



7HP GASOLINE ENGINE

ITEM: 62027 & 62029



OWNER'S MANUAL AND SAFETY INSTRUCTIONS

SAVE THIS MANUAL: KEEP THIS MANUAL FOR SAFETY WARNINGS, PRECAUTIONS, ASSEMBLY, OPERATING, INSPECTION, MAINTENANCE AND CLEANING PROCEDURES. WRITE THE PRODUCT'S SERIAL NUMBER ON THE BACK OF THE MANUAL NEAR THE ASSEMBLY DIAGRAM (OR MONTH AND YEAR OF PURCHASE IF PRODUCT HAS NO NUMBER)

FOR QUESTIONS PLEASE CALL OUR CUSTOMER SUPPORT: 909.628.0880 MON-FRI 9AM TO 3PM PST

IMPORTANT SAFETY INFORMATION



GENERAL SAFETY WARNINGS

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

SAFETY

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator. Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

- Gasoline fuel and fumes are flammable, and potentially explosive. Use proper fuel storage and handling procedures. **DO NOT** store fuel or other flammable materials nearby.
- Have multiple ABC class fire extinguishers nearby.
- Operation of this equipment may create sparks that can start fires around dry vegetation. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.
- Set up and use only on a flat, level, well ventilated surface.
- Wear ANSI-approved safety goggles and heavy-duty work gloves during set up.
- Use only oil and fuel recommended in the “Specifications” section of this manual.
- Keep all safety guards in place and in proper working order at all times.

OPERATING PRECAUTIONS:



Carbon Monoxide Hazard Using an engine indoors CAN KILL YOU IN MINUTES. Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell.



NEVER use inside a home or garage, **EVEN IF** doors and windows are open. Only use **OUTSIDE** and far away from windows, doors, and vents.

- **DO NOT** transport the Engine with the Engine running
- **DO NOT** sit or stand on this machine.
- **DO NOT** tilt the machine while the Engine is running.
- Wear ANSI-approved safety goggles, hearing protection, and heavy duty work gloves during use.
- Parts, especially exhaust system components, get very hot during use. Stay clear of hot parts.
- **DO NOT** cover the Engine during operation.

IMPORTANT SAFETY INFORMATION

- People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to a heart pacemaker could cause pacemaker interference or pacemaker failure. Caution is necessary when near the engine's magneto or recoil starter.
- Use only accessories that are recommended by XtremePowerUS for your model. Accessories that may be suitable for one piece of equipment may become hazardous when used on another piece of equipment.
- **DO NOT** operate in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Gasoline-powered engines may ignite the dust or fumes.
- Stay alert, watch what you are doing and use common sense when operating this piece of equipment. **DO NOT** use this piece of equipment while tired or under the influence of drugs, alcohol or medication.
- **DO NOT** overreach. Keep proper footing and balance at all times. This enables better control of the equipment in unexpected situations.
- Dress properly. **DO NOT** wear loose clothing or jewellery. Keep hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- Use the equipment, accessories, etc., in accordance with these instructions and in the manner intended for the particular type of equipment, taking into account the working conditions and the work to be performed. Use of the equipment for operations different from those intended could result in a hazardous situation.
- **DO NOT** operate the equipment with known leaks in the Engine's fuel system.
- This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, et seq.)
- When spills of fuel or oil occur, they must be cleaned up immediately. Dispose of fluids and cleaning materials as per any local, state, or federal codes and regulations. Store oil rags in a bottom ventilated, covered, metal container.
- Before use, check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the equipment's operation. If damaged, have the equipment serviced before using. Many accidents are caused by poorly maintained equipment.
- Use the correct equipment for the application. **DO NOT** modify the equipment and do not use the equipment for a purpose for which it is not intended.
- **FIRE HAZARD! DO NOT** fill fuel tank while engine is running. **DO NOT** operate if gasoline has been spilled. Clean spilled gasoline before starting engine. **DO NOT** operate near pilot light or open flame.
- This unit is to be installed so that access is restricted to only qualified service personnel who have been instructed of the reasons for the restrictions applied to the location and about any precautions that must be taken. Access shall be through the use of a special tool, or lock and key, or other means of security and shall be controlled by the authority responsible for the location.
- Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.
- Use only lubricants and fuel recommended in the Specifications chart of this manual.
- **WARNING:** This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, et seq.)

IMPORTANT SAFETY INFORMATION

- **DO NOT** smoke, or allow sparks, flames, or other sources of ignition around the equipment, especially when refuelling.
- Before use, check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the equipment's operation. If damaged, have the equipment serviced before using. Many accidents are caused by poorly maintained equipment.
- Use the correct equipment for the application. **DO NOT** modify the equipment and do not use the equipment for a purpose for which it is not intended.
- **Before service, maintenance, or cleaning:** **A.** Turn the engine switch to its "OFF" position. **B.** Allow the engine to completely cool. **C.** Then, remove the spark plug cap from the spark plug.
- Keep all safety guards in place and in proper working order. Safety guards include muffler, air cleaner, mechanical guards, and heat shields, among other guards.
- **DO NOT** alter or adjust any part of the equipment or its engine that is sealed by the manufacturer or distributor. Only a qualified service technician may adjust parts that may increase or decrease governed
- Have the equipment serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the equipment is maintained. **DO NOT** attempt any service or maintenance procedures not explained in this manual or any procedures that you are uncertain about your ability to perform safely or correctly.
- **DO NOT** fill fuel tank to the top. Leave a little room for the fuel to expand as needed.
- Wipe up any spilled fuel and allow excess to evaporate before starting engine. To prevent **FIRE**, do not start the engine while the smell of fuel hangs in the air.



TO PREVENT SERIOUS INJURY: Operate only with proper spark arrestor installed. Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

WARNING! DO NOT INSTALL THIS ENGINE ON A VEHICLE.

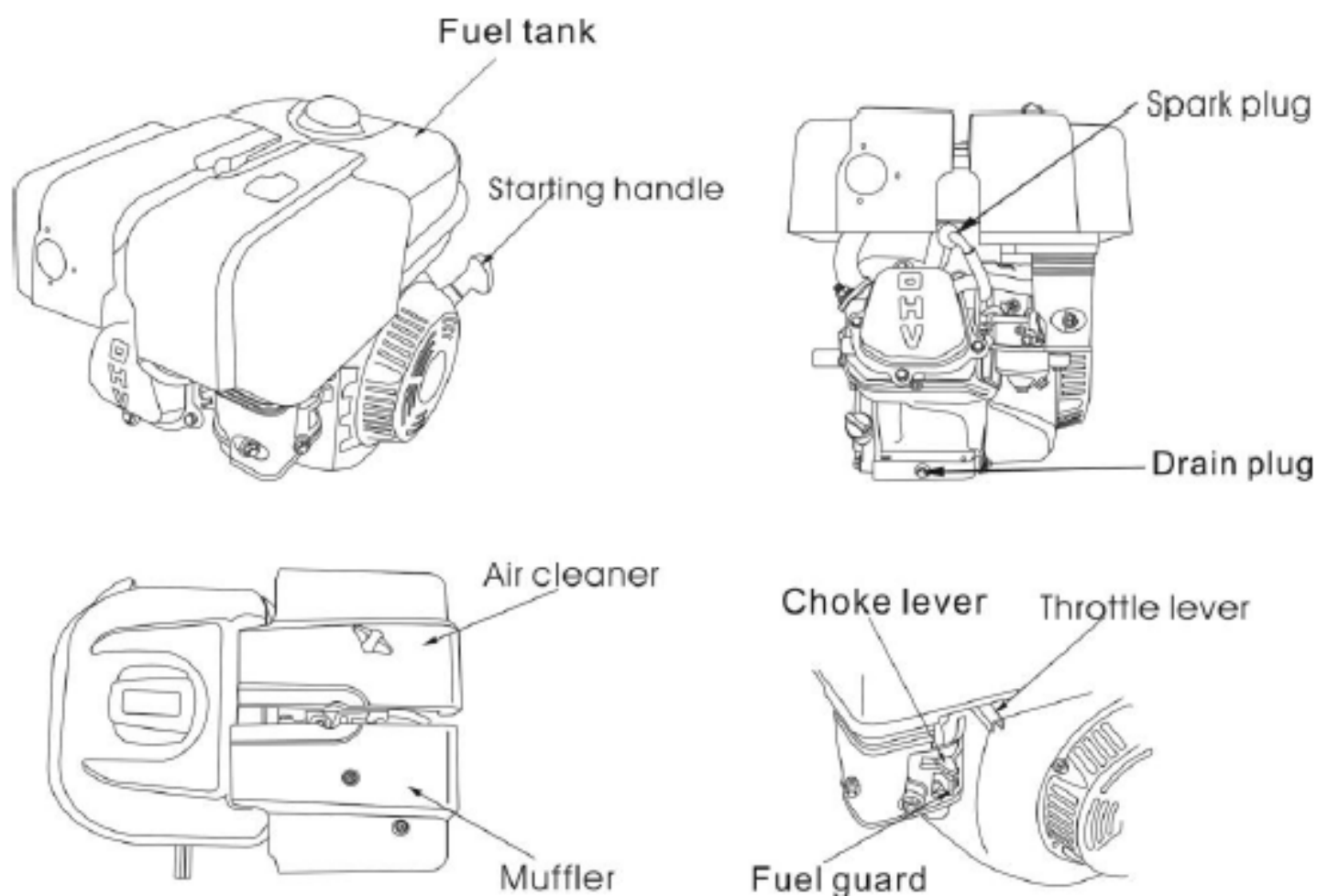
WARNING! INSTALL THIS ENGINE ACCORDING TO EQUIPMENT INSTRUCTIONS BEFORE USE.



