

**PETTIBONE**

# RAIL CAR MOVER

**MODEL 300**

**PB-3406**

This Part Book is divided into sections and contains all repair parts listed in sub-assemblies of machine by line drawing and exploded views with reference numbers, identifying each Pettibone Corporation part number and quantity. This includes breakdown of major assemblies such as Axles, Pumps, etc.

## **IMPORTANT**

### **When Ordering Parts**

Always specify Model and Serial Number of your RAIL CAR MOVER. Refer to your Parts Catalog for correct identification by name and part number.

All parts orders should be placed with the distributor or dealer from whom you purchased your equipment.

**PETTIBONE CORPORATION**

4700 WEST DIVISION STREET • CHICAGO, ILLINOIS 60651 • PHONE: (312) 772-9300

## Standard Warranty

The Pettibone Corporation warrants its products against defective material and/or workmanship for a period of 6 (six) months or 1,000 (one thousand) hours of operation, whichever occurs first, after such products are placed in operation, subject to normal use and service. The Company's sole liability shall be limited to replacement of defective parts, f. o. b. factory. If any material is found within the warranty period specified above, immediate written notification of said defect must be made to the distributor from whom the machine was purchased or to the Company. The cost of any labor, expenses and/or downtime incurred by such defective parts excluded. The Company reserves the right to demand the return of such parts for its inspection. Transportation and all other charges are to be prepaid by the customer.

The Company reserves the right to make any change in design or otherwise modify the product without obligation to incorporate these changes in any product previously sold or delivered.

The Company makes no warranty in respect to tires, engines, ignition apparatus, horn, lights, starting devices and other trade accessories, since these are warranted separately by their respective manufacturers.

**SPECIFICATIONS**

**CAPACITY:**

Drawbar Pull (on tires) . . . . . 33,000 lbs. (14,968.5 kg)  
 Drawbar Pull (on rail wheels) . . . . . 17,500 lbs. (7938 kg)

**OVERALL MEASUREMENTS:**

Height with Cab (on tires) . . . . . 113-7/8" (2893 mm)

**ENGINE TYPE**

Make . . . . . Diesel  
 Model . . . . . G. M. C. 4-53N  
 Torque Converter Multiplication . . . . . 2.29 to 1  
 Maximum Horsepower . . . . . 118  
 Displacement Cu. In. . . . . 212 (3473.8 cc)  
 Bore and Stroke . . . . . 3-7/8 x 4" (98.42 x 101.6 mm)  
 Cylinders . . . . . 4  
 Governed R. P. M. . . . . 2,450  
 Max. Torque ft./lbs. . . . . 270 @ 1800 r.p.m. (37.33 mkg)

**ELECTRICAL SYSTEM**

. . . . . 12 Volts

**FUEL TANK**

. . . . . 34 Gal. (128.7 L)

**WHEELS AND TIRES:**

Tires - Front and Rear . . . . . 14:00 x 24 - 18 Ply  
 Track - Front and Rear . . . . . 85-3/8" (2168 mm)

**TURNING RADIUS ( 4-Wheel Steer):**

Curb Clearance . . . . . 180" (4572 mm)  
 Outside Corner . . . . . 198" (5029 mm)

**POWER TRAIN:**

Torque Converter and Power Shift Transmission

**SPEEDS:**

	Gear	On Rubber	On Rail Wheels
Low Range	1	1.25 (2.01kmh)	1.5 (2.41kmh)
	2	2.5 (4.02kmh)	3.25 (5.23kmh)
	3	8 (12.87kmh)	10 (16.09kmh)
High Range	4	3 (4.83kmh)	3.75 (6.04kmh)
	5	6 (9.66kmh)	7.5 (12.07kmh)
	6	18 (29.97kmh)	23 (37.02kmh)

**NOTE:** Unit must be stopped to shift between low and high. Listing of maximum speeds does not necessarily mean it is safe to operate the vehicle at these speeds.

**AXLES:**

Pettibone Planetary. Spiral bevel ring gear and pinion with planetary

Pettibone Corporation reserves the right to change specifications without notice, to follow its policy of constantly striving to manufacture a better product.

reduction at the wheels. No-Spin differential in front axle.

**WHEELBASE** . . . . . 75-1/2" (1917.7 mm)

**HYDRAULIC SYSTEM:**

**PUMP** - Fixed displacement type driven from accessory drive.  
**RESERVOIR** - 22 Gals. (83.28 L). Electric welded with hand hole for cleaning.

