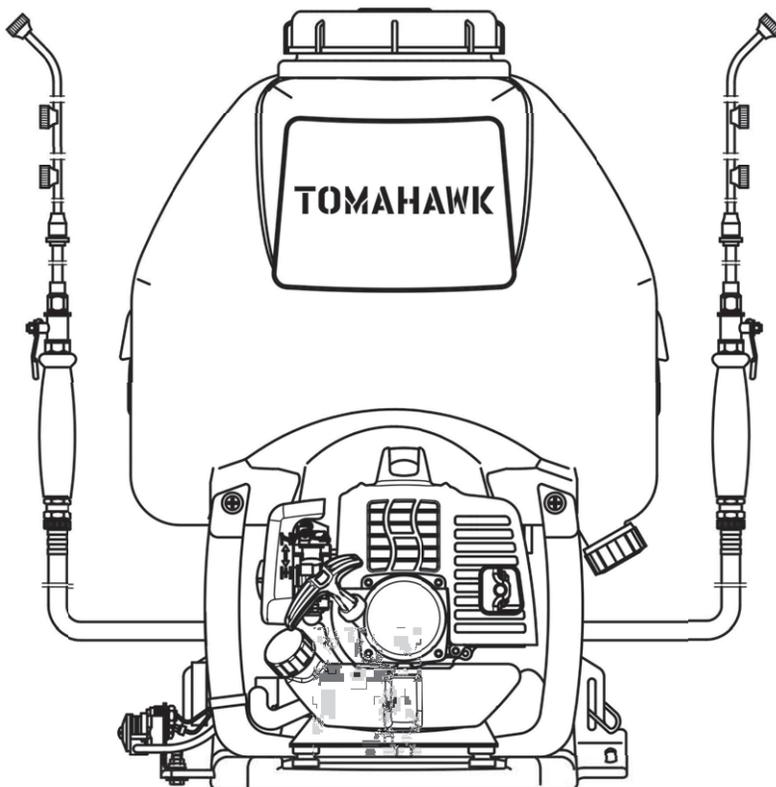




TOMAHAWK POWER
BACKPACK SPRAYER
TPS25

OPERATIONS & PARTS MANUAL



FIND OUR HOW TO GUIDE ON



www.youtube.com/tomahawk-power

For Video Assembly Instructions

- 1** Go to www.Youtube.com
- 2** Type the following on Search Bar
[assemble Tomahawk TPS25](#)
- 3** Click on video titled:
[HOW TO: Assemble TPS25 Backpack Sprayer](#)

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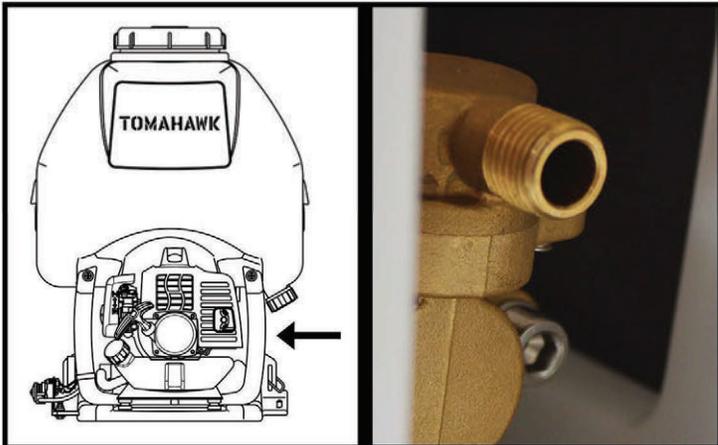
Backpack Sprayer Wand Assembly Manual



1 Remove all parts from the box.
(You may not need all pieces for assembly).



2 Place the washer inside the Y connection fitting.



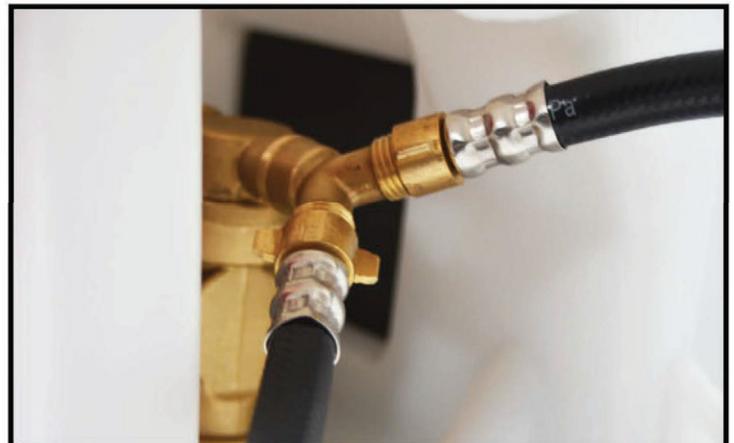
3 Locate the opening of the pump.
(Found to the right, behind the engine).



4 Fasten the Y connection fitting clockwise around the opening of the pump, until secure.



5 Fasten one hose (clockwise) around one side of the Y connection fitting.



6 Fasten the 2nd hose (clockwise) around the other side of the Y connection fitting.

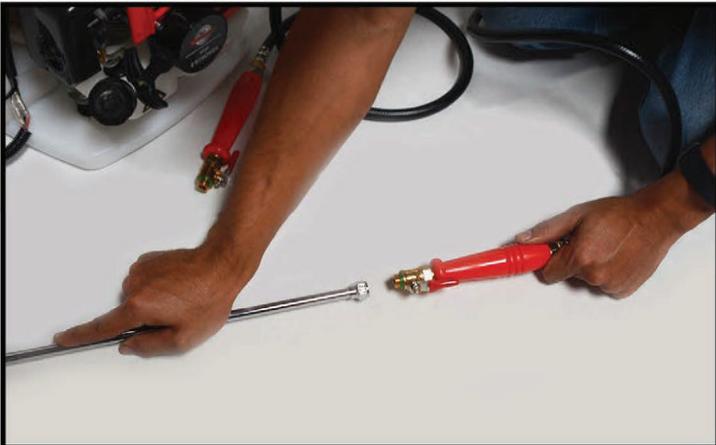
Backpack Sprayer Wand Assembly Manual



7 Find the 4 parts above to begin assembling the dual wands.



8 Fasten the bottom end of each wand to the top (curved) end.



9 Attach each wand to the valved end of the sprayer hoses.



10 To attach the backpack straps, slip the strap's end underneath the back bar.



11 Feed the strap's end through the buckle.



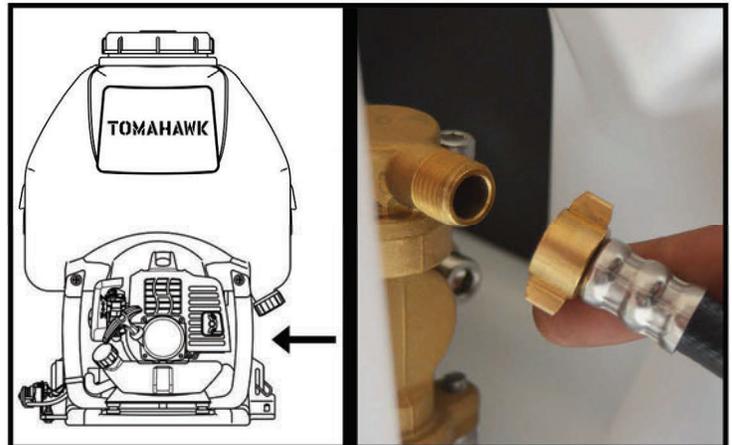
12 Cinch tightly and repeat for the 2nd strap. Your sprayer is now assembled.

