the rotary tiller while the machine is running.
- 1.13 After use, it is necessary to remove the dirt, weeds, oil stains and other attachments from the machinery.
- 1.16 During the transportation in the field, the working shaft clutch should be set to the disengaged position before the transfer is carried out.
- 1.17 Regular inspections should be conducted to check whether the screws on the blades, bearing housings and other moving parts are loose or damaged.

Safety Operating Procedures

I. Training

1. Carefully read the operation and maintenance manual. Fully understand all the operation mechanisms and the correct methods of using the machine. Knowing how to shut down the machine and quickly separate the operation mechanisms.
2. Children are strictly prohibited from using the machine. Adults who have not read the manual are also strictly prohibited from using the machine.
3. Keep the working area free of people, especially children and pets.

II. Preparation

1. Conduct a comprehensive inspection of the area where the machine will be used and remove all debris.
2. Before starting the engine, disengage all clutches and shift into neutral.
3. Do not operate the machine without wearing the appropriate cover. Wearing anti-slip shoes will improve stability when standing on slippery surfaces.
4. Handle the fuel carefully as it is a flammable substance.
 - (1) Store the fuel in an appropriate container.
 - (2) Do not add fuel to the fuel tank while the engine is running or hot.
 - (3) Be particularly careful when refueling outdoors and do not do it indoors.
 - (4) Before starting, tighten the fuel tank cap and wipe off any spilled fuel.
 - (5) Do not make any adjustments while the engine is running (except for the special adjustments recommended by the manufacturer).
 - (6) When performing any operations, such as preparing, operating and maintaining, wear safety goggles

Operation

1. Hands and feet must not approach rotating parts or place them under rotating parts.
2. Be especially careful when operating on (or through) gravel roads, sidewalks or highways. Be alert to potential dangers, pay attention to traffic conditions, and do not carry passengers.
3. After hitting debris, stop the engine, thoroughly inspect whether the agricultural management machine is damaged. If damaged, it can only be restarted and operated after being repaired.
4. Always pay attention to your feet to avoid slipping or falling.
5. Once abnormal vibration occurs in the machine, stop the engine immediately to find out the cause. Vibration is usually a precursor to a fault.
6. Before leaving the operating position, clear the blade blockage, perform maintenance, adjustment or inspection, and stop the engine.
7. Before cleaning, repairing or inspecting the machine, turn off the engine and confirm that all moving parts are in a stopped state.
8. The exhaust gas emitted by the engine is harmful. Do not operate the machine indoors.
9. Do not operate the agricultural management machine without appropriate protective devices, guards or other protective devices in place.
10. Stay away from children and pets.
11. Do not dig too deep at one time or use high gears to operate the machine causing it to overload.
12. The machine must not run at high speed on slippery roads; when reversing, observe the rear and operate carefully.
13. No bystanders are allowed to approach the machine during operation.
14. Only use the additional devices and equipment allowed by the manufacturer of the agricultural management machine (such as wheel weights, balance weights, etc.).
15. Do not operate the agricultural management machine when the vision or light is poor.
16. This machine should be used for ditching and soil covering operations on cultivated land and pay attention to safety.
17. Do not operate the agricultural management machine on steep slopes.
18. When going up or down slopes on the machine, prevent overturning.

Maintenance and storage

1. Periodically, check whether the shear bolts, engine fixing bolts and other bolts are tightened to ensure that the machine is in a safe working condition.
2. The machine should be stored indoors and kept away from fire sources. Before storing the machine indoors, the engine should be cooled down.
3. If the farm management machine is to be stored for a long time, the user manual should always be kept as an important document.

Operating Instructions

I. Starting

Warning: Before starting, all clutches must be disengaged and the gearshift lever must be placed in the neutral position. Otherwise, any accidents will be your own responsibility!!!

1. Start the engine according to the steps specified in the engine operation manual.
2. The engine should run at idle speed (1600 ± 150 r/min) without load for 2 to 3 minutes.
3. Check if the engine is running normally. If not, stop the engine for maintenance.
4. The forward direction of this machine refers to the direction directly in front when a person stands on the handrail. In the opposite case, it is considered as reverse or the direction indicated by the manual for reverse gear movement.
5. Before starting, place the walking gearshift lever and the rotary blades gearshift lever in the neutral position.

II. Operation (Note: Before using the agricultural management machine, it must be run-in. The run-in method is described in Chapter 8)

1. Function Introduction of Each gear

(1) The walking part contains 3 speed-changing devices.

The main walking speed control lever: high gear, low gear;

The secondary walking speed control lever: high speed gear, low speed gear;

The walking direction switching lever: forward gear, neutral gear, reverse gear.

The walking speed needs to be switched by the cooperation of the main walking speed control and the secondary walking speed control.

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II.Operation

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The secondary walking speed control lever: high speed gear, low speed gear;

The walking direction switching lever: forward gear, neutral gear, reverse gear.

The walking speed needs to be switched by the cooperation of the main walking speed control and the secondary walking speed control.

Walking 1 gear: main walking speed control in low gear + secondary walking speed control in low gear

Walking 2 gear: main walking speed control in high gear + secondary walking speed control in low gear

Walking 3 gear: main walking speed control in low gear + secondary walking speed control in high gear

Walking 4 gear: main walking speed control in high gear + secondary walking speed control in high gear

At the same time, in each walking gear, the forward gear, neutral gear, and reverse gear can all be switched.

(2) The ditching/rotary blades speed section includes 3 speed-changing devices.

main speed selector: fast gear, neutral gear, slow gear;

secondary speed selector: high speed gear, low speed gear;

Direction switching lever: forward rotation, reverse rotation.

Speed needs to be switched by the cooperation of the main speed selector and the secondary speed selector.

1st gear: main speed selector slow gear + secondary speed selector low speed gear

2nd gear: main speed selector fast gear + secondary speed selector low speed gear

3rd gear: main speed selector slow gear + secondary speed selector high speed gear

4th gear: main speed selector fast gear + secondary speed selector high speed gear

At the same time, each gear can also be switched between forward rotation and reverse rotation.

Distribution of each gear and specific operation

(1) Handrail frame operation area

- ① Walk direction control lever, by pushing the lever forward and backward, the forward-retracting-backward direction of the walking wheels can be controlled.
- ② Tool main speed lever, by pushing the lever forward and backward, the fast-slow-reverse speed of the tool can be controlled.

(2) Left side operation area of the gearbox

- ① Near the engine end is the main walking gearshift lever. By pushing the lever forward and backward, you can control the speed of walking at high and low levels.
- ② Near the handrail end is the operation lever for reversing the rotary blades. By pushing the lever forward and backward, you can achieve the forward and reverse rotation of the rotary blades.

(3) Right side operation area of the gearbox

- ① Near the engine end is the walking gear shift lever. By pushing the lever forward and backward, the walking speed can be adjusted from high to low.
- ② Near the handrail end is the rotary blades gearshift lever. By pushing the lever forward and backward, the rotation speed of the rotary can be adjusted from low to high.

Note:

- ①. The gear shifting and walking shifting gears are all located in the operating area of the handrail frame. There are no gear shift positions on either side of the gearbox.
- ②. When switching the gear positions of the rotary and walking, the clutch handle should be released.

Gear shifting operation

During the walking process, gear shifting should be carried out by first reducing the engine throttle (it is advisable to keep the engine running without shutting it off), then disengaging the clutch, and finally shifting gears when the machine stops moving.

4.Stop machine

- (1) Release the clutch handle to put the clutch in the disengaged state, and stop the operation of the ditching blades and the walking wheels.
- (2) When it is necessary to shut down the engine, first release the clutch handle with your left hand, and then turn the accelerator switch on the right side of the handrail frame clockwise to the minimum position (for gasoline engines, the ignition switch also needs to be turned to the off position). This will stop the operation of the machine. (Note: The parking of the farm management machine is generally carried out on a flat surface.)

Note: After parking, make sure the gearshift is in the neutral position.

Connection and use of supporting equipment

1. When it is necessary to dig ditches, place the hexagonal tube of the ditching device on both ends of the output mechanism drive shaft, insert the small pin shaft for fixation. Note: The ditching tools are divided into left and right groups. After installation, it should be ensured that the blade edge works first when the machine moves forward. After installing the ditching blades, the left and right guard plates must be installed to prevent the tools and splashing materials from injuring people. The depth of the ditching can be adjusted by regulating the height of the support wheel assembly. During ditching operation, the support wheel assembly must not be removed to prevent the machine from being overloaded and the engine from shutting down.

2. Users can choose the height and position of the handrail according to their own operating habits.

Maintenance and Care

During the operation of the agricultural machine, due to the operation, friction wear and load changes, inevitable phenomena such as loosening of connecting bolts and wear of parts occur, which disrupt the correct state of the system, causing abnormal clearance, reduction in engine power, increase in fuel consumption, and imbalance of various components. As a result, the agricultural management machine experiences more malfunctions, seriously affecting its usage. To prevent the occurrence of these situations, it is necessary to strictly and regularly carry out maintenance work with a focus on "prevention first". This is to maintain the good technical condition of the agricultural management machine and extend its service life.

I. Running-In

For engine warm-up, please refer to the user manual. For new machines or those after major repairs, they should first operate under no-load conditions for 1 hour, and then work at light load for 5 hours. Immediately after that, warm the machine up and release all the lubricating oil in the gearbox and the engine crankcase. Inject an appropriate amount of clean diesel and run at low speed in slow gear for 3 to 5 minutes to clean the machine. Then drain the diesel. Next, follow the procedures in Chapter 6/3/4 to inject engine oil for 4 hours of warm-up. Only then can your agricultural management machine be put into normal farming operations.