SAVE THESE WARNINGS

FEATURES AND PRODUCT INFORMATION

Based on the latest engine technology at home and abroad, our Co. has individually developed general gasoline engines with 4-stroke single cylinder, OHV and forced-air cooling. The engines are characterized by advanced design, compact structure, reliable performance, convenient service low fuel consumption and easy speed adjustment. They are widely used as ideal power in many fields such as generating set, tour, open working, public place of entertainment, construction machine, agricultural machinery, etc. the vital part bodies including cylinder cover, crankcase, etc, are all cast formed with aluminium alloy. Laser-scanning technology, 3D shaping technology and CN program processing technology used in the mould production upgrade the engine surface and manufacturing accuracy obviously. Applying auto-press reducing system and centrifugal fly hammer regulating system assure that assemblies equipped with the engine function smoothly and reliably as well as the engine start easily. Besides, the introduction of the lubricant film-sensing protection system prevents accidental damage of the engine for poor lubrication. The manual gives information with respect to operation and maintenance of the general gasoline engine, and be sure to read it carefully first before operating. All the materials and diagrams of this manual are in accordance with the newest products at the publishing time. Due to revision and other change, the information described in this manual may be a little different from the actual status. The copyright of this manual belongs to our Co., any group or individual is forbidden to reprint or copy any it. The manual is subject to change without notice.



PRE-OPERATION INSPECTION

ENGINE OIL: a key factor in deciding the engine's performance. Do not apply engine oil with additives or 2-stroke gasoline oil, as they haven't enough lubrication, which may shorten the engine's service life.

1. Before adding fuel, make sure the engine is on a level, flat surface equipment.

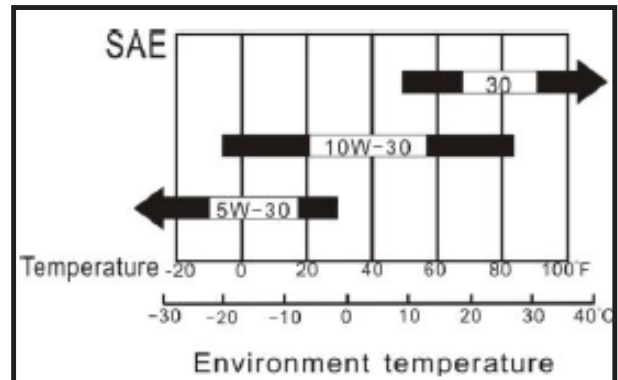
Engine oil recommended: SAE10W-30. As viscosity varies with regions and temperatures, so the Lubricant has to be selected in accordance with our recommendation.

2. Clean the top of the Dipstick and the area around it. Remove the Dipstick and wipe it off with a clean, lint free rag.

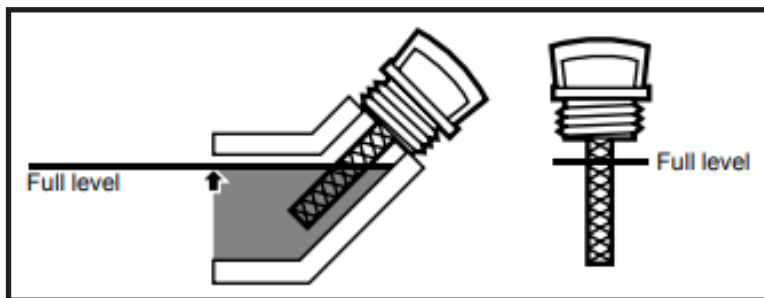
3. Reinsert the Dipstick without threading it in and remove it to check the oil level. The oil level should be up to the full level.

4. If the oil level is at or below the low mark add the appropriate type of oil until the oil level is at the proper level. SAE 10W-30 oil is recommended for general use.

5. Thread the dipstick back in clockwise.



NOTICE: DO NOT run the engine with too little oil. Engine will shut off if engine oil level is too low.

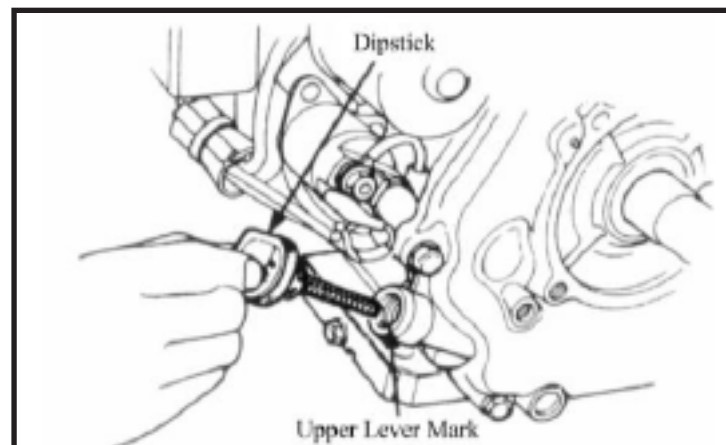


OIL IN THE REDUCTION GEAR BOX (only for the model equipped with it) 1/2 Reduction gearbox with an auto-centrifugal clutch.

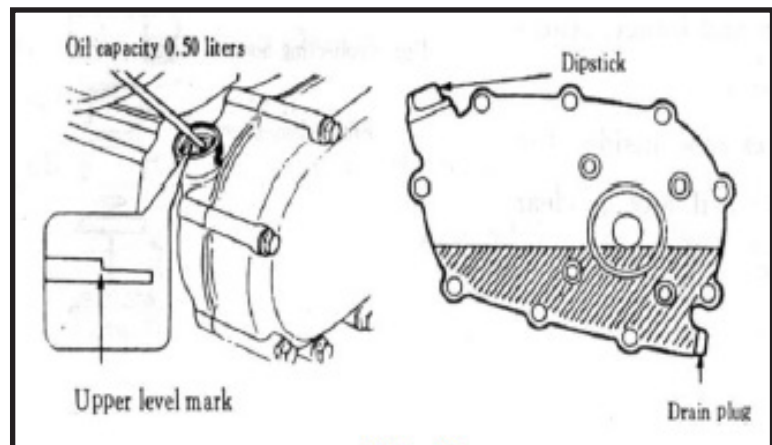
1. Before adding fuel, make sure the engine is on a level, flat surface. Remove the dipstick and clean it. (Pic. 3. Pic.4)

2. Reinsert the dipstick without screwing it in, and then take out it and check oil level.

3. If the oil level is too low, and recommended engine oil until it arrives the upper level mark. Brand of the oil is the same as that of engine oil. Oil capacity: 0.50 litres



PIC 3

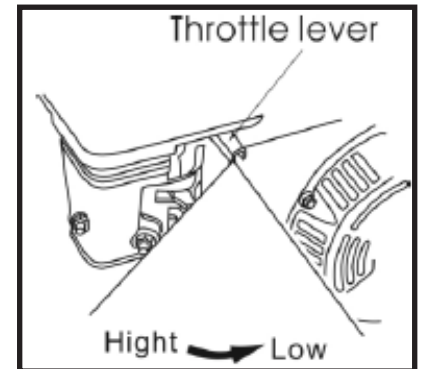
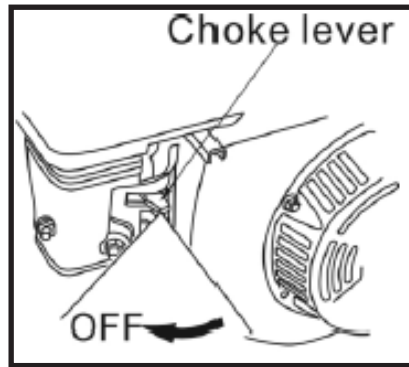
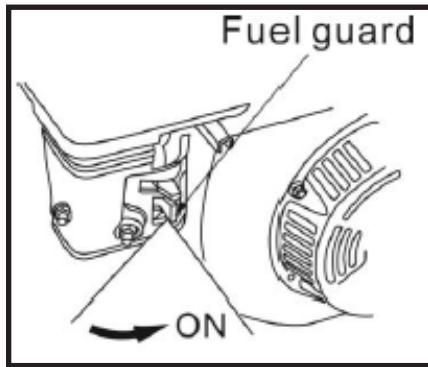


PIC 4

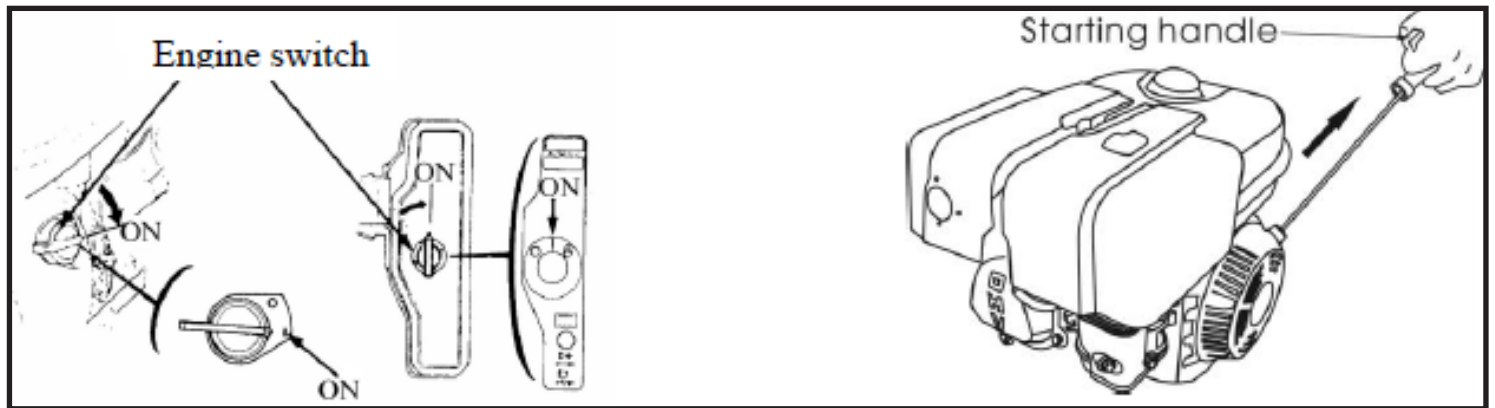
OPERATION

STARTING THE ENGINE

1. Push the fuel switch to "ON".
2. Push the choke lever to "OFF".
3. Move left the throttle lever a little.

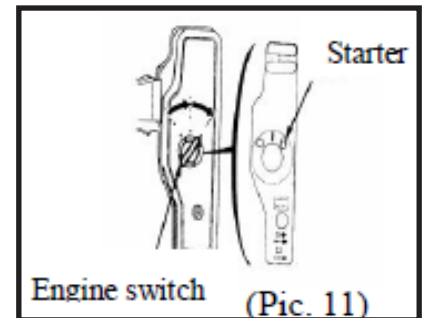


4. Start the engine. **ROPE HANDLE STARTER:** Push the engine switch to "ON". Pull slightly the starting rope handle up until feeling anti-action, and then make a rapid pull. Releasing the handle suddenly may make it hitting the engine. Release the handle slowly conforming to its recoiling force.

