

User Manual



AM-708 **PRO** **2S** Motorised Knapsack Sprayer



DISCLAIMER: DUE TO CONSTANT UPGRADATION, FEATURES AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE



**BEFORE OPERATING THIS MACHINE,
PLEASE READ THESE INSTRUCTIONS CAREFULLY**

CAUTION

1. Stop running the gasoline engine before the tank is refueled, and ensure that the gasoline engine is far from the fire. Against the position, discharge the exhaust gas from the rooms, channels using gasoline engine or any other closed places.
2. Forbid to touch the muffler and the body when the gasoline engine runs and just stops.
3. Don't touch the ignition plug cap and wires, to avoid the electrical shock
4. Forbid children and persons unconcerned to touch the gasoline engine.
5. Ensure the cooling of the muffler and the body, cover the gasoline engine after daily work.
6. Against the problem, the damage or the misfire of gasoline engine, check and maintain the gasoline regularly and clean the deposit carbon in the muffler and in the cylinder exhaust.
7. Forbid to use pure gasoline (without two-stroke engine oil) as fuel.
8. Against the damage of gasoline engine and the instruments, forbid to accelerate abruptly, to run speedily and stop abruptly.
9. Forbid the drunk, the dizzy and the pregnant to use the gasoline engine.

PREPARTION

Refuel

Use the mixture of the gasoline and the two stroke engine oil, the volume ratio is 25-30:1 (Fig-1)

Check and clean the air filter

The air filter must be often cleaned, or the polluted air filter will lower the output power of the engine. If the core is blocked by dust, use gasoline to clean the core and the inside of the air filter, then dip in the oil, wring oil out and put the core back (Fig 2)

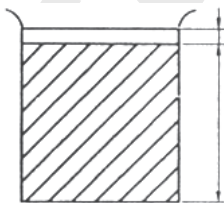


Fig 1

1. The FC Two-stroke engine oil
25. The Gasoline

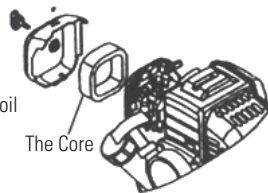


Fig 2

START UP

1. Turn on the gasoline switch until the gasoline flows out the clear plastic pipe. (Fig 3)
2. Close the choke totally (Fig 4)
If the engine is heated, the choke must be totally opened.
3. Open half the throttle.
4. Draw the starter several times slowly, and then draw quickly.

Note: if the excessive gasoline causes the difficult start, take down the ignition plug and the input pipe, open the choke and the throttle totally, draw the starter several times then install the input pipe and start the engine. After the startup, open the choke totally.



Fig 3

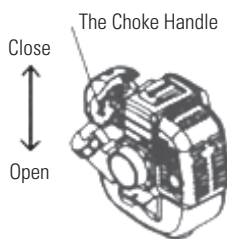


Fig 4

RUNNING

1. After the engine starts, run 3-5 minutes at a low speed
2. When the engine is heated enough, adjust the throttle handle to the corresponding speed.
3. Note: don't accelerate abruptly due to bad lubrication of the engine at the beginning of startup.
4. Avoid the speedy idle motion and over speed motion. If the throttle is totally opened, the engine will run over speed, which not only shortens the service life of the engine but also causes more problems in the engine.

STOPPING

1. Reduce the gasoline engine to the slowest speed and run 3-5 mins
2. Press the stop switch to stop the engine.

MAINTENANCE

1. Daily check

- Check all screws and nuts
- Check oil leakage or air leakage

2. Check after running 20 hours

- Clean the core of the air cleaner
- Clean the gasoline filter

3. Check after running 50 hours

- Refasten the nuts of the cylinder
- Clean the accumulated carbon both in the combustion chamber and in the exhaust of the cylinder
- Clean the accumulated carbon in the ignition plug, adjust the clearance to 0.6mm (Fig 5)
- Clean the accumulated carbon both in the intake and in the exhaust of the muffler (Fig 6,7)

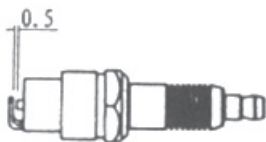


Fig 5

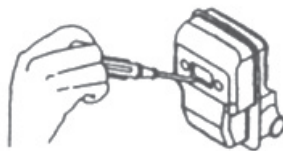


Fig 6

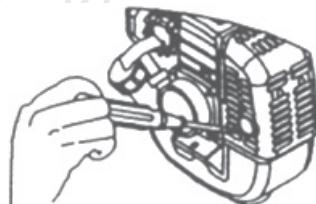


Fig 7

STORAGE

If the gasoline engine isn't used for a long time, it must be maintained as follows:

1. Remove the fuel in the tank and in the carburetor, close the choke totally, draw the starter 3-5 times.
2. Take down the spark plug, add certain engine oil from the spark plug hole into the cylinder, and draw the starter 2-3 times to move the piston to the top dead center, then install the spark plug.
3. Use the soft cloth with engine oil to clean the surface of the engine, stor the engine in a dry and windy place for the next use.

TRUBLE SHOOTING

1. Fail to start

- Oil switch is not turned on
- Gasoline is mixed with water, replace it
- The ignition plug has accumulated carbon or has been broken
- Poor contact of the high voltage wire with the spark plug

2. The engine can start, but can't run fast

- The choke is either open or closed fully
- The ratio of engine oil and the gasoline is normal or not
- Maybe there is water in gasoline

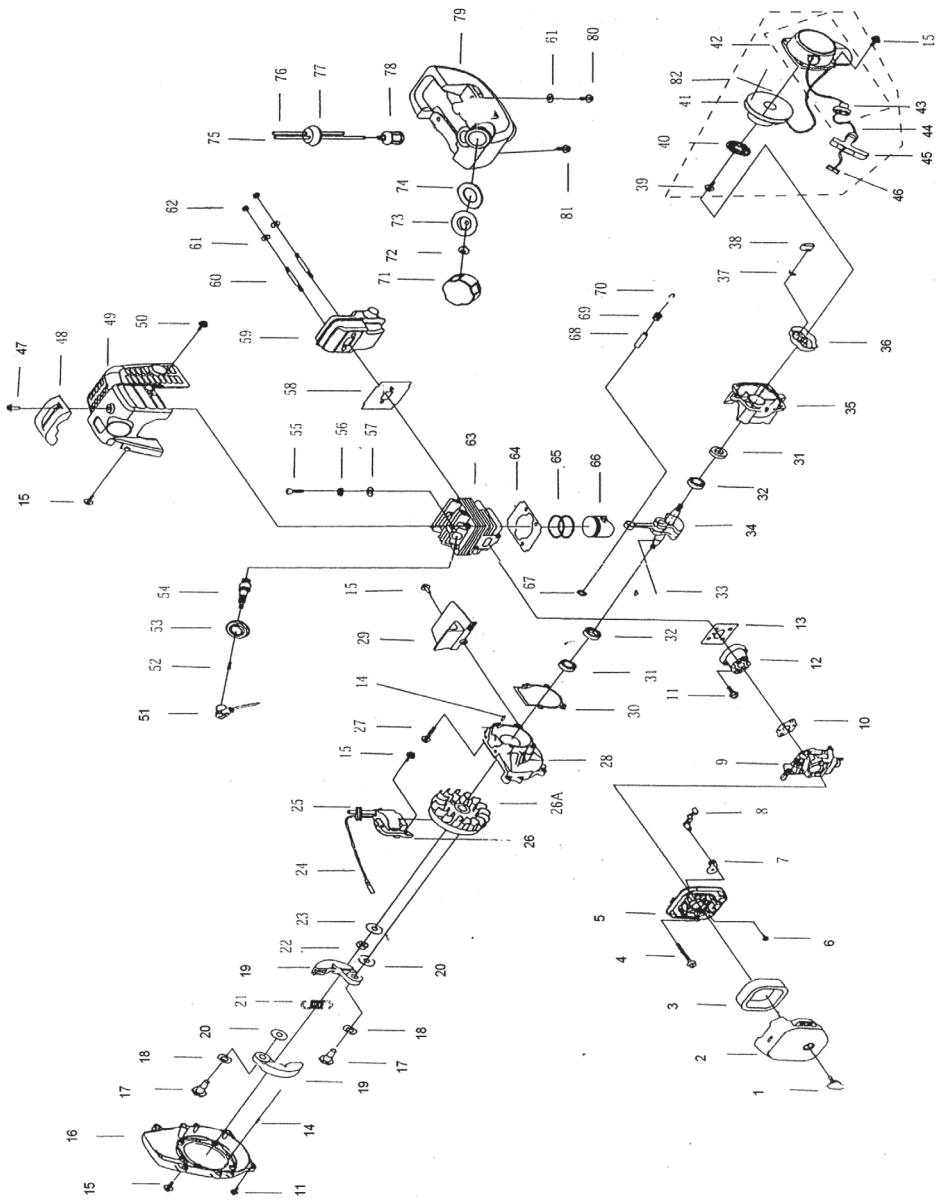
3. The gasoline engine can run, but has not enough power