Backpack Sprayer

Attachment Assembly Manual



1 Remove all parts from the box.
(You will not need all pieces for assembly).



2 Attach 1 hose directly to the sprayer's pump.
Twist clockwise.



3 Fasten the sprayer attachment to the valved end of the hose.



4 To attach the backpack straps, slip the strap's end underneath the back bar.



5 Feed the strap's end through the buckle.
Cinch tightly and repeat for the 2nd strap.



6 Your backpack sprayer is now ready for work.

* This manual may be used for Tomahawk Power fogger, foundation, conical, and mist gun attachments.



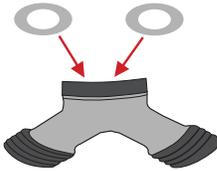
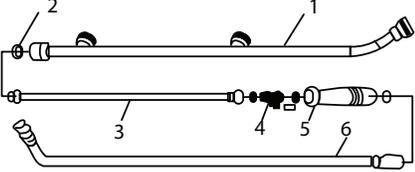
TPS25

www.tomahawk-power.com

QUICK HOW-TO GUIDE

1

Start by assembling sprayer wands



Place washers inside brass connectors

Washers



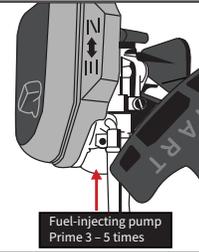
-Do not add fuel while the engine is hot or running

-Avoid filling the tank all the way to the top

-Do not spill fuel on the machine

2

2 stroke oil only



-Keep away flammable objects

-Do not add oil near fire sources

-Smoking near the machine is strictly prohibited

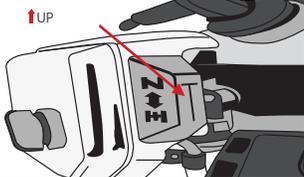
3



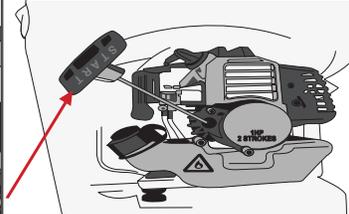
• Slowly pour pesticide liquid into the chemical tank



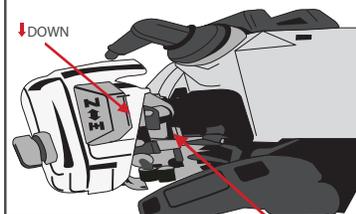
4



• Place choke into its closed position



• Pull the recoil starter a couple of times until engine is running

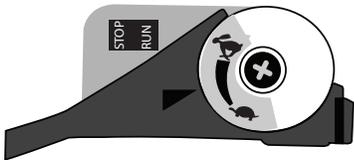


• Move choke to the open position



-Do not add fuel or operate inside an enclosed area

5



• Start the engine at half throttle. Maintain the engine running on idle for 3-5 minutes.

6



• Begin spraying

For questions call:
(866) 577-4476

Warning to Users

1. This gasoline engine must use mixed fuel at a ratio of 50:1 ratio, with No.90 gasoline to two-stroke automobile oil.

NOTE: 30:1 fuel ratio is recommended for Latin American countries.

2. Keep engine at a low speed 3-5 minutes after start and before stop.

3. Using your sprayer at a high engine speed without liquid spray or dust is prohibited and may damage your sprayer engine.

4. When adding fuel, stop the engine and keep away from open flames.

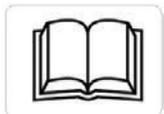
5. In order to avoid electric shock, do not touch the cap of the spark plug or wiring while the engine is on.

6. The surface of the muffler and the cylinder are very hot. Refrain from touching while hot. Children should be kept away from the engine.

SAFETY PRECAUTION



The use of the machine may be hazardous. The impeller rotating in the volute case may cause harm if you try to touch it. It is important that you read & fully understand the following safety precautions and warning.



Do not lend or rent your sprayer-duster without the Owner's Manual. Be sure that anyone using your sprayer-duster reads and understands the information contained in this manual.

Safe use of the Tomahawk Power Sprayer:

1. The operator

The operator must be in good physical condition and mental health.

The operator must not use the machine if:

- (1) Under the influence of a mind altering substance.
- (2) Under the legal age.
- (3) Has just exercised or has not had enough sleep.
- (4) Has no knowledge of the machine

2. Proper Clothing

To reduce the risk of injury, the operator should wear proper protective apparel.



•Carefully read this manual before using this product.



•Wear ear muffs to protect your hearing.



•Wear glasses and gauze mask to protect your eyes and face to protect against dust and pesticide.



•Wear closed-toed protective shoes.



•Gloves must be worn to avoid contact with pesticide .



•Clothing covering arms and legs must be worn to avoid contact with pesticide.

3. Using the Tomahawk Power ackpack Sprayer Starting the engine

- (1) Set the throttle handle to the stop position before starting the engine, otherwise chemical will be sprayed when starting engine.
- (2) Be sure no one stands in front of nozzle, even though the handle is set, to stop, residual materials in pipe will blow out.

Spray Operation

- (1) Operation during cool weather with little wind is recommended. For example, in the early morning or in the late afternoon. This can reduce the evaporation and drift of chemicals and improve spraying efficiency.
- (2) Operator should face his/her back to wind.
- (3) If your mouth or eyes are spattered with chemicals, wash them with clean water and go to see a doctor immediately.
- (4) If the operator has a headache or dizziness, stop working at once and go to see a doctor immediately.

(5) For the operator's safety, dusting / spraying must be carried out strictly according to the instruction of the chemicals and agricultural requirements.

(6) If you want to stop the engine while dusting, the throttle handle must be set to stop.

Warning



Do not direct the air blast towards bystanders since the air flow can blow small objects at great speed.



Toxic exhaust fumes may be colorless and odorless and contain unburned hydrocarbons and benzol. Never operate the power tool in enclosed or poorly ventilated locations.



During operation, the muffler or catalytic muffler and surrounding cover may become extremely hot. Avoid contact during and immediately after operation. Always keep exhaust area clear of flammable debris. Allow the engine and muffler to completely cool before performing any maintenance activities.



After working, wash your hands and clean all of clothing. NOTE: Residual pesticide can stain what you touch.

Fueling

Keep the fuel tank far away from the flames or sparks. Do not smoke near fuel. When the machine is running, do not add more fuel to the fuel tank.

Open the fuel cap carefully to allow any pressure build-up in the tank to release slowly and avoid fuel spillage.

Fuel your power tool only in well-ventilated areas. If you spill fuel, wipe the machine immediately – if fuel gets on your clothing, change immediately.



Check for leakage. To reduce the risk of serious or fatal burn injuries, do not start or run the engine until the leak is fixed.



After fueling, tighten down the screw-type fuel cap as tight as possible.

This reduces the risk of unit vibrations causing the fuel cap to loosen or come off and spill fuel.



Gasoline is an extremely flammable fuel. Keep clear of naked fires. Do not spill any fuel – do not smoke while operating.

Always shut off the engine before refueling.

Do not fuel a hot engine – fuel may spill and cause a fire.