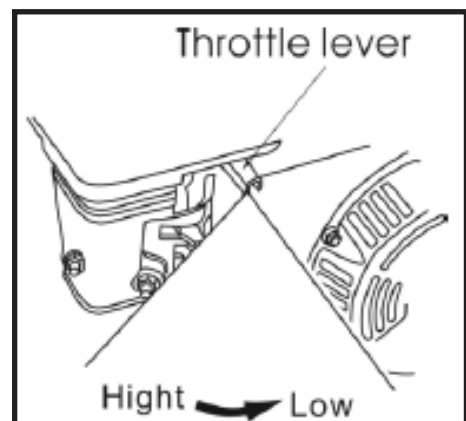
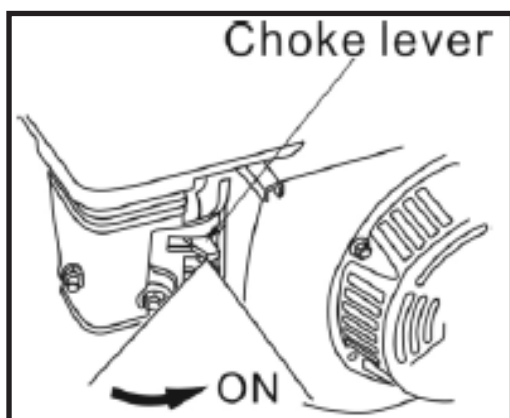


- ELECTRIC STARTER:** Push the engine switch to "START" and remain there until the engine starts.

CAUTION: Use the engine switch not more than 5 second each time to avoid damage of the engine. Try once more 10 second later after last attempt failures. Once the engine starts, reset the engine switch to "ON".



1. Preheat the engine and push back the 2. Set the throttle lever in proper position to ensure choke lever to "ON".



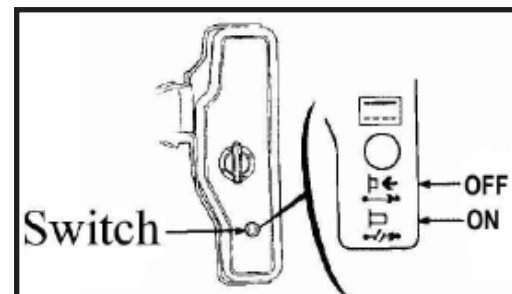
OPERATION

Engine Oil Alarm: The engine oil alarm is designed to alarm the user the fact that the engine oil in the crankcase is insufficient. Run with insufficient engine oil may damage the engine. Once oil level in the crankcase is too low, the engine oil alarm will stall the engine automatically to make it free of damage while the engine switch is still at "ON".

CAUTION: If the engine still fails to work, check the engine oil level first before go to other check items.

Breaker (Electric Start): The Breaker is used to protect the battery charging circuit. It will be disconnection when short circuit or battery polarity connects in wrong direction. Check items.

The green indicator would be light once the circuit off. If this happens, please find out the reason and solve it then press the button to recover the breaker.

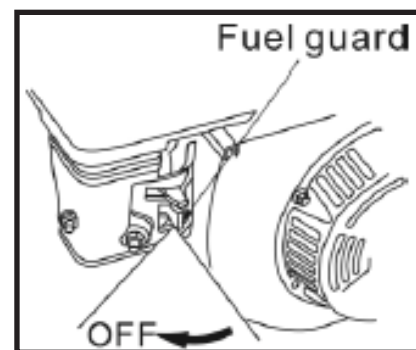
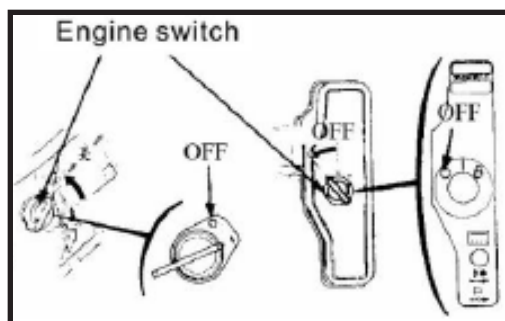
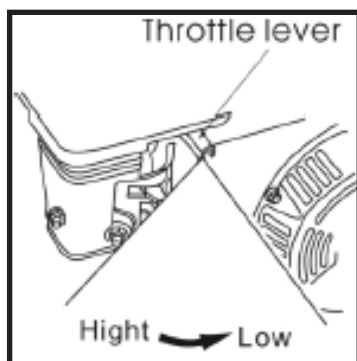


In higher elevations, the standard mixture ratio is relatively too big so the engine performance may be impaired while the fuel consumption may increase. This problem can be solved as follows: replace the main jet of carburetor with a smaller one, then, adjust the idly screw. If always using on highlands with a height above sea level of 1830 meters, ask your dealer for doing the job. The engine power will decrease by about 3.5% with every 305 meters up in height; even the proper main jet is used. The output would be much lower if not adjust the jet.

CAUTION: The engine equipped with the main jet applicable to high altitudes may be damaged seriously in area below specified altitude, because its mixture ratio is too thin, output drops and the engine overheats for operation in low altitude area. In the case, ask your dealer to recover the engine to its normal technical status.

STOPPING THE ENGINE

1. Push right the throttle valve lever to the bottom
2. Push the engine switch to "OFF"
3. Set the fuel switch to "OFF"



EXHAUST CONTROL SYSTEM

With the engine running, carbon monoxide, oxide of nitrogen and hydrocarbon will produce, and in certain conditions, oxide of nitrogen and hydrocarbon will react chemically each other to make smoke while carbon monoxide is toxic, so exhaust control of them is very important. The company decreases the exhaust emissions by introducing poor-fuel carburetors and other devices into the engine to solve the problem.

Maintain the engine periodically in accordance with the Maintenance Schedule in the manual. The maintenance schedule is made out on the base of normal use in normal conditions, if using under heavy load, dusty or wet circumstances or in high temperature, more frequents maintenance will be necessary.

We recommend that you should choose such parts, which are manufactured by XTREMEPOWERUS or equivalent to these in quality as replacement ones. Replacement without so high quality may impair the exhaust control system in effectiveness.

MAINTENANCE

Modifying the exhaust control system may make actual exhaust emissions exceeding statutory limit values. Illegal modification is as follows:

1. Dismantle or modify any part of air inlet or outlet system.
2. Modify or take off speed-adjusting connection device or speed adjustment device to result in the engine's running or outside the set parameters.

PROBLEMS AFFECTING EXHAUST EMISSIONS

1. Difficult starting or difficult stopping.
2. Unstable idling.
3. Give off black smoke or consume too much fuel.
4. Poor ignition sparks or sparks returned.
5. Ignition is too advanced.

MAINTENANCE SCHEDULE

Procedure	Before Each Use	Monthly or every 20 hr. of use	Every 3 mo. or 50 hr. of use	Every 6 mo. or 100 hr. of use	Yearly or every 300 hr. of use	Every 2 Years
Brush off outside of engine	✓	✓	✓	✓	✓	✓
Check engine oil level	✓	✓	✓	✓	✓	✓
Check air cleaner			✓	✓	✓	✓
Check sediment cup				✓	✓	✓
Change engine oil		✓		✓	✓	✓
Clean air filter			✓*	✓	✓	✓
Check and clean spark plug				✓	✓	✓
1. Check/adjust idle speed 2. Check/adjust valve clearance 3. Clean fuel tank, strainer and carburetor 4. Clean carbon build-up from combustion chamber					✓**	✓**
Replace fuel line if necessary						✓**

*Service more frequently when used in dusty areas.

**These items should be serviced by a qualified technician.

For Paper Core Air Cleaners: If the engine still fails to work, check the engine oil level first before go to other check items.

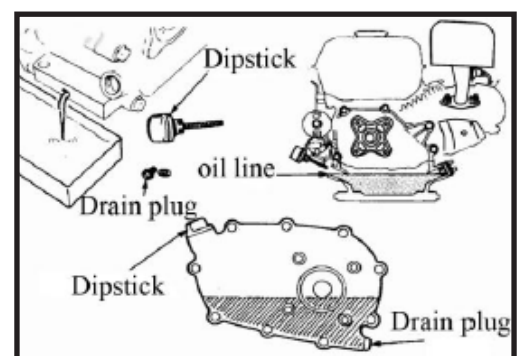
Replacement of Engine Oil: A still hot engine is helpful to drain out the engine oil in the crankcase rapidly and entirely.

1. Turn off the oil filler cap and drain plug to drain engine oil thoroughly. Reinstall the drain plug and screw in securely.
2. Fill the specified engine oil to the upper lever mark
3. Reinstall the oil filler cap.

Engine oil capacity of the crankcase is 0.6 liters.

Engine oil capacity of the 1/2 reduction gearbox is 0.5 liters.

Engine oil capacity of the 1/6 reduction gearbox is 0.15 liters.



NOTE: Do not dump oil containers or discarded engine oil into rubbish boxes or onto the ground. For the sake of environmental protection, we suggest you take in discarded engine oil with a closed container and bring to local recycling station.

SERVICE OF AIR CLEANER: A dirty air cleaner may block enough air's flowing into the carburetor. To keep the carburetor in Good working conditions, please service the air cleaner periodically. If operating the engine in extremely dusty area, the job should be done more often.

CAUTION: Never clean the air cleaner core in gasoline or low flash-point detergents, or explosion may happen. Never run the engine without an air cleaner, or air with dirt and dust may enter the engine so speed the engine's wear.

1. Turn off the air cleaner's cap, and then separate the filter to check the air cleaner filter weather worn out or broken. If there is something wrong with it, replace it.
2. Clean with home detergents and warm water (or non-flammable of high flash-point cleaning solvents) and dry.
3. Sock in clean engine oil until saturated. Squeeze out excess oil, otherwise, the engine will discharge smoke in starting stage.
4. Empty the oil in the air cleaner, Use non-flammable or high flash-point cleaning solvents to clean the dusty, and then dry-up the air cleaner box.
5. Install the air cleaner filter and cover to original position.