**COUPLERS:**

A. A. R. type with adjustable height, horizontal sliding, hydraulic power pivot control and push button release,

**BRAKES:**

4-Wheel air over hydraulic, full contact bladder type. Spring actuated emergency system on front axle. Manual parking brake on drive shaft.

**STEERING:**

**FOUR-WAY** - Front Wheel, Four Wheel, Rear Wheel and Crab Modes. Orbital full hydraulic steering with pilot check valves on front steering cylinders.

**WEIGHTS:**

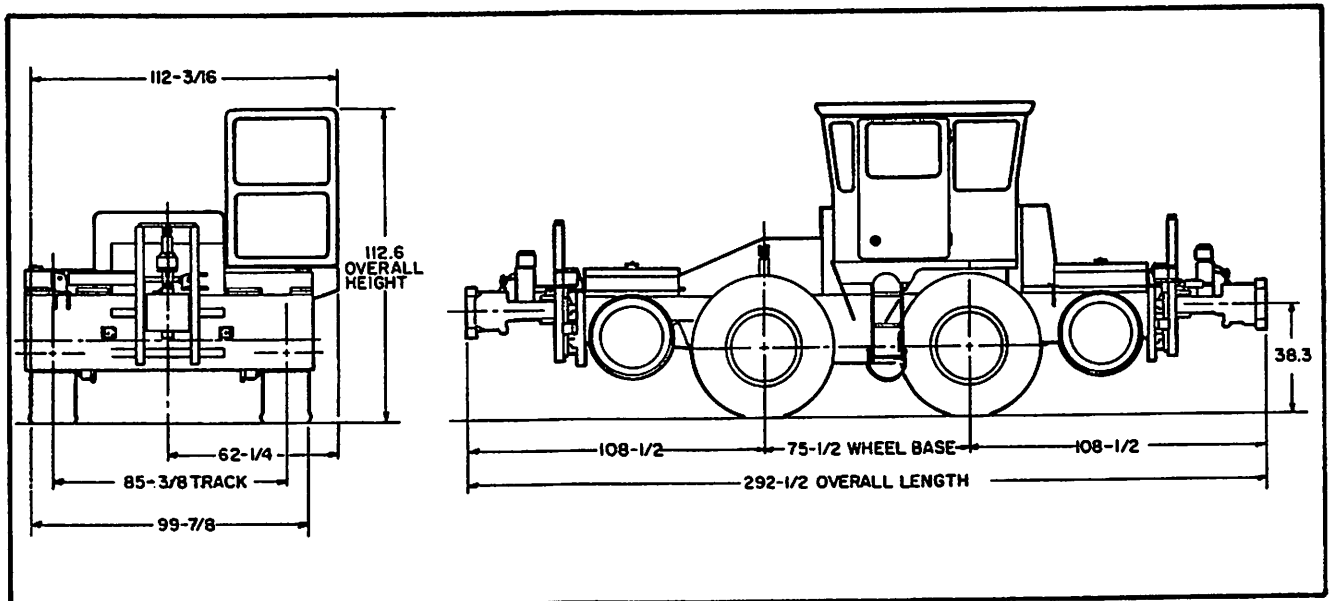
**Total** . . . . . Diesel G.M.C. 48,000 lbs. (21,772.43 kg)  
**Front Wheels** . . . . . 2,400 lbs. (10,886.22 kg)  
**Rear Wheels** . . . . . 2,400 lbs. (10,886.22 kg)

**STANDARD EQUIPMENT:**

Deluxe two-man cab, power shift transmission, torque converter, planetary axles, 4-wheel drive, 4-wheel air over hydraulic brakes, 4-wheel power steering, 17-1/4 x 4" (438.15 x 101.6 mm) bladder brakes, parking brake, adjustable seat, seat belt, headlights, tail and stoplight, license bracket, air horn, dry type air cleaner, engine compartment side panels, foot throttle, batteries, voltage regulator, alternator, starter, Maxim Silencer muffler, locks on all tanks. Ammeter, hourmeter, engine temperature, engine oil pressure, fuel, torque converter, oil temperature gauges, automatic engine warning system, windshield wiper (truck type) front and rear, heater, defroster, directional signals, electrically operated rail sanders, 56-1/2 gage rail wheel attachment, backup alarm, two West Coast mirrors.

