

SPECIFICATIONS

GENERAL

The Model RT- 42 work car has been designed as a subway tunnel maintenance aid for safe positioning of workmen to access tunnel walls for the manual removal of asbestos lining from the tunnel.

UNDER CARRIAGE

The trucks used on the car are basic H-1 trucks with the input pinion seal cover machined for mounting of the motor/brake assembly. Refer to Toronto Transit Commission documentation for parts replacement.

WORK MODULES & PLATFORMS

The scaffold car is divided into seven (7) removable modules. There is a power module at the back end and a front module with ladder access and walkway door. The five (5) modules in between are identical.

The power module is equipped with a power cable reel (575 VAC, 75 amp, 60Hz) capable of 100 ft of power cord pay out, a 50 HP air compressor, 575 to 220/110 volt transformer, electrical switch gear with interlock components, and four (4) 200 watt work lights.

The other six (6) modules are each equipped with four (4) 200 watt work lights and two (2) manually extendable platforms (one left, one right). The platforms permit access to tunnel walls and each platform is equipped with one (1) water outlet, two (2) air outlets and two (2) GFI 110 volt electrical outlets.

FRAME

The car frame is 75 feet long, 123 ½ inches wide, is equipped with standard side pockets spaced 60 inches apart and has a capacity of 70,000 lbs.

PROPULSION SYSTEM

When at work site and connected to commercial electrical power (575 VAC) a 50 HP electric motor driving a variable displacement pump supplies hydraulic power to three (3) hydraulic motor/brake assemblies providing infinitely variable slow speed control from car location to next work location.

Provision has been designed into the system to automatically release the motor brakes and hitches when connected to support vehicles for high speed (30 km/hr) towing.

HYDRAULIC SYSTEM

The hydraulic system consisting of an electrically driven hydraulic pump, oil reservoir, return filter, suction screen, and air/hydraulic intensifier with check valves. Fill/vent cap, is located under car deck. System operating pressure is 3200 psi. If required, system may be isolated from track ground by disconnecting the seven (7) module ground cables. The hydraulic hoses utilized to car drives from hydraulic power pack are non-conductive. Refer to hydraulic schematic A112065 hose part numbers A112056 and A112062.

Travel speed control for forward and reverse, electric motor start and stop, and brake release are located at right

front corner of car.

AIR SYSTEM

Car is equipped with TTC standard rail car air system with the addition of an air/hydraulic intensifier required for releasing slow speed travel motor/brakes when connected to tow vehicle air supply.

CAUTION: See note for brake control operation before moving car with tow vehicle. Reference air schematic section 7 of this manual.

CONTROLS - PROPULSION

Controls for starting/stopping of electric propulsion motor, hydraulic travel speed control, emergency and holding brake are located at right front corner of car. See operating instructions for proper operation of controls. Refer to Configuration Diagram in this section for location of controls.

CONTROLS - MODULES

Due to limited commercial power (75KVA) a three (3) position interlock switch, located at left rear of power module limits simultaneous operation of all power systems as follows:

- Drive System with lights
- Compressor and vacuum circuits with lights
- Compressor with GFI modules circuits with lights

DIMENSIONAL & PERFORMANCE DATA

Manual Revision A (01 04 27)

AT0T230

CAR

Length: 75'-0"
 Width: 123 ½ "
 Height (deck) 43 ½ "
 Trucks: H-1 Truck Modified
 Frame: Consisting of two (2) main longitudinal fabricated girders with channel perpendicular members ¼ inch steel diamond plate deck with 3" x 3" side stake pockets.
 Travel: Limited self travel to 100 ft cord length. Actual cord length 125 ft.

Travel Speed: 0 to 3 mph
 Power to car: 575V ac, 75 Amp, 60 Hz
 Propulsion Motor: 50 Hp, 3600 rpm
 Propulsion Pump: Eaton 72400
 Hyd. Reservoir Capacity: 10 US gal
 Hyd. System Capacity: 13.5 US gal
 Hyd. Oil Required: ISO 32
 Drive Motors: 3 Parker 17.1 cu in clutch mtr.
 Drive Brake: 3 Ausco Model 37340 9000 lb/in torque.
 Total Car Weight: 120,000 lbs (Includes modules)

SCAFFOLD MODULE

Length: 119" typ
 Height: 122 ¾" rail to top

	87" rail to platforms		manual
	136" rail to top of	Lights:	4 each 200 watts
	lights		
Width:	122 ½ " platforms		
	retracted		
	185" platforms		
	extended		
Platform Extension:	32"		
Electrical Outlets:	4 GFI 110 volt 15		
	Amp Outlets per		
	module		
Air Outlets:	4 per module		
Water Outlets:	2 per module		
Lights:	4 per module 200 watt		
	each halogen		
Weight:	4,400 lbs		

EQUIPMENT MODULE

Length w/Power Reel: 142"
Width: 121 ½"
Height, rail to top: 136"

AIR COMPRESSOR

Model: 50Hp Ingersol Rand
Voltage: 575Vac, 3ph, 60 Hz
Rated: 250 cfm, 125 psi
Style: screw

POWER REEL

Model: HU61C74C CW
Rating: 75 Amp
Cable: 4 Con, #4 AWG,
125'

ELECTRICAL EQUIPMENT

Transformer: 575V, 208V, 120V
Size: 45KVA
General: See Sec 8 of this

Manual Revision A (01 04 27)

CONFIGURATION

