



# INSTRUCTION MANUAL

## **GRASS TRIMMER**

## **MESIN POTONG RUMPUT**



**MODEL: MPR-328**

## GENERAL INSTRUCTIONS FOR SAFETY OPERATION

All our company products are delivered with an Owner's manual. Please read it carefully to get acquainted with the operation of your unit. For further details, consult your dealer.

### Before Operation

Protect head (eyes and ears), feet and hands with safety hat, ear cover, goggles, safety shoes and protective clothes.

Dress properly, do not wear loose clothing or jewelry that could become caught in moving parts of the unit.

Never let a child operate the machine.

Be sure to check bolts and other fasteners to see if any of them have become loose or missing.

Cutting blade

—The cutter blade is very sharp, handle it with care.

—To install the blade correctly, read the instructions in this manual thoroughly.

—The Cutter fixing blot is left threaded, turn counter-clockwise to tighten, clockwise to loosen.

### Fuel

#### **NEVER OPERATE THE ENGINE WITH GASOLINE ONLY.**

The engine requires a fuel mix of 25 parts regular gasoline to 1 part quality two-cycle oil.

Do not fill the fuel tank while the engine is running or still warm. The fuel should be poured into the fuel tank when the engine is cold.

**Do NOT SMOKE WHEN FUEL IS ADDED**, and when you are working with the machine.

Keep an open flame away because fuel vapors are flammable.

Never smoke or allow a flame to come close to the unit while mixing fuel, filling the tank or maintaining the unit.

Fuel should be stored in a dry and cool place.

### During Operation

The unit should be operated in a well ventilated area.

Keep children away. Onlookers should be kept at a safe distance from the work area, at least 7~8m(30 feet).

Keep all parts of your body and clothing away from the blade when starting or running the engine.

While cutting, hold the machine firmly with both hands, and stand with feet well-balanced and your body balanced.

The operator must obey the local regulations of cutting area.

Never carry the unit with the engine running.

For safety, the unit should not run in full throttle without any load.

Don't run the unit without a muffler.

During a heavy work, be always with a partner.

When making a repair or adjustment, the unit must be stopped and the fuel completely drained.

### For Long-term Storage

Drain all fuel from the carburetor, fuel tank and fuel lines.

Repair any damage which has resulted from use.

Clean the unit with a clean rag, or the use of high pressure air hose.

Put a few drops of engine oil into the cylinder through the spark plug hole, and spin the engine over several times to distribute oil, then reinstall the spark plug.

Cover the unit and store it in a dry area.

## 1. ASSEMBLING PROCEDURES

BG-328 is composed of three major units; engine, flexible shaft and drive shaft.

### 1. Assembling drive shaft(Fig. 1)

Insert the flexible shaft into the joint pipe of Drive Shaft to the end and tighten the joint pipe bolt by engaging the bolt to the slot of flexible shaft.

**NOTE:** Make sure to align square end of flexible inner shaft with square hole of drive shaft by slightly rotating drive shaft. so that they are connected firmly.

### 2. Assembling flexible shaft(Fig. 2)

Remove temporarily installed PIN . Insert flexible shaft into clutch case to the end by inserting square end of flexible inner shaft into square hole of adaptor in Clutch Case. Then screw-in the PIN by engaging the pin the slot of flexible shaft.

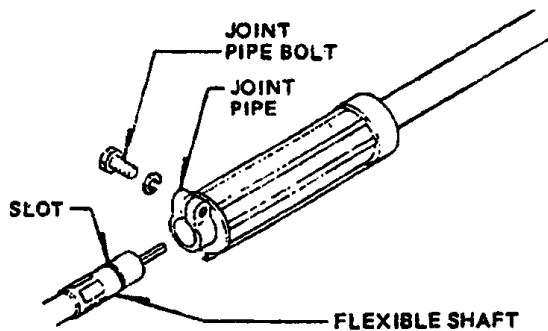


Fig. 1

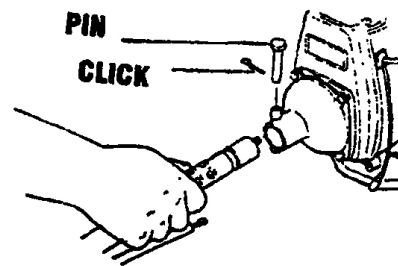


Fig. 2

### 3. Throttle cable and stop cord

Put throttle cable and stop cord through cable passage of shaft grip, then connect each terminal with each proper position respectively. (Fig. 3)

Finally, clamp those connected throttle cable and stop cord together to flexible shaft with two wire clamp bands provided. (Fig. 4)

