

# CHAMPION

POWER EQUIPMENT™

OWNER'S MANUAL & OPERATING INSTRUCTIONS



338cc

# REPLACEMENT ENGINE

**2YEAR**  
LIMITED WARRANTY

MODEL NUMBER  
**61151**

**SAVE THESE INSTRUCTIONS**  
Important Safety Instructions  
are included in this manual.

MADE IN CHINA  
REV 61151-20110328

10006 Santa Fe Springs Road  
Santa Fe Springs CA 90670  
USA / 1-877-338-0999  
[www.championpowerequipment.com](http://www.championpowerequipment.com)

**Have questions or need assistance?**

*Do not return this product to the store!*

**WE ARE HERE TO HELP!**

Visit our website:

**[www.championpowerequipment.com](http://www.championpowerequipment.com)**

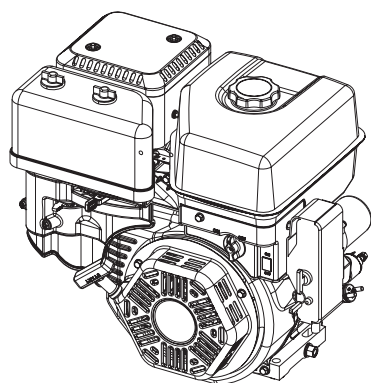
for more info:

- Product Info & Updates
- Tech Bulletins
- Frequently Asked Questions
- Product Registration

– or –

Call our Customer Care Team Toll-Free at:

**1-877-338-0999**



# 338cc REPLACEMENT ENGINE

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# INTRODUCTION

## Introduction

Congratulations on your purchase of a Champion Power Equipment engine. CPE designs and builds engines to strict specifications. With proper use and maintenance, this engine will bring years of satisfying service.

## Replacement Engine

This unit is a gasoline driven, key-way shaft replacement engine. It is designed to supply power for air compressors, pumps, pressure washers, reel-type lawn mowers, go-carts, agricultural and construction equipment and other pulley-style applications.

## Accessories

Champion Power Equipment manufactures and sells accessories designed to help you get the most from your purchase. To find out more, please visit our web site at:  
→ [www.championpowerequipment.com](http://www.championpowerequipment.com)

## This Booklet

Every effort has been made to ensure the accuracy and completeness of the information in this manual. We reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

Record the model and serial numbers as well as date and place of purchase for future reference. Have this information available when ordering parts and when making technical or warranty inquiries.

Champion Power Equipment Support	
1-877-338-0999	
Model Number	
61151	
Serial Number	
Date of Purchase	
Purchase Location	
For <b>Oil Type</b> see "Add Engine Oil" section. For <b>Fuel Type</b> see "Add Fuel" section.	

This manual uses the following symbols to help differentiate between different kinds of information. The safety symbol is used with a key word to alert you to potential hazards in operating and owning power equipment.

Follow all safety messages to avoid or reduce the risk of serious injury or death.

 **DANGER**

DANGER indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.

 **WARNING**

WARNING indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.

 **CAUTION**

CAUTION indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury.

**CAUTION**

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **may** result in property damage.

 **NOTE**

If you have questions regarding your engine, we can help. Please call our help line at **1-877-338-0999**

# SAFETY RULES

## WARNING

Read this manual thoroughly before operating your engine. Failure to follow instructions could result in serious injury or death.

## WARNING

The engine exhaust from this product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

## DANGER

Engine exhaust contains carbon monoxide, a colorless, odorless, poison gas. Breathing carbon monoxide will cause nausea, dizziness, fainting or death. If you start to feel dizzy or weak, get to fresh air immediately.

Operate engine outdoors only in a well ventilated area DO NOT operate the engine inside any building, including garages, basements, crawlspaces and sheds, enclosure or compartment, including the engine compartment of a recreational vehicle. DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings. **DANGER CARBON MONOXIDE, using an engine indoors CAN KILL YOU IN MINUTES.**

## DANGER

Rotating parts can entangle hands, feet, hair, clothing and/or accessories. Traumatic amputation or severe laceration can result.

Keep hands and feet away from rotating parts. Tie up long hair and remove jewelry. Operate equipment with guards in place. DO NOT wear loose-fitting clothing, dangling drawstrings or items that could become caught.

## DANGER

Sparks can result in fire or electrical shock.

### When servicing the engine:

Disconnect the spark plug wire and place it where it cannot contact the plug. DO NOT check for spark with the plug removed. Use only approved spark plug testers.

## WARNING

Running engines produce heat. Severe burns can occur on contact. Combustible material can catch fire on contact.

DO NOT touch hot surfaces. Avoid contact with hot exhaust gases. Allow equipment to cool before touching. Maintain at least three feet of clearance on all sides to ensure adequate cooling. Maintain at least five feet of clearance from combustible materials.

**⚠ WARNING**

Rapid retraction of the starter cord will pull hand and arm towards the engine faster than you can let go. Unintentional startup can result in entanglement, traumatic amputation or laceration. Broken bones, fractures, bruises or sprains could result.

When starting engine, pull the starter cord slowly until resistance is felt and then pull rapidly to avoid kickback.

**⚠ CAUTION**

Improper treatment or use of the engine can damage it, shorten its life and void your warranty.

Use the engine only for intended uses. Operate only on level surfaces. DO NOT expose engine to excessive moisture, dust, or dirt. DO NOT allow any material to block the cooling slots. DO NOT use the engine if:

- Equipment sparks, smokes or emits flames
- Equipment vibrates excessively

**⚡ DANGER**

Fuel and fuel vapors are highly flammable and extremely explosive. Fire or explosion can cause severe burns or death. Unintentional startup can result in entanglement, traumatic amputation or laceration.

**When adding or removing fuel:**

Turn the engine off and let it cool for at least two minutes before removing the fuel cap. Loosen the cap slowly to relieve pressure in the tank. Only fill or drain fuel outdoors in a well-ventilated area. DO NOT overfill the fuel tank. Always keep fuel away from sparks, open flames, pilot lights, heat and other sources of ignition. DO NOT light or smoke cigarettes.