1. Technical Specification

Name	Specification
Shipping Dimensions	20 × 16 × 26
Net Weight (lbs)	26
Chemical Tank Capacity (gal)	6.6
Water Absorption Volume (gal)	1.45
Working Pressure (MPA)	0 ~ 2.5
Engine Power	23cc
Fuel Type	50:1 Pre-Mix Fuel
Way of ignition	CDI
Way of starting	Recoil starting
Way of stopping	Shutting throttle fully

2. Main Application

This Tomahawk Power backpack Sprayer is the ideal portable tool for prevention of diseases and for plant protection. It is mainly used in prevention and cure of diseases and pests of plants such as cotton, rice, wheat, fruit trees, corn, greens, vines, etc. It can also be used for residential and commercial pest control, city sanitation, and greenhouses.

3. Main Features

3.1 This machine uses a gear structure to decrease speed, so it is very durable.

3.2 The main part is the plunger pump. The structure is simple and compact, so it allows for easy maintenance.

3.3 This machine has high pressure, great flow and high efficiency, so the spraying of the chemicals is highly efficient.

4. Main Structure

This machine consists mainly of:

4.1 Engine. It is the source of power for the machine. It is connected to the plunger pump through a decelerating device and connected to the frame by a bottom support.

4.2 Plunger Pump. It is the heart of the machine. It is connected to the engine and to the frame.

4.3 Frame. It supports the machine.

4.4 Chemical Tank. It is used for holding chemical liquid.

4.5 Spraying Parts. Consists of plastic tube assembly, handle, valve, straight spraying tube assembly and long spraying nozzle.

4.6 Accessories. A single nozzle conical gun and a heavy duty foundation gun are available. Must purchase separately.

5. Operating Instructions

5.1 Preparation before start

5.1.1 Connecting spraying parts. Before starting, verify all the connections are working.

- | | |
|---------------------------|-----------------|
| 1. Long Spraying Nozzle | 4. Valve |
| 2. Washer | 5. Handle |
| 3. Straight Spraying Tube | 6. Plastic Tube |

Never fill the fuel tank to the very top.

Never add fuel to the tank in a closed non-ventilated area.

Do not add fuel to this unit close to a open fire or sparks.

Be sure to wipe off spilled fuel before attempting to start the engine.

Do not attempt to refuel a hot engine.



Figure 2

5.2 Start

5.2.1 Adding fuel. This gasoline engine is a single-cylinder, two stroke. The engine uses a fuel mixture of No. 90 gasoline and two-stroke oil. The gasoline oil mixture ratio is of 30:1 (gasoline : oil)

5.2.2 Push the fuel-injecting pump continuously until the pump is visibly full.

5.1.2 Check that all the connections are correct and stable.

5.1.3 For long term storage, oil sealed must be removed first. To remove: Take off the spark plug, use the lift thumb to stop the spark plug hole and pull the starter to remove oil.

5.1.4 Check the spark of the spark plug. Normally the sparks should be blue.

5.1.5 Check if the air filter is clean. A dirty air filter will influence the volume of incoming air that may cause bad engine performance.

5.2.3 Move the fuel handle in the starting position (about one third of the whole scale).

See Figure 3.

5.2.4 Pull the starter lightly 3-5 times to push fuel into the cylinder. Then pull faster to start the engine.



Figure 3

Note: After starting the engine, the recoil starter should be retracted slowly. If the rope on the recoil retracts fast, it may cause damage to the engine.

5.2.5 Next, move the choke slowly to full open position. Regulate the fuel handle to a proper position to run at a low speed for 3-5 minutes.

5.2.6 New machines should not work at full open position within the first 4 hours. The speed should be controlled at 4000-5000 rpm. Start new machine's at a half throttle.

5.3 Spraying

5.3.1 When adding chemical liquid, it should be poured slowly into the chemical tank. The liquid must be poured through the filter in order to avoid undesired matter from entering into the liquid tank, which could cause harm to the chemical tank or engine. After adding liquid, screw down the chemical tank lid in order to avoid leakage.

5.3.2 Regulate the choke (see Figure 4) to the closed position to start and then move to the full open position when the engine is hot.

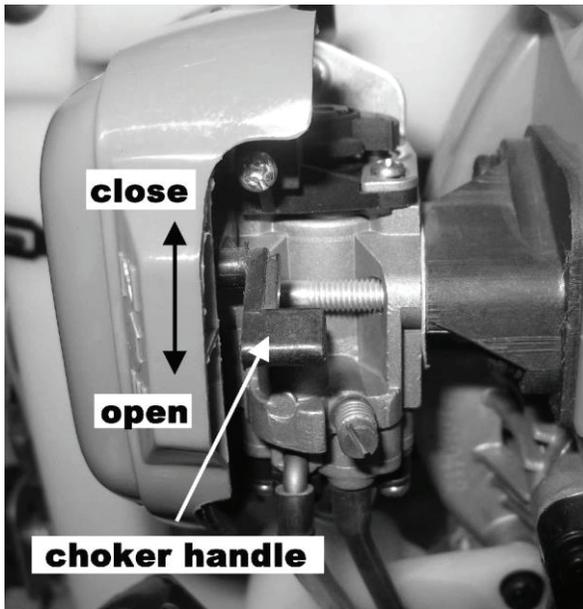


Figure 4

- 5.3.3 Important notes when spraying:
- A) Swing the spraying tube with your hand after turning on the handle valve. In order to avoid chemical harm, it is strictly prohibited to spray only in one place.
 - B) Operator should face the wind. The spraying tube should form an approximate 15° angle.
 - C) During spraying, the spraying tube should be swung continuously between the left and the right to increase spraying range.

5.3.4 Pressure regulation. When the engine's speed is 5000-6000rpm, regulate the water pressure of the plunger pump. If it is necessary to regulate, please do this procedure as per the instructions on Figure 5.

- 5.3.4 Spraying. Regulate the fuel handle to allow the machine to run at about 6500r/min and turn on the handle spraying valve to begin spraying.
- 5.3.5 Stopping. Move the stop switch to the STOP position when the engine idles.

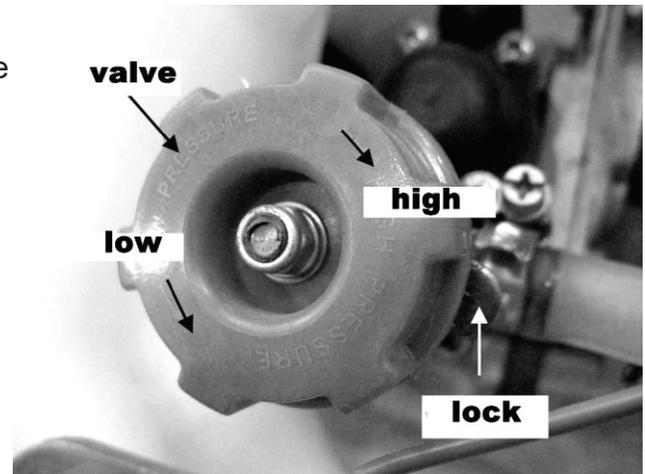


Figure 5

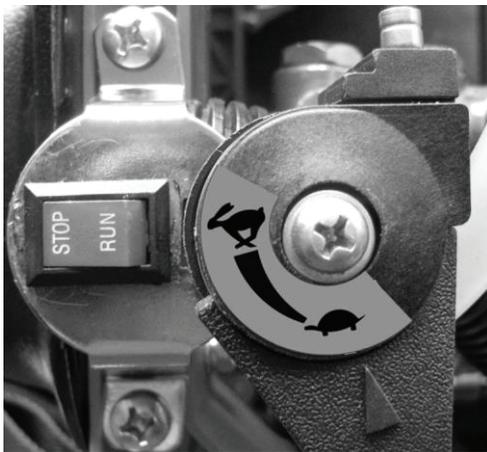


Figure 6

- 5.4 Avoid fire.
- a) NEVER start a fire or smoke near the machine.
 - b) NEVER refuel the machine when it is hot or running.
 - c) NEVER pour fuel on the machine. If you do, clean it immediately. After adding fuel, screw down the fuel tank lid, then move the machine to a new place to start the engine.