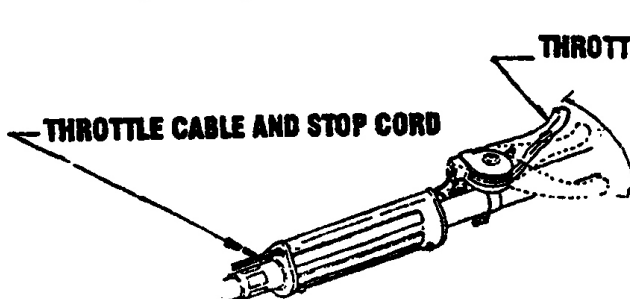


Fig. 3

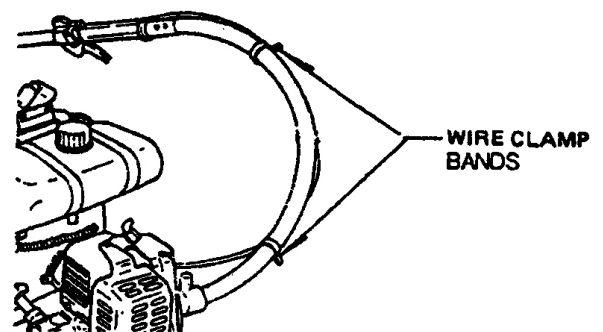


Fig. 4

#### 4. Handle (Fig. 5)

Remove the handle bracket A.

Set the handle on, and attach the handle bracket A with two bolts slightly. And adjust position of the handle according to your working style. Then fix it firmly with the bolts.

#### 5. Safety cover (Fig. 6)

- 1) Install the safety cover on the shaft with the safety cover bracket and the screws provided.
- 2) Tighten the screws after setting the safety cover bracket at the appropriate position.

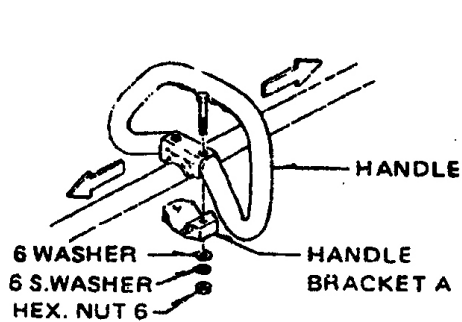


Fig. 5

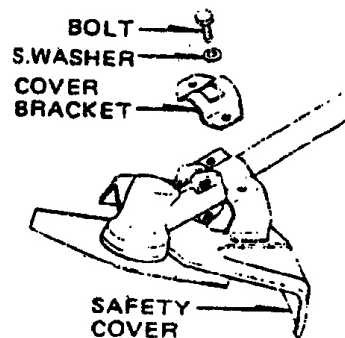


Fig. 6

#### 6. Blade

- 1) When installing a steel blade, fit the blade as shown in the fig. 7
- 2) When installing or removing a blade, lock cutter holder with lock handle to tighten or to untighten as shown in Fig. 8

**NOTE:** As the blade fixing bolt is left threaded, turn it counter-clockwise and take a special care not to hurt your fingers by the blade. Be sure to check if it has been fitted correctly.

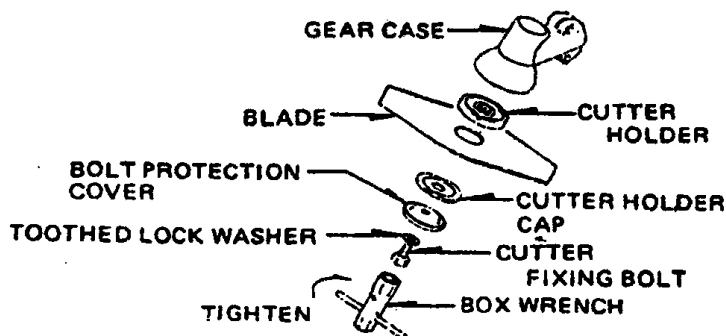


Fig. 7

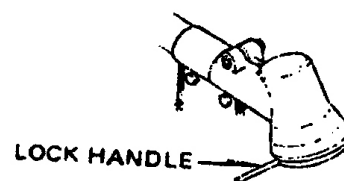


Fig. 8

## 2. OPERATING PROCEDURES

Adjust shoulder belt length as you feel appropriate before starting engine.

## 1. Filling the fuel (Fig. 9)

- 1) This engine uses a fuel mix of 25 parts regular gasoline to 1 part of two-cycle oil. The fuel should be premixed prior to pouring into the fuel tank. It is recommended a quality two-cycle oil be used in the fuel mix.