**When starting the engine:**

DO NOT attempt to start a damaged engine. Make certain that the gas cap, air filter, spark plug, fuel lines and exhaust system are properly in place. Allow spilled fuel to evaporate fully before attempting to start the engine. Make certain that the engine is resting firmly on level ground.

**When transporting or servicing the engine:**

Make certain that the fuel shutoff valve is in the off position and the fuel tank is empty. Disconnect the spark plug wire.

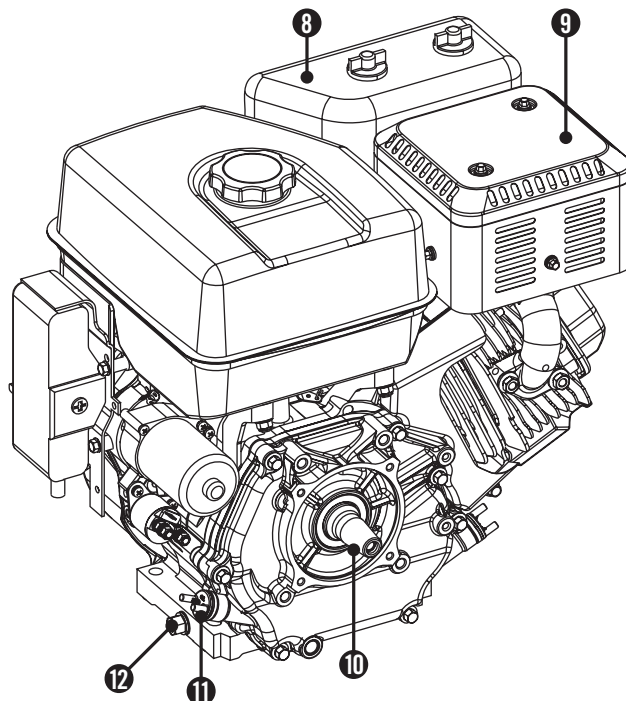
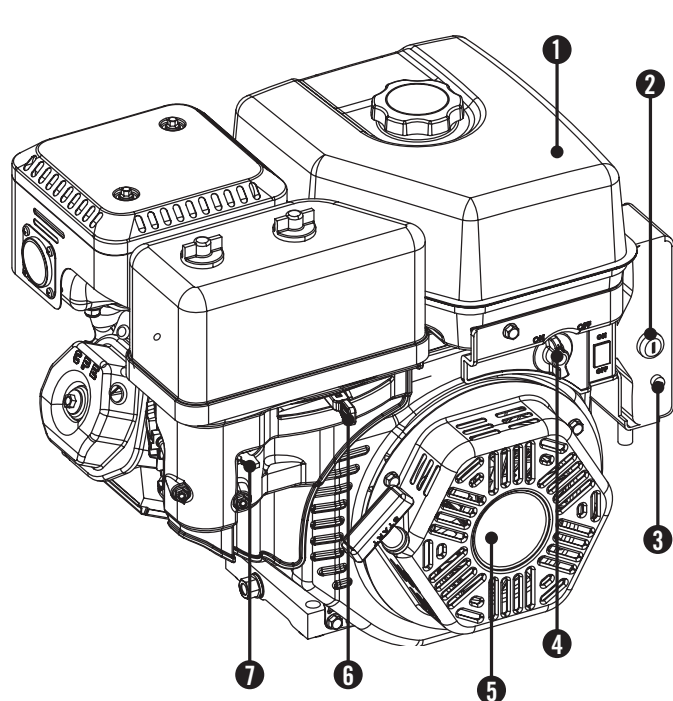
**When storing the engine:**

Store away from sparks, open flames, pilot lights, heat and other sources of ignition.

# CONTROLS AND FEATURES

Read this owner's manual before operating your engine. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

## Replacement Engine



- (1) **Fuel Tank** – 1.8 (6.8 L) gallon capacity fuel tank.
- (2) **Ignition Switch**
- (3) **Circuit Breaker** – Protects the ignition switch from electrical overload.
- (4) **Fuel Valve Knob** – Turn this valve to the “On” position to supply fuel to the engine.
- (5) **Recoil Starter** – Used to start the engine.
- (6) **Throttle** – Controls the engine speed.
- (7) **Choke Lever** – Used to start the engine.

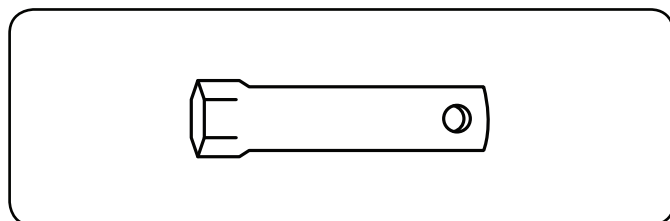
- (8) **Air Cleaner** – Protects the engine by filtering dust and debris from the intake air.
- (9) **Muffler**
- (10) **Crank Shaft**
- (11) **Oil Filler Cap** – Check and fill engine oil level.
- (12) **Oil Drain** – Check and fill engine oil level.

## Parts Included

Your 61151 Gasoline Powered Engine ships with the following parts:

### Other

- Spark Plug Socket . . . . . 1





This unit ships from our factory without oil. It must be properly serviced with fuel and oil before operation.

## Add Engine Oil

### ⚠ CAUTION

DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the engine as a result of failure to follow these instructions will void your warranty.

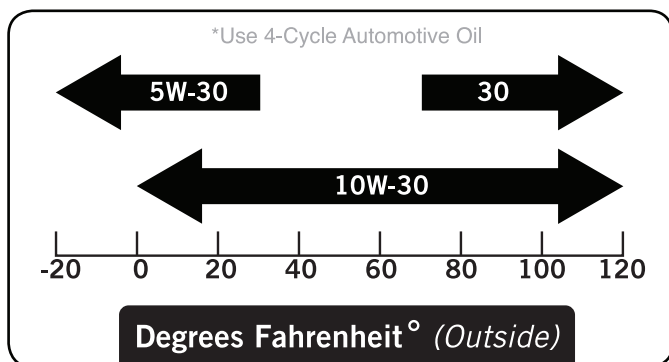
1. Place the engine on a flat, level surface.
2. Remove oil fill cap/dipstick to add oil.
3. Add 1.16 qt (1.1 L) or less of oil (SAE10W-30) and replace oil fill cap/dipstick.
4. Check engine oil level daily and add as needed.