- Maybe the core of the air filter is blocked by dust
- Maybe the cylinder exhaust and the muffler are blocked by accumulated carbon
- The piston, the piston rings and cylinder have been badly worn out
- Maybe the gasoline filter is blocked by dust
- The body or the top of the shaft has oil leakage and air leakage

4. The gasoline engine stops suddenly when running

- Run out of the gasoline
- The high voltage wire drops
- The ignition plug has accumulated carbon or has been broken
- The gasoline filter is blocked by dust
- Maybe there is water in the gasoline
- The air hole of the tank lid is blocked by dust

ENGINE SPARE PARTS DIAGRAM SPRAYER AM-708



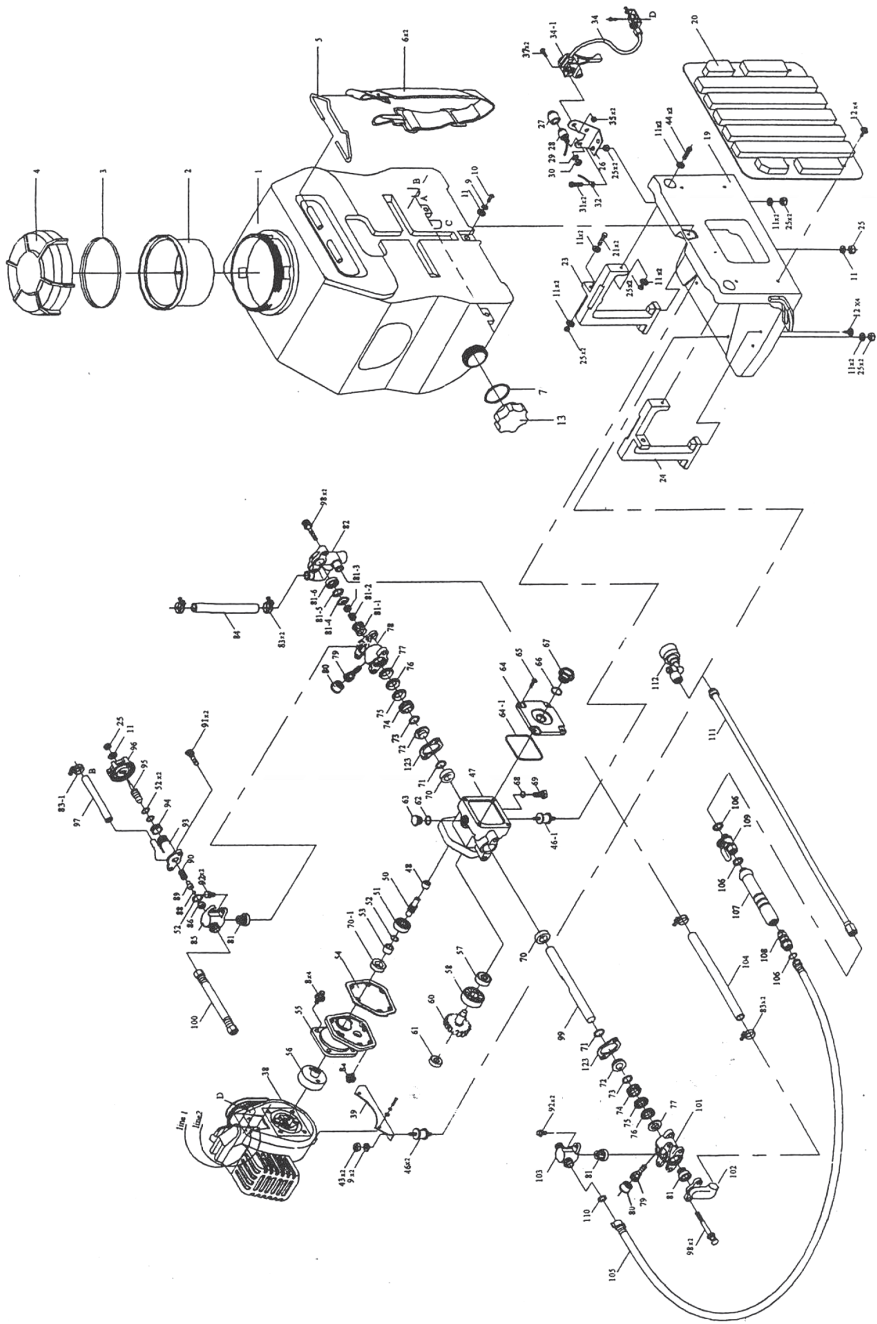
PART NO.	PART NAME
AM708-PRO-E01	Screw
AM708-PRO-E02	Cleaner Outside Cover
AM708-PRO-E03	Filter Element
AM708-PRO-E04	Screw Assy
AM708-PRO-E05	Cleaner Inside Cover
AM708-PRO-E06	Screw
AM708-PRO-E07	Choke
AM708-PRO-E08	Choke Handle
AM708-PRO-E09	Carburetor
AM708-PRO-E10	Gasket, Carburetor Side
AM708-PRO-E11	Screw Assy
AM708-PRO-E12	Inlet Mainfold
AM708-PRO-E13	Washer, Cylinder Side
AM708-PRO-E14	Pin
AM708-PRO-E15	Screw Assy
AM708-PRO-E16	Fan Cover
AM708-PRO-E17	Clutch Step Screw
AM708-PRO-E18	Washer
AM708-PRO-E19-21	Clutch Assy
AM708-PRO-E20	Washer
AM708-PRO-E21	Spring
AM708-PRO-E22	Nut
AM708-PRO-E23	Washer
AM708-PRO-E24	Stop Cord Comp.
AM708-PRO-E25	Primary Cord Grommet
AM708-PRO-E26	Magneto Stator
AM708-PRO-E26	Magneto Rotor
AM708-PRO-E27	Screw
AM708-PRO-E28	Front Half Crankcase