**CAUTION: FAILURE TO MIX OIL WITH GASOLINE WILL RESULT IN SEIZURE AND SEVERE DAMAGE TO THE ENGINE.**

- 2) Be sure to check bolts and other fasteners to see if any of them have become loose or missing.

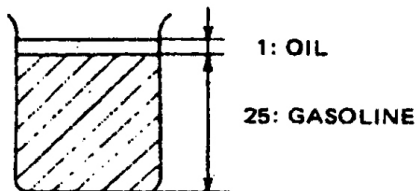


Fig. 9

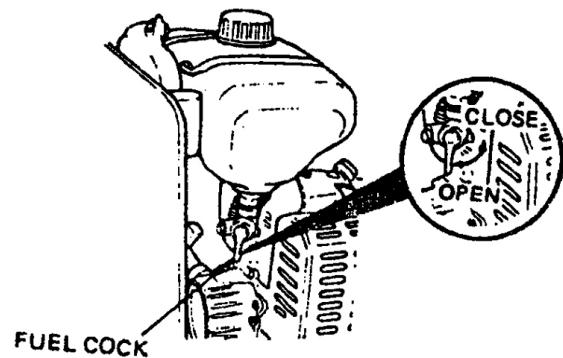


Fig. 10

## 2. Starting

- 1) Open the fuel cock. (Fig. 10)
- 2) Move the throttle lever to start position or about 1/4 full throttle, in case of metal lever. (Fig. 11)

**NOTE: Starting with full throttle causes sudden high revolution of Blade, which is dangerous, so please avoid it.**

- 3) Set the choke lever to CLOSE. (Fig. 12)
- 4) Pull the recoil starter briskly, **TAKING CARE TO KEEP THE HANDLE** in your grasp, while not allowing it to snap back.
- 5) When you hear combustible sounds a couple of times, move the choke lever back to as it is (open position). Then pull the recoil starter briskly.
- 6) After starting the engine, allow it about 2~3 minutes to warm up before subjecting it to any load.

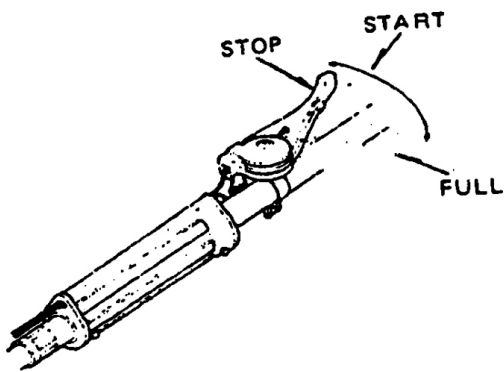


Fig. 11

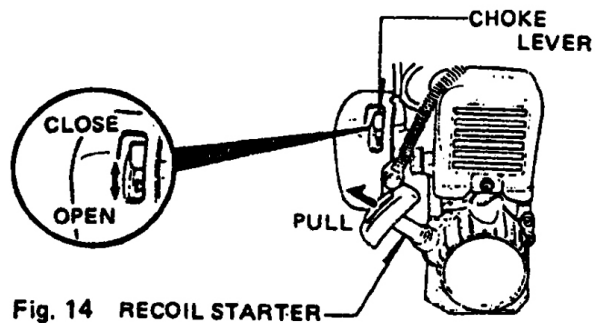


Fig. 14 RECOIL STARTER

Fig. 12

**CAUTION:** Blade may turn and flexible shaft may swing as engine starts. Do not let the blade touch any object when engine starts.

\* Adjustment (Fig. 13)

When the idle speed is too high or too low, adjust it with the idle speed adjusting screw.

In case that the blade keeps turning at the idling speed, turn the idle adjusting screw counter-clockwise.

3. How to carry (Fig. 14)

- 1) First, hold the handle with your left hand and bend yourself down. Slip your right arm into the right belt.
- 2) Transfer the shaft to your right hand and reaching back, slip the left arm through the other belt.
- 3) When the engine unit is mounted on your back, grip the shaft as shown in the figure.

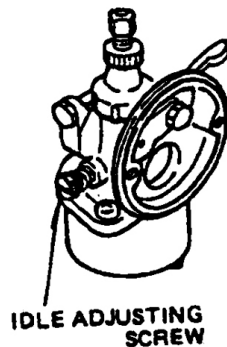


Fig. 13



Fig. 14

4. Cutting

- 1) The blade turns counterclockwise, therefore be advised to operate the cutter from right to leftward for efficient cutting.
- 2) When working on a slope, the blade should allow the contour from top to bottom, with the operator looking down to the left.
- 3) Keep the onlookers out of the working area at least 7~8m(30ft). (Fig. 15)
- 4) Special care

If the cutter should strike against stones or the like, stop the engine and cutter and make sure that the cutter and related parts are in normal condition.