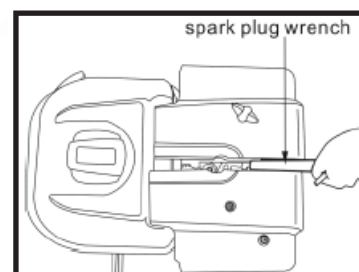
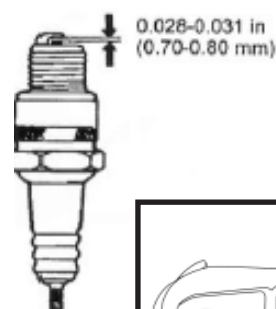
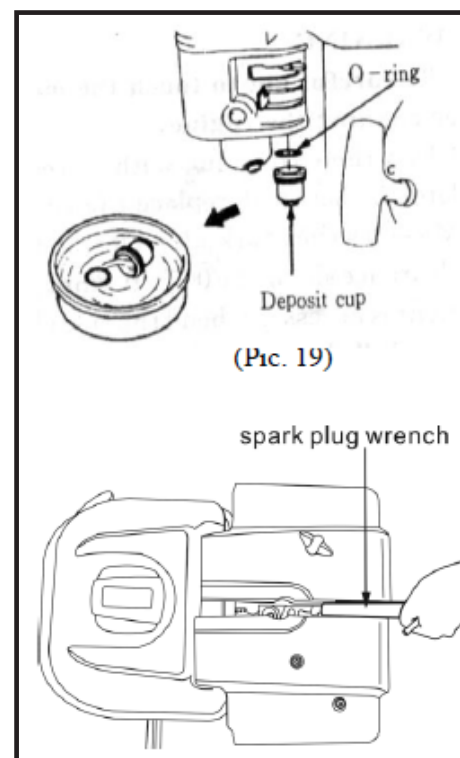
6. Washing of Deposit Cup: Set the fuel switch at "OFF", remove the deposit cup and O-ring. Wash them in non-flammable or high flash-point cleansing solvents, and then dry them up, at last, carry out re-installation. Set the fuel switch to "ON" and check for leaks. After reinstalling the deposit cup, check it for leakage and make sure the area around the engine is dry enough.

After reinstalling the deposit cup, check it for leakage and make sure the area around the engine is dry enough. The oil in the air cleaner, Use non-flammable or high flash-point cleaning solvents to clean the dusty, and then dry-up the air cleaner box.

Spark Plug: Spark plug type: F6TC or BPR6ES (NGK) Proper spark plug clearance and without deposit around the spark plug ensure the engine's normal running.

1. Remove the spark plug by means of spark plug wrench. Be careful not to touch the muffler during or just after running the engine.
2. Clean the spark plug with a steel brush. If the insulator is damaged, replace the spark plug instead.
3. Measure the spark plug clearance with a feeler. The clearance should be 0.7~0.8mm, If adjustment is necessary, bend the side electrode carefully.
4. Check if the spark plug gasket is in good condition, or replace with a new one.
5. Screw on the spark plug to the bottom first by hand and then tighten it up by a spark plug wrench.

If a new spark plug is used, twist 1/2 more turns after impacting the gasket; if reinstall the original one, just twist 1/8~1/4 more turns.



MAINTENANCE

The spark plug must be tightened securely, or it may become very hot to damage the engine. Only use recommended spark plug or the equivalent. Incorrect heat range of the spark plug may damage the engine.

The muffler is very hot during running the engine and even a long Time after stopping. Never touch it, or you may get burns. Service After the engine cools down.

A. Unscrew two nuts M4, and remove the exhaust elbow from the engine body.

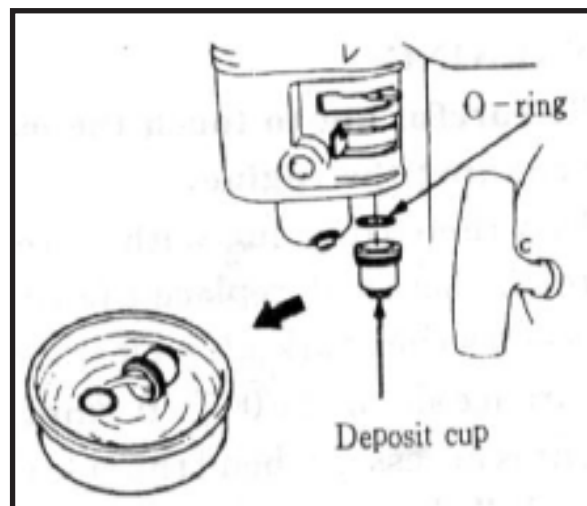
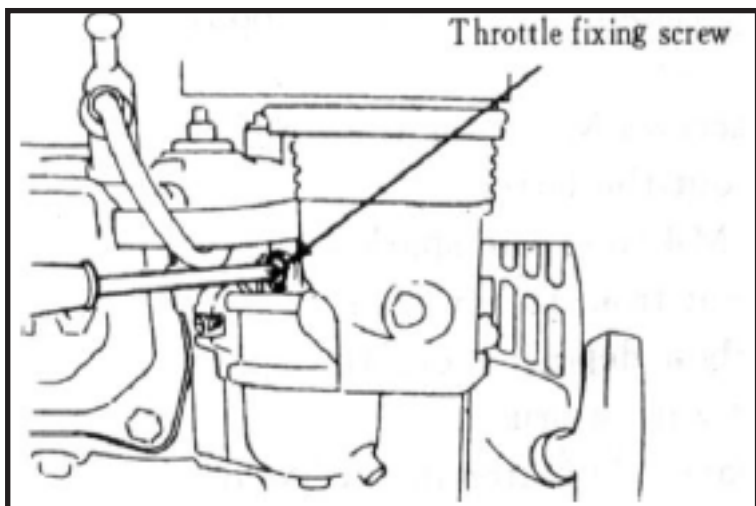
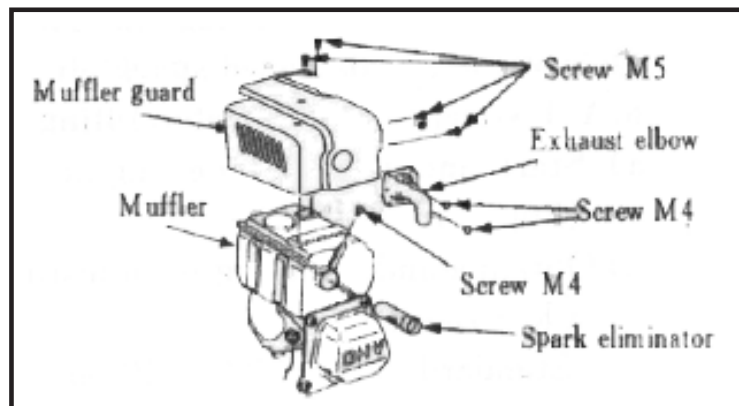
B. Turn off four screws M5 from the muffler guard and take out the latter.

C. Turn off screw M4 from the spark eliminator and separate it from the muffler.

D. Clear away carbon deposit from the spark eliminator mesh with a brush.

E. Reinstall the spark eliminator in reverse order of removal. Be careful not to damage the mesh of the spark eliminator.

Adjustment of Carburetor Idling: Start and preheat the engine until arriving at its normal working temperature. Obtain standard idling by adjusting the throttle fixing screw under the engine runs at a low speed. Standard idling: 1500 ± 100 rpm



TRANSPORT, STORAGE AND REMOVAL FROM STORAGE

Transport with the fuel switch turned off. Transport or store the engine it is cool so as to avoid getting burns or fire. If the engine is not kept in use for a long time, be sure to store it properly. **1)** Make sure the storage area is dry and free of dust. **2)** Make sure to put the oil (which in the gasoline tank and carburetor) into another proper container.

1. Replace the engine oil.

2. Disconnect the spark plug. Fill a spoon of fresh engine oil from the spark plug mount hole into the cylinder. Rotate the engine to distribute engine oil evenly, followed by fitting the spark plug to original position.

3. Pull the starting rope slowly until feel a slight anti-action, and then keep pulling so as to align the arrow of the starting sleeve with the hole of the starter. At this time, both the inlet and outlet valves are closed so to help prevent the engine inside from rusting.

4. Electric starter: disconnect the battery and store in dry and cool area. Charge once every month.

5. Cover the engine so keep dust away.

TROUBLESHOOTING

Problem	Possible Causes	Probable Solutions
Engine will not start	FUEL RELATED: - No fuel in tank or fuel valve closed. - Choke not in START position, cold engine. - Gasoline with more than 10% ethanol used. (E15, E20, E85, etc.) - Low quality or deteriorated, old gasoline. - Carburetor not primed. - Dirty fuel passageways. - Carburetor needle stuck. Fuel can be smelled in the air. - Too much fuel in chamber. This can be caused by the carburetor needle sticking. - Clogged Fuel Filter.	FUEL RELATED: - Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline and open fuel valve. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). - Move Choke to START position. - Clean out ethanol rich gasoline from fuel system. Replace components damaged by ethanol. Use fresh 87+ octane stabilizer-treated unleaded gasoline only. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). - Use fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). - Pull on Starter Handle to prime. - Clean out passageways using fuel additive. Heavy deposits may require further cleaning. Gently tap side of carburetor float chamber with screwdriver handle. - Turn Choke to RUN position. Remove spark plug and pull the start handle several times to air out the chamber. Reinstall spark plug and set Choke to START position. - Replace Fuel Filter.
	IGNITION (SPARK) RELATED: - Spark plug cap not connected securely. - Spark plug electrode wet or dirty. - Incorrect spark plug gap. - Spark plug cap broken. - Incorrect spark timing or faulty ignition system.	IGNITION (SPARK) RELATED: - Connect spark plug cap properly. - Clean spark plug. - Correct spark plug gap. - Replace spark plug cap. - Have qualified technician diagnose/repair ignition system.
	COMPRESSION RELATED: - Cylinder not lubricated. Problem after long storage periods. - Loose or broken spark plug. (Hissing noise will occur when trying to start.) - Loose cylinder head or damaged head gasket. (Hissing noise will occur when trying to start.) - Engine valves or tappets mis-adjusted or stuck.	COMPRESSION RELATED: - Pour tablespoon of oil into spark plug hole. Crank engine a few times and try to start again. - Tighten spark plug. If that does not work, replace spark plug. If problem persists, may have head gasket problem, see #3. - Tighten head. If that does not remedy problem, replace head gasket. - Have qualified technician adjust/repair valves and tappets.
	ENGINE OIL RELATED: - Low engine oil. - Engine mounted on slope, triggering low oil shutdown.	ENGINE OIL RELATED: - Fill engine oil to proper level. Check engine oil before EVERY use. - Operate engine on level surface. Check engine oil level.