II. Technical maintenance

1. Daily maintenance (before and after work)

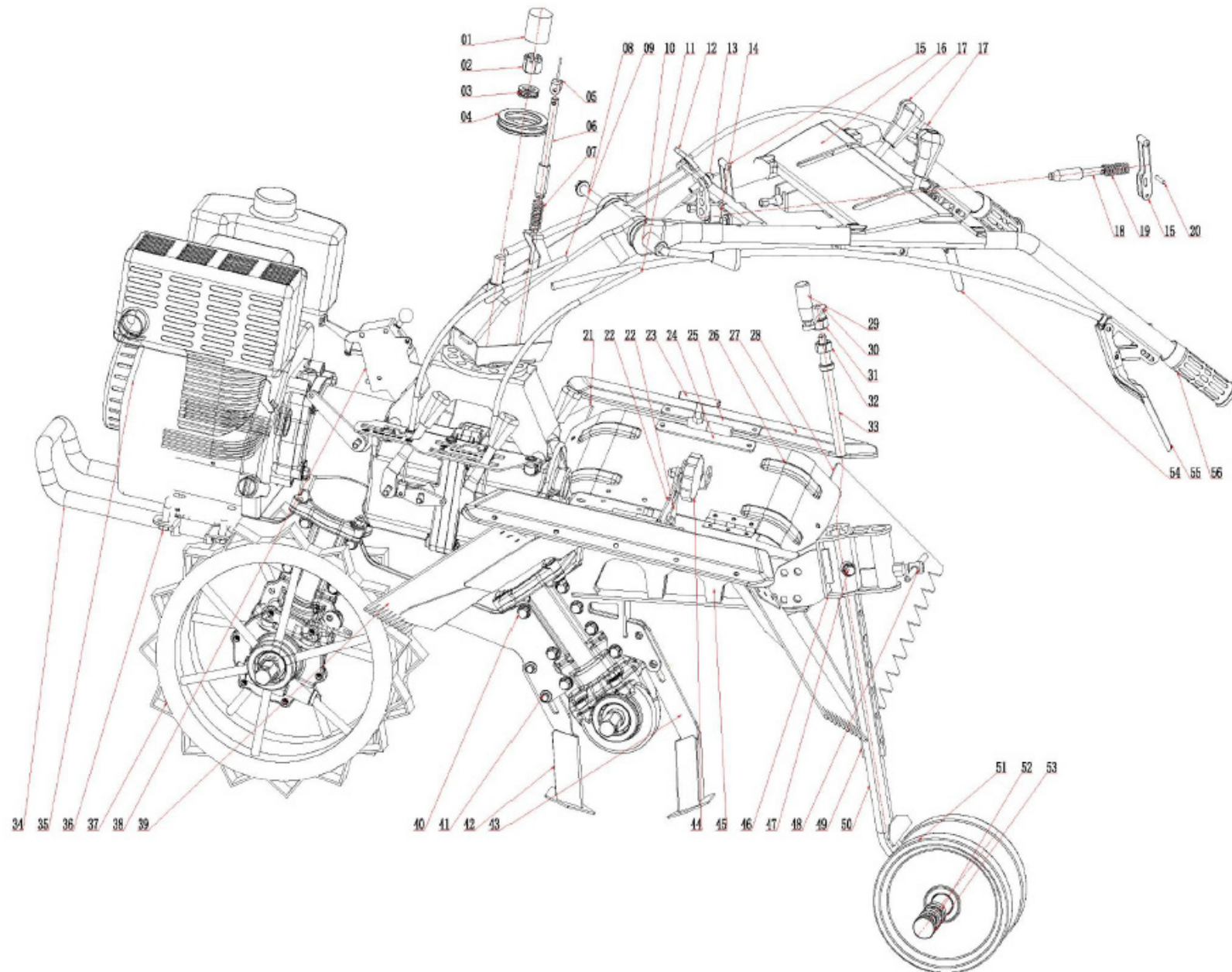
- (1) Listen and observe for any abnormal phenomena in each part (such as abnormal noises, overheating, and loose bolts, etc.).
- (2) Check for any oil leakage in the engine, transmission and gearbox.
- (3) Check whether the engine and transmission oil levels are within the range indicated by the oil dipsticks.
- (4) Remove dirt, weeds, oil stains, etc. from the entire machine and its accessories in a timely manner.
- (5) Fill out the farming record.

Drive Mechanism Failure and Troubleshooting

Phenomenon	Reason	Method
Excessive noise from the gears	Excessive wear of the gears or incorrect adjustment and repair	Reassembly, adjustment or replacement
The gears are jammed due to rotation.	Incorrect assembly	Reassemble
Excessive heat	insufficient lubricating oil inside the box.	Add engine oil as required
	side clearance of the gear is too small.	Reassemble
	Axial clearance is too small.	Re-adjust
Gearbox combination point oil leakage	connecting bolts at this location are loose.	Tighten the bolts
	gasket at this location is damaged.	replacement
Bottom gearbox and mudguard point oil leakage	connecting bolts at this location are loose.	Tighten the bolts
	O-ring pad damage	Replacement
Oil leakage at the output shaft bearing	oil seal damaged.	Replace the oil seal
Oil leakage at the oil drain hole	aluminum gasket is damaged.	Replacement
	Loose bolt	Tighten the bolts
oil leakage on the side of the box.	box body has concealed micro-sized pores.	Re-welding

TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

DIAGRAM & PART LIST OF INTERCULTIVATOR/POWER WEEDER



TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

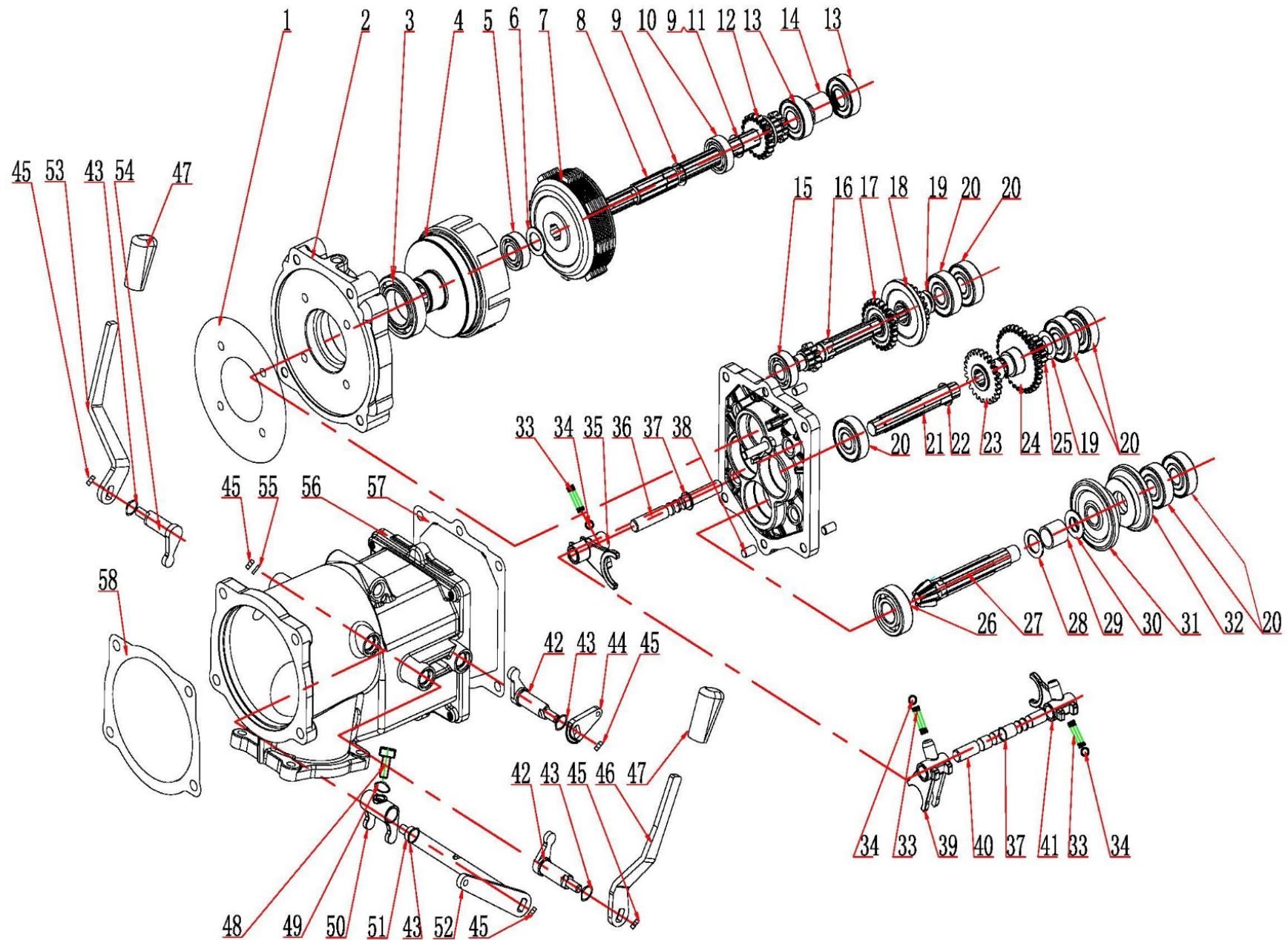
SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-MPTC-2620-9DA-TA01	Protective sleeve	17	AM-MPTC-2620-9DA-TA17	Gearshift handle
2	AM-MPTC-2620-9DA-TA02	Hexagonal slotted nut	18	AM-MPTC-2620-9DA-TA18	Positioning pin
3	AM-MPTC-2620-9DA-TA03	Bearing	19	AM-MPTC-2620-9DA-TA19	Spring
4	AM-MPTC-2620-9DA-TA04	Bearing	20	AM-MPTC-2620-9DA-TA20	Pin
5	AM-MPTC-2620-9DA-TA05	Cable for rotate	21	AM-MPTC-2620-9DA-TA21	"Rubber sheet of left fender"
6	AM-MPTC-2620-9DA-TA06	Pin for rotate	22	AM-MPTC-2620-9DA-TA22	Fender limit plate
7	AM-MPTC-2620-9DA-TA07	Spring	23	AM-MPTC-2620-9DA-TA23	The external fender locking handle
8	AM-MPTC-2620-9DA-TA08	Hexagonal bolt	24	AM-MPTC-2620-9DA-TA24	Fender hinge1
9	AM-MPTC-2620-9DA-TA09	Armrest assembly	25	AM-MPTC-2620-9DA-TA25	Fender hinge2
10	AM-MPTC-2620-9DA-TA10	Handle bar assembly	26	AM-MPTC-2620-9DA-TA26	Inner fender
11	AM-MPTC-2620-9DA-TA11	Gear shift cable	27	AM-MPTC-2620-9DA-TA27	Outter fender
12	AM-MPTC-2620-9DA-TA12	up&down fixed plate	28	AM-MPTC-2620-9DA-TA28	Rubber sheet of right fender
13	AM-MPTC-2620-9DA-TA13	Hexagonal bolt	29	AM-MPTC-2620-9DA-TA29	"Lifting and rotating handle support"
14	AM-MPTC-2620-9DA-TA14	Lifting pin seat assembly	30	AM-MPTC-2620-9DA-TA30	"Lifting and rotating arm support"
15	AM-MPTC-2620-9DA-TA15	Lifting handle	31	AM-MPTC-2620-9DA-TA31	Cover type nut
16	AM-MPTC-2620-9DA-TA16	panel	32	AM-MPTC-2620-9DA-TA32	Hexagonal nut

TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
33	AM-MPTC-2620-9DA-TA33	lifting screw Support	49	AM-MPTC-2620-9DA-TA49	Support wheel adjustment pipe
34	AM-MPTC-2620-9DA-TA34	Bumper assembly	50	AM-MPTC-2620-9DA-TA50	Support wheel bracket assembly
35	AM-MPTC-2620-9DA-TA35	Engine	51	AM-MPTC-2620-9DA-TA51	support wheel
36	AM-MPTC-2620-9DA-TA36	Hexagonal bolt	52	AM-MPTC-2620-9DA-TA52	Bearing
37	AM-MPTC-2620-9DA-TA37	Tire	53	AM-MPTC-2620-9DA-TA53	Sealing Cover
38	AM-MPTC-2620-9DA-TA38	Start box	54	AM-MPTC-2620-9DA-TA54	"Steering cable handle assembly"
39	AM-MPTC-2620-9DA-TA39	Rubber sheet of right fender	55	AM-MPTC-2620-9DA-TA55	Clutch cable handle assembly
40	AM-MPTC-2620-9DA-TA40	Front and rear box connection brackets	56	AM-MPTC-2620-9DA-TA56	Handle rubber sleeve
41	AM-MPTC-2620-9DA-TA41	Flange plate hexagonal bolt			
42	AM-MPTC-2620-9DA-TA42	small ditching blade			
43	AM-MPTC-2620-9DA-TA43	big ditching blade			
44	AM-MPTC-2620-9DA-TA44	The fender locking handle			
45	AM-MPTC-2620-9DA-TA45	fender bracket assembly			
46	AM-MPTC-2620-9DA-TA46	"Support wheel installation bracket"			
47	AM-MPTC-2620-9DA-TA47	Hexagonal bolt			
48	AM-MPTC-2620-9DA-TA48	Support wheel locking handle			

TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

UPPER BOX ASSY - B



TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

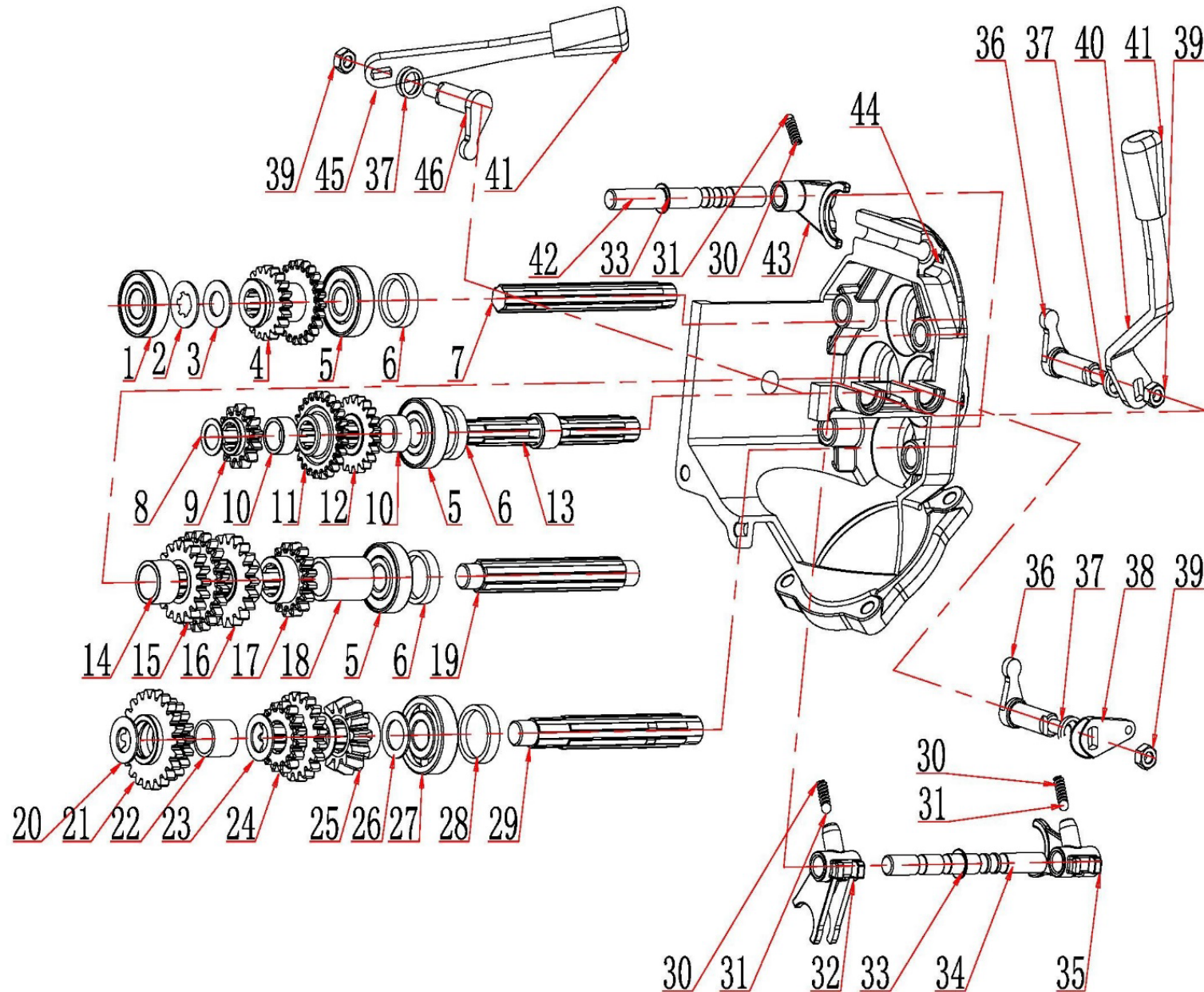
SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-MPTC-2620-9DA-TB01	Flange Gasket	17	AM-MPTC-2620-9DA-TB17	X3 Shaft
2	AM-MPTC-2620-9DA-TB02	Flange	18	AM-MPTC-2620-9DA-TB18	X3 Shaft Double-Toothed Gear
3	AM-MPTC-2620-9DA-TB03	Deep Groove Ball Bearing	19	AM-MPTC-2620-9DA-TB19	Gasket
4	AM-MPTC-2620-9DA-TB04	Clutch Cover	20	AM-MPTC-2620-9DA-TB20	Deep Groove Ball Bearing
5	AM-MPTC-2620-9DA-TB05	Deep Groove Ball Bearing	21	AM-MPTC-2620-9DA-TB21	X2 Spline Shaft
6	AM-MPTC-2620-9DA-TB06	Cable For Rotate	22	AM-MPTC-2620-9DA-TB22	Gasket
7	AM-MPTC-2620-9DA-TB07	Clutch Core Assy	23	AM-MPTC-2620-9DA-TB23	X2 Shaft 25Teeth
8	AM-MPTC-2620-9DA-TB08	Main Shaft	24	AM-MPTC-2620-9DA-TB24	X2 Shaft 32Teeth
9	AM-MPTC-2620-9DA-TB09	Axle Retaining Spring	25	AM-MPTC-2620-9DA-TB25	X2 Shaft 14Teeth
10	AM-MPTC-2620-9DA-TB10	Deep Groove Ball Bearing	26	AM-MPTC-2620-9DA-TB26	Deep Groove Ball Bearing
11	AM-MPTC-2620-9DA-TB11	Keyway Flat Washer	27	AM-MPTC-2620-9DA-TB27	X4-Axis Skew Main Bevel Gear
12	AM-MPTC-2620-9DA-TB12	X Main Shaft Double-Toothed Gear	28	AM-MPTC-2620-9DA-TB28	Flat Gasket
13	AM-MPTC-2620-9DA-TB13	Deep Groove Ball Bearing	29	AM-MPTC-2620-9DA-TB29	Bushing
14	AM-MPTC-2620-9DA-TB14	Splined Hub	30	AM-MPTC-2620-9DA-TB30	Flat Gasket
15	AM-MPTC-2620-9DA-TB15	Deep Groove Ball Bearing	31	AM-MPTC-2620-9DA-TB31	X4 Shaft Shift Interlock Gears
16	AM-MPTC-2620-9DA-TB16	X3 Shaft	32	AM-MPTC-2620-9DA-TB32	X4 Shaft Bridge Double Gear

TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
33	AM-MPTC-2620-9DA-TB33	Shift Spring	49	AM-MPTC-2620-9DA-TB49	Spring Washer
34	AM-MPTC-2620-9DA-TB34	Shift Steel Balls	50	AM-MPTC-2620-9DA-TB50	Clutch Fork
35	AM-MPTC-2620-9DA-TB35	Shift Lever	51	AM-MPTC-2620-9DA-TB51	Clutch Selector Rod
36	AM-MPTC-2620-9DA-TB36	Shift Shaft	52	AM-MPTC-2620-9DA-TB52	Clutch Arm
37	AM-MPTC-2620-9DA-TB37	Axle Retaining Spring	53	AM-MPTC-2620-9DA-TB53	Shift Arm Lever
38	AM-MPTC-2620-9DA-TB38	Hollow Locating Pin	54	AM-MPTC-2620-9DA-TB54	Shift Shaft 2 Assy
39	AM-MPTC-2620-9DA-TB39	Shift Lever	55	AM-MPTC-2620-9DA-TB55	Flat Gasket
40	AM-MPTC-2620-9DA-TB40	Shift Shaft	56	AM-MPTC-2620-9DA-TB56	Upper Box
41	AM-MPTC-2620-9DA-TB41	Shift Lever	57	AM-MPTC-2620-9DA-TB57	Pad
42	AM-MPTC-2620-9DA-TB42	Shift Shaft	58	AM-MPTC-2620-9DA-TB58	Flange Gasket Paper
43	AM-MPTC-2620-9DA-TB43	O-Ring			
44	AM-MPTC-2620-9DA-TB44	Shift Arm Lever			
45	AM-MPTC-2620-9DA-TB45	Self-Locking Nut			
46	AM-MPTC-2620-9DA-TB46	Shift Arm Lever			
47	AM-MPTC-2620-9DA-TB47	Rubber Handle			
48	AM-MPTC-2620-9DA-TB48	Hexagonal Round Head Bolt			

TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

REAR GEAR BOX ASSY - C



TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

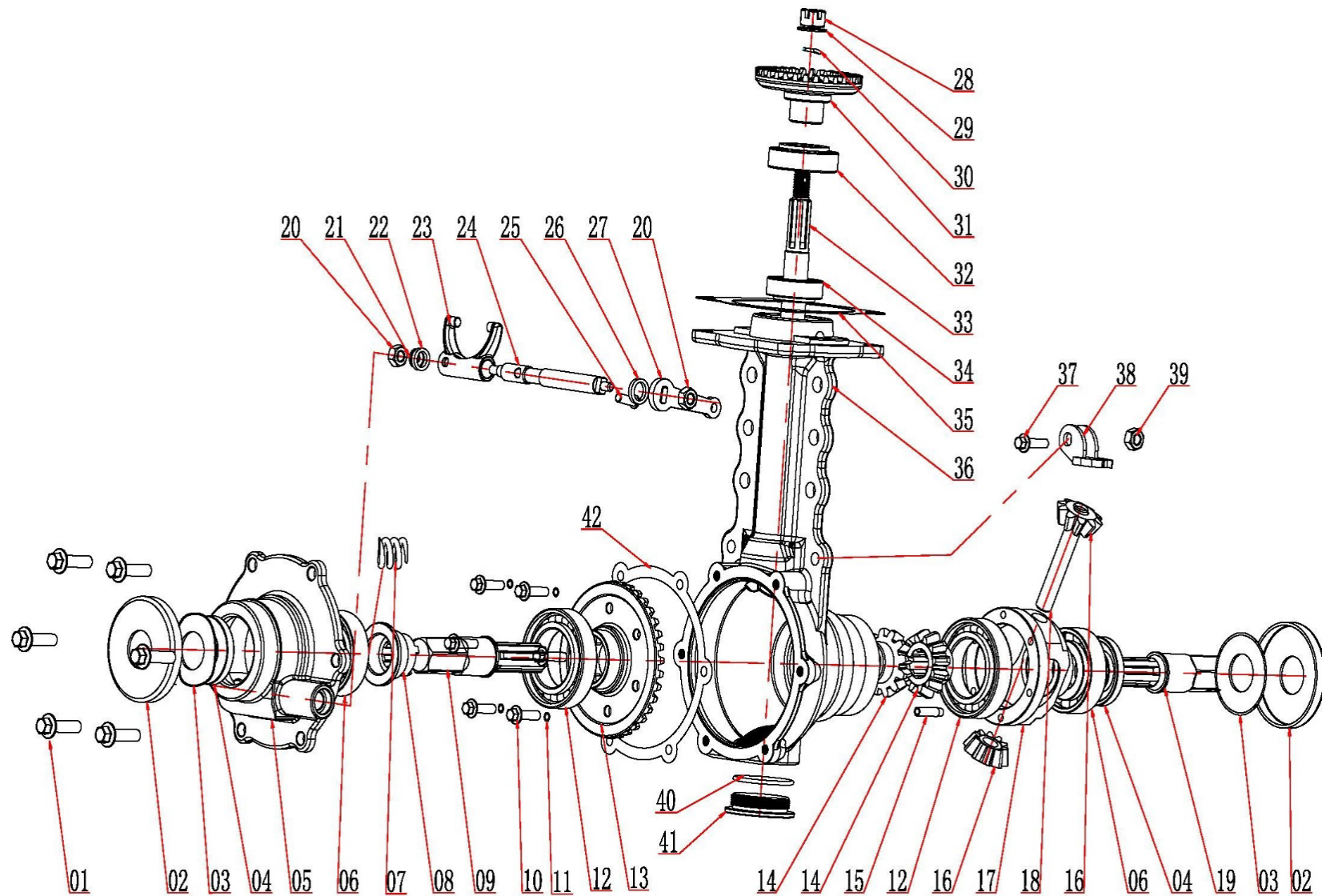
SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-MPTC-2620-9DA-TC01	Deep Groove Ball Bearing	17	AM-MPTC-2620-9DA-TC17	K3 Axis With 16 Teeth
2	AM-MPTC-2620-9DA-TC02	Flat Pad	18	AM-MPTC-2620-9DA-TC18	Sleeve
3	AM-MPTC-2620-9DA-TC03	Axle Retaining Spring	19	AM-MPTC-2620-9DA-TC19	K3 Shaft
4	AM-MPTC-2620-9DA-TC04	K1 Axis Double-Toothed Gear	20	AM-MPTC-2620-9DA-TC20	Flat Gasket
5	AM-MPTC-2620-9DA-TC05	Deep Groove Ball Bearing	21	AM-MPTC-2620-9DA-TC21	K4 Axle Overpass Double-Link Teeth
6	AM-MPTC-2620-9DA-TC06	Cable For Rotate	22	AM-MPTC-2620-9DA-TC22	Bearing Bush
7	AM-MPTC-2620-9DA-TC07	K1 Shaft	23	AM-MPTC-2620-9DA-TC23	Flat Gasket
8	AM-MPTC-2620-9DA-TC08	Flat Gasket	24	AM-MPTC-2620-9DA-TC24	K4 Shaft Shift Interlock Gears
9	AM-MPTC-2620-9DA-TC09	K2 Axis With 13 Teeth	25	AM-MPTC-2620-9DA-TC25	K4-Axis Skew Main Bevel Gear
10	AM-MPTC-2620-9DA-TC10	Sleeve	26	AM-MPTC-2620-9DA-TC26	Flat Gasket
11	AM-MPTC-2620-9DA-TC11	K2 Axis With 24 Teeth	27	AM-MPTC-2620-9DA-TC27	Deep Groove Ball Bearing
12	AM-MPTC-2620-9DA-TC12	K2 Axis With 21 Teeth	28	AM-MPTC-2620-9DA-TC28	Cover
13	AM-MPTC-2620-9DA-TC13	K2 Shaft	29	AM-MPTC-2620-9DA-TC29	K4 Shaft
14	AM-MPTC-2620-9DA-TC14	Sleeve	30	AM-MPTC-2620-9DA-TC30	Shift Spring
15	AM-MPTC-2620-9DA-TC15	K3 Axis Double-Toothed Gear	31	AM-MPTC-2620-9DA-TC31	Shift Steel Balls
16	AM-MPTC-2620-9DA-TC16	K3 Axis With 20 Teeth	32	AM-MPTC-2620-9DA-TC32	Shift Fork3

TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
33	AM-MPTC-2620-9DA-TC33	Axle Retaining Spring			
34	AM-MPTC-2620-9DA-TC34	Shift Shaft			
35	AM-MPTC-2620-9DA-TC35	Shift Lever			
36	AM-MPTC-2620-9DA-TC36	Shift Shaft 1 Assy			
37	AM-MPTC-2620-9DA-TC37	O-Ring			
38	AM-MPTC-2620-9DA-TC38	Shift Arm Lever			
39	AM-MPTC-2620-9DA-TC39	Self-Locking Nut			
40	AM-MPTC-2620-9DA-TC40	Shift Arm Lever			
41	AM-MPTC-2620-9DA-TC41	Rubber Handle			
42	AM-MPTC-2620-9DA-TC42	Shift Shaft			
43	AM-MPTC-2620-9DA-TC43	Shift Lever			
44	AM-MPTC-2620-9DA-TC44	Rear Gearbox			
45	AM-MPTC-2620-9DA-TC45	Shift Arm Lever			
46	AM-MPTC-2620-9DA-TC46	Shift Shaft 2 Assy			

TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

DIFFERENTIAL LOWER GEARBOX BODY - D



TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

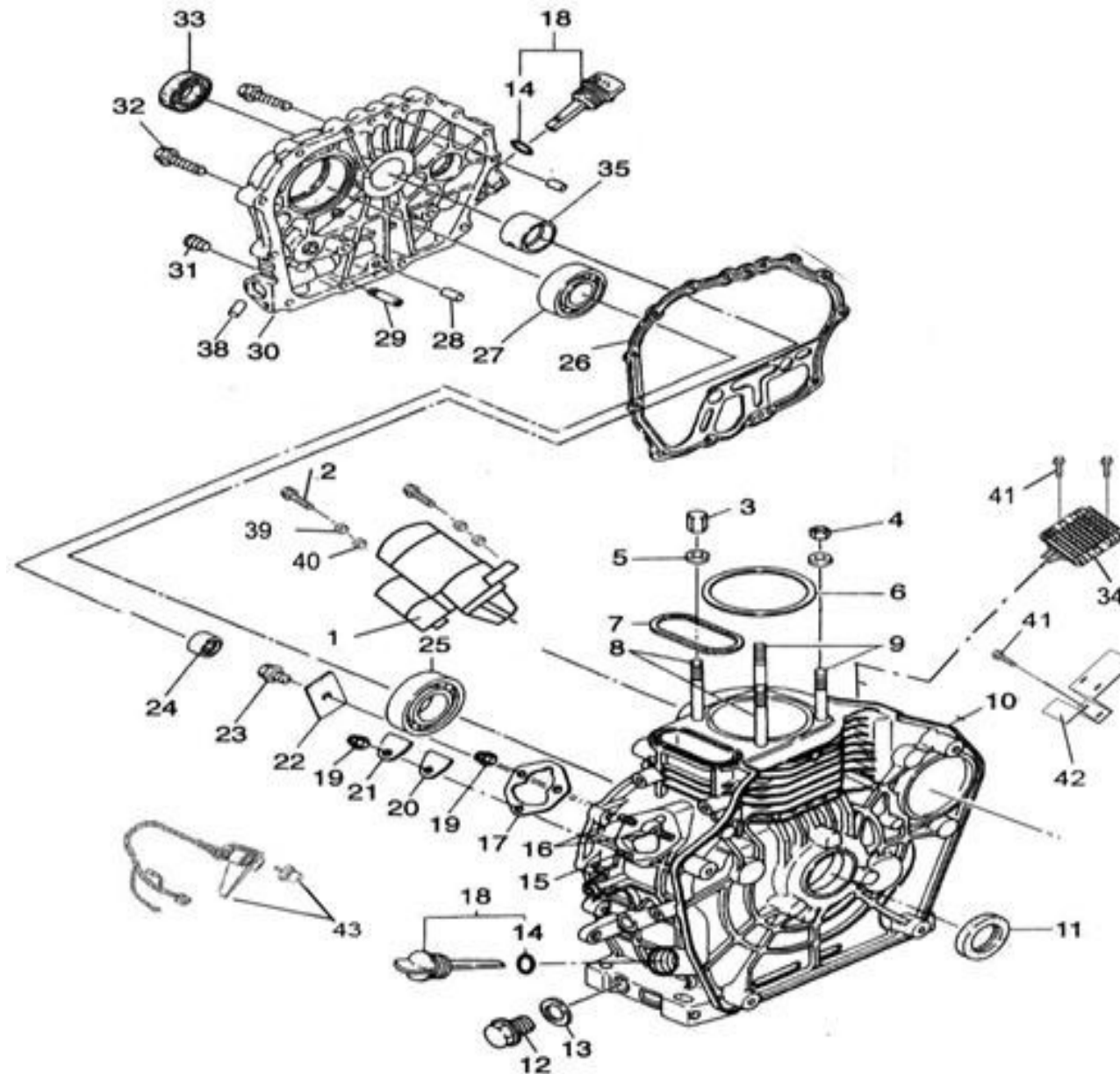
SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-MPTC-2620-9DA-TD01	Bolt	17	AM-MPTC-2620-9DA-TD17	Planetary Teeth Cover
2	AM-MPTC-2620-9DA-TD02	Dust Cap	18	AM-MPTC-2620-9DA-TD18	Planetary Axis
3	AM-MPTC-2620-9DA-TD03	Gasket	19	AM-MPTC-2620-9DA-TD19	Right Half Axle
4	AM-MPTC-2620-9DA-TD04	Oil Seal	20	AM-MPTC-2620-9DA-TD20	Self-Locking Nut
5	AM-MPTC-2620-9DA-TD05	Side Cover	21	AM-MPTC-2620-9DA-TD21	Flat Gasket
6	AM-MPTC-2620-9DA-TD06	Bearing	22	AM-MPTC-2620-9DA-TD22	O-Ring
7	AM-MPTC-2620-9DA-TD07	Na	23	AM-MPTC-2620-9DA-TD23	Differential Fork
8	AM-MPTC-2620-9DA-TD08	Clutch Teeth	24	AM-MPTC-2620-9DA-TD24	Differential Fork Shaft
9	AM-MPTC-2620-9DA-TD09	Left Half Axle	25	AM-MPTC-2620-9DA-TD25	Differential Fork Pin
10	AM-MPTC-2620-9DA-TD10	Hexagonal Bolt	26	AM-MPTC-2620-9DA-TD26	O-Ring
11	AM-MPTC-2620-9DA-TD11	Spring Washer	27	AM-MPTC-2620-9DA-TD27	Differential Clutch Arm
12	AM-MPTC-2620-9DA-TD12	Bearing	28	AM-MPTC-2620-9DA-TD28	Slotted Nut
13	AM-MPTC-2620-9DA-TD13	Bevel Gear	29	AM-MPTC-2620-9DA-TD29	Flat Gasket
14	AM-MPTC-2620-9DA-TD14	Driving Tooth	30	AM-MPTC-2620-9DA-TD30	Cotter Pin
15	AM-MPTC-2620-9DA-TD15	Spring Pin	31	AM-MPTC-2620-9DA-TD31	Driven Bevel Gear 32Teeth
16	AM-MPTC-2620-9DA-TD16	Planetary Teeth	32	AM-MPTC-2620-9DA-TD32	Bearing

TRANSMISSION DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
33	AM-MPTC-2620-9DA-TD33	Walking Drive Bevel Gear			
34	AM-MPTC-2620-9DA-TD34	Bearing			
35	AM-MPTC-2620-9DA-TD35	Papaer Pad			
36	AM-MPTC-2620-9DA-TD36	Differential Gearbox			
37	AM-MPTC-2620-9DA-TD37	Bolt			
38	AM-MPTC-2620-9DA-TD38	Turning Cable Support Lug			
39	AM-MPTC-2620-9DA-TD39	Nut			
40	AM-MPTC-2620-9DA-TD40	O-Ring			
41	AM-MPTC-2620-9DA-TD41	Bottom Box Cover			
42	AM-MPTC-2620-9DA-TD42	Paper Pad			

ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

ENGINE BLOCK ASSY - EA



ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

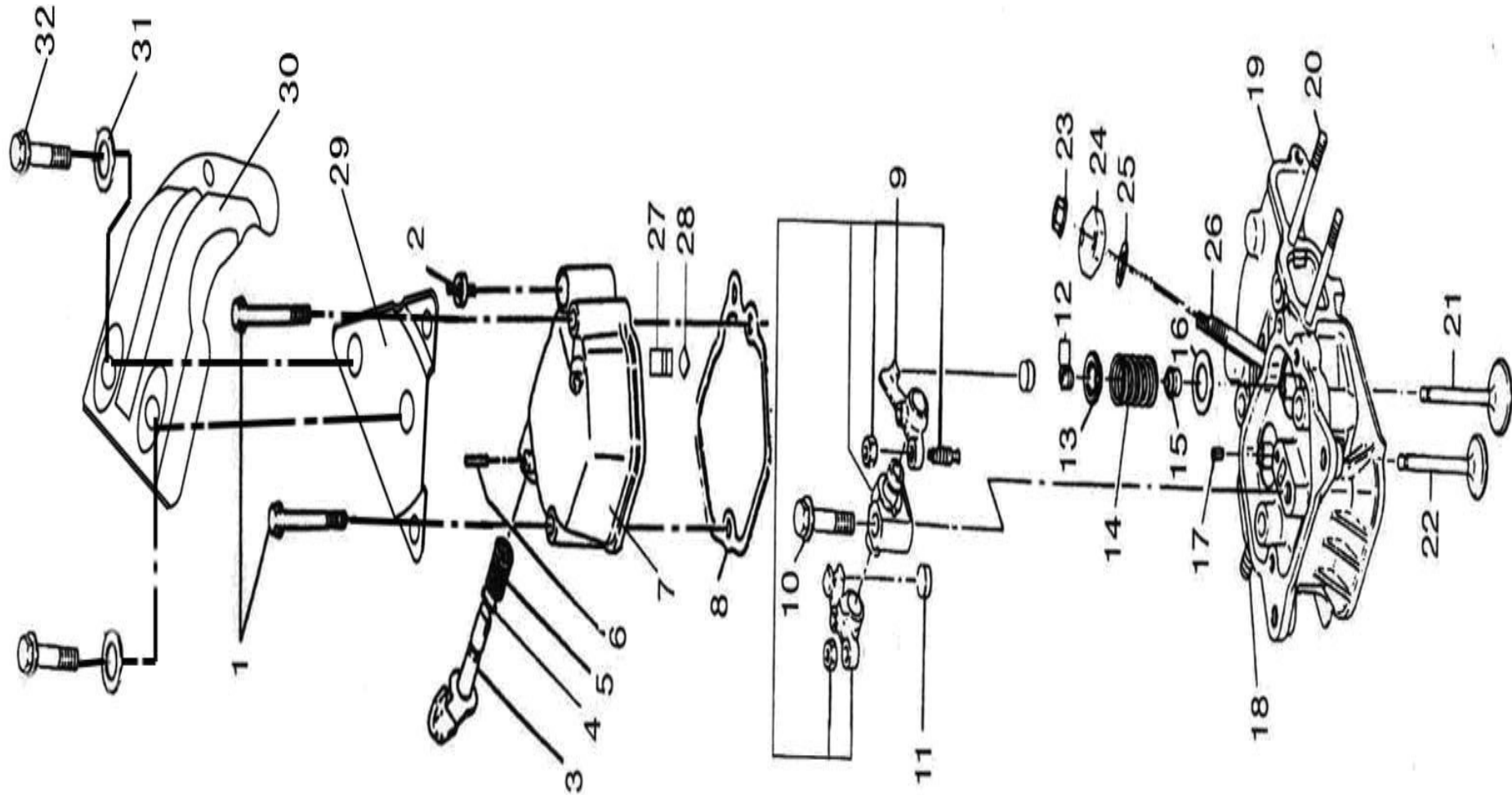
SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-186FD+- EA01	Start motor	17	AM-186FD+- EA17	Fuel injector adjusting gasket
2	AM-186FD+- EA02	Bolt	18	AM-186FD+- EA18	86-Oil dipstick
3	AM-186FD+- EA03	86-Cylinder head nuts (long)	19	AM-186FD+- EA19	Heterotypic nut
4	AM-186FD+- EA04	86-Cylinder head nuts (short)	20	AM-186FD+- EA20	Sealing plate gasket
5	AM-186FD+- EA05	86- Cylinder head nut gasket	21	AM-186FD+- EA21	Sealing plate
6	AM-186FD+- EA06	86-Cylinder head gasket	22	AM-186FD+- EA22	Thrust piece
7	AM-186FD+- EA07	86-Rectangle ring gasket	23	AM-186FD+- EA23	bolts
8	AM-186FD+- EA08	86-Cylinder head bolts (long)	24	AM-186FD+- EA24	Needle bearing
9	AM-186FD+- EA09	86-Cylinder head bolts (short)	25	AM-186FD+- EA25	86-Ball bearing
10	AM-186FD+- EA10	86-Cylinder block	26	AM-186FD+- EA26	86-Crankcase cover gasket
11	AM-186FD+- EA11	Rear oil seal	27	AM-186FD+- EA27	NA
12	AM-186FD+- EA12	Oil drain plug	28	AM-186FD+- EA28	Retaining pin
13	AM-186FD+- EA13	Oil drain plug gasket	29	AM-186FD+- EA29	86-Oil guide
14	AM-186FD+- EA14	O ring for oil dipstick	30	AM-186FD+- EA30	86-Crankcase cover
15	AM-186FD+- EA15	Fuel injection pump fastening bolt (short)	31	AM-186FD+- EA31	Inner Hexagon Plug
16	AM-186FD+- EA16	Fuel injection pump fastening bolt (long)	32	AM-186FD+- EA32	Hexagon flange bolts

ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
33	AM-186FD+- EA33	Front oil seal			
34	AM-186FD+- EA34	Regulator			
35	AM-186FD+- EA35	86-Main Bushing			
36	AM-186FD+- EA36	Aluminum Plug			
37	AM-186FD+- EA37	Flat washer			
38	AM-186FD+- EA38	Spring washer			
39	AM-186FD+- EA39	Heterotypic bolt			
40	AM-186FD+- EA40	Support of regulator			
41	AM-186FD+- EA41	Start switch assembly			

ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

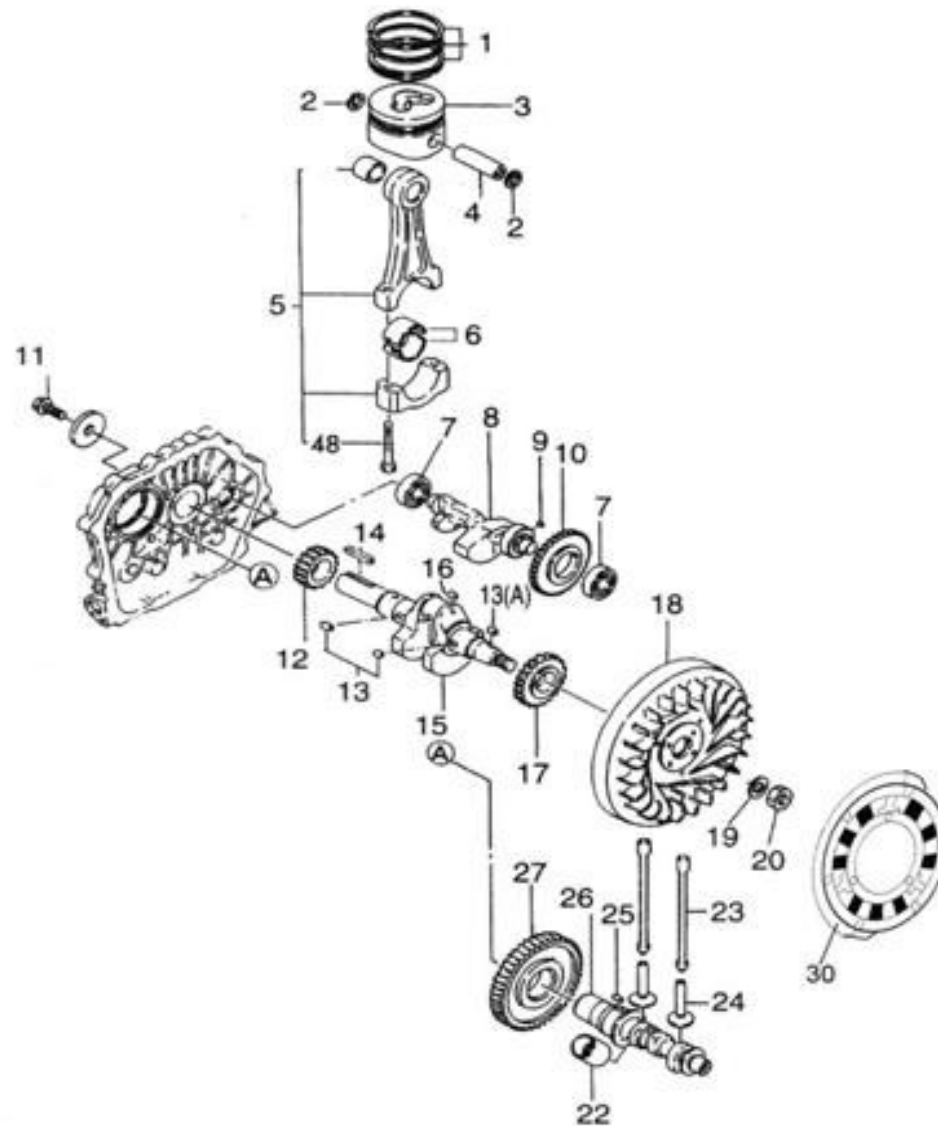
CYLINDER HEAD - EB



ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-186FD+- EB01	Flanged Bolt	17	AM-186FD+- EB17	Pin
2	AM-186FD+- EB02	Oiling screw plug	18	AM-186FD+- EB18	Double ended stud
3	AM-186FD+- EB03	Decompression shaft	19	AM-186FD+- EB19	86-Cylinder Head
4	AM-186FD+- EB04	O ring	20	AM-186FD+- EB20	86-Double ended bolt
5	AM-186FD+- EB05	Decompression shaft spring	21	AM-186FD+- EB21	86-Intake valve
6	AM-186FD+- EB06	Retaining pin	22	AM-186FD+- EB22	86-Exhaust valve
7	AM-186FD+- EB07	86-Cylinder head cover	23	AM-186FD+- EB23	Nut
8	AM-186FD+- EB08	86-Cylinder head cover gasket	24	AM-186FD+- EB24	Fuel injector pressure plate
9	AM-186FD+- EB09	86-Rocker arm	25	AM-186FD+- EB25	Fuel injector adjusting gasket
10	AM-186FD+- EB10	86-Rocker arm shaft fastening bolt	26	AM-186FD+- EB26	86-Fastened bolt of fuel injector
11	AM-186FD+- EB11	86-Adjusting valve spacer	27	AM-186FD+- EB27	Breather assembly
12	AM-186FD+- EB12	86-Valve clip	28	AM-186FD+- EB28	O ring
13	AM-186FD+- EB13	86-Valve spring seat			
14	AM-186FD+- EB14	86-Valve spring			
15	AM-186FD+- EB15	86-Valve guide oil seal			
16	AM-186FD+- EB16	86-Valve spring washer			