When grass or vine twines round the cutter, stop the engine and blade and remove grass or vine.

### 5. Stopping

- 1) Decrease the engine speed, and depress the stop button until engine has stopped. (Fig. 16)

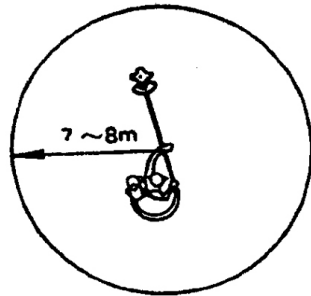


Fig. 15

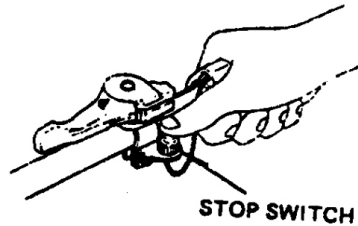


Fig. 16

## 3. MAINTENANCE

### 1. Periodical check

#### 1) Cleaning

1-1 Clean the cleaner element. (Fig. 17)

1-2 Scrape off the carbon from the spark plug gap (standard gap is 0.6mm or 0.023in.). (Fig. 18)

1-3 Clean the cylinder exhaust port and muffler.

Remove the grasses or dusts entered in the cylinder cover or fan case cover (otherwise they may cause a trouble such as an overheating).

2) Inspect carefully for any fuel or oil leaks.

3) Check all nuts, bolts, screws, etc., making sure they are tightened and secured as they should be.

4) Lubricate Gear Case, every 50 hours of use.

5) When lubricating flexible shaft, apply grease in the flexible pipe of clutch case side. (It is recommended to

apply grease after every 10 hours of use.)

CLEANER ELEMENT

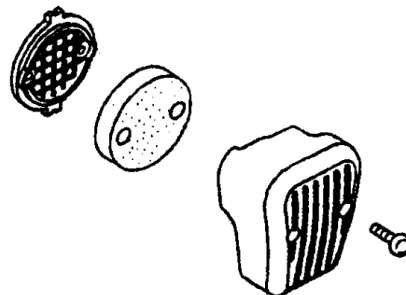


Fig. 17

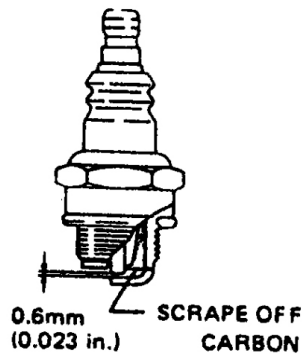


Fig. 18

## 2. Storage

- 1) Completely drain the fuel out of the tank and the carburetor.
- 2) Keep the engine always to be higher than gear box part.
- 3) Clean the unit carefully and keep it from moisture.

### Installation of throttle lever and stop switch (Fig. 19 and Fig. 3)

Before installation, put throttle, cable and stop cord through cable passage of the shaft grip.

- 1) The throttle lever and stop switch are temporarily assembled together, so they should be disassembled first.
- 2) Put the round head of throttle cable and throttle cable together into the handle channel.
- 3) Fix the throttle lever on the hard shaft.
- 4) Finally, fix the stop switch on the throttle lever with a screw.

