

KEROSENE FIRED COOKER



Instruction Manual

This manual contains complete instructions for MODEL TS-808, AWCS-85, TS-909 Kerosene fired cooker.

Read all the materials contained in this manual before you start to operate the cooker unit and you will find it quite handy to keep aside for your future reference.

CARE INSTRUCTIONS

Please observe following care instructions for your safety.

- (1) Fill the fuel by operating a fuel pump. When refill or move make sure that the cooker is completely extinguished and cooled down.
- (2) Do not operate when no one attended or leave it unattended.
- (3) Do not fill other than Kerosene. Never fill gasoline, paint thinner or contaminated Kerosene with foreing matters.
- (4) Do not operate the cooker where any flammable materials are nearby.
- (5) Do not attempt to operate this cooker in areas where traffic is busy or wind blows, if the floor or the platform is unstable, not fairly leveled.
- (6) Keep the fill cap close tight and care not to lost it.
- (7) Always wipe off if andy fue spilled or over flowed before the operation.
- (8) Do not store your fuel container in a place where it is exposed under direct sunlight. Store it in safe storage space to avoid possible fire hazard.
- (9) For wick cleaning, at least once a month leave the cooker burns con tineously until its flame dies away itself. Each time the remaining fuel in the fuel tank is nearly empty.
- (10) When burning flame is adjusted for larger flame height, rotate the adjustor knob gradually clockwise to reach your designated flame size.
- (11) Before you attempt to operate the cooker after long storage period, follow the care instruction described in the daily care struction printed on a following page.

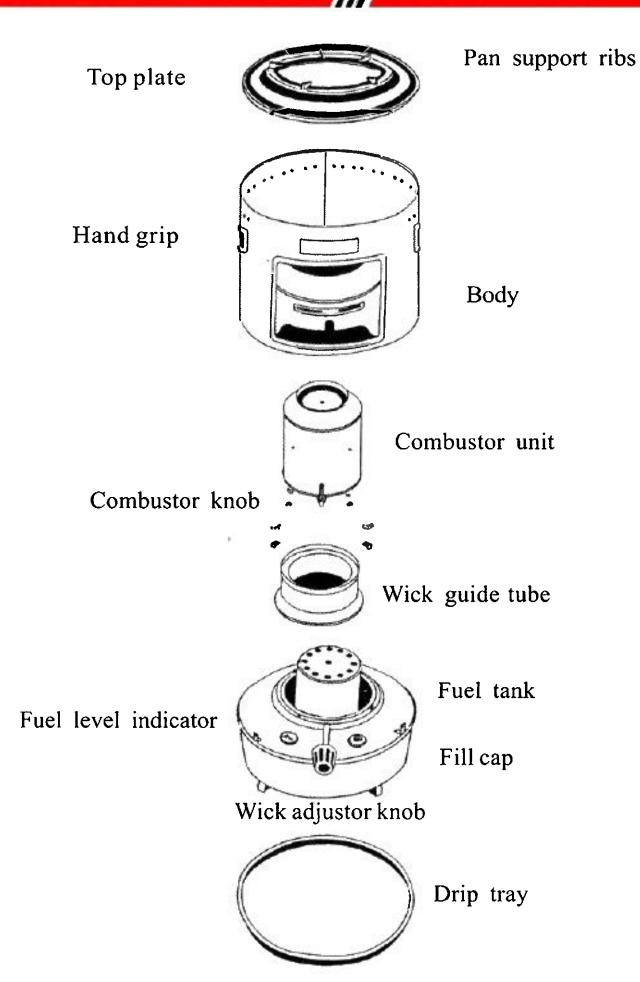
TROUBLE SHOOTING GUIDE

Following chart indicates symptoms of troubles you might face, possible causes of and how to do with them. Check out the criss cross point where possible causes column joints with symptoms row and extend horizontal line to meet remedies.

symptom

Flame appears only on one side of burner											
Not ignited or hard to set flame on						Fuel onsumption at rapid rate					
Produces bad fume						Wick moves heavilly					
Flame spreads too slowly						Vick movement is not smooth					
Burns with red flame and creates soot					Prolonged extinguishment						
Red flames				Abnormal sound							
								l			
(Possible Causes)											(Remedies)
Wick is wet with water				•	ŀ						The wick has to be dried or replace with new one
Wick is elevated too high	7	F	•		Γ	•	Ī	Π	ſ	•	Wick height is readjusted to lower position
Wick is too low in its position		[•	•				Γ			Wick height is readjusted to higher position
Uneven wick height					•				ľ	•	Wick has to be trimmed
Combustor unit is unstablely seated			•		•						Jiggle the combustor unit, otherwise replace it
Some obstructor between wick assembly and wick guide tube								•			Try to reassemble after removing the obstructor
Gears are disengaged in the movement mechanism											Try to reassemble after removing the obstructor
A little or out of fuels in the tank			•	·	F						Refill the fuel
Tar or carbon accumulated on the wick		١,	•	•	•			• •		Γ	Clean the wick following the instructions
Wick is forced and became out of the shape								• •			Replace the wick with new one
Fuel is contaminated with water		[·	•			Ī			Į,	Clean the fuel tank throughly and refill
Low quality kerosene is used			R								Refill with good quality kerosene
Fuels spilled			•	•							Wipe off the spills with cloth