**ATTACHMENTS (Optional Extra):**

Rail car air system, switch-man platforms, air conditioning, broad gage rail wheels, spring loaded snow plow, rear steer indicator, cab pressurizer, radiator shutters, L.H. window plexiglass bubble, extra seat.



PETTIBONE MODEL 300 RAIL CAR MOVER

CAPACITY:

Drawbar Pull (on tires)..... 33,000 Lbs.  
 Drawbar Pull (on rail wheels)..... 17,500 Lbs.

OVERALL MEASUREMENTS:

Height with cab (on tires).....9'5-7/8" (2093mm)  
 Length with complers front and rear.....24' 4-1/2"

ENGINE TYPE.....Diesel  
 Make.....G.M.C.  
 Model.....4-53N  
 Torque Converter Multiplication.....2.29 to 1  
 Max Horsepower.....118  
 Displacement Cu. in. ....212 (3473.8cc)  
 Bore and Stroke.....3-7/8" x 4" (98.42mm x 101.6mm)  
 Cylinders.....4  
 Governed R.P.M.....2.450  
 Max Torque Ft. Lbs.....270 @ 1800 r.p.m. (37.33mkg)

ELECTRICAL SYSTEM.....12 VOLTS

FULL TANK.....34 Gal. (128.7L)

WHEELS AND TIRES:

Tires - Front and Rear.....14:00 x 24 - LOAD RANGE N  
 Track - Front and Rear.....7' 1-3/8" (2168mm)

TURNING RADIUS (4-Wheel Steer):

Curb Clearance.....15'  
 Outside Corner.....16' 6"

POWER TRAIN:

Torque Converter and Power Shift Transmission

SPEEDS:

	GEAR	ON RUBBER	ON RAIL WHEELS
LOW RANGE	1	1.25 (2.01 kmh)	1.5 (2.41 kmh)
	2	2.5 (4.02 kmh)	3.25 (5.23 kmh)
	3	8 (12.87 kmh)	10 (16.09 kmh)
HIGH RANGE	4	3 (4.83 kmh)	3.75 (6.04 kmh)
	5	6 (9.66 kmh)	7.5 (12.07 kmh)
	6	18 (28.97 kmh)	23 (37.02 kmh)

**NOTE:** Unit must be stopped to shift between low and high. Listing of maximum speeds does not necessarily mean it is safe to operate the vehicle at these speeds.

**AXLES:**

Pettibone Planetary. Spiral bevel ring gear and pinion with planetary reduction at the wheels.

**WHEELBASE.....75-1/2" (1917.7mm)**

**HYDRAULIC SYSTEM:**

**PUMP -** Vane type driven from accessory drive.  
**Reservoir -** 22 Gals. (83.28L) Electric welded with hand hole for cleaning.

**BRAKES:**

4-Wheel air over hydraulic full contact bladder type. Spring actuated emergency system on front axle. Manual parking brake on drive shaft.

**STEERING:**

**FOUR-WAY -** Front Wheel, Four Wheel, Rear Wheel and Crab Modes. Orbitrol full hydraulic steering with pilot check valves on front steering cylinders. Steering lockout for use on rail.

**WEIGHTS:**

	<b>DIESEL G.M.C.</b>
<b>Total.....</b>	<b>48,000 Lbs.</b>
<b>Front Wheels.....</b>	<b>24,000 Lbs.</b>
<b>Rear Wheels.....</b>	<b>24,000 Lbs.</b>

**STANDARD EQUIPMENT:**

Deluxe two-man cab, power shift transmission, torque converter, planetary axles, 4-wheel drive, 4-wheel air over hydraulic brakes, 4-wheel power steering, 17-1/4" x 4" (438.15mm x 101.6mm) bladder brakes, parking brake, adjustable seat, headlights, tail and stop light, license bracket, air horn, oil bath air cleaner, engine compartment side panels, foot throttle, batteries, voltage regulator, alternator, starter, Maxim silence muffler, locks on all tanks. Ammeter, hourmeter, engine temperature, engine oil pressure, fuel, torque converter, oil temperature gauges, automatic engine warning system, windshield wiper (truck type), heater, defroster, directional signals, push button coupler release, air operated rail sanders, rail wheel attachment, back-up alarm, hydraulic powered coupler pivot, two west coast mirrors, no-spin differential, horizontal sliding coupler.