5.5 Spraying operation.

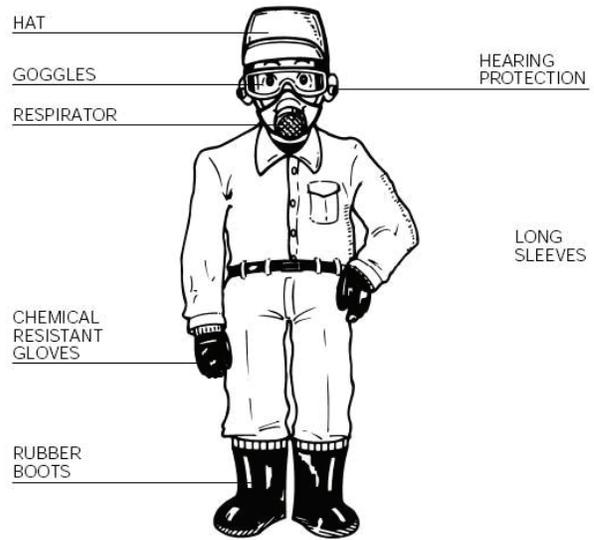
- a) Chemical spraying should be performed under cool weather with little wind. We recommend spraying early in the morning or in the late afternoon. This will reduce evaporation and drift of chemicals improving spray efficiency.
- b) The operator must walk facing the wind.
- c) If chemical touches the operator's mouth or eyes, wash them immediately with clean water and then visit a doctor.
- d) If the operator has a headache or feeling dizzy, he must stop working immediately and should visit a doctor.
- e) For the operator's safety, spraying must be carried out strictly according to the instruction of the chemicals being used.

6.Safe Operation

6.1 Read the instruction manual carefully.

6.2 Protective gear:

- a) Wear a flanged cap
- b) Wear dirt/fog-proof goggles
- c) Wear a gauze mask
- d) Wear a coat guard
- e) Wear long sleeve gloves
- f) Wear boots



7.Troubleshooting

7.1 Engine troubleshooting guide

Problem	Cause	Remedy
Fails to start	Fail to push the fuel-injecting pump	Push continuously
	Water mixed with fuel	Replace the fuel
	Deterioration or carbon deposit of spark plug	Replace the plug
	Bad contact between spark plug and lead wire	Check spark plug wire
It starts but cannot run at high speed	The choke is not on the full open position	Open to full position
	Wrong ratio of fuel	Replace
	Water in fuel	Replace the fuel
It runs but does not work efficiently	The air filter is dirty	Check and clean
	Outlet of cylinder and muffler are dirty	Remove the dirt
	Piston, piston ring, cylinder have been worn	Replace
Stops while running	Fuel is out	Add fuel
	The lead wire of plug is loose	Check and replace
	Plug covered with carbon	Replace the plug
	The filter is clogged	Clean
	Water in fuel	Replace fuel
	The air hole in the tank lid is clogged	Clean

7.2 Troubleshooting for spraying

Problem	Cause	Remedy
Liquid does not spray out	Inlet valve and outlet valve blocked	Replace or clean
	Washer is damaged	Replace
	6004Z bearing is damaged	Replace
	Piston is damaged	Replace
Low or no spraying pressure	Not enough pressure	Regulate
	Not enough elastic force on regulating spring	Replace
	Corrosion resistant steel ball worn	Replace
	Pressure regulating valve seat worn	Replace
Pressure is fine but spraying is low	Piston is worn	Replace
	Piston running distance is not enough	Replace
	Inlet valve and outlet valve are worn	Replace
	Spraying parts are clogged	Clean
Spraying mist is low	The holes of spraying sheet are worn	Replace
	Spraying parts are clogged	Clean

Service and Maintenance

Tomahawk Power guarantees problem-free quality and will assume the costs for defect remediation by replacing defective parts in the case of material or manufacturing defects that occur within the guarantee period a the date of purchase. Please note that specific guarantee conditions apply in some countries. Ask your sales person if you have any questions. As vendor of the products he is responsible for the guarantee. We request your understanding that no guarantee can be assumed for damages due to the following: • Non-compliance with the operating instructions. • Neglecting required maintenance and repair work. • Damages due to improper carburetor adjustment. • Normal wear and tear. • Obvious overload through persistently exceeding the upper performance limits. • Using non-approved tools and cutting fixtures, Using non-approved cutting bar and chain lengths in the case of chain saws. • The use of force, improper handling, misuse, or accident. • Damages caused by overheating due to dirt build up on the ventilator casing. All guarantee work must be carried out by a Tomahawk Power dealer.

Parts subject to wear and tear must be replaced, when required.

The following parts are subject to normal wear and are not covered by the manufacturer's warranty:

- Air filter
- Fuel filter
- All rubber parts which come into contact with fuel
- Spark Plug
- Starter

9. Technical Maintenance and Long Term Storage

(1) Spraying units

a. Clean out any residual chemical mixture in the chemical tank and all other parts after operation with clean water and and dry.

b. Clean the chemical tank inside and out after spraying.

c. Loosen the chemical tank lid.

d. Let the machine run at a low speed 2-3 minutes after cleaning.

(2) Fuel system maintenance

a. Water or dirt in fuel is one of the main cause of the engine trouble, clean the fuel system regularly.

b. Residual fuel remaining in the fuel tank and carburetor for an extended period will clog the fuel system, causing the engine not to work properly. Fuel should be discharged if the machine will not be in use for a week.

(3) Air filter and plug.

a. Clean the filter after every day operation. Dirt adhering to the filter reduces the engine power.

b. Dry filter before reinstalling.

c. Clean stains or carbon off the spark plug and adjust spark gap to 0.6~0.7mm.

d. The plug model of this machine is 4106J, as seen on Figure 13.

Do not use other models.



0.6-0.7mm

Fig 13

Note:

The work including maintenance, cleaning and adjusting must be done after stopping the machine.

Periodically check the braces.

Without delay, replace the worn out braces.

(4) Long term storage

a. Clean the machine and apply antirust oil to metal parts.

b. Remove the spark plug and pour 15~20g of 2-stroke engine oil into the cylinder through the spark plug pole. Pull the starter handle 4~5 times to distribute the oil inside the engine. Pull the handle slowly until the piston reaches the top of its travel and leave it there, then install the spark plug.

c. Remove the chemical tank lid, and clean inside and outside, then leave the lid loose.

d. Remove spray wands and clean them. Store separately.

e. Discharge fuel in the tank and carburetor entirely.

f. Cover the machine with a plastic dustcoat and store it in a dry and clean place.