PART NO.	PART NAME
AM708-PRO-E29	Guide Plate
AM708-PRO-E30	Gasket, Crankcase
AM708-PRO-E31	Oil Seal
AM708-PRO-E32	Ball-Bearing
AM708-PRO-E33	Key
AM708-PRO-E34	Crankshaft Comp.
AM708-PRO-E35	Rear Half Crankcase
AM708-PRO-E36	Starter Case AM 708 Only
AM708-PRO-E36+37+38	Starter Pawl & Spring Assy AM 708
AM708-PRO-E36+37+38	Starter Pawl & Spring Assy AMP 768
AM708-PRO-E37	Starter Pawl Spring
AM708-PRO-E38	Starter Pawl
AM708-PRO-E39	Screw
AM708-PRO-E40	Recoil Spring
AM708-PRO-E41	Starter Pulley
AM708-PRO-E42	Recoil Starter Body
AM708-PRO-E43	Rope Guide
AM708-PRO-E44	Rope
AM708-PRO-E45	Starter Handle
AM708-PRO-E46	Gasket
AM708-PRO-E47	Screw Assy
AM708-PRO-E48	Cover
AM708-PRO-E49	Cover
AM708-PRO-E50	Screw Assy
AM708-PRO-E50	Gasket Muffler
AM708-PRO-E51	Plug Cap
AM708-PRO-E52	Screw
AM708-PRO-E53	Plug Cover
AM708-PRO-E54	Plug

PART NO.	PART NAME
AM708-PRO-E55	Screw
AM708-PRO-E56	Washer
AM708-PRO-E57	Washer
AM708-PRO-E58	Sealing Washer
AM708-PRO-E59	Muffler
AM708-PRO-E60	Bolt
AM708-PRO-E61	Washer
AM708-PRO-E62	Nut
AM708-PRO-E63	Cylinder
AM708-PRO-E64	Gasket, Cylinder
AM708-PRO-E65	Ring, Piston
AM708-PRO-E66	Piston
AM708-PRO-E66	Gasket, Fuel Tank Cap
AM708-PRO-E67	Stop Ring
AM708-PRO-E68	Pin, Piston
AM708-PRO-E69	Needle, Bearing
AM708-PRO-E70	Piston Pin Circlet
AM708-PRO-E71	Fuel Tank Cap
AM708-PRO-E72	Air Inlet Mouth
AM708-PRO-E73	Frame
AM708-PRO-E74	Sealing Washer
AM708-PRO-E75	Outlet Fuel Pipe
AM708-PRO-E76	Inlet Fuel Pipe
AM708-PRO-E77	Primary Cord Grommet
AM708-PRO-E78	Cleaner
AM708-PRO-E79	Fuel Tank - AM 708
AM708-PRO-E80	Screw
AM708-PRO-E81	Screw
AM708-PRO-E82	Starter Pulley Assy