### CAUTION

The engine is equipped with a low-oil-shutoff and the will stop when the oil level in the crankcase falls below the threshold level.

### NOTE

Check oil often during the break-in period. Refer to the Maintenance section for recommended service intervals.



## Add Engine Fuel

1. Use clean, fresh, regular unleaded fuel with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.
2. DO NOT mix oil with fuel.
3. Clean the area around the fuel cap.
4. Remove the fuel cap.
5. Slowly add fuel to the tank. DO NOT overfill. Allow approximately ¼ inch of space for fuel expansion.
6. Screw on the fuel cap and wipe away any spilled fuel.

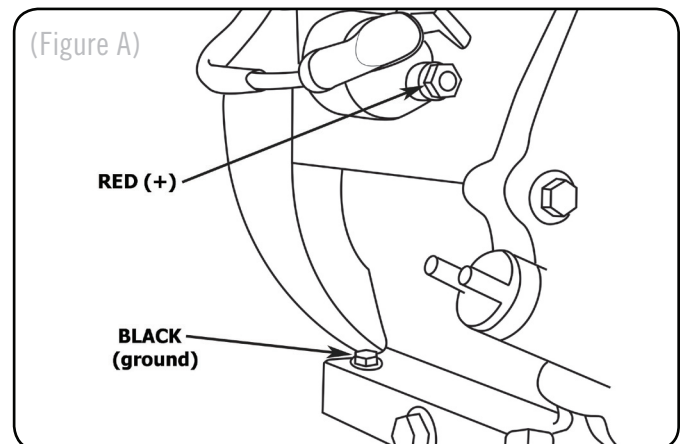
### ⚠ CAUTION

Use regular unleaded gasoline with a minimum octane rating of 85.

Do not mix oil and gasoline.  
 Fill tank to approximately ¼ inch below the top of the tank to allow for fuel expansion.  
 DO NOT fill fuel tank indoors.  
 DO NOT fill fuel tank when the engine is running or hot.  
 DO NOT overfill the fuel tank.  
 DO NOT light cigarettes or smoke when filling the fuel tank.

## Connect Battery (not included) (Figure A)

1. Connect the red (+) lead to the positive (+) terminal on the battery. Then connect the lead to the bolt on the back side of the starter solenoid.
2. Connect the black (-) lead to the negative (-) terminal on the battery. To ground the lead, connect to the bolt on the engine base.



# OPERATION

## Engine Location

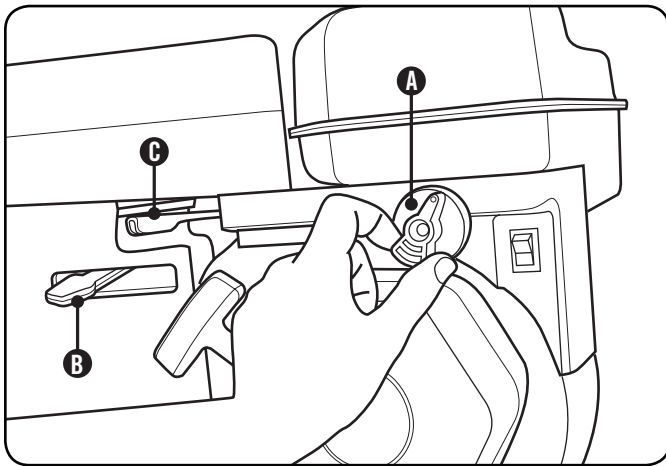
Place the engine in a well-ventilated area. DO NOT place the engine near vents or intakes where exhaust fumes could be drawn into occupied or confined spaces. Carefully consider wind and air currents when positioning engine.

## Starting the Engine

1. Make certain the engine is on a flat, level surface.
2. Turn the engine switch to "ON" position.
3. Rotate the fuel valve to the "ON" position (to the left) (Item A).
4. Move the choke lever (Item B) to the "Choke" position (to the left).
5. Turn the engine switch to the "Start" start position until the engine starts and then release, **OR**
6. Pull the starter cord slowly until resistance is felt and then pull rapidly. **SEE NOTE BELOW.**

### NOTE

Keep choke lever in "Choke" position for only 1 pull of the recoil starter. After first pull, move choke lever to the "Run" position for up to the next 3 pulls of the recoil starter. Too much choke leads to sparkplug fouling/engine flooding due to the lack of incoming air. This will cause the engine not to start.



7. As engine warms up, move the choke lever (Item B) to the "Run" position (to the right).
8. Move the throttle lever (Item C) to the "Fast" position.

## Starting the Engine Cont'd.

### NOTE

If the engine starts but does not run make certain that the engine is on a flat, level surface. The engine is equipped with a low oil sensor that will prevent the engine from running when the oil level falls below a critical threshold.

## Stopping the Engine

1. Turn the ignition switch to the "Off" position.
2. Turn the fuel knob to the "Off" position.

The owner/operator is responsible for all periodic maintenance.

### **! WARNING**

Never operate a damaged or defective engine.

### **! WARNING**

Improper maintenance will void your warranty.

### **NOTE**

For service or parts assistance, contact our help line at **1-877-338-0999**.

Complete all scheduled maintenance in a timely manner. Correct any issue before operating the engine.

## Engine Maintenance

To prevent accidental starting, remove and ground spark plug wire before performing any service.

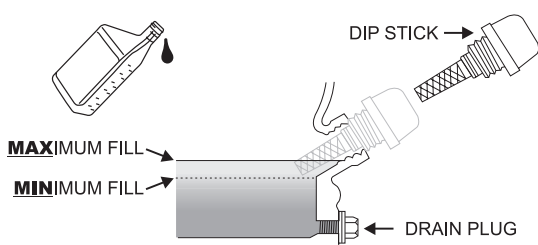
### Oil

Change oil when the engine is warm. Refer to the oil specification to select the proper grade of oil for your operating environment.