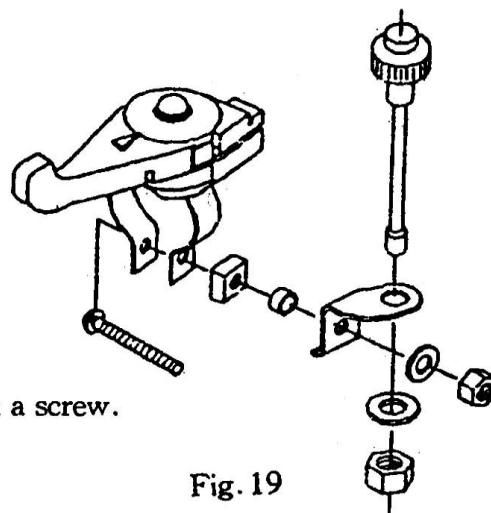


Fig. 19

## SPECIFICATIONS

MODEL	MPR-328
<b>Engine</b>	
Type	2 cycle, Single cylinder, Forced air-cooled, Gasoline engine
Displacement	30.5cc
Max. Output	0.81kw/6000rpm
Carburetor	Float type
Ignition system	IC Ignition(Solid state)
Ignition plug	BM-7A or CHAMPION CJ6
Fuel	Mixed fuel of Gasoline and 2 cycle oil at 25:1
Fuel tank capacity	1.2 liters
<b>Body</b>	
Drive	Flexible shaft, Drive shaft, Pinion and Gear
Rotational direction of the cutter (Viewed from the top of the cutter)	Counter-clockwise
Dimensions(Length × Width × Height)	345 × 280 × 401 mm(Back-loaded part only)
Dry weight	9.4kg

Note: To improve the performance, the specifications are subject to change without notice.



## PARTS LIST FOR OUR COMPANY BACK-PACK BRUSH CUTTER MODEL BG-305 ( 328 )

### FOREWORD

1. The parts list contains listing for all the spare parts available for the OUR COMPANY BACK PACK BRUSH CUTTER MODEL BG-328 and should always be used when ordering genuine OUR COMPANY parts.
2. You may happen to receive ordered parts with a slightly different parts number which has nothing to do with interchangeability, but it is improved one.
3. In this parts list there may be some different accessories or optional parts from your unit for this manual covers several models.

### HOW TO READ PARTS LIST

1. When "V" appears in the quantity column, the quantity of the specific part is variable and will have to be determined when the unit is reassembled.
2. The following abbreviations are used in this list:

COMP. (COMPLETE) . . . This represents a part made of two or more pieces permanently fastened together, which cannot be broken down into separate parts.

ASS'Y (ASSEMBLY) . . . This represents a part made of two or more pieces which can be broken down into separate parts.

