SHUTTLEWAGON® MOBILE RAILCAR MOVERS

COMMANDER SERIES | SWX315 SPECIFICATIONS

STANDARD FEATURES

- 90 gallon fuel tank
- ABS vehicle brakes
- Air knife
- Anti-slip traction control
- CAN-bus electrical system
- Door mounted windshield wipers
- Engine diagnostic adapter: console
- Exterior mounted cameras with color monitor on operator's console
- Full width cab; 360 degree visibility
- Speed based rail guidance pressure
- Three 12 volt power receptacles
- Tinted cab glass
- Two air ride operator seats

OPTIONAL FEATURES

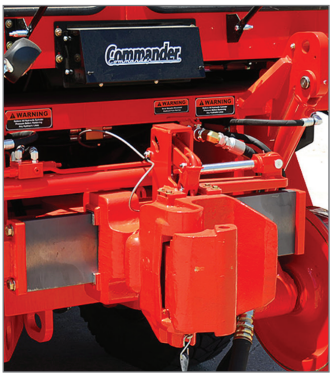
- Air bell
- Cab air pressurizer
- Cold weather package
- Corrosion Resistance package
- Extended warranties
- Heated mirrors
- Hydraulic broom
- LED work lights
- On board DVR with cameras
- Radio remote control
- Shuttletrak: machine telematics
- Snow plow
- Additional options available

The **Commander Series Shuttlewagon** shares many of the same features as the larger Navigator but comes in a smaller package. It is designed to complete up to 27,000 lbs of tractive effort from one coupler. Compact yet powerful, the Commander Series pulls as much weight as other manufacturers' largest models.

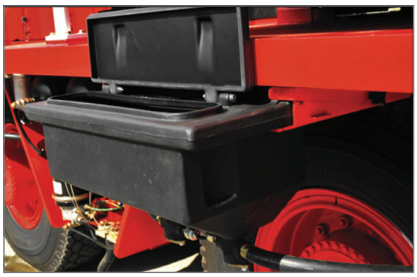
SWX315 GENERAL SPECIFICATIONS

FUEL CAPACITY	90 gallons (340.69 ltr)
HYDRAULIC RESERVOIR CAPACITY	50 gallons (189.27 ltr)
AIR TANK CAPACITY (RAIL BRAKES)	30 gallons (113.56 ltr)
AIR TANK CAPACITY (VEHICLE BRAKES)	10.5 gallons (39.74 ltr)
AIR FILTER	Dry replacement element
OIL & FUEL FILTERS	Replacement element
WHEEL BASE	92" (2337 mm)
WIDTH	120" (3048 mm)
HEIGHT	130.5" (3327 mm)
LENGTH	242" (6147 mm) (To end of couplers)
GROUND CLEARANCE	10½"(266.7 mm)
WEIGHT	43,000 lbs (19,498 kg)
FIRST GEAR	0 to 3mph
SECOND GEAR	0 to 7mph
THIRD GEAR	0 to 15mph

180-degree rotating console with multifunction display. Dual four-way air suspension seats for operation from either side of cab in rail mode. Shown with 4-camera surround.



Wide range AAR sliding couplers are air released and hydraulically positioned to improve pulling performance on curves and grades.



Pull out sander boxes with wide mouth lids for easy loading. Air activated sanders for smooth dispensing.

Powerful air knife increases capacities up to 50% in adverse weather.

*For narrow or wide applications: Please consult with factory. *Note: Tractive effort may vary with rail and weather conditions. Dimensions and Weight do not include optional equipment. Specifications are subject to change without notice.*

SWX315

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SHUTTLEWAGON® MOBILE RAILCAR MOVERS

COMMANDER SERIES | SWX315 SPECIFICATIONS

ENGINE

Model	Cummins diesel engine model QSB 6.7 L (electronic)
EPA	Tier 3 / Tier 4 Final
Horsepower	185 HP @ 2200 RPM / 195 HP @ 2300 RPM
Torque	590 ft lbs @ 1500 RPM Charge air-cooled
Electronic controlled diesel engine	Electronics programmed to shut engine down if "High Water Temperature" or "Low Oil Pressure" occurs
Radiator	Charge air cooler across the top, engine radiator in the middle, and transmission oil cooler across the bottom
Exhaust	Vertically mounted away from cab to reduce noise. After treatment utilizes D.O.C., S.C.R. and diesel exhaust fluid.

TRANSMISSION

Powershift Transmission	Three speeds forward and reverse both on rail and on road. Constant mesh helical low noise gearing electronically controlled. Flex plate connects torque converter directly to engine flywheel. Automatic or manual gear selection. Shift protected (downshift and forward/reverse). Operator panel shows gear, direction, and transmission diagnostics.

DRIVE LINES

7C Series	Heavy Duty

AXLES

Planetary Axles	Front: Heavy Duty Planetary drive steer axle. Rear: Heavy Duty Planetary non-steer axle. Mechanically locked differentials in both front and rear.

FRAME

All welded steel plate construction	2 1/2" full width and full length deck plate. Frame rails are 1" plate connecting 4" coupler base plates to the deck plate. Front axle is mounted on oscillating bracket and is controlled by urethane blocks that allow oscillation to both sides and reduce shock loads. Frame layout allows for easy access to both sides of engine compartment.