PARTS ILLUSTRATED



OPERATING INSTRUCTION

* Fuel Requirements *

- (1) Use crystal clear kerosene only.
- (2) Never use kerosene contaminated with oils or water. Never attempt to use gasoline.
- (3) Store your kerosene container in a place where no heat, no direct sunlight, no rain, duse free space available.
- (4) A designated fine kerosene with no impurity contents is specified as it has a specific gravity of 0.8, a flashing point at 40 C and up approximately. If you scoop up half spoon of unknown fuel and try to burn it where no nearby combustibles are, since the flashing point of gasoline and thinner ore so low that they easily put a flame on the spoon bue kerosene will not.

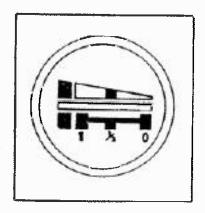
* Fuel Filling Procedure *

- (1) Open fill cap and fill the fuel through a funnel or by a fuel pump observing dial pointer reaches (1) in the dial of fuel level indicator and stop the filling deyond this point.
- (2) A careful oberbation must be exercised during the fill procedure to avoid any impurity contents flow into the fuel tank together with the fuel when kerosene container reaches near empty, since water and dirts are heavier than normal kerosene and stay at the the bottom of the container.
- (3) Throughly wipe off and clean the spills or over flows of the fuel each time you have refilled the cooker. Close the fill cap tight after the fuel filling.

* Lighting Procedure *

To allow the wick of this cooker sufficiently get wet with kerosene it will usually take you 10 minutes or so to wait before igniting the cooker.

- (1) Grab the wick adjustor knob provided front side of the cooker and turn it fully clockwise until it stops at "BURN" sign printed on lebel.
- (2) Ignite a match or gasmatch with either hand and push the combustor knob upward with the other hand so that you con put flames on the wick. Put flames 3-4 spots on the wick even spaced around the top circle of the wick. In this way you can avoid a prolonged bad fumes and get a quicker flame circle. A care must be exercised not to drop a match stick on the wick but throw it on a safer place.
- (3) Right after this lighting procedure described above, jiggle the combustor knob a few times so that the combustor unit can sit air tight. Otherwise a puff of a smoke might be produced even creating soot.





FLAME HEIGHT ADJUSTMENT ////

When the flame sets on even circle around the top of the wick sleeve wait about I minute and you will see the flame turns to a bright blue color indicating a perfect combustion had taken in its place. If the combustor unit were not air tight sit (in this occasion please jiggle the wick adjustor knob again) or the wick height is too high than the height it designated and a smoke will arose with a bad fume and the flame would be in a red color.

Keep an eye on the flame height and its color not to become a too large flame or the tip of flame turns to a golden yellow color and frequently readjust the flame height so that it could always be maintained at your designated height. This could easily be done by turning the wick adjustor knob toward left(to "EXTINGUISH" sign) a little by little at a time.

* EXITNGUISHING PROCEDURE *

Turn the wick adujstor knob gently and gradually toward to left (to "EXTINGUISH" sign) until it stops. It will take you about 3 minutes or so to let the cooker completely extinguish for which you make sure of it.

* DAILY CARE INSTRUCTION *

Where To Check and How

Always keep the cooker and the place around it clean.

- 1. CARE for the combustor cylinder and the wick guide tube. Remove the combustor unit and check if tar or carbon has been accumulated around the top of the combustor cylinder as well as around the wick guide tube You can remove the tars and carbons by scrapping it with a flat scres driver blade and it is a must.
- 2. If the wick movement mechanism is some what hard and it is not smooth, if the lighting problems happens, it had surely caused by the tar and carbon accumulation described above.

To overcome this problem first remove kerosene fuel from the fuel tank and burn the cooker contineously until the flame of the cooker dies away itself (it will usually take you 30 minutes to 60 minutes) and you will find the wick had became soft and the tars and carbons are automatically removed.

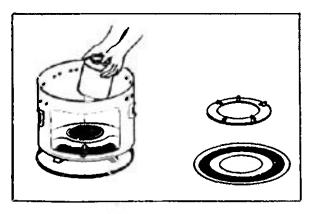
Note: Since a wick is made of glass fiber that won't wear out and prolonged operation will naturally accumulate the tar and carbon around the wick causing insufficient burning, a bad flame.

The wick cleaning procedures described above will be great help to maintain clean ideal burning, make a routine to practice this procedure at least once each operating month.

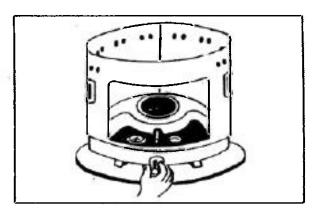
* WICK REPLACEMENT PROCEDURES *

When the wick cleaning procedures described on a previous page does not imp rove the cooker performance proceed to replace it with a new wick following the pictorial instructions down below

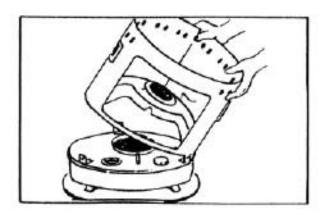
Note: Purchase a new wick referring the model number of the cooker for exact repllica to replace the old wick.