1 Start the engine and keep it in idle.



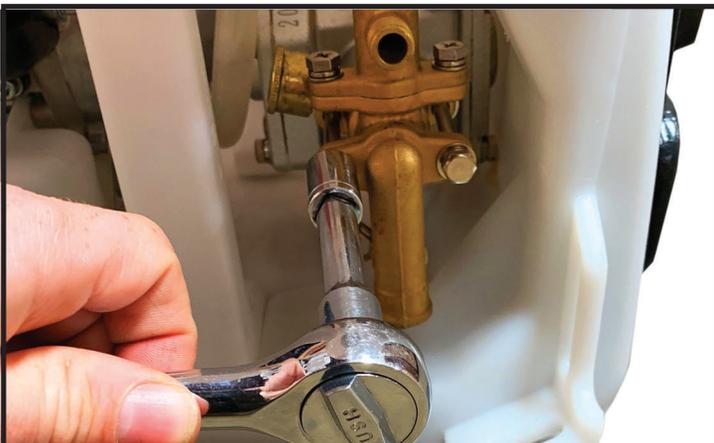
2 Using a 10mm socket wrench, loosen the 4 bolts on the right & left sides of the pump.



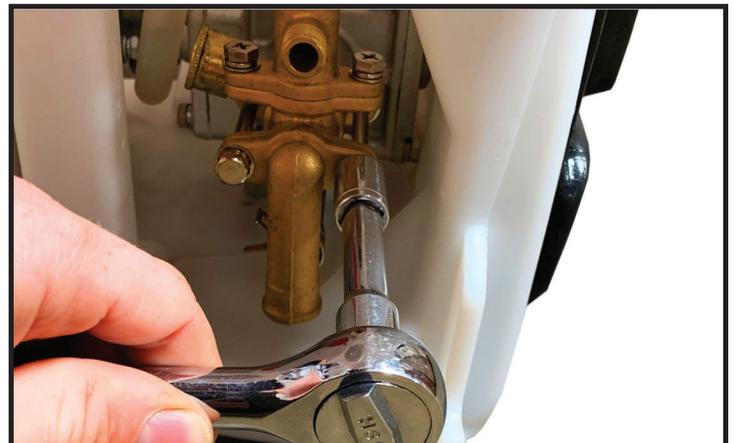
3 Loosen the left screw on the left side.



4 Loosen the right screw on the left side.



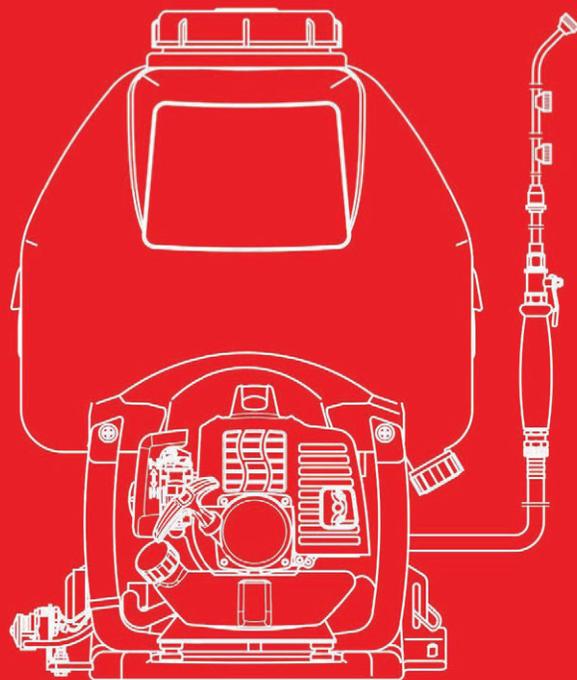
5 Loosen the left screw on the right side.