HEX. . . . . HEXAGONAL

SCREW . . . . . ROUND HEAD SCREW

F. H. SCREW . . . . . COUNTER SUNK SCREW

WASHER . . . . . FLAT WASHER

S. WASHER . . . . . SPRING (LOCK) WASHER

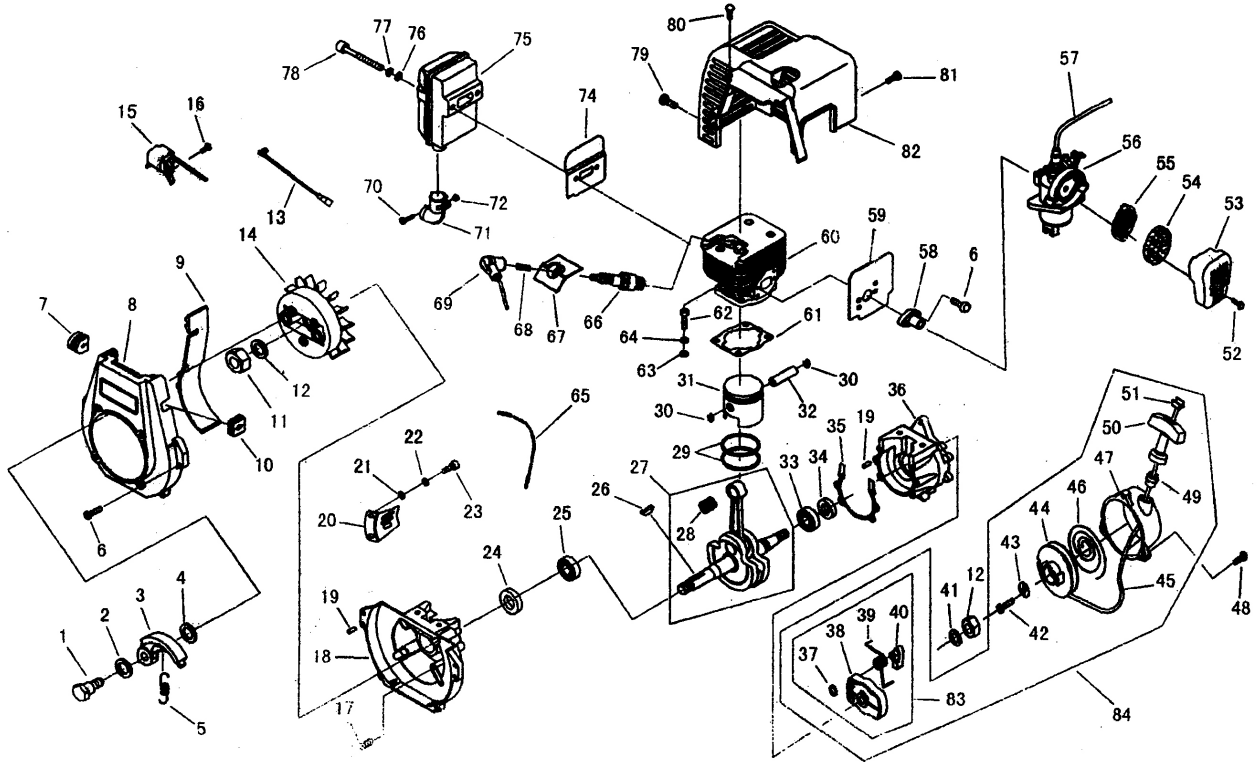
S. NUT . . . . . SPECIAL NUT

All dimensions are in millimeters except for special fasteners, pulleys, wheels and steel balls.

PARTS NAME	EXAMPLE	INTERPRETATION
SCREW or BOLT	5 × 13	5mm diameter, 13mm length
WASHER	6	for 6mm fastner
TUBE	6 × 150	6mm inside diameter, 150mm lengh
PIN	6 × 12	6mm diameter, 12mm length
OIL SEAL	12225	12mm inside diameter, 22mm outside diameter, 5mm thick
GASKET or O-RING	8	8mm inside diameter

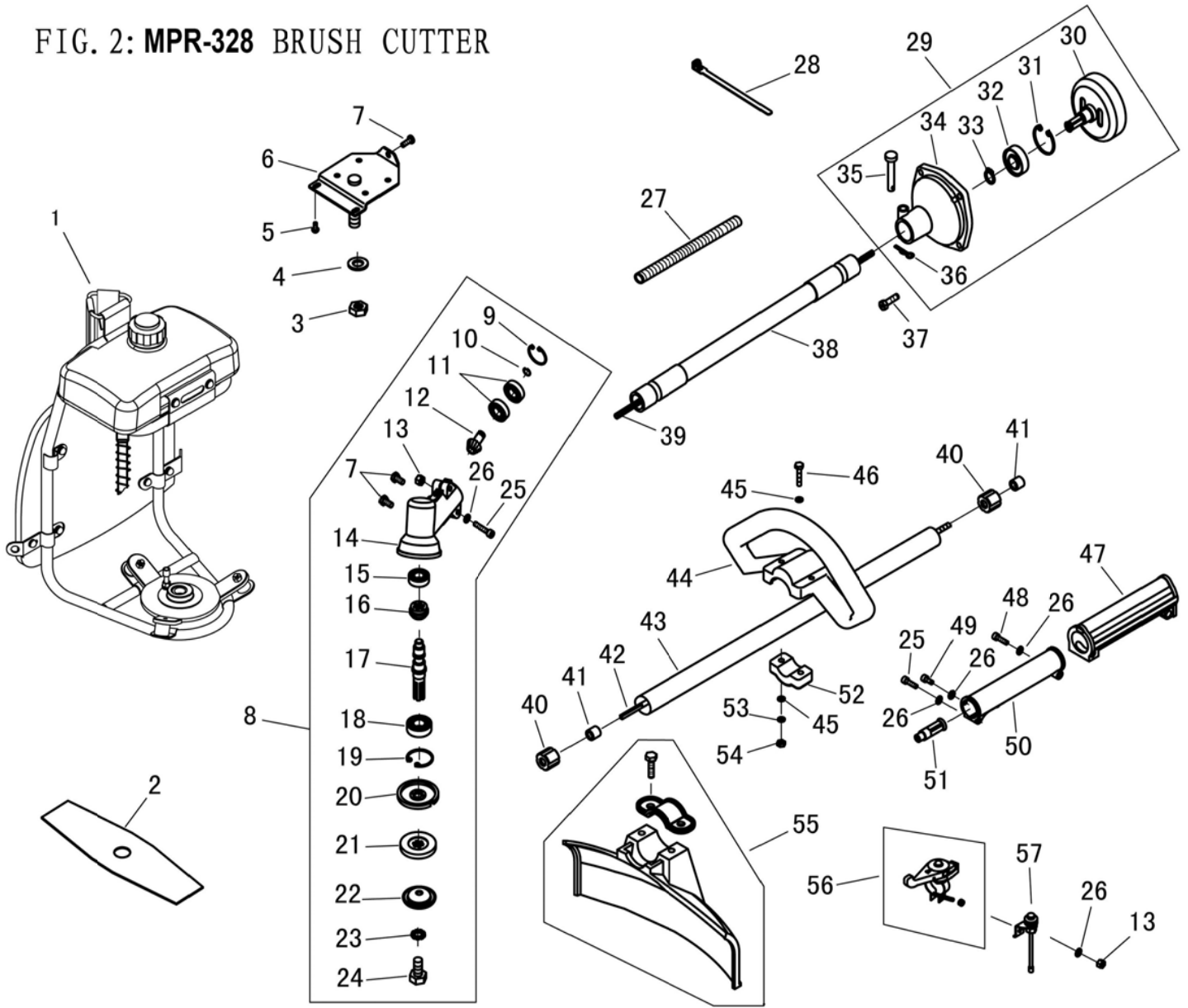
ALL DATA SUBJECT TO CHANGE WITHOUT NOTICE.

