

OPERATIONAL DATA

MAIN FRAME

GENERAL

The Model RT-48/49 Snow Thrower is a self propelled type vehicle having the ability to attach a snow blower or a brush blower or a combination of these attachments. A diesel engine supplies power to drive the snow blower and hydraulic pump, which drives the snow brushes and electrical battery power for an electrically driven glycol pump. Air pressure is supplied by a shaft compressor mounted on the frame. The unit is configured to accept a coupler allowing it to couple to another vehicle or be pushed in an emergency.

UNDER CARRIAGE

The under carriage is a modified H-1 Car truck. The front and rear axles are driven by a two speed transmission with pinion flanges intact for mounting of air released spring applied disc brakes. The axle torque arm is modified to accommodate the 14 inch air released parking brakes. Given protrusions have been removed from the truck to accommodate space for fuel tank and third rail snow brushes. As the cab is equipped with two seats facing opposite directions the machines may travel either direction.

The fabricated main frame is attached to the H-1 truck at the bolster mount cap screws. Horizontal thrust is absorbed by packer plates between heavy vertical plates onto which the snow blower or brush blower are attached. The undercarriage is configured to accept the brush, snow blower or tow/push coupler at either end.

SNOW BLOWER MOUNT & SUSPENSION

The snow blower has a three (3) point hitch which is attached to a hydraulically lifted and lowered roller mounted carriage. The top hitch point is spring mounted to permit the front of the snow blower to tip up.

The carriage is raised and lowered on four (4) rollers with side thrust rollers. Carriage height is controlled via hydraulic cylinders. A pressurized hydraulic accumulator permits carriage to be temporarily raised for obstical clearance.

HYDRAULIC SYSTEM

The hydraulic system consists of four (4) direct engine driven pumps. One pump supplies oil flow for travel. Two (2) pumps supply oil flow for either snow blower or brush with auger. A fourth pump supplies oil flow for accessories such as side brushes, raising of blower/brush, chute rotation and chute angles. A directional valve stack provides function and direction for the following;
Blower Raise/Lower (2 Cylinders)
Blower Chute Rotation

Blower Chute Angle
Right Brush Rotation
Left Brush Rotation

The above functions may only be operated with engine running.

SNOW BRUSHES

Two (2) hydraulic driven power rail snow brushes are mounted on the car. One per side, designed to clear the snow from between the power rail cover board and the power rail.

The brushes automatically lower when hydraulic pressure is directed to the brushes.

AIR SYSTEM

An air circuit from the compressor is used to direct air pressure into the snow brush area to finish clearing the snow from the power rail area.

ELECTRICAL SYSTEM

The electrical system is 24 volt DC. Lights are turned on automatically based on position of traction switch.

To operate Glycol pump, engine stop/start switch must be in 'ON' pos. and traction selector switch properly positioned.

CAUTION
If stop/start switch is left in Accessories position, battery will be run dead.

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GLYCOL SYSTEM

The Snow Throwing unit is equipped with a system designed to spray glycol onto the power rail after the brushes and air nozzles have cleared snow from between the power rail cover board and the power rail.

PARKING BRAKE

The front and rear axles are each equipped with two (2) spring applied air released calliper brakes. Brake control valve is located on the seat control valve panel.

Brake is not to be used as a service brake, brake is intended to stop snow thrower vehicle if unit were to break free from push unit.

Parking brake callipers are spring applied. Brakes may be manually released by unlocking the two 1/4" (7/16 inch wrench) nuts and turning inside nut clockwise. Calliper pads will feel loose when brakes are manually released.

CAUTION
Ensure that air pressure is up to 90 PSI and brake valve is in 'OFF' position before attempting to move unit.

EMERGENCY AIR BRAKE

Emergency air brake valve located at right lower corner of control station,

1.2

applies brakes on push vehicle only.
Valve does not apply calliper brake on snow thrower undercarriage.

When snow thrower is to be parked,
Parking Brake Valve must be put into
'ON' position.

SPECIFICATIONS

Undercarriage:

Modified H-1 Truck

Travel:

Sunstrand motor & pump
clark/Hurth transmission 2 speed
Self Propelled vehicle

Engine:

Model- Cummins
200 hp 6BTA-5.9L
RPM- 1800 RPM
Funk Triple pump Drive
Drive Motor
Hurth Transmission

Fuel Capacity:

100 US Gallons with gauge

Hydraulic Pumps:

Drive
Auger
Snow blower or Brush blower
On engine, Eaton auxiliary
functions

Hydraulic Oil Reservoir:

50 US GAL.

Snow Brushes:

Brush- 18"OD 4 per brush
Brush Mtr- Char-Lynn
Model 101-1835 ser 8
Speed- Adjustable 0 to 275 RPM

Glycol System:

Tank Capacity- 30 US Gal.
Spray Nozzles- Two-one left one
right each side

Pump- Flow Jet

Pump Capacity- 4 GPM

Pressure- Variable 0 to 60psi

Pressure Regulator- Parker-

Hannifin adjustable flow 0 to 5
GPM

Control- 2 solenoid and 2 ball
valves-three way valve (front &
back)

Air System:

250 CFM NCA compressor with
oil cooler

Snow Blower:

Manufacture- Pronovost
Model- P-862
Working Width- 86 inch
Cutting Height- 43 inch
Type- Two Stage
Chute Adjustment- Hyd Rotation
and angle
Rated RPM- 540 to 600
Modified to put drive system,
hydraulic motor, chain etc.
Weight: 1,850 lbs

Brake, Parking:

Manufacture- Tol-Matic
Type- Failsafe air released/
spring applied
Callipers- two per brake
Disc- 14" x ½" thick
Location- Axle Pinion Flange
Release- when connected to
support vehicle air system
Control – Two position Ball Valve
'OFF/ON'
(4 brakes per truck)

Height:

Top of Cab – 133 inches

Width:

Frame – 120 inches
Cab Door Handles – 64" from
centreline
Total width 124"
Snow Thrower – 86 inches

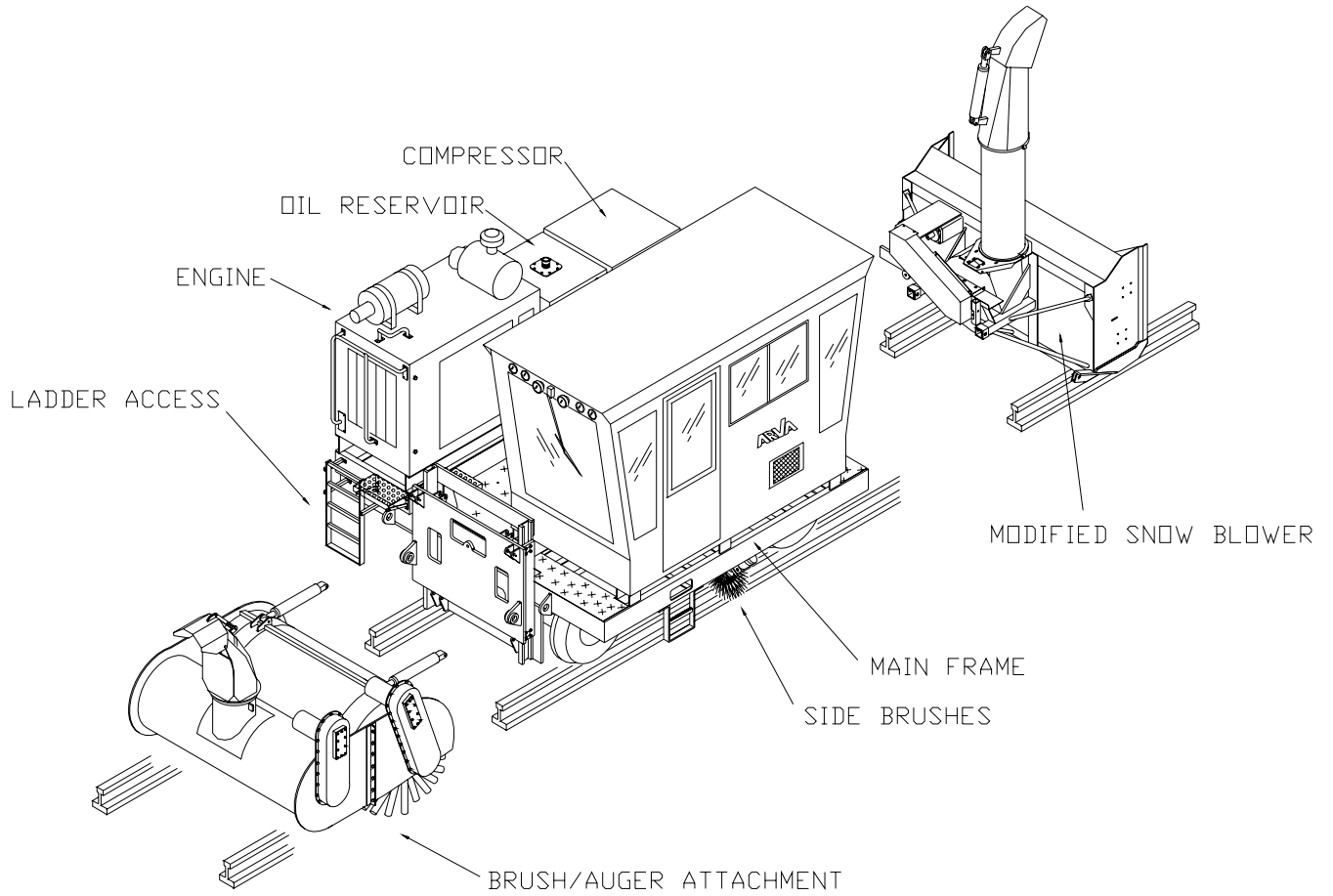
Outside retracted Brushes – 94”
Length:
w/o Push Coupling – 146 inches
Lift Height:
Thrower – 16” cylinder stroke

Brush/Auger Blower:
Weight (without brushes) – 1600
kg (3,528 lbs.)
Weight (of brushes) – 5 lbs. each
Total qty per machine – 105
Total weight = 525 lbs.
Total brush/auger wt = 4,053 lbs.
Length: 80”
Height: 83”
Width: 87”

Total RT-48/49 machine with brush and
snow blower attachments = 28,084 lbs.

Frame w/o attmnts = 22,184 lbs.

CONFIGURATION



SEE ALSO, PHOTOGRAPHS AT THE
END OF THIS SECTION