

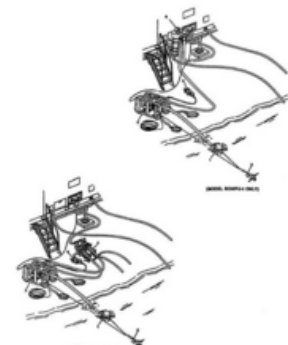
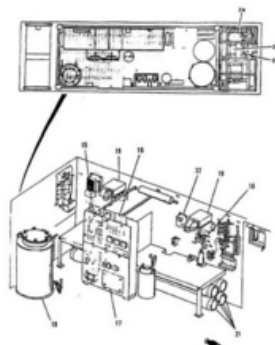
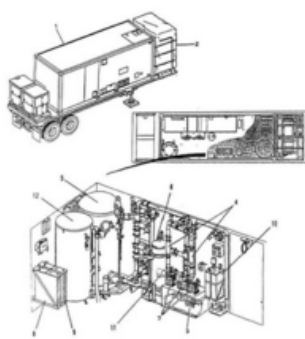
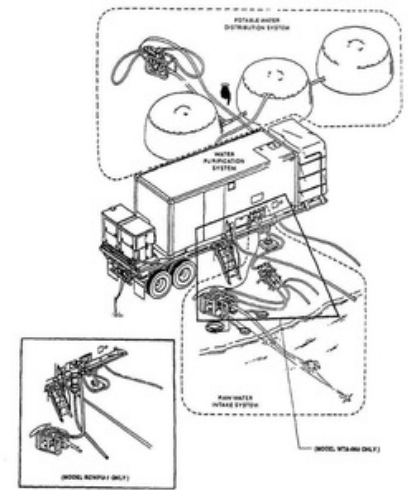
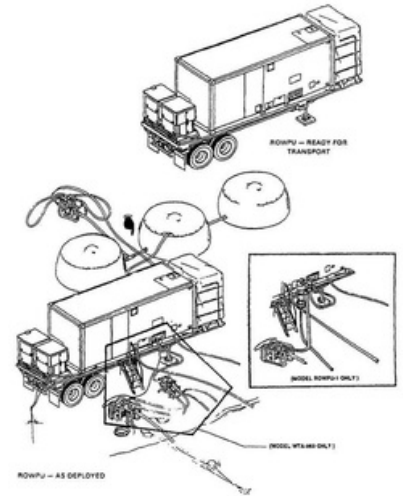
# EQUIPMENT DESCRIPTION

## a. Characteristics.

- Contained in a special 8 x 8 x 20 ft (2.4 x 2.4 x 6.1 m) ISO (International Standards Organization) container with skid mounted external components.
- The ROWPU can be shipped by military aircraft.
- The ROWPU is mounted on a standard 30 ft (9.5 m) M871 military trailer so it can be moved to where it is needed.
- The ROWPU is powered by a 60 KW utility diesel generator.

## b. Capabilities and Features.

- The ROWPU can supply up to 60,000 gallons daily from fresh waters or brackish waters 75F (24C) and over. Less water is produced from colder water sources.
- The ROWPU can supply up to 40,000 gallons daily from sea water 75F (24C) and over.
- The ROWPU can supply up to 60,000 gallons daily from NBC contaminated fresh waters 75F (24C) and over.
- The ROWPU produces potable water to long term consumption standards of purity.
- It can handle raw water turbidity to 150 NTU.
- On an NBC decontamination mission, raw water containing up to 10 ppm CW agent, or one million microorganism colonies per 100 ml, or 100,000 pC/l (picoCuries per liter) radioactivity can all be made potable.
- Raw water can be taken from wells, lakes, seas, lagoons, rivers, or through an ice hole. The raw water pump can lift water about 15 feet (4.5 m) and discharge up to a height of 30 feet (9 m) at 110 gpm (416 lpm).
- The winter kit allows the unit to be operated at a water point where air temperatures are between -25 and 32°F (-32 and 0°C) and water temperatures are above 32°F (0°C).
- The ROWPU is set up and operated by a 3 person crew (one of whom is an NCO). Operation is semi-automatic.



# EQUIPMENT DATA

## a. Performance

Brackish water (based upon TDS of 1000-15,000 at 77°F (25°C) water temperature:

Flow Rate	53 gpm (200 l/min)
Average Daily Production	60,000 gallons (227,100 l)
Quality	20 to 200 ppm TDS
Fuel Consumption	2.0 to 3.4 gph (7.5 to 12.9 l/hr)

Sea water (based upon TDS of 15,000-35,000 at 77°F (25°C) water temperature:

Flow Rate	34 gpm (128.7 l/min) A
Average Daily Production	40,000 gallons (151,400 l)
Quality	470 to 825 ppm TDS
Fuel Consumption	3 to 3.4 gph (11.4 to 12.9 l/hr)

Fresh water and NBC contaminated fresh water (based upon TDS of up to 1000 TDS at 77°F (25°C) water temperature:

Flow Rate	53 gpm (200 min)
Average Daily Production	60,000 gallons (227,100 l)
Quality	0.1 to 10 ppm TDS
Fuel Consumption	2.0 to 3.4 gph (7.5 to 12.9 l/hr)

### Note

When the temperature is lower than 75° F (24° C), the flow rate and daily production of potable water may be less.  
This is due to viscosity effects.

b. Operating Temperatures	-25F to +110F (-32C to +43C)
c. Storage Temperatures.	
ROWPU less sensitive items	8F to +145F (-33C to +63C)
Sensitive-items	35F to +110F (+2C to +43C)
RO Elements	
Polyelectrolyte	
Sequestrant	
Color Test Kit	
Available Chlorine Color Comparator Test Kit	
Turbidity Standards	
NTP-A Cleaner	
Membrane Cleaner Detergent	
d. Power Requirements	60 KW maximum demand
e. Dimensions and Weight	
(1) ISO container fully packed	20 x 8 x 8 ft (6.1 x 2.4 x 2.4m),
15,100 lb (6849 kg)	(MODEL WTA-060 ONLY) .
	20 x 8 x 8 ft (6.1 x 2.4 x 2.4 m),
14,790 lb (6723 kg)	(MODEL ROWPU-1 ONLY)
(2) Mobility configured	8 x 13 x 30 ft (2.4 x 3.9 x 9.1 m)
(3) ROWPU with generator mounted on trailer ready for transport and deployment	37,960 lb (17,215 kg)
	(MODEL WTA-060 ONLY)
	37,650 lb (17,114 kg)
	(MODEL ROWPU-1 ONLY)