1. Remove the oil drain plug with a 12 mm socket and extension.
2. Allow the oil to drain completely.
3. Replace the drain plug.
4. Remove oil fill cap/dipstick to add oil.
5. Add 1.16 qt (1.1 L) of oil and replace oil fill cap/dipstick.
6. Dispose of used oil at an approved waste management facility.

### **! CAUTION**

The engine ships from the factory without oil. Before pulling the recoil start or starting the engine, fill with oil. Do not overfill.



## Spark Plugs

1. Remove the spark plug cable from the spark plug.
2. Use the spark plug tool that shipped with your engine to remove the plug.
3. Inspect the electrode on the plug. It must be clean and not worn to produce the spark required for ignition.
4. Make certain the spark plug gap is 0.7 - 0.8 mm (0.028 - 0.031 in.).
5. Refer to the spark plug recommendation chart when replacing the plug.
6. Carefully thread the plug into the engine.
7. Use the spark plug tool to firmly install the plug.
8. Attach the spark plug wire to the plug.

## Air Filter

1. Unscrew wing nut to remove the air filter cover.
2. Unscrew wing nut to remove the air filter.
3. Separate the foam element and the paper element.
4. Tap the paper filter element to remove dirt and debris. Use compressed air (25 PSI) to clear debris.
5. For the foam element: Wash in liquid detergent and water. Squeeze thoroughly dry in a clean cloth.
6. Saturate in clean engine oil.
7. Squeeze in a clean, absorbent cloth to remove all excess oil.
8. Reassemble the two elements and reattach. Tighten wing nut.
9. Reattach the air filter cover and snap in place.

## Cleaning

Use a damp cloth to clean exterior surfaces of the engine. Use a soft bristle brush to remove dirt and oil. Use an air compressor (25 PSI) to clear dirt and debris from the engine.

### **! CAUTION**

DO NOT spray engine with water.

Water can contaminate the fuel system.

# MAINTENANCE AND STORAGE

## Adjustments

The air-fuel mixture is not adjustable. CPE recommends that you contact our service line at **1-877-338-0999** for all other service and/or adjustment needs.

## Maintenance Schedule

Follow the service intervals indicated in the schedule below. Service your engine more frequently when operating in adverse conditions.

Contact our help line at **1-877-338-0999** to locate the nearest Champion Power Equipment certified service dealer for your engine maintenance needs.

Every 8 hours or daily	
	Check oil level
	Clean around air intake and muffler
First 5 Hours	
	Change oil
Every 50 hours or every season	
	Clean air filter
	Change oil if operating under heavy load or in hot environments
Every 100 hours or every season	
	Change oil
	Clean/Adjust spark plug
	Check/Adjust valve clearance *
	Clean spark arrester
	Clean fuel tank and filter *
Every 3 years	
	Replace fuel line

\*To be performed by knowledgeable, experienced owners or Champion Power Equipment certified dealers.

## Storage

Engines stored for over 30 days need to be drained of fuel to prevent gum from forming in the fuel system, carburetor components and hoses. For long term storage, please follow these guidelines.

### Engine Storage

1. Allow the engine to cool completely before storage.
2. Clean the engine according to the instructions in the Maintenance section.
3. Drain all fuel completely from the fuel line and carburetor to prevent gum from forming.
4. Add a fuel stabilizer into the fuel tank.
5. Change the oil.
6. Remove the spark plug and pour about ½ ounce of oil into the cylinder. Crank the engine slowly to distribute the oil and lubricate the cylinder.
7. Reattach the spark plug.

## Engine Specifications

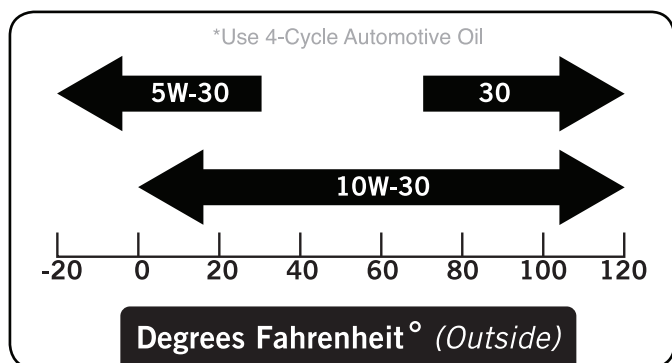
- Engine . . . . . 338 cc OHV CPE
- PTO Rotation . . . . . Counterclockwise
- Ignition Mode . . . . . TCI (transistorized)
- Displacement . . . . . 338 cc
- Torque (max) . . . . . 18.5 ft-lb at 3000 RPM
- Compression . . . . . 8.0:1
- Crank Shaft . . . . . 1" x 3 3/64" (2.54 cm x 8.85 cm)
- End Hole . . . . . Tapped 3/8" 24 UNF
- Fuel Capacity . . . . . 1.8 gallons (6.8 L)
- Gross Weight . . . . . 82.1 lbs. (37.3 kg)
- Net Weight . . . . . 77.7 lbs. (35.3 kg)
- Height . . . . . 17.4 inches (44.2 cm)
- Width . . . . . 16 inches (40.6 cm)
- Length . . . . . 19.7 inches (50 cm)

## Fuel

Fuel capacity is 1.8 gallons (6.8 L). Use regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.

## Oil

Use 4-Cycle automotive oil.  
 Oil capacity is 1.16 qt (1.1 L).  
 Please reference the following chart for recommended oil types for use in the engine.



