



MULTIPURPOSE SNOW CONTROL VEHICLE MODEL PD87VRG

SHIPPING

1. General

This section provides information for transporting the MP Series MultiPurpose Snow Control Vehicle and attachments. For shipping of combined vehicle and snowblower attachment, it is recommended a detachable type trailer with a minimum length of 40' be used due to height and width restrictions.

Sweeper assembly and reversible plow will require removal from the vehicle for shipping.

2. Shipping Specifications

A. Vehicle with Snow Blower Attached

(1) Weight (Dry)	29,580 lbs.
(2) Height	11'6"
(3) Overall Width	103"
(4) Overall Length	31'
(5) Wheel Base	11'4"
(6) Tread Width	80"

B. Sweeper Assembly

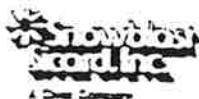
(1) Weight (Brush Head & Blower Assy.)	Approx. 8,000 lbs.
(2) Brush Head Length.....	18'
(3) Brush Head Width	8'
(4) Brush Head Height	6'
(5) Blower Height	8'
(6) Blower Length.....	8'
(7) Blower Width	3'

C. Reversible Plow

(1) Weight	Approx. 1,500 lbs
(2) Width	5'
(3) Length	16'4"

NOTE: Length and width dimensions given for attachments reflect minimum space required when loaded lengthwise of a truck or trailer bed.

With air nozzles removed, vehicle may be transported with the basic air blast system attached to the rear of the vehicle.

SPECIFICATIONS AND CAPABILITIES**1. General**

This section outlines the specification of the Multipurpose Snow Control Vehicle and specifications for attachments and component parts.

2. Specifications and Capabilities**A. Dimensions**

Vehicle GVW (dry)	29,580 lbs.
Operating Weights	
Front	10,000 lbs.
Rear	12,000 lbs.
Total.....	22,000 lbs.
Wheel Base	136 in.
Tread	80 in.
Blower Capacity	70 tons/min.(3000 TPH)
Casting Distance	150 ft.(3000 TPH)
Cutting Width	102 in.
Overall Dimensions	
Length.....	372 in.
Width	103.25 in.
Height (top of beacon)	120 in.
Height (w/chute collapsed)	138 in.
Ground Clearance (chassis)	13 in.
Center of Gravity Location (carrier only)	52 in. above ground, 90 in. aft of centerline of front axle

B. Conveyor

Number of Conveyors.....	2
Diameter of Conveyor	44 in.
Drive	Differential

C. Impeller Assembly

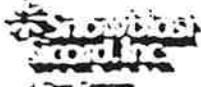
Number of Impeller Blades	5
Diameter of Casing	45 in.
Casing Control	Hydraulic-actuated rotation

D. Casting Chute

Diameter	22 in.
Rotation	240 degrees
Extension-Retraction	Hydraulic-actuated

E. Accessories Engine

Model.....	8V92TA @600 HP
Type	Diesel 8 cylinder
Manufacturer	Detroit
Rating	600 HP @ 2100 RPM (sea level)



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2 Specifications and Capabilities / Cont'd

F Blower Engine Accessories

Air Cleaner
Make Donaldson
Model PVG-16-0152
Type Cyclopac

Oil Filter (Primary)
Make Detroit
Type Full flow
Element PF911L

Fuel Filter (Primary)

Make Detroit
Type Full flow
Element T-915

Fuel Filter (Secondary)

Make Detroit
Type Full flow
Element T-916

Governor

Model PTG-V5
Type Mechanical
Setting 2100 RPM

G Blower Transmission

Model SR972
Type Mechanical
Manufacturer Cotta
Gear Ratios 5:1
Clutch Overcenter, 2-plate

H Carrier Engine

Model 6-71T
Type Diesel, 6 cylinder
Manufacturer Detroit
Rating 265 HP @ 2,100 RPM (sea level)
Compression Ratio 16:1
Torque 728 lb. ft. @ 1,500 (85 degrees and 500 ft.)
Bore and Stroke 4.49 x 5.32

I Carrier Engine Accessories

Air Cleaner

Make Donaldson
Model FHG-14-055
Type Cyclopac

2. Specifications and Capabilities (Cont'd.)

I. Carrier Engine Accessories (Cont'd.)

Oil Filter	Make	Detroit
	Type	Full flow
	Element	PF911L
Fuel Filter (Primary)	Make	Detroit
	Type	Full flow
	Element	TP-915
Fuel Filter (Secondary)	Make	Detroit
	Type	Full flow
	Element	TP-916
Governor	Model.....	1343
	Type	Variable speed mechanical
	Setting	2,100 RPM