RAIL GEAR

22" (559mm) diameter cast steel heat-treated rail guide wheels.	AAR standard 56.5" (1435mm) rail gauge, mounted to 4" coupler base with four bolt pillow block style clamps. Control of guide wheels is from four hydraulic cylinders, controlled from the cab. Rail suspension and vehicle suspension are independent, allowing ample travel for adverse track conditions and providing smooth quiet ride.

BRAKES

Service	Air over hydraulic actuated high-pressure disk brakes with Haldex pressure converter (master cylinder). Foot control located at drivers station for road travel. Hand vehicle brake control located on instrument panel for vehicle brake control on rail. Vehicle brakes use ABS (Antilock Brake System) while on rail.
Parking	Disc brake running in oil located internally on output shaft of transmission. Transmission cannot be shifted into forward or reverse with parking brake engaged.
Rail	80 cfm compressor. AAR glad hand connections located front and rear. Lever operated pressure control and emergency stop on dash panel. Rail brake valve protected with safety filter for harsh environments.

ANTILOCK BRAKES (ABS) AND TRACTION CONTROL (ATC)

An electronic controller monitors rail wheels and tires to detect tire slip on the rail.	The ABS valve controls vehicle brake pressure to minimize brake lock up. Engine speed is automatically adjusted to reduce wheel spin when starting a move, while maintaining the maximum drawbar pull. The operator panel message window alerts the operator if the tires are slipping. ABS and ATC are used in rail mode only.

STEERING

Hydraulic power steering controlling front axle.	Steering is locked out when on rail. Straight ahead steering indicator provided on instrument panel to ensure the position of the steer axle.

COUPLERS

Front and Rear Couplers	Cast steel full size AAR coupler with automatic latch, cab controlled air unlatch. **NON-WEIGHT TRANSFER** design, wide range AAR sliding couplers with buffer system to reduce shock load to railcar mover during coupling operation. Couplers are hydraulically positioned from side to side with controls located on instrument panel inside cab. Video camera system to view rear coupler from cab.

HYDRAULIC SYSTEM

Variable displacement load-sensing pump driven from transmission.	Centrally located Eaton Vickers manifold is two-pressure design electric operated and detent maintained (provides the safety of manual valves). All solenoid valves have manual overrides. Hydraulic tank has excess capacity for cooling and large clean out flanges. Rail gear is dual pressure with extra traction momentary switch.

PNEUMATIC SYSTEM

80 cfm engine mounted compressor with 30 gallon air tank.	Heated air dryer and desiccant cartridge with single mounting bolt for easy maintenance. All reservoirs equipped with drain valves.

CAB

10' full width cab constructed of "galvanneal" steel, mounted on rubber isolation bushings, at opposite end from engine to reduce noise.	Cab has two doors located at rear. Four electric wipers, two on front windshield and one each on rear doors. Console is mounted in the center of the cab and can be swiveled to allow operation from either side of the cab. Hand throttle, hand vehicle brake, and train brake conveniently located on console. Console extends to operator as desired and allows easy reach when looking out the side windows. Air ride seats on both sides have side travel to allow easy viewing out side windows. Tilt steering column adjusts out of the way for rail operation. 360-degree cab visibility with filtered outside air supply and 46,000 BTU/hr heater and Optional air conditioner. Defroster fans at each corner. All glass tinted, with darker tint on side windows to reduce solar heat gain. Padded rubber floor mat is "Diamond" design for easy cleaning.

INSTRUMENTATION

Heavy-duty operator panel with color display, push buttons, and warning light.	CAN Bus system allows direct communication with engine and transmission, for display of all operating conditions and alarms. Main operating screen displays fuel level, transmission gear, rail pressure, engine speed, vehicle speed, oil pressure, coolant temperature, transmission temperature, battery voltage, and a message window. The message window, with light and buzzer, alerts operator of important events and alarms. Rail gear is controlled with operator panel push buttons. Duplex rail brake reservoir and brake pipe gauge.

ELECTRICAL

12 Volt starting and lighting with 160-ampere alternator.	Two Heavy-duty maintenance-free batteries rated at 950 CCA. Batteries located in self-contained battery box located on Shuttlewagon deck. Two amber strobe lights, one mounted on each side of cab. LED corner markers. Cab interior dome lights to illuminate instrument panel. Automotive fuses and circuit breakers provide protection for each electrical circuit.

WARNING SIGNALS

Two dual blast type air horns.	One air horn facing forward and one facing rearward. Back up alarm for on road operation.

TIRES & RIMS

Four 315/80R22.5 radial steel belted tubeless tires.	Mounted on solid drop center rims.

SANDERS

Air operated, electrically controlled from cab.	Eight sanders two for each drive wheel, front and rear. Four removable polyethylene sander boxes that hold a total of 800 pounds of sand. These sand boxes can be pulled out to allow easy filling.

LADDERS

One ladder per side, with crossover walkway at rear end.	Ladders have inclined steps with breakaway lower step.