# FIG. 1: 1E36F GASOLINE ENGINE



NO.	PART NO.	PART NAME	QTY.	NO.	PART NO.	PART NAME	QTY.	NO.	PART NO.	PART NAME	QTY.
1	1E36F-1	CLUTCH STEP SCREW	2	29	1E36F. 10-3	PISTON RING	2	57	1E36F. 14	THROTTLE WIRE COMP.	1
2	1E36F-2	CLUTCH WASHER A	2	30	1E36F. 10-2	PISTON PIN CIRCLIP	2	58	1E36F-14	INLET MANIFOLD	1
3	1E36F. 6. 1	CLUTCH SHOE COMP.	2	31	1E36F. 10. 1	PISTON 36	1	59	1E36FB-4	INLET MANIFOLD GASKET	1
4	1E36F-3	CLUTCH WASHER B	2	32	1E36F. 10-1	PISTON PIN	1	60	1E36FB-5	CYLINDER	1
5	1E36F. 6-1	CLUTCH SPRING	1	33	GB/T276	BALL BEARING 6002/P5	1	61	1E36F-5	CYLINDER WASHER	1
6	GB/T9074. 4	SCREW M5×20	6	34	1E36F. 2	OIL SEAL	1	62	GB/T70. 1	SCREW M5×20	4
7	1E36F-7	PRIMARY CORD GROMMET	1	35	1E36F. 3-1	CRANK CASE GASKET	1	63	GB/T848	S. WASHER 5	4
8	1E36F-4	FAN CASE	1	36	1E36F. 3-2	REAR HALF CRANK CASE	1	64	GB/T93	S. WASHER 5	4
9	1E36F-17	FLASH PAN	1	37	GB/T896	STOP RING 4	1	65	1E36F. 9	STOP WIRE	1
10	1E36F-12	GROMMET	1	38	1E36F. 1. 2-1	STARTER PAWL SPRING	1	66	A4117	PLUG	1
11	GB/T6170	NUT M8	2	39	1E36F. 1. 2-2	STARTER PAWL SPRING	1	67	1E36FB. 1-1	PLUG COVER	1
12	1E36F-9	S. WASHER 8	1	40	1E46FP. 4-2	STARTER PAWL	1	68	1E40F-3A. 8-2	CLICK SPRING	1
13	1E36FB. 1. 1	SHORT STOP CORD COMP	1	41	GB/T859	STOP RING 8	1	69	1E36FB. 1-2	PLUG CAP	1
14	1E36F. 5-1	MAGNETO ROTOR COMP.	1	42	GB/T67	SCREW M5×12	1	70	GB/T823	SCREW M4×12	1
15	1E36F. 5-2	IGNITION COIL COMP.	1	43	1E36F. 1-4	ROPE REEL WASHER	1	71	1E36F. 12. 1	TAIL PIPE COMP.	1
16	GB/T9074. 4	SCREW M4×20	2	44	1E36F. 1-3	STARTER ROPE REEL	1	72	GB/T6170	NUT M4	1
17	GB/T9074. 4	SCREW M5×30	4	45		ROPE	1	74	1E36FB-3	GASKET	1
18	1E36F. 3-3	FRONT HALF CRANK CASE	1	46	1E36F. 1-2	RECOIL SPRING	1	75	1E36F. 12	MUFFLER COMP.	1
19	GB/T119	ANNUL B4×10	4	47	1E36F. 1. 1. 1	RECOIL STARTER BODY	1	76	GB/T97. 1	S. WASHER 6	2
20	1E36F. 3-6	HELMET	1	48	GB/T9074. 4	SCREW M4×16	3	77	GB/T93	S. WASHER 6	2
21	GB/T97. 1	S. WASHER 5	2	49	1E36F. 1. 1-1	ROPE GUIDE	1	78	GB/T70. 1	SCREW M6×65	2
22	GB/T93	S. WASHER 5	2	50	1E36F. 1-1	STARTER HANDLE	1	79	GB/T9074. 4	SCREW M4×10	2
23	GB/T70. 1	SCREW M5×10	2	51	1E36F. 1-5	RING	1	80	GB/T9074. 4	SCREW M4×12	2
24	1E36F. 4	OIL SEAL	1	52	GB/T9074. 4	SCREW M4×25	2	81	GB/T9074. 4	SCREW M5×12	1
25	GB/T276	BALL BEARING 6202/P5	1	53	1E36F. 16-1	CLEANER BODY	1	82	1E36FB-2	CYLINDER SHROUD	1
26	GB/T1099	WOOD-RUEF KEY 3×5×13	1	54	1E36F. 16-2	CLEANER ELEMENT	1	83	1E36F. 1. 2	STARTER PULLEY ASS' S	1
27	1E36F. 8	CRANK SHAFT COMP.	1	55	1E36F. 16-3	CLEANER FIXING BASE	1	84	1E36F. 1	STARTER	1
28	1E36F. 8. 2	NEEDLE BEARING	1	56	1E36F. 15	CARBURETOR ASS' S	1				