## Spark Plugs

Recommended replacement spark plug:

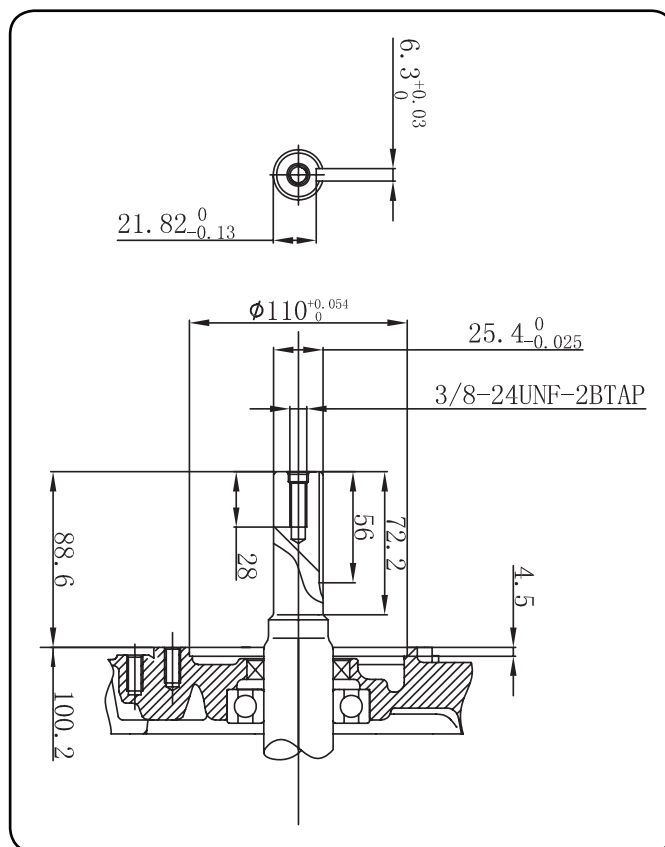
- **NGK BR6ES or equivalent**

Make certain the spark plug gap is 0.7 - 0.8 mm or (0.028 - 0.031 in.).

## Valve Clearance

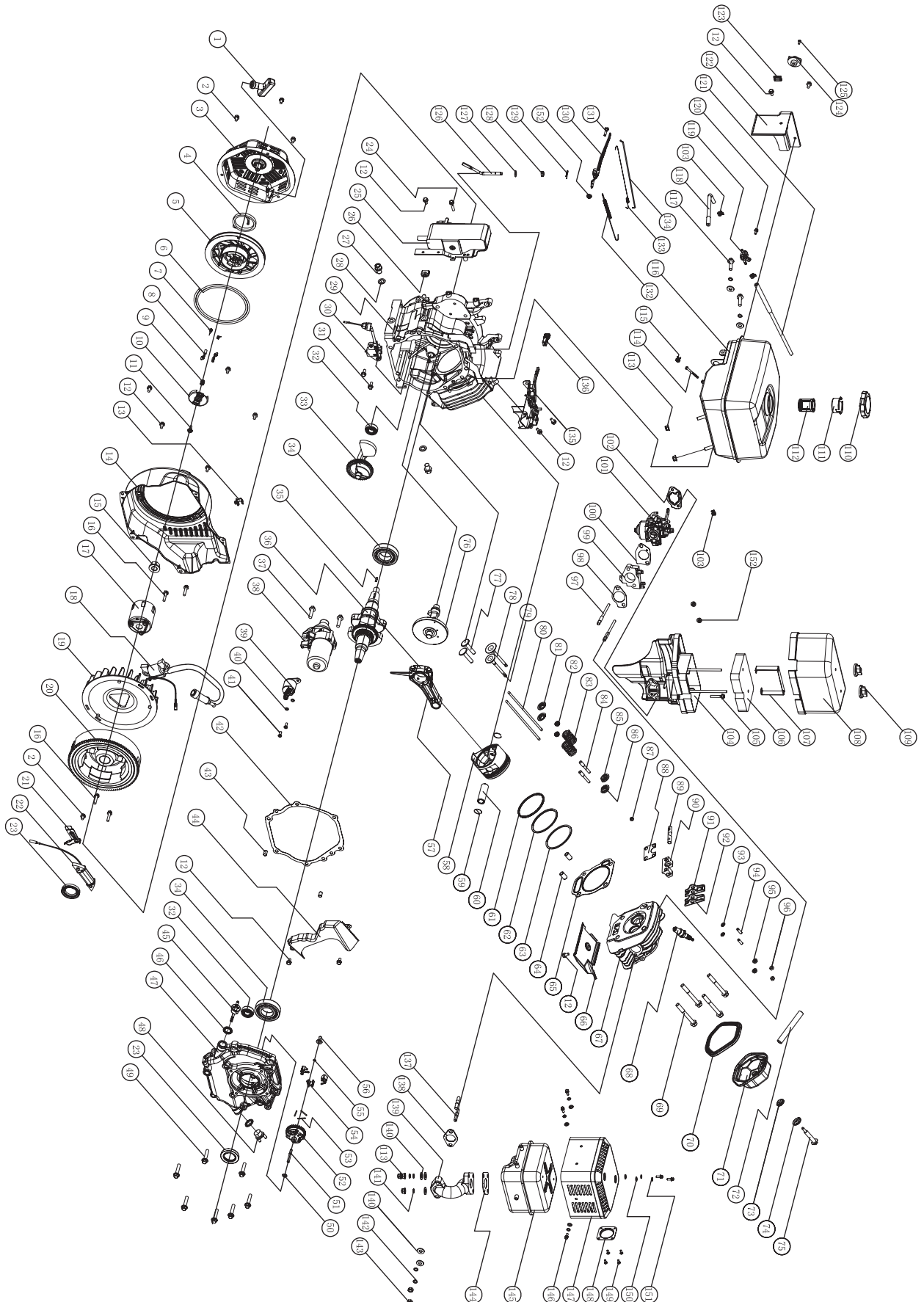
- Intake: 0.13 – 0.17 mm (0.004 – 0.005 in.)
- Exhaust: 0.18 – 0.22 mm (0.007 – 0.009 in.)