TROUBLESHOOTING

Problem	Possible Causes	Probable Solutions
Engine misfires	1. Spark plug cap loose. 2. Incorrect spark plug gap or damaged spark plug. 3. Defective spark plug cap. 4. Old or low quality gasoline. 5. Incorrect compression.	1. Check cap and wire connections. 2. Re-gap or replace spark plug. 3. Replace spark plug cap. 4. Use only fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). 5. Diagnose and repair compression. (Use Engine will not start: COMPRESSION RELATED section.)
Engine stops suddenly	1. Fuel tank empty or full of impure or low quality gasoline. 2. Low oil shutdown. 3. Defective fuel tank cap creating vacuum, preventing proper fuel flow. 4. Faulty magneto. 5. Disconnected or improperly connected spark plug cap.	1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). 2. Fill engine oil to proper level. Check engine oil before EVERY use. 3. Test/replace fuel tank cap. 4. Have qualified technician service magneto. 5. Secure spark plug cap.
Engine stops when under heavy load	1. Dirty air filter 2. Engine running cold.	1. Clean element. 2. Allow engine to warm up prior to operating equipment.
Engine knocks	1. Old or low quality gasoline. 2. Engine overloaded. 3. Incorrect spark timing, deposit buildup, worn engine, or other mechanical problems.	1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). 2. Do not exceed equipment's load rating. 3. Have qualified technician diagnose and service engine.
Engine backfires After sudden impact, engine will run, but equipment will not operate	1. Impure or low quality gasoline. 2. Engine too cold. 3. Intake valve stuck or overheated engine. 4. Incorrect timing. Shaft key or other shear pin broken by impact to disconnect engine and limit damage.	1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). 2. Use cold weather fuel and oil additives to prevent backfiring. 3. Have qualified technician diagnose and service engine. 4. Check engine timing. Have qualified technician check and replace broken shaft key or other shear pins.

- When testing the spark plug, never hold the high- voltage wire of the spark plug with wet hand.
- Make sure there is no spilled fuel outside the engine and that the spark plug isn't dipped with fuel.
- To prevent fire, keep sparks far away from the spark plug mount hole. Once you find any of above problems, contact the authorization entitled to the dealer of the privilege helps for you.

SPECIFICATIONS

Model	Items
62027/62029	
	$380 \times 312 \times 360$ < $380 \times 332 \times 360$ >
	16 <17.9 >
	4-stroke, OHV, single cylinder tilt 25°
	212
	70×55
	5.5(7.5PS)/3600
	4.5(6.0PS)/3600
	11.5/3000
	395g/kwh
	Force air - cooled
	Non – transistorized ignition (TDI)
	F6TC, BPR6ES (NGK)
	Counterclockwise

Item	Date
Spark plug clearance	0.7~0.8mm
Carburetor idling	1500±100rpm
Valve clearance (cold engine)	Intake: 0.15±0.02mm; Exhaust: 0.20±0.02mm

- Technical data vary with type of engine; therefore, they are subject to change without notice.
- Data in<>are suitable for engine which is equipped with reducer.

TIMING OF DISTRIBUTION

Intake valve opening: BTDC10°

Intake valve closing: ABDC20°

Exhaust valve closing: ATDC10°

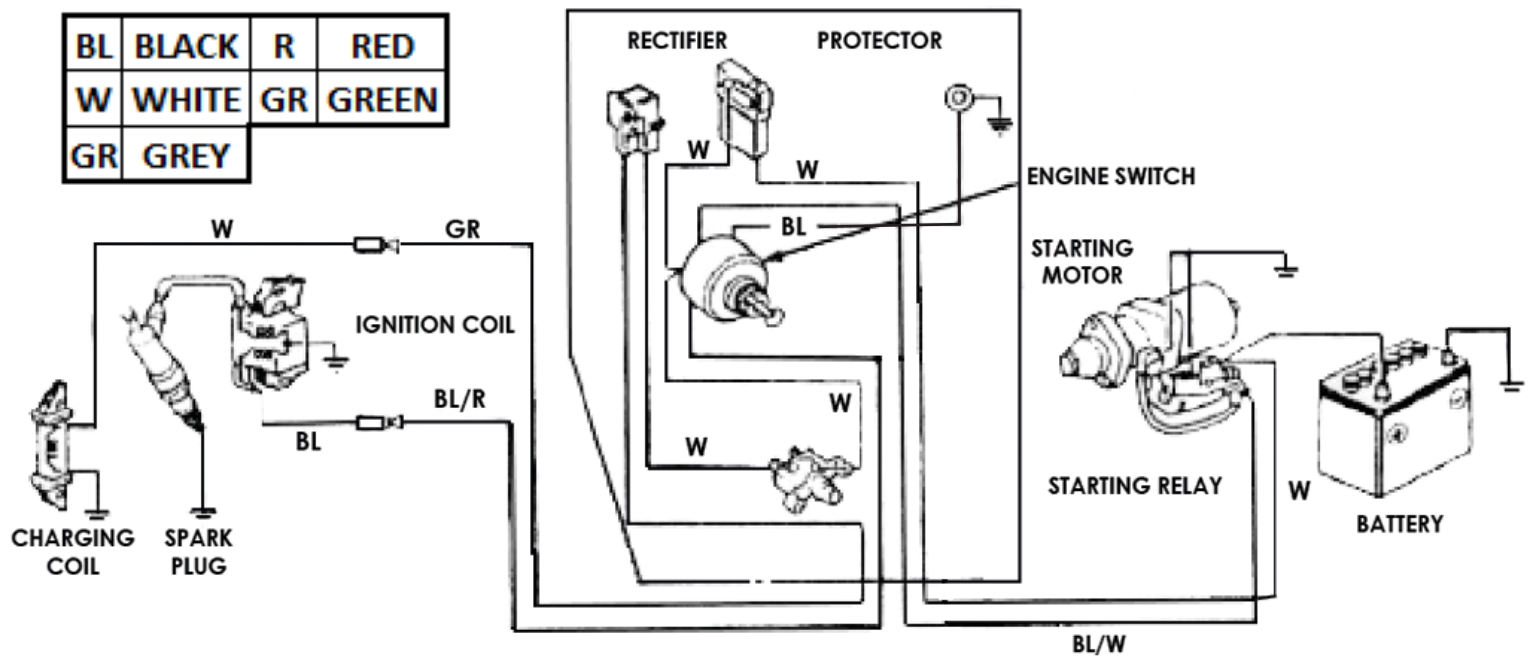
Exhaust valve opening: BBDC30°

S/N	Item	Torque Value (N · m)
1	Cylinder head bolt	34
2	Flywheel bolt	118
3	Crankcase cover bolt	24
4	Connecting rod bolt	14