TANK & PUMP SPARE PARTS DIAGRAM OF SPRAYER AM-708

PRD 2S



TANK & PUMP SPARE PARTS LIST OF SPRAYER AM-708

PART NO.	PART NAME
AM708-PRO-P01	Chemical Container
AM708-PRO-P02	Filter
AM708-PRO-P03	Gasket
AM708-PRO-P04	Container Cover
AM708-PRO-P05	Chain Holder
AM708-PRO-P06	Strap
AM708-PRO-P07	Gasket
AM708-PRO-P08	Screw
AM708-PRO-P09	Spring Washer
AM708-PRO-P10	Screw
AM708-PRO-P11	Washer
AM708-PRO-P12	Screw
AM708-PRO-P13	Drain Cup
AM708-PRO-P19	Frame
AM708-PRO-P20	Pad
AM708-PRO-P23	Right Stand
AM708-PRO-P24	Left Stand
AM708-PRO-P26	Fixed Plate
AM708-PRO-P28	Stop Switch
AM708-PRO-P32	Cord Comp
AM708-PRO-P34	Throttle Wire
AM708-PRO-P34-1	Throttle Lever
AM708-PRO-P39	Engine Stand
AM708-PRO-P46	Joint S
AM708-PRO-P46-1	Joint-L
AM708-PRO-P47	Crank Case
AM708-PRO-P48	Bearing
AM708-PRO-P50	Shaft

PART NO.	PART NAME
AM708-PRO-P51	Bearing
AM708-PRO-P52	O-Ring
AM708-PRO-P53	Steel Pipe
AM708-PRO-P54	Gasket
AM708-PRO-P55	Drum Case
AM708-PRO-P56	Drum Clutch
AM708-PRO-P57	Bearing
AM708-PRO-P58	Bearing
AM708-PRO-P60	Gear Shaft and Gear
AM708-PRO-P61	Bearing
AM708-PRO-P62	O-Ring
AM708-PRO-P63	Oil Inlet Cup
AM708-PRO-P64	Crankcase Cover
AM708-PRO-P64-1	O-Ring
AM708-PRO-P66	O-Ring
AM708-PRO-P67	Oil Glass
AM708-PRO-P68	O-Ring
AM708-PRO-P69	Drain Plug
AM708-PRO-P70	Oil Seal
AM708-PRO-P70-1	Oil Seal
AM708-PRO-P71	O-Ring
AM708-PRO-P72	Adjusting Ring
AM708-PRO-P73	Grease Ring
AM708-PRO-P74	V-Packing Upper Seal
AM708-PRO-P75	V-Packing
AM708-PRO-P77	Packing Seat
AM708-PRO-P78	Cylinder
AM708-PRO-P79+80	Grease Cup
AM708-PRO-P81	Valve Assy

PART NO.	PART NAME
AM708-PRO-P82	Suction Chamber
AM708-PRO-P83	Clip-L
AM708-PRO-P83-1	Clip-S
AM708-PRO-P84	Suction Hose
AM708-PRO-P85	Outlet Chamber
AM708-PRO-P86	Valve Seat
AM708-PRO-P88	Pressure Valve
AM708-PRO-P89	Pressure Valve Rod
AM708-PRO-P90	Spring
AM708-PRO-P93	Relief Valve Assy
AM708-PRO-P94	Nut
AM708-PRO-P95	Pressure Valve Screw
AM708-PRO-P96	Pressure Adjusting
AM708-PRO-P97	Overflow Hose
AM708-PRO-P99	Plunger
AM708-PRO-P100	High Pressure Hose
AM708-PRO-P101	Cylinder
AM708-PRO-P102	Suction Chamber
AM708-PRO-P103	Outlet Chamber
AM708-PRO-P104	Suction Hose
AM708-PRO-P105	High Pressure Hose
AM708-PRO-P107	Hose Pipe Handle
AM708-PRO-P108	Roller
AM708-PRO-P109	Ball Cock
AM708-PRO-P111	Spray Rod (SG101-C)
AM708-PRO-P123	Fixed Plate

INSPECTION & MAINTENANCE

For safety use, make sure the machine is cleaned every three-months. Before working, make sure to inspect the filter and the nozzle, and ensure there is no impurity. After working, make sure there is no water in the pump and the hose.