FIG. 2: MPR-328 BRUSH CUTTER



NO.	PART NO.	PART NAME	QTY.	NO.	PART NO.	PART NAME	QTY.	NO.	PART NO.	PART NAME	QTY.
1	BG328A	Shoulder Frame Comp.	1	20	BG-328. 9. 5-7	Gear Washer	1	39	BG-328. 1. 1	Flexible Shaft	1
2	BG-328-10	Blade	1	21	BG-328. 9. 5-8	Holder	1	40	CG330. 2. 1-2	Rubber Cover	4
3	GB/T6170-M10	Nut	2	22	BG-328. 9. 5-9	Bolt Cover	1	41	CG330. 2. 1-3	Oil-Bearing	4
4	GB/T97. 1-10	Washer	1	23	GB/T862. 1-8	Washer	1	42	BG-328. 9. 4-2	Drive Shaft	1
5	GB/T9074. 4-M5 × 12	Screw	2	24	BG-328. 9. 5-10	Bolt	1	43	BG-328. 9. 4-3	Aluminium Pipe	1
6	BG-328. 2	Engine Base Comp.	1	25	GB/T70. 1-M5 × 20	Screw	3	44	BG430B. 9-1	Handle	1
7	GB/T9074. 13-M6 × 16	Bolt	3	26	GB/T93-5	Washer	6	45	GB/T96. 2-6	Washer	4
8	BG-328. 9. 5	Gear Case Comp.	1	27	φ 12. 5X780	Tube	1	46	GB/T9074. 13-M6 × 45	Bolt	2
9	GB/T893. 2-26	Stop Ring	1	28	CG330-1	Wire Clamp Band	2	47	BG-328. 9. 2-1	Grip	1
10	GB/T894. 1-10	Stop Ring	1	29	BG-328. 8	Clutch Case Comp	1	48	GB/T70. 1-M5 × 25	Screw	1
11	GB/T276-6000-2RS/P5	Bearing	2	30	BG-328. 8. 1	Clutch Drum Comp.	1	49	GB/T70. 1-M5 × 10	Screw	1
12	BG-328. 9. 5-1	Pinion	1	31	GB/T893. 1-35	Stop Ring	1	50	BG-328. 9. 2-2	Joint Pipe	1
13	GB/T6170-M5	Nut	3	32	GB/T276-6202-2RS/P5	Bearing	1	51	BG-328. 9. 4-1	Adapter Comp.	1
14	BG-328. 9. 5-6	Gear Case	1	33	GB/T894. 1-15	Stop Ring	1	52	BG430B. 9-3	Handle Cover	1
15	GB/T276-6000/P5	Bearing	1	34	BG-328. 8-1	Clutch Case	1	53	GB/T93-6	Washer	2
16	CG330. 9-3	Gear	1	35	BG-328. 8-2	Pin	1	54	GB/T6170-M6	Nut	2
17	BG-328. 9. 5-3	Gear Shaft	1	36	3WF-2. 6A-2	Click	1	55	BG328. 13	Safety Guard	1
18	GB/T276-6002-2RS/P5	Bearing	1	37	GB/T9074. 13-M6X20	Bolt	4	56	BG-328. 9. 3	Throttle Lever Comp.	1
19	GB/T893. 2-32	Stop Ring	1	38	BG-328. 1. 2	Flexible Liner Comp.	1	57	BG-328. 9A	Stop Button Comp.	1