MAINTENANCE

ELECTRIC DIAGRAM

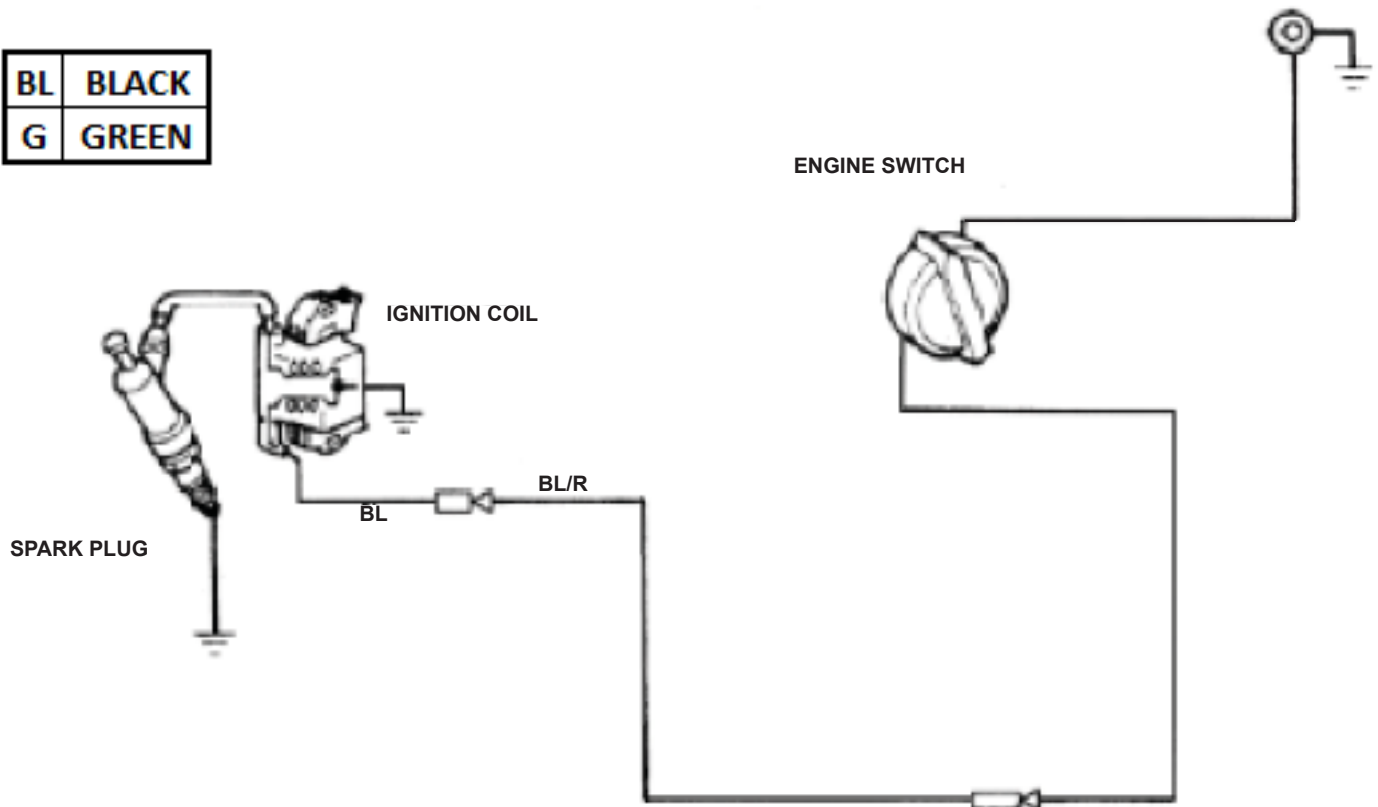
BL	BLACK	R	RED
W	WHITE	GR	GREEN
GR	GREY		



SWITCH COMBINATION

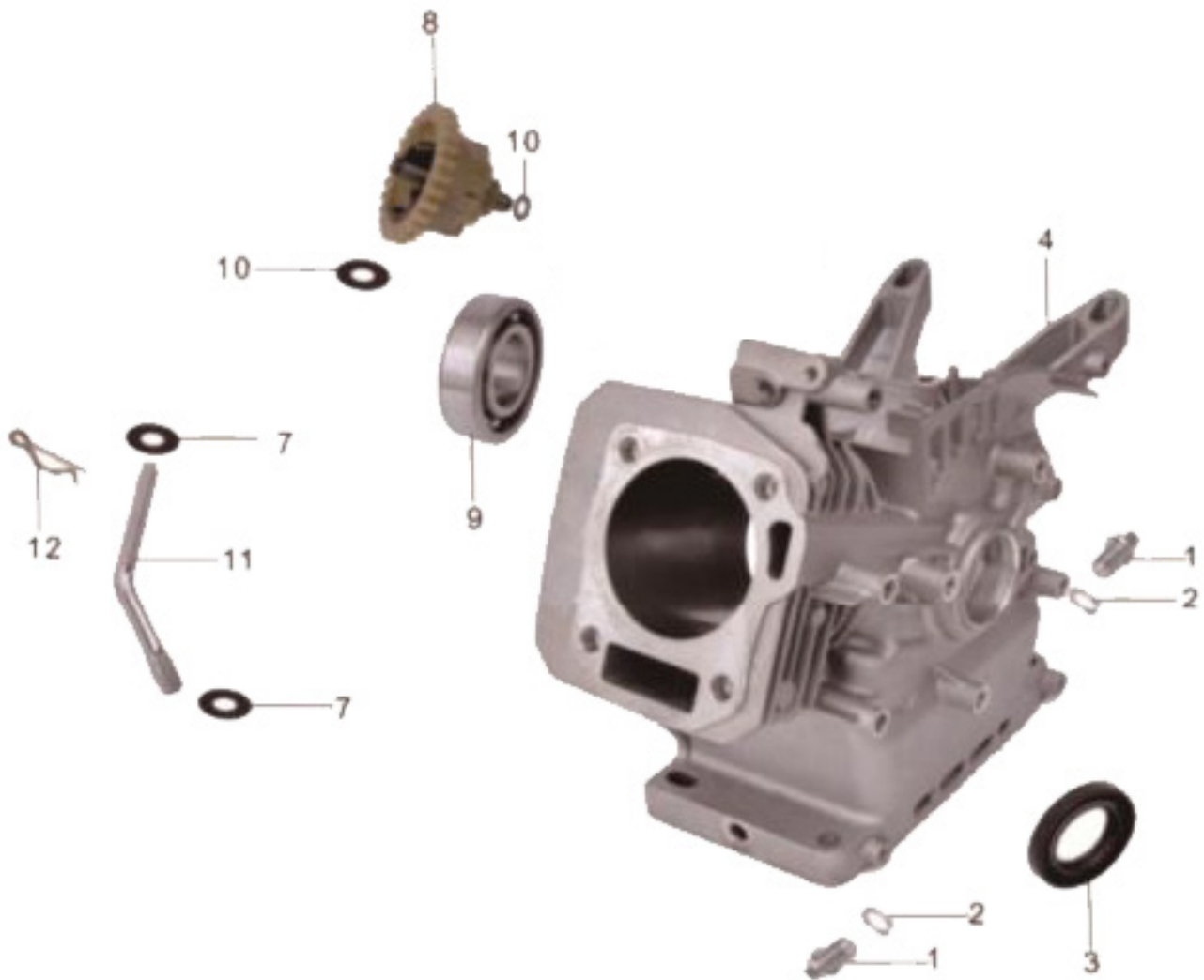
	IG	E	ST	BAT
OFF				
ON				
START				

BL	BLACK
G	GREEN



PARTS LIST

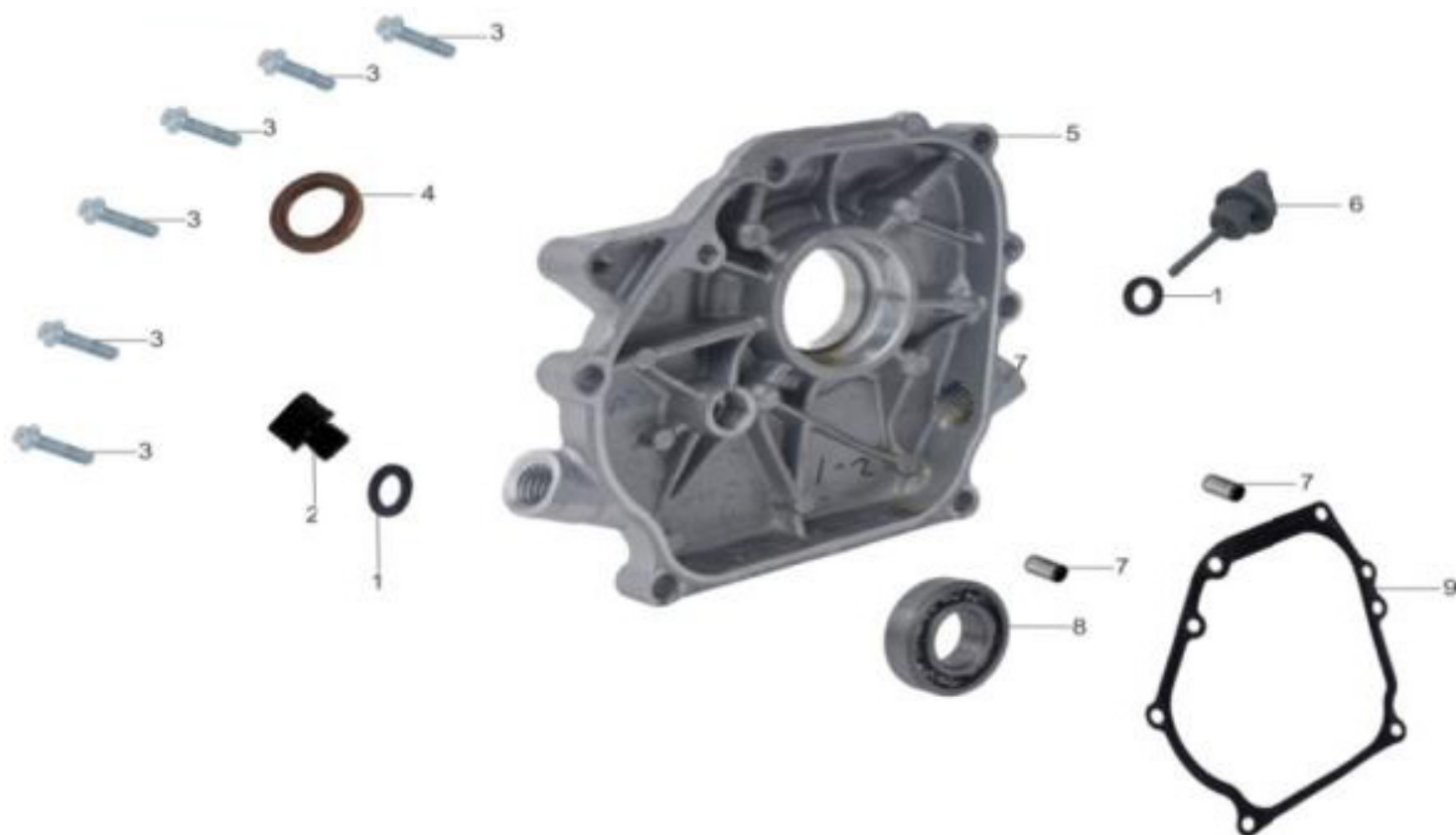
CRANKCASE ASSEMBLY



ID	Part Number	Description	Quantity
1	11115-A0710-0001	Drain plug M10x1.25x15mm	2
2	11116-A0710-0001	Washer $\Phi 12 \times \Phi 20 \times 2$	2
3	11120-A0710-0001	Oil seal, crankshaft	1
4	11110-A2310-0011	Crankcase	1
7	26113-A0710-0001	Washer	2
8	25100-A0710-0004	Driven gear, regulator assy	2
9	T910-0001	Bearing 6207 GB/T276	1
10	25113-A0810-0001	Washer	2
11	26111-A0710-0001	Regulating sway bar	1
12	26112-A0710-0001	Split pin	1

PARTS LIST

CRANKCASE COVER ASSEMBLY



ID	Part Number	Description	Quantity
1	15512-A0710-0001	Seal,dipstick	2
2	15610-A0410-0001	Seal plug	1
3	T151-0001	Bolt M8×32mm	6
4	11120-A0710-0002	Oil seal, crankshaft	1
5	11211-A0710-0001	Crankcase cover	1
6	15510-A0710-0009	Dipstick with seal	1
7	11113-A0710-0001	Pin	2
8	T910-0001	Bearing GB/T276	1
9	11114-A0710-0005	Gasket, crankcase	1