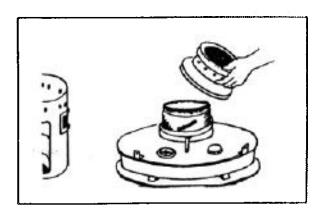
Remove pan support ribs, top plate and combustor unit lifging them upward.



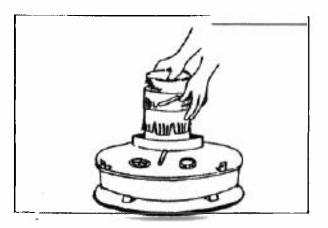
Pull the wick adjustor knob out at forward direction.



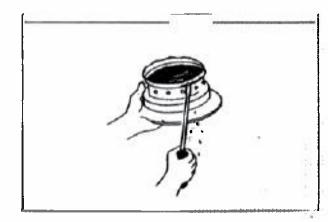
Separate the body from the fuel tank after removing 3 screws fixed at bottom edge of the body.



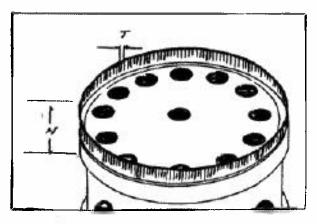
Remove 3 wing nuts and pull out the wick guide tube at upward direction.



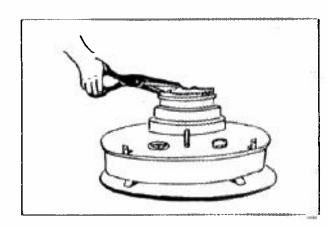
First remove a nut on the gear and the gear itself, next remove the old wick.



Scrap off carbon accumulation from the top of the wick guide tube before you proceed to replace the wick.



When a new wick is replaced, adjust the wick height to 6-7 mm high. The wick guide tube and (draf tube must form a concentric circle, avoid they from executric, otherwise the wick movement will not be smooth. Assembling procedures are progresively in reverse order described above.



Trim off with a scissor if the wick height is uneven and check the over all performance before you refill the fuel and to operate the cooker.

* TO CHECK FUEL TANK *

Wipe off the spills or overflows right after fuel filling to see if the fuel tank leaks and if so, completely evacuate the fuels from the tank and see your dealer to replace it with new tank.

* WHEN FIRE BREAK OUT *

Do not upset but cool down and do first to turn the wick adjustor knob fully counter-clockwise to reach it at "EXTINGUISH" sign. Use fire extinguisher to spray over on the fire caught cooker. In case a fire extinguisher is not on hand, cover the fire caught cooker with a thick blanket and apply some cold water on top of it then bring the cooker outdoor. If it was the moment the fire did not reach to the fuel tank, a momentally splaching plenty amount of water on the cooker might possibly put out ther fire.

* ASSEMBLING INSTRUCTIONS *

- (1) When water and dirts stay at the bottom of the fuel tank first remove the remaining fuels with a pump and turn the tank upside down to drain water and dirts.
- (2) Do not remove the rubber ring attached around at the bottom edge of the wick guide tube. It is an oilseal.
- (3) If the wick guide tube is warped and not in the form of perfect circle, if you find hard to screw wing nuts to make the wick guide tube air tight seat against the fuel tank, you must be aware of the fact that this will in turn cause for heavy wick movement.
- (4) Tightening screws and attaching small parts will call your care and attention during the cooker assembling procedures.
- (5) When assembling procedures have been performed make a final over all check and test the operation of the cooker outdoor for your safety before make use of it.

* LONG TERM CARE *

- (1) Before to store the cooker for an off season period or to transport fo the move do not forget to set the wick adujstor knob fully counter clockwise at "EXTINGUISH" position.
- (2) Drain the fuels completely out from the tank.
- (3) Do not store it at a place where direct sunlight shine, nearby heating source exist, but store it at a rather coll dried shadowy place where no rain drops air exist.

* SPECIFICATION *

MODEL: TS-808	AWCS-85	KEROSENE	FIRED COOKER					
Type: Wick movement mechanism, blue flame.								
Fuel tank capacity: 3.5 LITER								
Fuel consumption rate: 0.22 L/Hr								
Heat generating efficiency: 48.81%								
Contineous operating time: 16 hours								
Wick type and measurement: Inflammable glass fiber								
inside diameter 95m/m								
Cylindrical thpe	Cylindrical thpe thickness 2.5m/m							
	length 148m/m							

MODEL: TS-90	9, KEROSENE FIRED COOKER						
Type: Wick movement mechanism, blue flame.							
Fuel tank capacity: 3.5 LITER							
Fuel consumption rate: 0.22 L/Hr							
Heat generating efficiency: 48.81%							
Contineous operating time: 16 hours							
Wick type and measurement: Inflammable glass fiber							
inside diameter 95m/m							
Cylindrical thpe thickness 2.5m/m							
	length 152m/m						