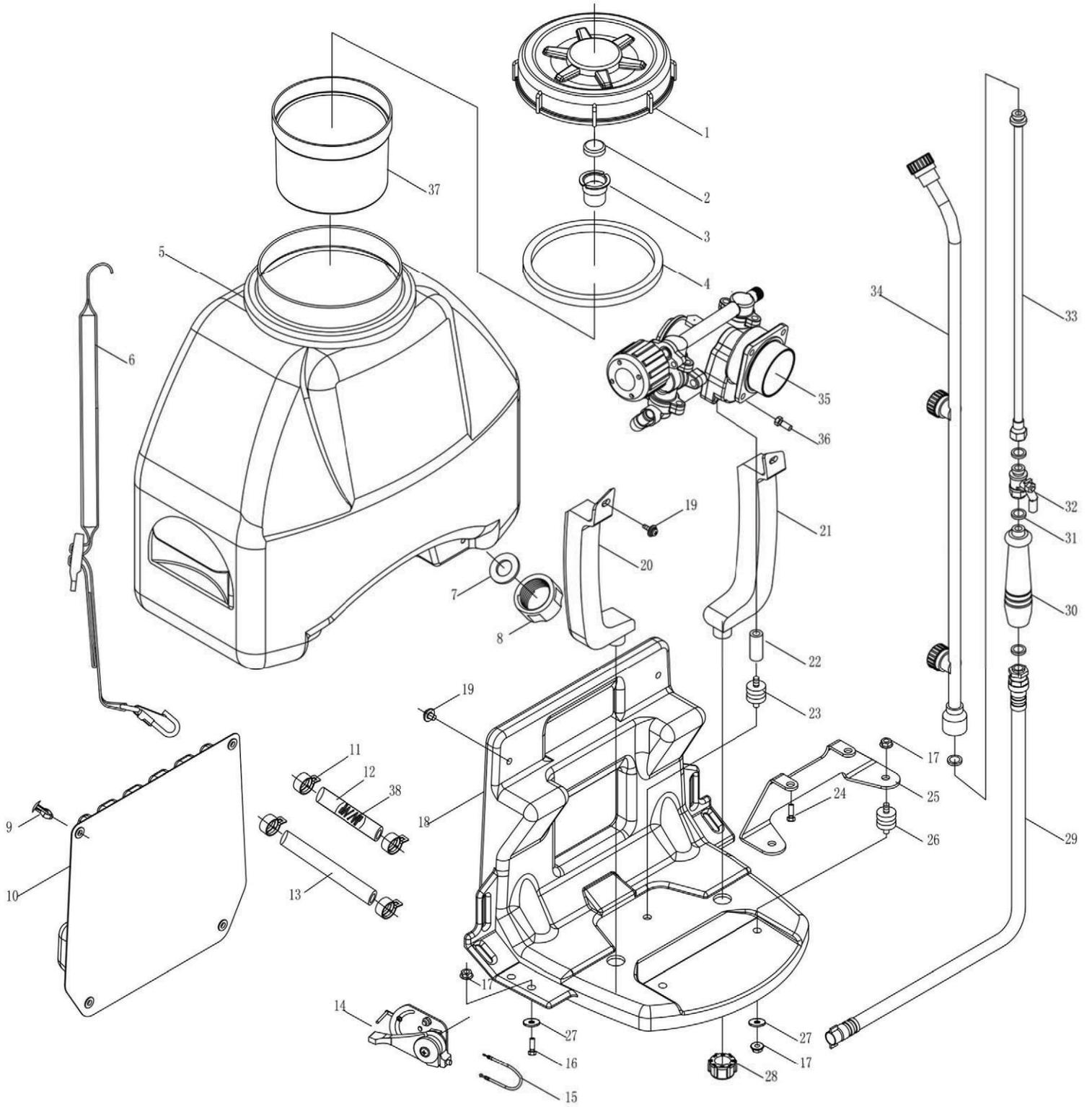


6 Loosen the right screw on the right side. Look for water to begin flowing through the tubes.

TOMAHAWK

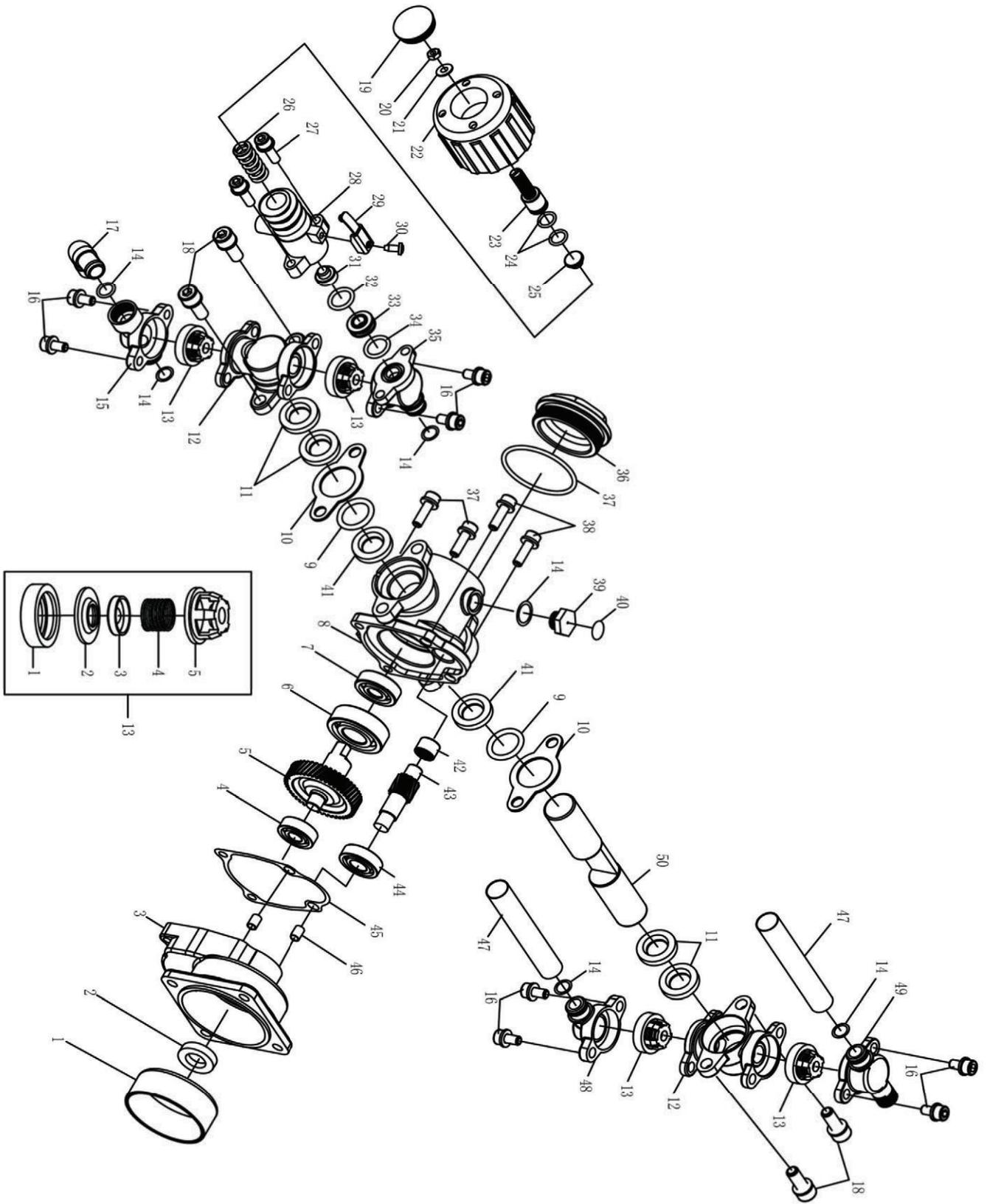
PARTS CATALOG BACKPACK SPRAYER TPS25





NO.	Part NO.	Part Name	Qty.
1	3WZ-6.5.2-1	LID	1
2	3WZ-4.7.1-3	LID	1
3	3WZ-4.7.1-4	LID	1
4	3WF-8.1-1	SEALING WASHER	1
5	3WZ-6.5.1	CHEMICAL TANK	1
6	3WZ-9.2	BANDS ASSM	2
7	3WF-3A.1-2	SEALING WASHER	1
8	3WZ-6.5-1	LID	1
9	3WF-14-13	PLASTIC CLICK	4
10	3WZ-9.1	BACK DACK ASSM	1
11	QC/T621 Q673B15	CLIP	4
12	GB13527.1LS-10×2.5×140	TUBE	1
13	GB13527.1LS-10×2.5×340	TUBE	1
14	3WZ-9.5	SWITH	1
15	3WZ-4C.3	FREL THROTTLE	1
16	GB/T29.2+GB/T96	SCREW ASSY M6×20	2
17	GB/T6177.1 M6	NUT M6	7
18	3WZ-6-4	FRAME	1
19	GB/T823+GB/T96	SCREW M6×12	4
20	3WZ-6-9	LEFT SUPPORT	1
21	3WZ-6-5	RIGHT SUPPORT	1
22	3WZ-9-1	SUPPORT MOUNT	1
23	3WZ-7B.2B	RUBBER MOUNT	1
24	GB70+GB93+GB97	SCREW ASSEM 5×20	2
25	3WZ-6F-1C	CONNECT PLATE	1
26	3WZ-6.1	RUBBER MOUNT	2
27	GB/T 96	WASHER 6	5
28	3WZ-6-2	PLASTIC NUT	2
29	3WZ-6.6	RUBBER TUBE ASSY	1
30	3WZ-4.11	HANDLE	1
31	3WZ-4-10	SEAL RING	4
32	3WZ-4.12	VALVE	1
33	3WZ-4.13	STAIGHT SPRAYING TUBE	1
34	3WZ-4.14	LONG NOZZLE	1
35	3WZ-7B.5	PISTON PUMP	1
36	GB/T 9074.13	SCREW M6×16	4
37	3WZ-7.2.2	FILTER ASSM	1
38	3WZ-4.7.4-2A	SPRING	1