PARTS LIST

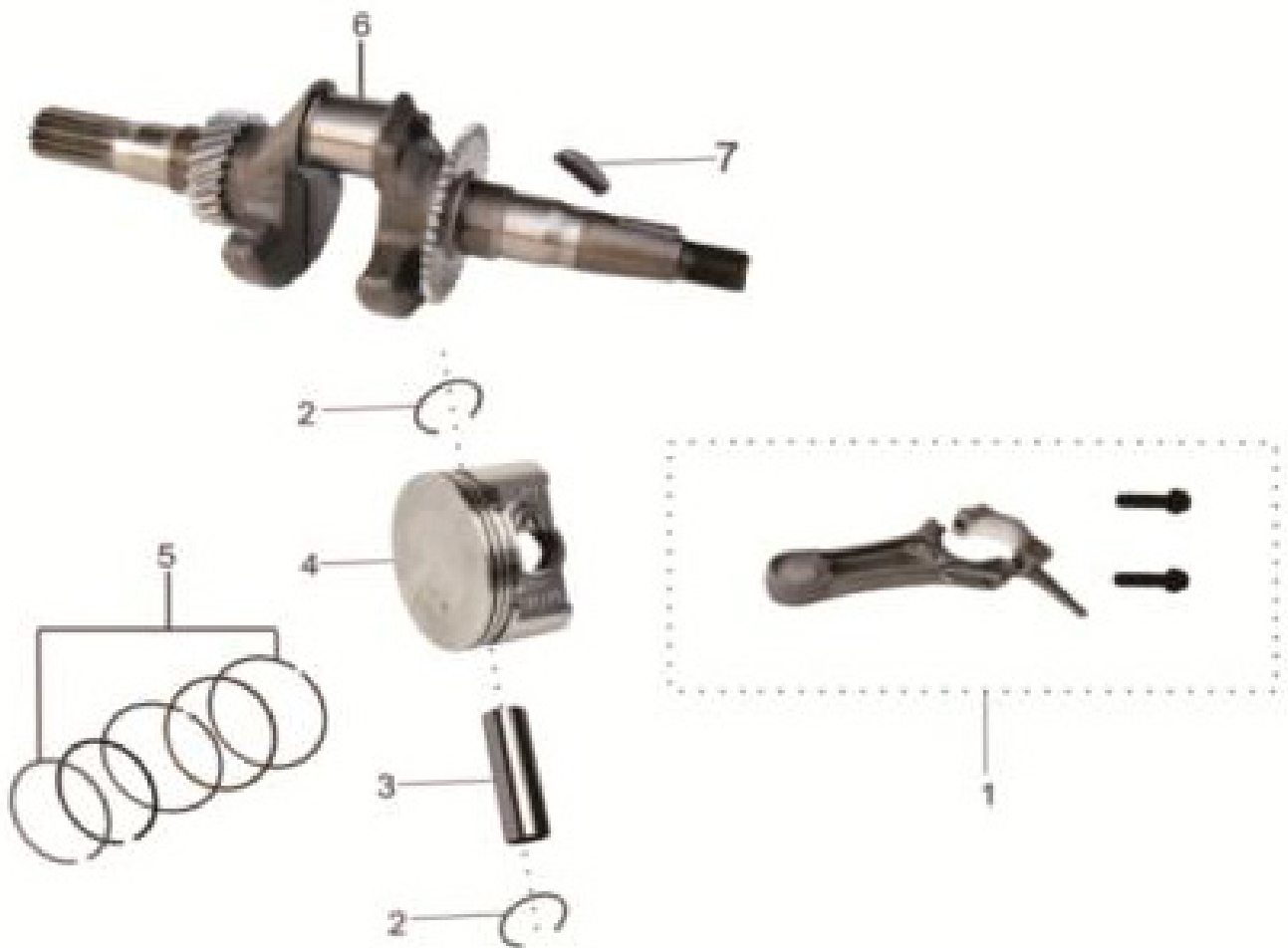
CYLINDER HEAD AND HEAD COVER ASSEMBLY



ID	Part Number	Description	Quantity
1	T152-0019	Bolt M6×12	6
2	12200-A0710-0001	Cylinder head cover Assy	1
3	19143-A0710-0001	Pipe of exhaust gas	1
4	12212-A0710-0001	Gasket, cylinder head cover	1
5	12118-A0710-0001	Bolt, cylinder head M8×60	4
6	18214-A0710-0001	Stud of exhaust outlet M8×34	2
7	27100-A0710-0001	Spark plug	1
8	12100-A0720-0006	Cylinder head Assy	1
9	12120-A2310-0001	Gasket, cylinder head	1
10	12117-A0710-0001	Set pin Φ10×16	2
11	17218-A0710-0001	Stud of exhaust outlet M6×109	2
12	19121-A0710-0004	Lead wind cover	1

PARTSLIST

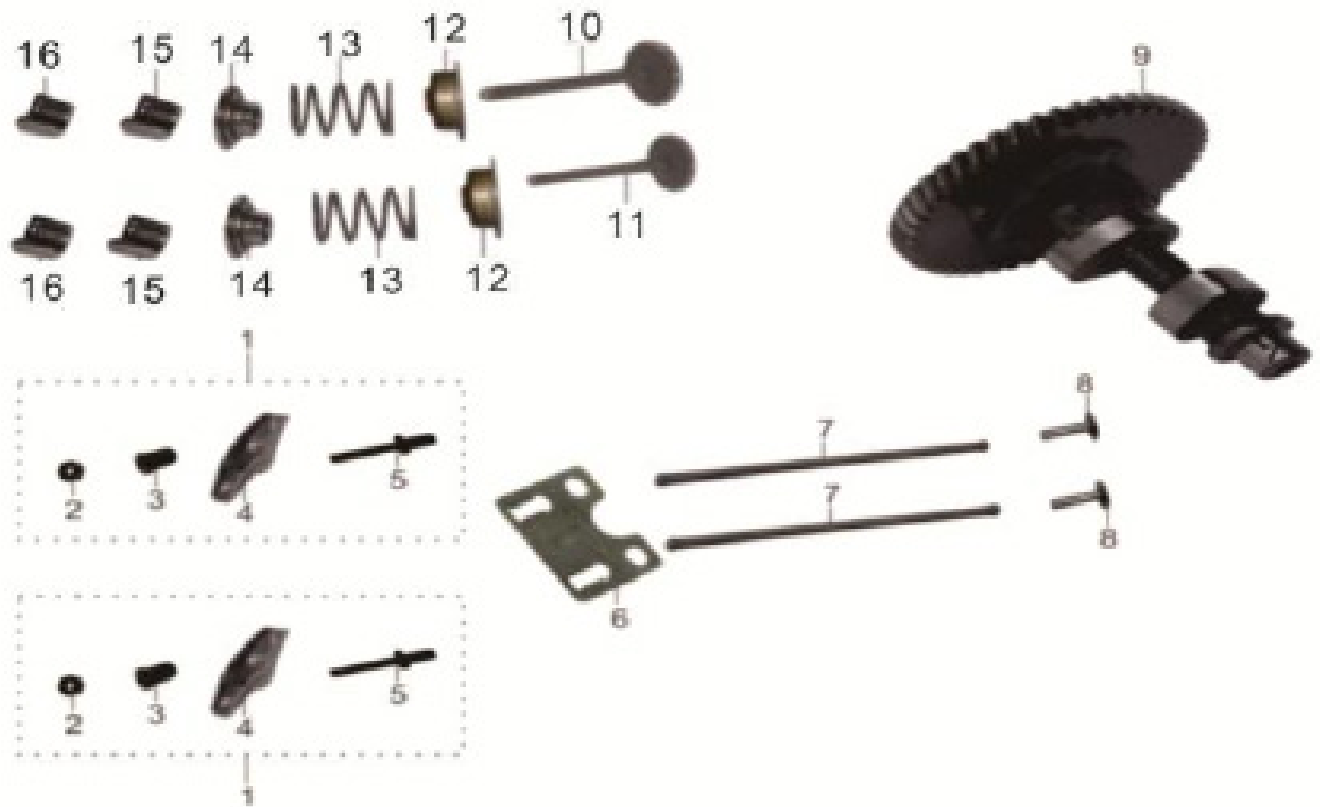
CRANKSHAFT, PISTON, CONNECTING & BALANCING SHAFT



ID	Part Number	Description	Quantity
1	13120-A0710-0007	Connect rod assy	1
2	13313-A0710-0001	Piston pin circlip	2
3	13312-A0710-0001	Piston pin	1
4	13311-A2310-0003	Piston	1
5	13400-A2310-0002	Piston ring set	1
6	13112-A0710-0001	Woodruff key	1
7	13110-A2310-0046	Crankshaft assy	1

PARTS LIST

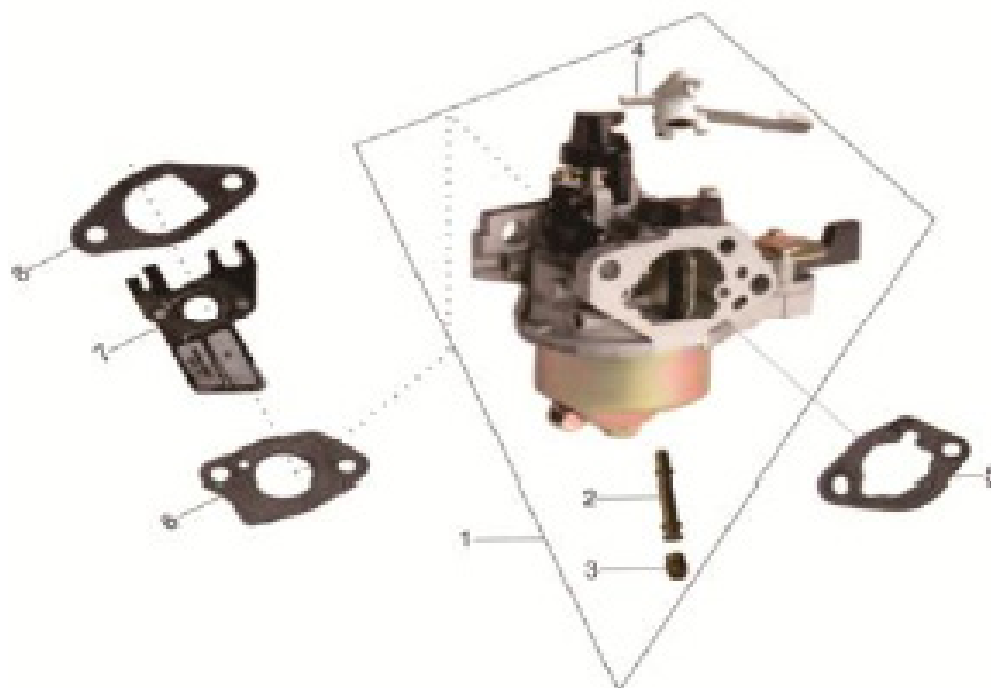
COMBINATION OF CAM SHAFT & VALVE ROCKER



ID	Part Number	Description	Quantity
1	14310-A0710-0001	Valve rocker assy	2
2	14314-A0710-0001	Lock nut	2
3	14312-A0710-0001	Sleeve	2
4	14311-A0710-0001	Valve rocker	2
5	14313-A0710-0001	Adjusting bolt for valve gap	2
6	14220-A0710-0001	Pusher guide	2
7	14210-A0710-0001	Pusher	2
8	14315-A0720-0001	Tappet	1
9	14100-A0720-0005	Camshaft Assy	1
10	14411-A0720-0001	Intake valve	1
11	14412-A0720-0001	Exhaust valve	1
12	14420-B9130-0001	Valve stem oil seal	2
13	14414-A0710-0001	Valve spring	2
14	14413-A0720-0001	Spring set, valve	2
15	14418-A0720-0001	Valve lock clamp	4