J. Carrier Transmission

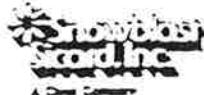
Model	MT654CR
Type	Automatic, 5-speed with torque converter
Manufacturer.....	Allison Division, General Motors Corp.
Rating	300 HP max., 3000 RPM input max.
Torque Converter	Single-stage, 3 element, multiphase
Clutches	Hydraulic, spring released, oil cooled (multidisk, self-adjusting), (manual shift from 1st to 2nd)
Gearing	Constant mesh spur type, planetary
Gear Ratios	
First	4.17
Second	2.21
Third	1.66
Fourth	1.27
Fifth	1.00
Reverse	10.76

K. Fuel System

Fuel Tanks	
Capacity	112 gals. ea.
Manufacturer.....	Snyder
Number.....	2
Location	Center of vehicle

L. Engine Cooling Systems

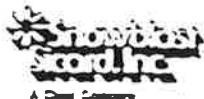
Blower Engine	
Radiator	Tube and fin
Capacity	34 gals.
Pressurization	7 PSI
Fan	32 in. 8 blade
Carrier Engine	
Radiator	Tube and fin
Capacity	8 gal.
Pressurization	7 PSI
Fan	28 in., 6 blade



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2 Specifications and Capabilities (Cont'd.)

M. Transfer Case	Model	ABG 4500
Manufacturer	GKN	
Ratios		1.00:1, 2.67:1
N. Axle (Front) (Rear Option)	Model	SD66
Type	Horizontal, single reduction, full-floating axle, hypoid gears	
Manufacturer	GKN	
Ratio		7.47:1
Capacity		24,900
Mounting		Leaf spring
O. Axle (Rear)	Model	D66 w/rear steer
Type	Horizontal, single reduction	
Manufacturer	GKN	
Ratio		7.47:1
Capacity		24,900
Mounting		Leaf spring
P. Tires	Type	Tubeless
Make		General
Size		1800 x 22.5
Ply Rating		18
Tread		Super all grip
Pressure		100
Q. Brakes	Service	
Type		Air
Model and Make		GKN manual adjust
Size of Drum		15 1/2 dia. x 8 in. wide
Parking		
Type		Air
Model		"S" CAM
Location		Both axles
R. Hydraulic System		
Front Gear Box	Type	Mechanical with power assist
Make		Ross
Model		HFB 64
Hydraulic Pump	Model	V20-IP-12P-ICIIHL
Make		Vickers Inc.
Pressure Rating		2000 PSI
Flow Rating		12 GPM
Drive		Chassis engine, flange mounted
Hydraulic Oil Filter	Model	10C
Make		Parker



MULTIPURPOSE SNOW CONTROL VEHICLE MODEL PD57VRG

2. Specifications and Capabilities (Cont'd.)

S. Blower Control Valves

Model Manual hydraulic
Make Husco
Relief Valve Setting 2000 PSI
Hydraulic Tank
Capacity gal.
Make Snowblast-Sicard, Inc.

T. Air System

Air Tanks

Number 3
Location Right rear of vehicle

Air Compressor

Make Bendix
Model TU-FLO 501
Reference Carrier engine Parts Manual

Air Foot Brake Valve

Part No. 280760
Make Bendix-Westinghouse

Quick Release Valve

Part No. 229844
Make Bendix-Westinghouse

Air System Governor

Part No. 275200
Make Bendix-Westinghouse

Control Valve

Part No. 229623
Make Bendix-Westinghouse

Windshield Wipers

Model B-4545
Make Trico
Type Electric

Blade M874-6BTM

Wiper Control

Model F-1690-2N5
Make Trico

U. Electrical System

Alternator

Rating 12V, 105 amp.

Batteries

Type Series 8D Industrial

V. Reversible Plow, 16' (for 3000 ton unit) (Option)

Make Viking

Model HS

Height 42"

Clearing Width 14'



MULTIPURPOSE SNOW CONTROL VEHICLE MODEL PD87VRG

2. Specifications and Capabilities (Cont'd.)

V. Reversible Plow, 18' for 3000 lbs unit	(Cont'd.)
Reversing Mechanism	Hydraulic cylinders
Deflector	Built into curvature of moldboard
Degree of Reversing	Up to 37 degrees available
Casters	Foam-filled tires, adjustable height, self-steering
No. Ribs	10
Rib Material	1/2" pl.
Moldboard Material	10 ga.
Cutting Edge	1/2" x 8", 1090 steel
Overall Length of Cutting Edge	164"
Reversing Cycle	Approx. 12 seconds
Female Quick Hitch	Tenco 21422022

W. Sweeper, 16' (18', 20 and 22' Optional) (Option)

Make	Sweepster
Model	3100
Clearing Width	14'
Reversing Mechanism	Hydraulic cylinders
Brush Drive	Hydrostatic
Degree of Reversing	45 degrees
Casters	4 - with adjustable anti-shimmy device
Tires	Foam filled
Brush Diameter	46"
Brush Material	Polypropylene or wire
Air Deflector	Hydraulic cylinder controlled
Air Blast Blower	24,000 CFM, 16,000 FPM nozzle velocity
Brush Speed	Variable 0 - 500 RPM