## Keyway Shaft



# SPECIFICATIONS

## Parts Diagram



#	Part Number	Description	Qty.
1	ST160F-1061200	Recoil Starter Knob	1
2	GB5789-FB6-8	Flange Bolt M6x8	4
3	188.061100.31	Recoil Starter Case	1
4	ST188F-1060009	Starter Return Spring	1
5	ST188F-1060008	Recoil Starter Pulley	1
6	ST188F-1060007	Recoil Starter Rope	1
7	ST188F-1060006	Return Spring	2
8	ST188F-1060005	Starter Ratchet	2
9	ST188F-1060004	Ratchet Guide Spring	1
10	ST188F-1060003	Ratchet Guide	1
11	ST188F-1060002	Ratchet Guide Bolt	1
12	GB5789-FB6-12	Flange Bolt M6x12	13
13	ST188F-1080003	Clamp	1
14	ST188F-1080100-G	Fan Cover	1
15	ST188F-1050006	Flywheel Nut	1
16	GB5789-FB6-29	Flange Bolt M6x29	4
17	ST188F-1060001	Starter Pulley	1
18	ST188F-1122000-G	Ignition Coil	1
19	ST188F-1080002	Cooling Fan	1
20	ST188FD-1121000	Flywheel	1
21	ST188F-1030002	Wire Flat	1
22	ST188F-1123000	Coil Assembly Charger	1
23	ST188F-1030200	Oil Seal	2
24	GB5789-FB6-25	Flange Bolt M6x25	1
25	ST188F-1128000-G	Ignition Assembly	1
26	ST188F-1030012	Grommet	1
27	139FMD-1003101	Drain Plug Bolt	2
28	139FMD-1003102	Drain Plug Washer	2
29	ST182F-1030006-G	Crankcase	1
30	ST188FD-1127000-A	Oil Level Switch Assembly	1
31	GB5789-FB6-15	Flange Bolt M6x15	2
32	GB276-BB-6202-UU	Radial Ball Bearing 6202 Unsealed	2
33	ST188F-1050303	Balance Gear	1
34	GB276-BB-6207-UU	Radial Ball Bearing 6207 Unsealed	2
35	ST188F-1050304	Key	1
36	ST188F-1050301S	Crankshaft	1
37	GB5789-FB8-35	Flange Bolt M8x35	2
38	ST188F-1125000	Start Motor	1
39	ST188F-1126000	Relay	1
40	GB93-LW-5	Lock Washer ø5	2
41	GB1667-S5-16	Screw M5x16	2
42	ST188F-1030010-G	Case Cover Packing	1
43	ST188F-1030015-G	Dowel Pin 9x14	2
44	ST188F-1080002-G	Shroud	1
45	ST188F-1030003	Oil Filler Cap	1
46	ST160F-1030002	Oil Filler Cap Packing	2
47	ST188F-1030011-G-5/16	Crankcase Cover 5/16-24Unf	1
48	ST160F-1030005-B	Oil Filler Cap	1
49	GB5789-FB8-40	Flange Bolt M8x40	7
50	ST160F-1110108	Governor Washer	1
51	ST188F-1110009	Governor Shaft	1
52	ST188F-1110101	Governor Weight Holder	1
53	ST188F-1110102	Governor Weight Pin	3
54	ST188F-1110103	Governor Weight	3
55	ST160F-1110103	Governor Holder Clip	1
56	ST188F-1110008	Governor Slider	1
57	ST188F-1050200	Connecting Rod Comp	1
58	ST182F-1050001	Piston	1
59	ST188F-1050004	Piston Pin Clip	2
60	ST188F-1050005	Piston Pin	1
61	ST182F-1050100	Oil Ring Set	1
62	ST182F-1050003	Second Ring Set	1
63	ST182F-1050002	First Piston Ring, Chrome	1
64	ST188F-1030013	Dowel Pin	2
65	ST182F-1030008-G	Cylinder Head Gasket	1
66	ST188F-1080001-G	Shroud	1
67	ST188F-1011000-G	Head Comp	1
68	F6TC	Spark Plug	1
69	ST188F-1030009	Bolt	4
70	ST188F-1020003-CPE	Head Cover Gasket	1
71	ST188F-1020100-A	Head Cover	1
72	ST188F-1020002	Tube	1
73	ST188F-1020004	Head Cover Bolt Seal	1
74	ST188F-1020005	Head Cover Bolt Washer	1
75	ST188F-1020006	Head Cover Bolt	1
76	ST188F-1041000	Camshaft Comp	1
77	ST188F-1040012	Valve Lifter	2

#	Part Number	Description	Qty.
78	ST188F-1040003	Intake Valve	1
79	ST188F-1040011	Exhaust Valve	1
80	ST188F-1040010-	Push Rod	2
81	ST188F-1040006	Valve Lock Washer	2
82	ST188F-1040004	Valve Stem Seal	2
83	ST188F-1040007	Valve Spring	2
84	ST188F-1040027	Pivot Bolt	2
85	ST188F-1040002	Intake Valve Spring Retainer	1
86	ST188F-1040008	Exhaust Valve Spring Retainer	1
87	ST188F-1040009	Valve Rotator	1
88	ST188F-1040028	Push Rod Guide Plate	1
89	ST188F-1040021	Rocker Axis	1
90	ST188F-1040026	Valve Rocker Arm	1
91	ST188F-1040022	Intake Valve Rocker	1
92	ST188F-1040023	Exhaust Valve Rocker	1
93	GB90-W-6	Washer ø6	2
94	ST160F-1040024	Rocker Arm Bolt	2
95	GB41-N-6	Nut M6	2
96	ST160F-1040025	Pivot Adjusting Nut	2
97	ST188F-1010002	Bolt	2
98	ST188FD-1130003	Carburetor Insulator Packing	1
99	ST182F-1134000	Carburetor Insulator	1
100	ST182F-1130002-CPE	Carburetor Packing	1
101	ST182F-1133000-G	Carburetor	1
102	ST188F-1130100	Air Cleaner Packing	1
103	ST188FD-1070006-A	Clip ø8	3
104	188.091100.32	Air Cleaner Elbow	1
105	GB5789-86-FB6-33	Flange Bolt M6x33	1
106	188.091003.32	Air Cleaner Element	1
107	188.091102.32	Air Cleaner Support	1
108	188.091200.32	Air Cleaner Cover	1
109	ST188F-1090100-C	Air Cleaner Wing Nut	2
110	ST160F-1070100H	Fuel Tank Cap	1
111	ST160F-1070006-B	Fuel Filter Fitting	1
112	ST160F-1070006	Fuel Filter	1
113	GB41-N-8	Nut M8	5
114	ST152FD-1070200	Fuel Filter	1
115	ST1P68F-1070006-F	Clip	1
116	188.071000.33	Fuel Tank	1
117	GB5789-FB8-32	Flange Bolt M8x32	2
118	ST188F-1070003-G	Tube2	1
119	ST168F-1070200-G	Fuel Valve	1
120	GB1667A-M5-12	Capitulum Bolt M5x12	1
121	ST188F-1070001-G	Tube1	1
122	188.070010.31	Fuel Tank Trim Plate	1
123	168.070023.01	Plug	1
124	ST168F-1070003-G	Fuel Valve Knob	1
125	GB1667-S4-12	Screw M4x12	1
126	ST188F-1110003	Cover Arm Shaft	1
127	ST188F-1110005	Washer8.2x17x0.8	1
128	ST188F-1030100	Oil Seal	1
129	ST188F-1110007	Pin Clip	1
130	ST188F-1110006	Governor Arm	1
131	ST160F-1110004	Governor Arm Bolt	1
132	ST188F-1110004	Governor Spring	1
133	ST188F-1110001	Throttle Return Spring	1
134	ST188F-1110002	Governor Rod	1
135	188.080300.06	Control Assembly	1
136	168.111008.01	Handle Bar Grip	1
137	ST188F-1010001	Bolt	2
138	ST188F-1100100-G	Muffler Gasket	1
139	188.101001.34	Exhaust Pipe	1
140	GB90-W-8	Washer ø8	7
141	GB93-LW-8	Lock Washer ø8	5
142	GB93-LW-8	Lock Washer ø8	2
143	GB41-N-8	Nut M8	2
144	188.101002.34	Muffler Packing	1
145	188.101100.34	Muffler	1
146	GB5789-FB5-10	Flange Bolt M5x10	5
147	188.101200.34	Muffler Protector	1
148	188.101300.34	Spark Arrester	1
149	GB1667-S4-6	Screw M4x6	4
150	GB90-W-5	Washer ø5	5
151	GB93-LW-5	Lock Washer ø5	5
152	GB41-N-6	Nut M6	3