If the machine needs to be repaired in the guarantee period, please return the machine to the shop. You need to provide the certificate of purchase in order to repair or get the substitute.

Before Packing, the machine should be cleaned, then use closed packaging, packaging should be firm. Store the machine in dry place.

For transportation safety. The machine should comply with ISTA.



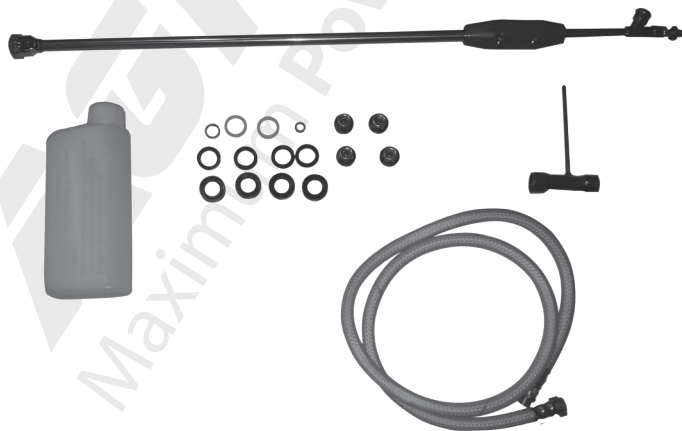
Meaning of crossed - out wheeled dustbin:

Do not dispose of electrical machines as unsorted municipal waste, use separate collection facilities.

If electrical machines are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old machines with new ones, the retailer is legally obligated to take back your old machine for disposals at least free of charge.

ACCESSORIES



Warranty Card

CUSTOMER COPY



Purchaser's Name & Address

Product Name

AM-708 Motorised Knapsack Sprayers

Product Serial No.

Invoice / DN No.

Date of Delivery

Dealer's Office Seal

Dealer Sign _____

Customer Sign. _____

I/We accept the terms and conditions of Warranty as in the Warranty Card.

Warranty Card

DEALER'S COPY



Purchaser's Name & Address

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AM-708 Motorised Knapsack Sprayers

Product Serial No.

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Customer Sign. _____

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Warranty Card

COMPANY COPY



Purchaser's Name & Address

Product Name

AM-708 Motorised Knapsack Sprayers

Product Serial No.

Invoice / DN No.

Date of Delivery

Dealer's Office Seal

Dealer Sign _____

Customer Sign. _____

I/We accept the terms and conditions of Warranty as in the Warranty Card.

1. **LIMITED WARRANTY PERIOD** : For a period of six months from the date of Sale / delivery of the product which ever is earlier. 2. **LIMITED WARRANTY OBLIGATION** : Replacement of defective part(s) by authorized dealer are free of charges. If found defective by reasons of defective material / poor workmanship, parts will be replaced and there will be no value re-imbursalment. 3. **TERMS & CONDITIONS** : a. Claims under warranty will be accepted on submission of Warranty Card duly filled and stamped by authorized dealer together with the original purchase document. : b. Shipping / transportation / Incidental charges incurred in replacing defective parts under warranty shall be borne by the purchaser.

WARRANTY null & void if

- (i) Lack of maintenance, (ii) Incorrect use of the machine or tampering, (iii) Use of non-genuine spare parts, (iv) Usage of acids, solvents, or any flammable materials, (v) Non-usage of filter water / clear water / soft water & using water above 40°C temperature, (vi) While using the pressure washers to draw water which is contaminated with dust & solvents (eg. paint thinners, gasoline, oil, etc.), (vii) Repair done by unauthorized service people, (viii) Those parts subject to wear & tear due to normal operations and plastic parts, rubber items etc, (ix) Loose connections, faulty electrical fixtures & fluctuations in power supply.
4. Should any failure occur during or after the warranty period, customer does not have the right to interrupt payment / price discount.
 5. Incidental or consequential damages like inconvenience commercial loss, loss of tie, mental agony etc.
 6. Loss of any nature due to operation or non-operation is not covered under warranty.
 7. All free service are at Dealer's service point only.
 8. Warranty ceases if service is not done periodically.
 9. The attached card should be completed and returned to Ratnagiri Impex Pvt. Ltd. for registration immediately after sale / delivery.
 10. The warranty is void unless you register the warranty card with Ratnagiri Impex Pvt. Ltd.
 11. The decision of Ratnagiri Impex Pvt. Ltd., in settling the warranty is final in all respects.
 12. All disputes are subject to Bangalore Courts Jurisdiction