PARTS LIST

CARBURETOR ASSEMBLY



ID	Part Number	Description	Quantity
1	16100-A0720-0021	Carburetor Assy	1
2	16244-A0720-0001	Main nozzle	1
3	16243-A0720-0001	Main jet	1
4	16363-A0710-0001	Switch of carburetor	1
5	17113-A0710-0001	Air cleaner gasket	1
6	16113-A0710-0001	Carburetor gasket	1
7	16120-A0710-0001	Connecting block	1
8	17219-A0710-0001	Inlet gasket	1

PARTS LIST

FUEL TANK ASSEMBLY



ID	Part Number	Description	Quantity
1	T311-0002	Nut M6	2
2	16400-A0410-0002	Fuel tank cap assy	1
3	16610-A0710-0003	Filter cup assy	1
4	16510-A0712-0084	Fuel tank assy	1
5	16557-A0710-0001	Air connector	1
6	16622-A0710-0003	Pipe clamp (1)8mm-10mm	3
7	11513-A0710-0002	Air connect pipe	1
8	16622-A0710-0002	Pipe clamp (1)10mm-14mm	1
9	12158-A0710-0001	Insulation sleeve	1
10	T152-0011	Bolt M6x28	1
11	16630-A0710-0001	Fuel connector assy	1
12	16621-A0710-0020	Fuel outlet pipe (1)	1

PARTS LIST

AIR CLEANER ASSEMBLY



ID	Part Number	Description	Quantity
1	17100-A0712-0008	Air cleaner assy	1
2	17111-A0712-0001	Air cleaner cover nut	1
3	17112-A0712-0001	Air cleaner cover	1
4	T350-0002	Wing nut	1
5	17120-A0710-0001	Filter element	1
6	17121-A0710-0001	Washer	1
7	17129-A0710-0001	Seal, air cleaner	1
8	17200-A0710-0002	Air cleaner housing	1
9	T311-0002	Nut M6	2

PARTS LIST

MUFFLER



ID	Part Number	Description	Quantity
1	18000-A0712-0044	Exhaust muffler assy	1
2	18215-A0710-0001	Gasket,exhaust	1
3	T441-0001	Spring washer	2
4	T310-0001	Nut M8	2

RECOIL STARTER



ID	Part Number	Description	Quantity
1	23100-A0722-0003	Recoil starter assy	1
2	23200-A0721-0007	Recoil starter	1
3	23230-A0712-0001	Pulling handle assy	1
4	23224-A0710-0001	Bolt M6x16	3
5	23226-A0710-0001	Washer 6	3
6	19300-A0710-0001	Side plate,crankcase	1
7	T152-0033	Bolt M6x22	1
8	19313-A0710-0001	Wire grommet	1
9	23260-A0710-0001	Space ring,recoil starter	1
10	T152-0019	Bolt M6x12	4
11	19211-A0725-0001	Fan hood assy	1
12	27300-A0712-0001	Motor switch assy	1

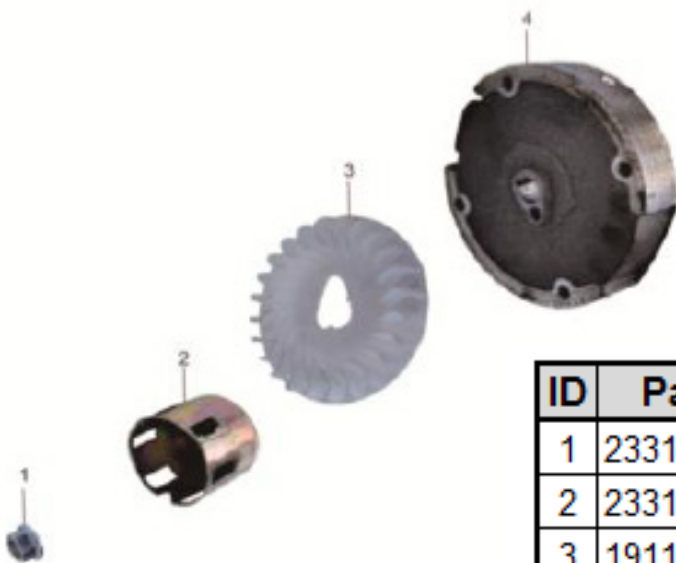
PARTS LIST

REGULATING CONTROL SYSTEM



ID	Part Number	Description	Quantity
1	T152-0033	Bolt M6x22	1
2	T152-0019	Bolt M6x12	2
3	26200-A0710-0011	Regulating frame assy	1
4	26117-A0710-0001	Back spring	1
5	26118-A0710-0001	Fine regulating spring	1
6	26115-A0710-0001	Pulling rod	1
7	26116-A0710-0001	Lock bolt	1
8	T311-0002	Nut M6	1
9	26114-A0710-0001	Regulating arm	1

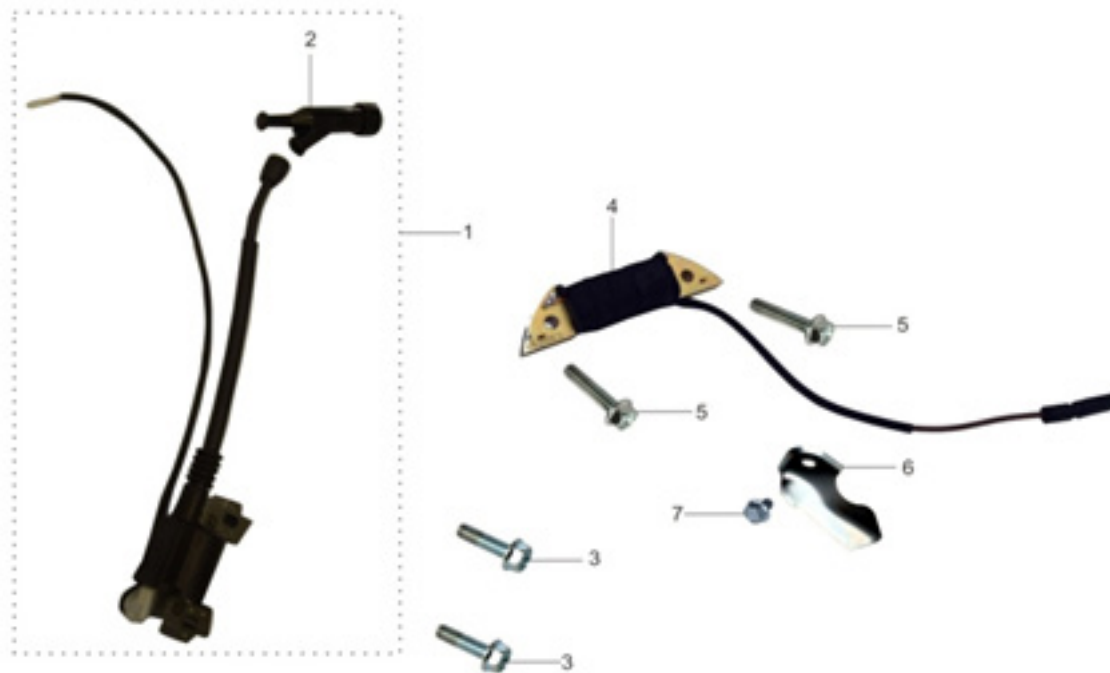
FLYWHEEL



ID	Part Number	Description	Quantity
1	23317-A0710-0001	Nut M14x1.5	1
2	23316-A0710-0002	Starting flange	1
3	19111-A0710-0001	Fan	1
4	23300-A0710-0011	Flywheel assy	1

PARTS LIST

IGNITION COIL



ID	Part Number	Description	Quantity
1	27200-A0710-0001	Ignition coil assy	1
2	27220-A0710-0001	Cap of spark plug assy	1
3	T152-0033	Bolt M6x22	2
4	24130-A0714-0001	Charge coil assy	1
5	T152-0034	Bolt M6x25	2
6	24145-A0714-0001	Clamper, cord	1
7	T152-0036	Bolt M6×8	1

STARTING MOTOR ASSEMBLY



ID	Part Number	Description	Quantity
1	24100-A0714-0002	Starter assy	1
2	24111-A0714-0001	Starter motor	1
3	T151-0088	Screw	2
4	24120-A0714-0001	Relay assy	1
5	11113-A0810-0001	Pin	2
6	T152-0030	Bolt M6×30	2

PARTS LIST

STARTING MOTOR CONTROL BOX ASSEMBLY



ID	Part Number	Description	Quantity
1	24200-A0714-0002	Start control box assy	1
2	31258-B9140-0001	Key	1
3	T152-0004	Bolt M6×14	1

WARRANTY

PLEASE READ THE FOLLOWING CAREFULLY

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Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.



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Hour : **9am To 3pm PST (Monday to Friday)**

Email : **customer@xtremepowerusa.com**

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