# TROUBLESHOOTING

Problem	Cause	Solution
Engine will not start	No fuel	Add fuel
	Faulty spark plug	Replace spark plug
Engine will not start; Engine starts but runs roughly	Low oil level	Fill crankcase to the proper level; place engine on a flat, level surface
	Choke in the wrong position	Adjust choke
	Spark plug wire loose	Attach wire to spark plug
Engine shuts down during operation	Out of fuel	Fill fuel tank
	Low oil level	Fill crankcase to the proper level; place engine on a flat, level surface
Engine cannot supply enough power or overheating	Insufficient ventilation	Check for air restriction; move to a well ventilated area
Engine gallops	Engine governor defective	Contact the help line

## For further technical support:

### Technical Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999

tech@championpowerequipment.com



**WARRANTY**

CHAMPION POWER EQUIPMENT  
2 YEAR LIMITED WARRANTY

**Warranty Qualifications**

Champion Power Equipment (CPE) will register this warranty upon receipt of your Warranty Registration Card and a copy of your sales receipt from one of CPE's retail locations as proof of purchase.

Please submit your warranty registration and your proof of purchase within ten (10) days of the date of purchase.

**Repair/Replacement Warranty**

CPE warrants to the original purchaser that the mechanical and electrical components will be free of defects in material and workmanship for a period of one year (parts and labor) and two years (parts) from the original date of purchase (90 days (parts and labor) and 180 days (parts) for commercial & industrial use). Transportation charges on product submitted for repair or replacement under this warranty are the sole responsibility of the purchaser. This warranty only applies to the original purchaser and is not transferable.

**Do Not Return The Unit To The Place Of Purchase**

Contact CPE's Technical Service and CPE will troubleshoot any issue via phone or e-mail. If the problem is not corrected by this method, CPE will, at its option, authorize evaluation, repair or replacement of the defective part or component at a CPE Service Center. CPE will provide you with a case number for warranty service. Please keep it for future reference. Repairs or replacements without prior authorization, or at an unauthorized repair facility, will not be covered by this warranty.

**Warranty Exclusions**

This warranty does not cover the following repairs and equipment:

**Normal Wear**

Engines need periodic parts and service to perform well. This warranty does not cover repair when normal use has exhausted the life of a part or the equipment as a whole.

**Installation, Use and Maintenance**

This warranty will not apply to parts and/or labor if this engine is deemed to have been misused, neglected, involved in an accident, abused, loaded beyond the engine's limits, modified, installed improperly or connected incorrectly to any electrical component. Normal maintenance such as spark plugs, air filters, adjustments, fuel system cleaning and obstruction due to buildup is not covered by this warranty.

**Other Exclusions**

This warranty excludes:

- Cosmetic defects such as paint, decals, etc.
- Wear items such as filter elements, o-rings, etc.
- Accessory parts such as starting batteries, and storage covers.
- Failures due to acts of God and other force majeure events beyond the manufacturer's control.
- Problems caused by parts that are not original Champion Power Equipment parts.

**Limits of Implied Warranty and Consequential Damage**

Champion Power Equipment disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this engine. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

A unit provided as an exchange will be subject to the warranty of the original unit. The length of the warranty governing the exchanged unit will remain calculated by reference to the purchase date of the original unit.

This warranty gives you certain legal rights which may change from state to state. Your state may also have other rights you may be entitled to that are not listed within this warranty.

**Contact Information****Address**

Champion Power Equipment, Inc.  
Customer Service  
10006 Santa Fe Springs Rd.  
Santa Fe Springs, CA 90670  
[www.championpowerequipment.com](http://www.championpowerequipment.com)

**Customer Service**

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)  
Toll Free: 1-877-338-0999  
Fax no.: 1 (562) 236-9429

**Technical Service**

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)  
Toll Free: 1-877-338-0999  
[tech@championpowerequipment.com](mailto:tech@championpowerequipment.com)

## **Champion Power Equipment, Inc (CPE), Emission Control System Warranty**

Your Champion Power Equipment (CPE) engine complies with Environment Canada (EC) emission regulations.