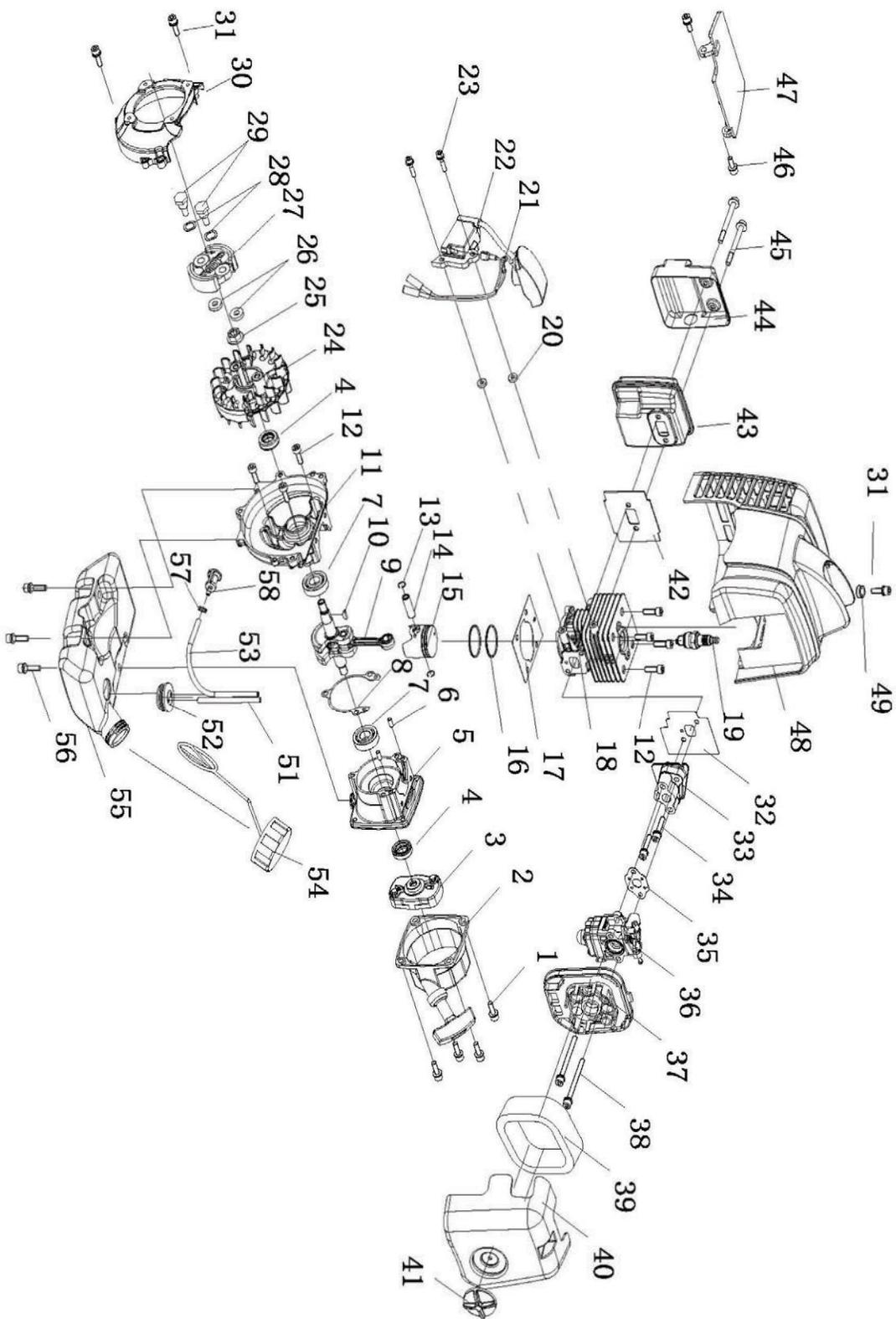


NO.	Part NO.	Part Name	Qty.
1	3WZ-7B.5-1	CLUTCH DRUM COVER	1
2	1E36F.2	SEAL	1
3	3WZ-7B.5.1-1	CONNECTING BASE	1
4	GB/T276	BEARING 6000/P6	1
5	3WZ-7B.5.1-4	WHEEL	1
6	GB/T276(17x42x12)	BEARING 6203x3	1
7	GB/T276(10x32x9)	BEARING 6200x1	1
8	3WZ-7B.5.1-2	NOUMENON	1
9	GB/T3452.1	O-RING 21.2×1.8	2
10	3WZ-7B.5-6	BAFFLE	2
11	3WZ-7B.5.3-4	WATER SEAL	4
12	3WZ-7B.5.3-3	CYLINDER STATOT	2
13	3WZ-7B.5.2A	CHECK VALVE	4
14	GB/T6659	O-RING 10×2	6
15	3WZ-7B.5.4-1	WATER CHAMBER B	1
16	GB70.1+GB93	SCREW ASSM M6X12	8
17	3WZ-7B.5-5	WATER INLET	1
18	GB70.1+GB93	SCREW ASSM M8X20	4
19	3WZ-7B.5.5-8	HANDLE CAP	1
20	GB6172	NUT M8	1
21	GB97.1	WASHER 8	1
22	3WZ-7B.5.5-1	HANDLE	1
23	3WZ-7B.5.5-3	REGULATING SCREW	1
24	GB/T6659	O-RING 10×1.8	2
25	3WZ-7B.5.5-6	SPRING SEAT 2	1
26	3WZ-7B.5.5-5	SPRING	1
27	GB70.1	SCREW ASSM M6X16	2
28	3WZ-7B.5.5-2	VALVE	1
29	3WZ-7B.5.5.1	BATTER BOARD	1
30	GB845ST4.2X10	SCREW ASSEM	1
31	3WZ-7B.5.5-4	SPRING SEAT 1	1
32	GB3452.1	O-RING 12.5×2.65	1
33	3WZ-7B.5.5-7	VALVE SEAT	1
34	GB3452.1	O-RING 11.8×1.8	1
35	3WZ-7B.5.3-2	DISCHARGE METAL A	1
36	3WZ-7B.5-3	BOX BACK COVER	1
37	GB/T3452.1	O-RING 46.2×2.65	1
38	GB70.1+GB93	SCREW ASSM M6X20	4



NO.	Part NO.	Part Name	Qty.
39	3WZ-7B.5-2A	BOLT	1
40	3WZ-7B.5-7	PASTER	1
41	3WZ-7B.5.1-7	OIL SEAL	2
42	GB/T290 HK1010	BEARING	1
43	3WZ-7B.5.1-3	GEAR SHAFT	1
44	GB/T276	BEARING 6001 P5	1
45	3WZ-7B.5.1-6	SEALING WASHER	1
46	6MF-30.1-14	PIN	2
47	3WZ-7B.5-4	TUBE	2
48	3WZ-7B.5.3-1	WATER CHAMBER A	1
49	3WZ-7B.5.4-2	DISCHARGE METAL B	1
50	3WZ-7B.5.1-5	PLUNGER	1
13-1	3WZ-7B.5.2-1	BALL SEAT	1
13-2	3WZ-7B.5.2-2	VALVE DISK	1
13-3	3WZ-7.5.2-3	VALVE BLOCK	1
13-4	3WZ-7B.5.2-4A	VALVE SPRING	1
13-5	3WZ-7B.5.2-5	VALVE BONNET	1





NO.	Part NO.	Part Name	Qty.
1	GB70.1+GB93+GB97	Screw M5×16	4
2	P23.10A	Starter	1
3	P23.9A	Guide Cover Ass'y	1
4	1E36F.2	Oil seal	2
5	P23.11-2	Crank case R	1
6	GB/T119.1	Pin 4×h8×8	2
7	GB/T276	Bearing 6001/P53	2
8	P23.11-3	Gasket crank case	1
9	P23.6A.1	Crank shaft assy	1
10	1E40FP-3Z.3-1	Key	1
11	P23.11-1	Crank case F	1
12	GB/T70.1	Screw M5×16	7
13	1E34F.6-2	Ring snap	2
14	1E31F.4-2	Piston pin	1
15	P23.6A-1	Piston	1
16	P23.6-2	Ring piston	2
17	P23-2	Gasket cylinder	1
18	P23-1	Cylinder	1
19	CMR6A	Spark plug	1
20	P40-5	Spacer lg coil	2
21	1E40F-5.3.1	Wire lead assy	1
22	HP23.2.1-SZ.2	IG coil	1
23	GB70.1+GB93+GB97	Screw M4×20	2
24	HP23.2.1-SZ.1	Rotor magnet	1
25	GB/T6177	Nut M8	1
26	1E34F-11	Wave washer	2
26A	1E34F.10	Clutch assy	1
27	1E34F-13	Washer	2
28	1E34F-12	Clutch bolt	2
29	HP23-1	Fan Cover	1
30	GB70.1+GB93+GB97	Screw M5×18	3
31	P23-7	Gasket insulator	1
32	P23.3	Insulator	1
33	GB70.1+GB93+GB97	Screw M5×25	2
34	1E36F-2A-1	Gasket carburetor	1
35	1E34F-2E.1A	Carburetor	1
36	1E34F.1.1	Cleaner base assy	1
37	GB70.1+GB97.1	Screw M5×60	2
38	1E34F.1-1	Air filter element	1