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impex
BRINGING YOU THE FUTURE TODAY

1st Free Service Coupon

ISO 9001-2015
CERTIFIED COMPANY

FREE SERVICE COUPON (30 Days / 30 hrs (Which ever is earlier))

Model
AM-708 Motorised Knapsack Sprayers

Serial Number

PDI Date

Purchase bill no. Date

Service No.

Dealer's Office Seal

Dealer Signature.....

Customer Signature.....

Conditions: Operations listed have been performed to my entire satisfaction without any labour charges. Only consumables were charged.



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WARRANTY AND FREE SERVICE COUPON



ratnagiri
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BRINGING YOU THE FUTURE TODAY

2nd Free Service Coupon

ISO 9001-2008
CERTIFIED COMPANY

FREE SERVICE COUPON (60 Days / 60 hrs (Which ever is earlier))

Model
AM-708 Motorised Knapsack Sprayers

Serial Number

PDI Date

Purchase bill no. Date

Service No.

Dealer's Office Seal

Dealer Signature.....

Customer Signature.....

Conditions: Operations listed have been performed to my entire satisfaction without any labour charges. Only consumables were charged.



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WARRANTY AND FREE SERVICE COUPON



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3rd Free Service Coupon

ISO 9001-2015
CERTIFIED COMPANY

FREE SERVICE COUPON (90 Days / 120 hrs (Which ever is earlier))

Model
AM-708 Motorised Knapsack Sprayers

Serial Number

PDI Date

Purchase bill no. Date

Service No.

Dealer's Office Seal

Dealer Signature.....

Customer Signature.....

Conditions: Operations listed have been performed to my entire satisfaction without any labour charges. Only consumables were charged.

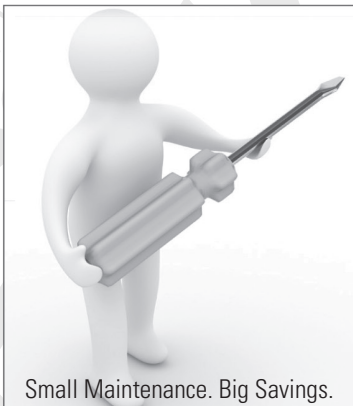


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WARRANTY AND FREE SERVICE COUPON



Small Maintenance. Big Savings.



Small Maintenance. Big Savings.



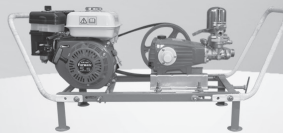
Small Maintenance. Big Savings.

Do's & Don'ts

- Always read the instruction manual supplied along with the equipments and understand the correct installation and operating procedures before attempting to use the equipments.
- It is important to use the personal protection equipments such as head helmet with visor, ear defenders, goggles, safety gloves, cut resistant shoes, trousers and jackets while operating potentially dangerous machines.
- Avoid untrained persons using the equipments. Children must not be allowed to handle these equipments.
- Always use genuine spares and accessories in repairs and usage to derive maximum life of the equipments.
- Always keep the equipments in good working condition to minimise loss of output as well as to reduce the pollution and save the environment.
- Do not use the machine within range of persons unless they wear protective clothing.
- Do not operate the machine when fatigued or under the influence of alcohol or drugs.
- When the machine is running, please maintain a constant water supply. Without water circulation will damage the sealing rings of the machine.
- For more query kindly contact for our Service Center/Dealer/ franchise

Agrimate Army For Pest Control

ANY WHERE - ANY TIME - ANY CROP




AGRIMATE[®]
Maximum Power - Super Economy

RATNAGIRI IMPEX PVT LTD
Annapurna House, #1/1G, 7th Cross, New Guddadahalli
Mysore Road, Bangalore-560 026
Customer Care: 1800-425-3036
email: info@ratnagiriimpex.com



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BRINGING YOU THE FUTURE... NOW

www.ratnagiriimpex.com

AN ISO 9001:2015 CERTIFIED COMPANY