### **YOUR WARRANTY RIGHTS AND OBLIGATIONS:**

CPE is pleased to explain the Emission Control Systems Warranty on your 2011 small off-road engine. New engines must be designed, built and equipped, at the time of sale, to meet EC regulations for small non-road engines. CPE must warrant the emission control system on your small off-road engine for the period of time listed below, provided there has been no abuse, neglect, unapproved modification, or improper maintenance of your small off-road engine. Your emission control system may include parts such as the carburetor, fuel-injection system, the ignition system, catalytic converter and fuel lines. Also included may be hoses, belts, connectors and other emission related assemblies. Where a warrantable condition exists, CPE will repair your small off-road engine at no cost to you including diagnosis, parts and labor.

### **MANUFACTURER'S EMISSION CONTROL SYSTEM WARRANTY COVERAGE:**

This emission control system is warranted for two years, subject to provisions set forth below. If, during the warranty period, emission related part on your engine is defective in materials or workmanship, the part will be repaired or replaced by CPE.

### **OWNER WARRANTY RESPONSIBILITIES:**

As the small off-road engine owner, you are responsible for the performance of the required maintenance listed in your Owner's Manual. CPE recommends that you retain all your receipts covering maintenance on your small off-road engine, but CPE cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

**As the small off-road engine owner, you should however be aware that CPE may deny you warranty coverage if your small, off-road engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.**

You are responsible for presenting your small off-road engine to an Authorized CPE service outlet, CPE dealer or CPE, Santa Fe Springs, CA., USA as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact:

**Champion Power Equipment, Inc.**

ATTN: Customer Service  
10006 Santa Fe Springs Road  
Santa Fe Springs, CA 90670  
USA

Tel: 1-877-338-0999

The emission warranty is a defects warranty. Defects are judged on normal engine performance. The warranty is not related to an in-use emission test.

## EMISSION CONTROL SYSTEM WARRANTY

The following are specific provisions relative to your Emission Control System Warranty Coverage.

Emission Control System Warranty (ECS Warranty) for 1997 and later model year engines):

1. **APPLICABILITY:** The ECS Warranty Period shall begin on the date the new engine or equipment is delivered to its original, end-use purchaser, and shall continue for 24 consecutive months thereafter.
2. **GENERAL EMISSIONS WARRANTY COVERAGE**  
CPE warrants to the original, end-use purchaser of the new engine or equipment and to each subsequent purchaser that each of its small off-road engines is:
  - a. Designed, built and equipped so as to conform at the time of sale with applicable regulations under the Canadian Environmental Protection Act, 1999 (CEPA 1999).
  - b. Free from defects in materials and workmanship that cause the failure of a warranted part to be identical in all material respects to the part as described in the engine manufacturer's application for certification for a period of two years.
3. **THE WARRANTY ON EMISSION-RELATED PARTS WILL BE INTERPRETED AS FOLLOWS:**
  - a. Any warranted part that is not scheduled for replacement as required maintenance in the Owners Manual shall be warranted for the ECS Warranty Period. If any such part fails during the ECS Warranty Period, it shall be repaired or replaced by CPE according to Subsection "d" below. Any such part repaired or replaced under the ECS Warranty shall be warranted for any remainder of the ECS Warranty Period.
  - b. Any warranted, emissions-related part which is scheduled only for regular inspection as specified in the Owners Manual shall be warranted for the ECS Warranty Period. A statement in such written instructions to the effect of "repair or replace as necessary", shall not reduce the ECS Warranty Period. Any such part repaired or replaced under the ECS Warranty shall be warranted for the remainder of the ECS Warranty Period.
  - c. Any warranted, emissions-related part which is scheduled for replacement as required maintenance in the Owner's Manual shall be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part shall be repaired or replaced by CPE according to Subsection "d" below. Any such emissions-related part repaired or replaced under the ECS Warranty, shall be warranted for the remainder of the ECS Warranty Period prior to the first scheduled replacement point for such emissions-related part.
  - d. Repair or replacement of any warranted, emissions-related part under this ECS Warranty shall be performed at no charge to the owner at a CPE Authorized Service Outlet.
  - e. The owner shall not be charged for diagnostic labor which leads to the determination that a part covered by the ECS Warranty is in fact defective, provided that such diagnostic work is performed at a CPE Authorized Service Outlet.
  - f. CPE shall be liable for damages to other original engine components or approved modifications proximately caused by a failure under warranty of an emission-related part covered by the ECS Warranty.
  - g. Throughout the ECS Warranty Period, CPE shall maintain a supply of warranted emission-related parts sufficient to meet the expected demand for such emission-related parts.
  - h. Any CPE Authorized and approved emission-related replacement part may be used in the performance of any ECS Warranty maintenance or repair and will be provided without charge to the owner. Such use shall not reduce CPE's warranty obligation.
  - i. Unapproved add-on or modified parts may not be used to modify or repair a CPE engine. Such use voids this ECS Warranty and shall be sufficient grounds for disallowing an ECS Warranty claim. CPE shall not be liable hereunder for failures of any warranted parts of a CPE engine caused by the use of such an unapproved add-on or modified part.

**EMISSION-RELATED PARTS INCLUDE THE FOLLOWING** (using those portions of the list applicable to the engine):

Systems covered by this warranty	Parts Description
Fuel Metering System	Fuel regulator, Carburetor and internal parts
Air Induction System	Air cleaner, Intake manifold
Ignition System	Spark plug and parts, Magneto ignition system
Exhaust System	Exhaust manifold, catalytic converter
Miscellaneous Parts	Tubing, Fittings, Seals, Gaskets, and Clamps associated with these listed systems

**TO OBTAIN WARRANTY SERVICE:**

You must take your CPE engine or the product on which it is installed, along with your warranty registration card or other proof of original purchase date, at your expense, to any Champion Power Equipment dealer who is authorized by Champion Power Equipment, Inc. to sell and service that CPE product during his normal business hours. Claims for repair or adjustment found to be caused solely by defects in material or workmanship will not be denied because the engine was not properly maintained and used.

**If you have any questions regarding your warranty rights and responsibilities, or to obtain warranty service, please write or call the Customer service of Champion Power Equipment, Inc.:**

**Champion Power Equipment, Inc.**

ATTN: Customer Service

10006 Santa Fe Springs Road

Santa Fe Springs, CA 90670

USA

Tel: 1-877-338-0999