NO.	Part NO.	Part Name	Qty.
39	HP23.1-1	Cover Cleaner	1
40	1E34FG.1.1	Knob cover	1
41	1E34F-3	Gasket muffler	1
42	1E34F-2E.2	Muffler	1
43	HP23-5A	Cover	1
44	HP23-8	Screw M5×55-10.9	2
45	GB70.1+GB93+GB97	Screw M5×14	2
46	HP23-2	Clapboard	1
47	HP23.3	Top cover	1
48	1E33F-4	Spacer lg coil	1
49	GB70.1+GB93+GB97	Screw M5×18	1
50	1E44F-E.5.1-2-EPA	Fuel Pipe $\phi 5 \times \phi 2.5 \times 100$	1
51	1E36FF.8.1-1	Plug	1
52	1E44F-E.5.1-1-EPA	Fuel Pipe $\phi 5.5 \times \phi 3 \times 165$	1
53	1E32FL.6.2B	Tank cap assy	1
54	HP23.6.1	Fuel tank	1
55	GB70.1+GB93+GB97	Screw M5×16	3
56	P23.12-1	Snap Rings	1
57	P40.12.2-3A	filter	1



CALIFORNIA AND FEDERAL EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board, the United States Environmental Protection Agency and Tomahawk Power, LLC are pleased to explain the emissions control system warranty on your 2018-2019 small engine/equipment (SORE). In the United States and California, new small engine/equipment must be designed, built and equipped to meet the State's stringent anti-smog standards. Tomahawk Power, LLC must warrant the emissions control system on your small engine/equipment for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your small engine/equipment.

Your emission control system may include parts such as the carburetor, fuel-injection system, the ignition system, catalytic convertor, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, belts, clamps, connectors, and other associated emission-related components. For engines less than or equal to 80 cc, only the fuel tank is subject to the evaporative emission control warranty requirements of this section.
(California only)

Where a warrantable condition exists, Tomahawk Power, LLC will repair your small off-road engine/equipment at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

The emissions control system is warranted for two years. If any emissions-related part on your small engine/equipment is defective, the part will be repaired or replaced by Tomahawk Power, LLC

OWNER'S WARRANTY RESPONSIBILITIES:

As the small engine/equipment owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Tomahawk Power, LLC recommends that you retain all receipts covering maintenance on your small engine/equipment, but Tomahawk Power, LLC cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small engine/equipment owner, you should however be aware that Tomahawk Power, LLC may deny your warranty coverage if your small engine/equipment or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your small engine/equipment to distribution center or service center authorized by Tomahawk Power, LLC as soon as the 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 Tomahawk Power, LLC customer service representative at 1-866-577-4476 or Email: support@tomahawk-power.com .

DEFECTS WARRANTY REQUIREMENTS

(a)The warranty period begins on the date the small engine/equipment is delivered to an ultimate purchaser.

(b)General Emissions Warranty Coverage. Tomahawk Power, LLC warrants to the ultimate purchaser and each subsequent owner that the engine/equipment is:

(1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the Air Resources Board; and

(2) Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.

(c)Subject to certain conditions and exclusions as stated below, the warranty on emissions related parts is as follows:

(1)Any warranted part that is not scheduled for replacement as required maintenance in your **Owner's Manual** is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by Tomahawk Power, LLC according to Subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period.

(2)Any warranted part that is scheduled only for regular inspection in your **Owner's Manual** is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.

(3)Any warranted part that is scheduled for replacement as required maintenance in your **Owner's Manual** is warranted for the period of time before the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part will be repaired or replaced by Tomahawk Power, LLC according to Subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

(4)Repair or replacement of any warranted part under the warranty provisions herein must be performed at a warranty station at no charge to the owner.

(5)Notwithstanding the provisions herein, warranty services or repair will be provided at all of our distribution centers that are franchised to service the subject small engine/equipment.

(6)The small engine/equipment owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

(7)Tomahawk Power, LLC is liable for damages to other small engine/equipment components proximately caused by a failure under warranty of any warranted part.

(8)Throughout the small engine/equipment warranty period stated above, Tomahawk Power, LLC will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

(9)Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of Tomahawk Power, LLC

(10) Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts by the ultimate purchaser will be grounds for disallowing a warranty claim. Tomahawk Power, LLC will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

(11) The manufacturer issuing the warranty shall provide any documents that describe that manufacturer's warranty procedures or policies within five working days of request by the Air Resources Board.

EMISSION WARRANTY PARTS LIST

The repair or replacement of any warranted part otherwise eligible for warranty coverage may be excluded from such warranty coverage if Tomahawk Power, LLC demonstrates that the small engine/equipment has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for repair or replacement of the part. That notwithstanding, any adjustment of a component that has a factory installed, and properly operating, adjustment limiting device is still eligible for warranty coverage. The following emissions warranty parts for each engine family list is covered.

For engine families greater than 80cc:

(1) Fuel Metering System:

- (a) Gasoline carburetor assembly and its internal components
- (b) Carburetor gaskets
- (c) Fuel tank
- (d) Fuel Line
- (e) Fuel Line Fittings
- (f) Clamps
- (g) Pressure regulator (if equipped)
- (h) Mixer assembly and its internal components (if equipped)

(2) Air Induction System including:

- (a) Intake pipe/manifold
- (b) Air cleaner

(3) Ignition System including:

- (a) Spark plug
- (b) Ignition coil

(4) Catalytic Muffler Assembly including:

- (a) Muffler gasket
- (b) Exhaust manifold
- (c) Catalytic converter

(5) Crankcase Breather Assembly including:

- (a) Breather connection tube.

(6) Fuel tank evaporative emissions control system including:

- (a) Purge Valves
- (b) Carbon Canister
- (c) Canister Mounting Brackets
- (d) Fuel Cap
- (e) Fuel Tank

(7) Miscellaneous items Used in Above Systems including:

- (a) Switches
- (b) Hoses, belts, connectors, and assemblies.

(8) Air injection system

(a) Pulse valve

For engine families less than or equal to 80cc:

(1) Fuel Metering System:

(a) Gasoline carburetor assembly and its internal components

(b) Fuel filter (if so equipped)

(c) Carburetor gaskets

(d) Fuel pump (if so equipped)

(2) Air Induction System including:

(a) Intake pipe/manifold

(b) Air cleaner

(3) Ignition System including:

(a) Spark plug

(b) Ignition module/coil

(4) Catalytic Muffler Assembly (if so equipped) including:

(a) Muffler gasket

(b) Exhaust manifold

(5) Crankcase Breather Assembly including:

(a) Breather connection tube.

(6) Miscellaneous items Used in Above Systems including:

(a) Switches

(b) Hoses, belts, connectors, and assemblies.

(7) Fuel tank evaporative emissions control system including:

(a) Fuel Tank

The warranty is provided in accordance with the "California AND FEDERAL Emission Control Warranty Statement".