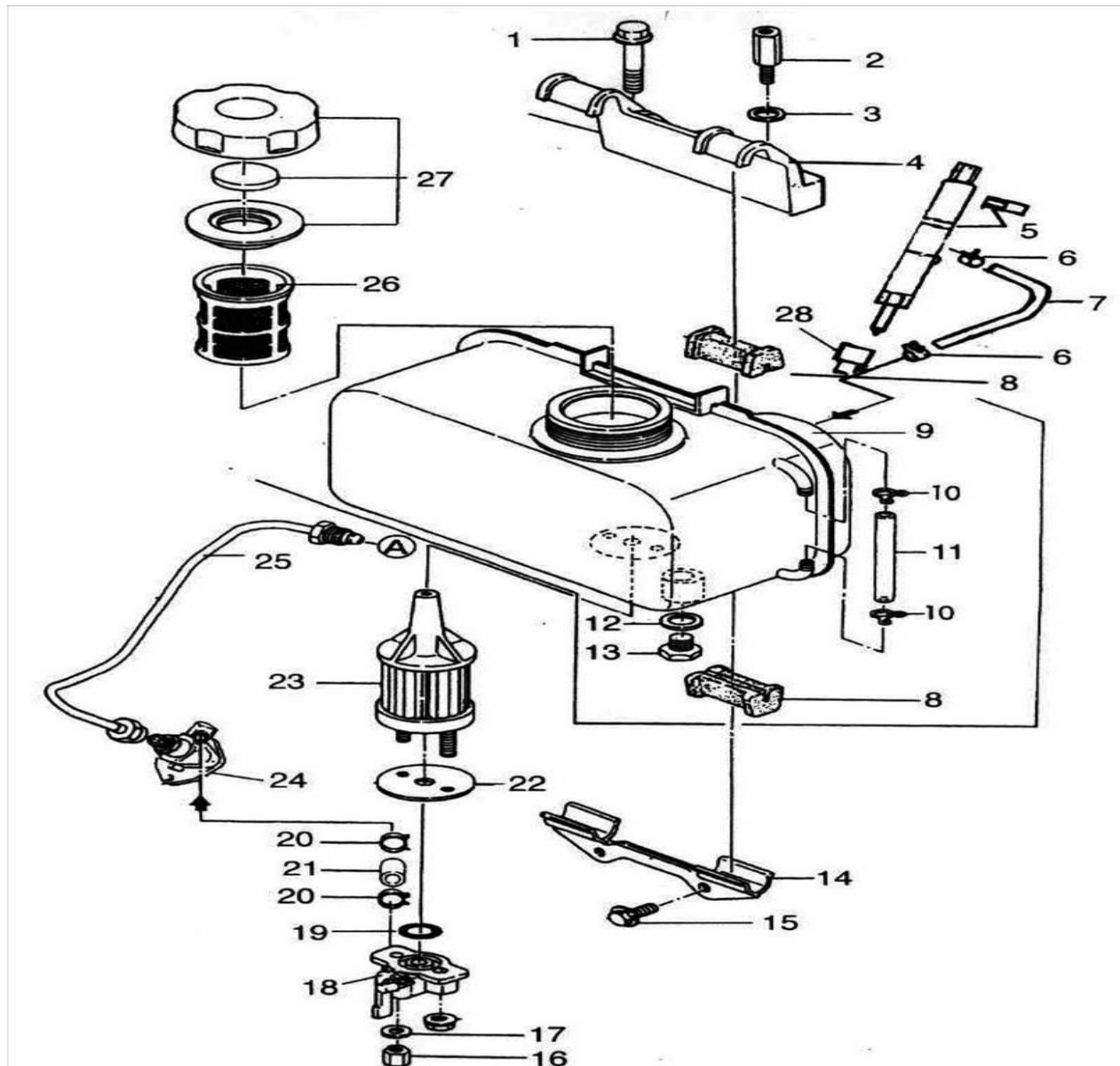
PISTON/CRANK ASSY - EC



ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-186FD+- EC01	86-Piston Ring group (standard)	17	AM-186FD+- EC17	86-Crankshaft conic type
2	AM-186FD+- EC02	86-Retainer clip of Piston pin	18	AM-186FD+- EC18	Steel ball
3	AM-186FD+- EC03	86-Piston	19	AM-186FD+- EC19	86-Balancing Shaft Driving Gear
4	AM-186FD+- EC04	86-Piston pin	20	AM-186FD+- EC20	86-Flywheel
5	AM-186FD+- EC05	86-Connecting rod body	21	AM-186FD+- EC21	86-Flywheel nut gasket
6	AM-186FD+- EC06	86-Connecting rod bush	22	AM-186FD+- EC22	86-Flywheel Nut
7	AM-186FD+- EC07	86-Bearing	23	AM-186FD+- EC23	86-Flywheel gear ring (for electric
8	AM-186FD+- EC08	86-Balancing Shaft	24	AM-186FD+- EC24	86-Sleeve of fuel pump rod
9	AM-186FD+- EC09	Key	25	AM-186FD+- EC25	86-Push rod
10	AM-186FD+- EC10	86-Balancing Shaft Timing Gear	26	AM-186FD+- EC26	86-Tappet
11	AM-186FD+- EC11	Bolt (for F shaft accompany with diesel	27	AM-186FD+- EC27	Key
12	AM-186FD+- EC12	Crankshaft timing gear	28	AM-186FD+- EC28	86-Camshaft
13	AM-186FD+- EC13	Key	29	AM-186FD+- EC29	86-Camshaft timing gear
14	AM-186FD+- EC14	Key	30	AM-186FD+- EC30	Key
15	AM-186FD+- EC15	86-Key	31	AM-186FD+- EC31	Flywheel alternator
16	AM-186FD+- EC16	86-Crankshaft keyway type			

FUEL TANK PARTS- ED

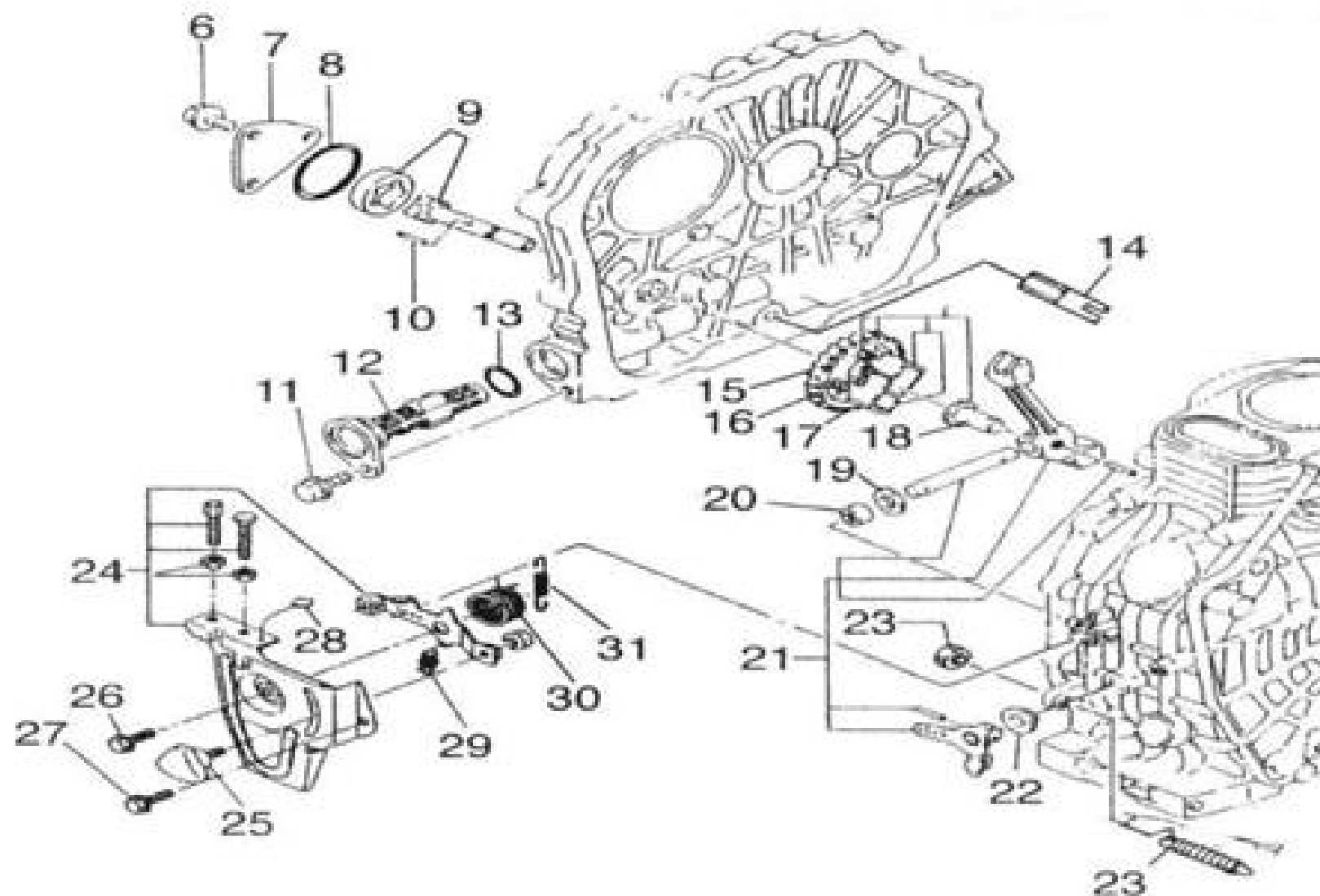


ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-186FD+- ED01	Bolt	17	AM-186FD+- ED17	Flat washer
2	AM-186FD+- ED02	Upper fuel tank bracket fastening bolt	18	AM-186FD+- ED18	Fuel tank cock assembly
3	AM-186FD+- ED03	Flat washer	19	AM-186FD+- ED19	Gasket of fuel tank cock
4	AM-186FD+- ED04	86-Upper fuel tank bracket	20	AM-186FD+- ED20	Fuel pipe clamp
5	AM-186FD+- ED05	86-Injector	21	AM-186FD+- ED21	86-Fuel oil pipe
6	AM-186FD+- ED06	Fuel leak-off pipe connecting	22	AM-186FD+- ED22	Fuel filter gasket
7	AM-186FD+- ED07	86-Fuel leak-off Pipe	23	AM-186FD+- ED23	Fuel filter element
8	AM-186FD+- ED08	Shock absorbing pad of fuel tank	24	AM-186FD+- ED24	86-Fuel injector pump
9	AM-186FD+- ED09	86-Fuel Tank	25	AM-186FD+- ED25	86-Fuel injector pump electric valve
10	AM-186FD+- ED10	Fuel Pipe connecting	26	AM-186FD+- ED26	High pressure fuel pipe(Chinese injector)
11	AM-186FD+- ED11	86-Fuel Pipe	27	AM-186FD+- ED27	Fuel oil filter
12	AM-186FD+- ED12	Fuel drain gasket	28	AM-186FD+- ED28	Fuel tank cap assembly
13	AM-186FD+- ED13	Fuel drain plug(in the fuel tank)	29	AM-186FD+- ED29	Fuel injector cap(china type only)
14	AM-186FD+- ED14	Lower fuel tank bracket			
15	AM-186FD+- ED15	Bolt			
16	AM-186FD+- ED16	Nut			

ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

LUBRICATION SPEED CONTROL SYSTEM - EF

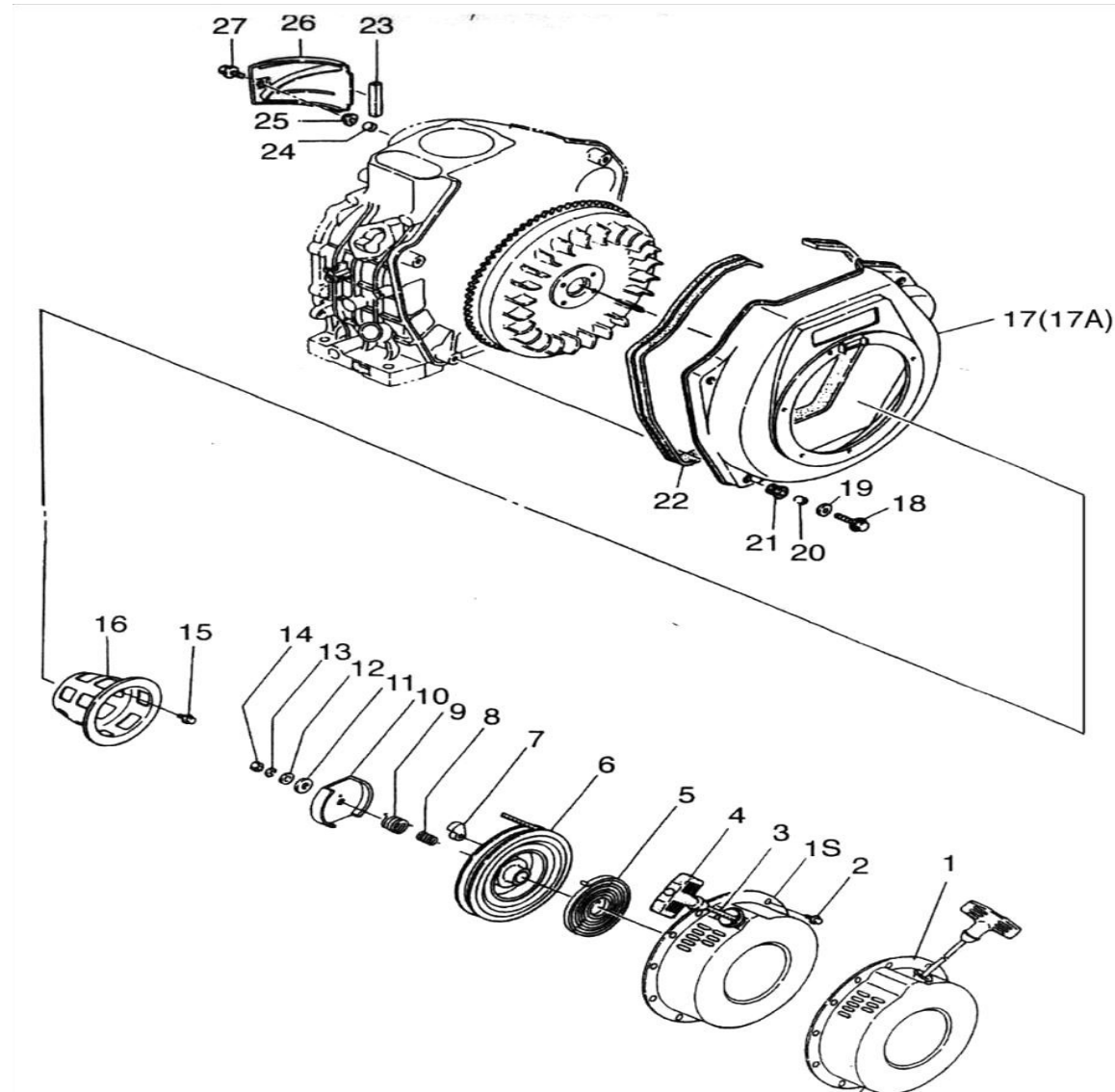


ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-186FD+- EF01	NA	17	AM-186FD+- EF17	Fly block
2	AM-186FD+- EF02	NA	18	AM-186FD+- EF18	Governor fork tappet
3	AM-186FD+- EF03	NA	19	AM-186FD+- EF19	Lever shaft gasket
4	AM-186FD+- EF04	NA	20	AM-186FD+- EF20	Bearing
5	AM-186FD+- EF05	NA	21	AM-186FD+- EF21	86-Fork lever assembly
6	AM-186FD+- EF06	Heterotypic Bolt	22	AM-186FD+- EF22	Washer
7	AM-186FD+- EF07	Oil pump cover	23	AM-186FD+- EF23	Fuel controller
8	AM-186FD+- EF08	O ring	24	AM-186FD+- EF24	Handle bracket
9	AM-186FD+- EF09	86-Oil Pump	25	AM-186FD+- EF25	On-off speed handle for generator
10	AM-186FD+- EF10	Pin	26	AM-186FD+- EF26	Speed-control lever
11	AM-186FD+- EF11	Heterotypic Bolt	27	AM-186FD+- EF27	Heterotypic Bolt
12	AM-186FD+- EF12	Oil filter cleaning element	28	AM-186FD+- EF28	Heterotypic Bolt
13	AM-186FD+- EF13	Seal ring	29	AM-186FD+- EF29	including in the handel assembly,could
14	AM-186FD+- EF14	Oil Guide	30	AM-186FD+- EF30	Return spring ☐
15	AM-186FD+- EF15	Oil pump driving gear	31	AM-186FD+- EF31	Return spring ☐
16	AM-186FD+- EF16	Fly block pin	32	AM-186FD+- EF32	Speed-control spring

ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

RECOIL STARTING SYSTEM - EG

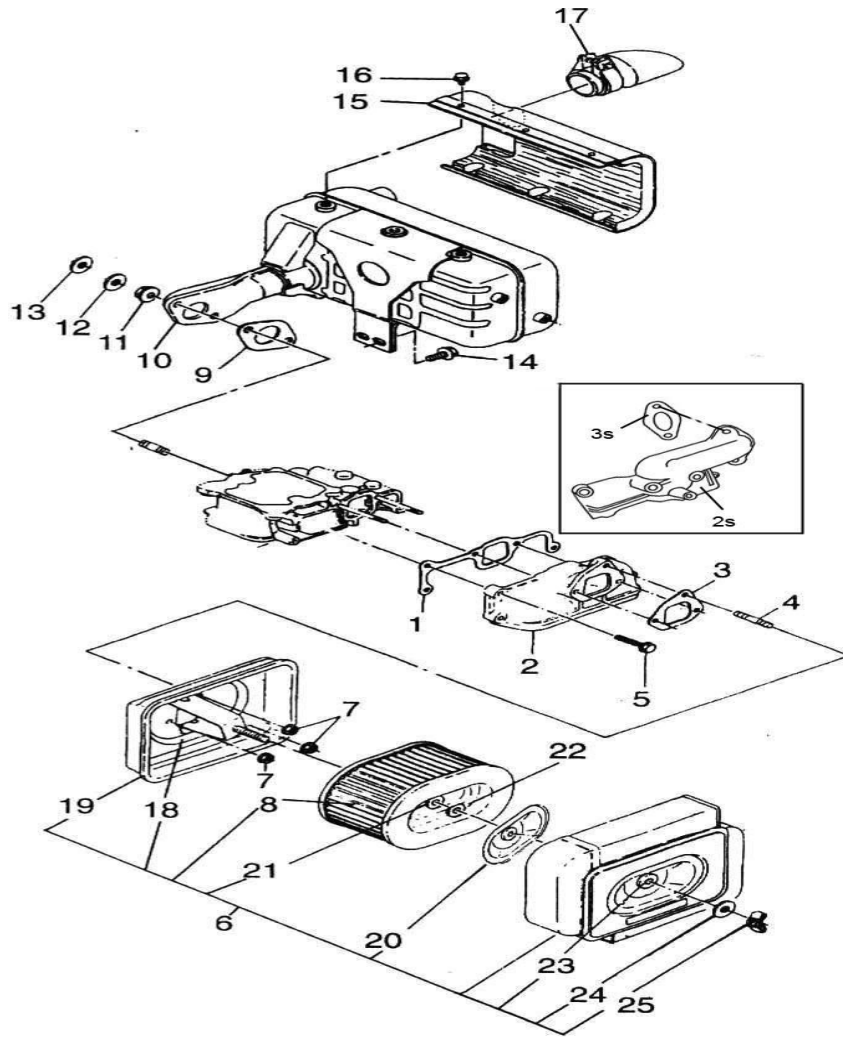


ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

SL NO.	PART NO.	DESCRIPTION	SL NO.	PART NO.	DESCRIPTION
1	AM-186FD+- EG01	86- recoil start assembly	17	AM-186FD+- EG17	86-Starter
2	AM-186FD+- EG02	86-Recoil case assembly	18	AM-186FD+- EG18	86-Wind leading case welded
3	AM-186FD+- EG03	Bolt	19	AM-186FD+- EG19	Bolt
4	AM-186FD+- EG04	86-Recoil starter rope	20	AM-186FD+- EG20	washer
5	AM-186FD+- EG05	86-Recoil starter handle	21	AM-186FD+- EG21	Collar of Wind leading case welded
6	AM-186FD+- EG06	86-Flat spiracle spring	22	AM-186FD+- EG22	Shock absorber
7	AM-186FD+- EG07	86-Recoil reel	23	AM-186FD+- EG23	86-Shock pads
8	AM-186FD+- EG08	86-Starting claw	24	AM-186FD+- EG24	86-Shock isolation piece of wind leading
9	AM-186FD+- EG09	86-Helical spring	25	AM-186FD+- EG25	86-Collar of Wind leading plate
10	AM-186FD+- EG10	86-Torsional spring	26	AM-186FD+- EG26	86-Pad
11	AM-186FD+- EG11	86-Starting claw plate	27	AM-186FD+- EG27	86-Wind leading plate
12	AM-186FD+- EG12	86-Friction plate	28	AM-186FD+- EG28	86-Bolt
13	AM-186FD+- EG13	Friction plate gasket			
14	AM-186FD+- EG14	Spring washer			
15	AM-186FD+- EG15	Nut			
16	AM-186FD+- EG16	Bolt			

ENGINE DIAGRAM & SPARE PARTS LIST OF INTERCULTIVATOR/POWER WEEDER - BACK ROTARY

MUFFLER ASSY - EH



SL NO.	PART NO.	DESCRIPTION
1	AM-186FD+- EH01	86-Intake pipe gasket
2	AM-186FD+- EH02	86-Intake pipe
3	AM-186FD+- EH03	86-Air cleaner gasket
4	AM-186FD+- EH04	86-fasten bolt for air cleaner
5	AM-186FD+- EH05	86-Heterotypic bolt
6	AM-186FD+- EH06	86-Air filter assembly
7	AM-186FD+- EH07	Heterotypic Nut
8	AM-186FD+- EH08	86-Air filter element
9	AM-186FD+- EH09	86-Muffler gasket
10	AM-186FD+- EH10	86-Muffler assembly
11	AM-186FD+- EH11	Flat washer
12	AM-186FD+- EH12	Spring washer
13	AM-186FD+- EH13	Nut
14	AM-186FD+- EH14	86-heterotypic Bolt
15	AM-186FD+- EH15	86-Muffler screen cover
16	AM-186FD+- EH16	Bolt
17	AM-186FD+- EH17	86-Muffler tail pipe
18	AM-186FD+- EH18	86-Sealing ring of shock proof
19	AM-186FD+- EH19	86-Bottom case assembly of Air Cleaner
20	AM-186FD+- EH20	86-Sealing ring of shock proof
21	AM-186FD+- EH21	86-Air filter shock absorber
22	AM-186FD+- EH22	86-Heterotypic nut
23	AM-186FD+- EH23	86-Washer
24	AM-186FD+- EH24	butterfly nut