



Specifications for New Tandem Truck Snow Plow With Spreader Dump (Flyer)

Dimensions		YES/NO/(NOTES)
a)	Cab to axle dimension to be determined by truck chassis supplier. Must be compatible to dump body dimensions included in specs. Cab to Axle: 126"	
b)	Wheelbase: To be determined by truck chassis supplier. Must be compatible to dump body dimensions included in spec (spreader or U-body dump, whichever option is selected) which allows most effective weight distribution. Note: Wheelbase to be optimized to accommodate the shortest possible turning radius to facilitate sanding/plowing operations in tight areas. Wheelbase: 210"	
c)	Gross vehicle weight shall be a minimum of 68,000 lbs	
Front Axle		
a)	Front axle capacity to be a minimum of 22,000 lbs., c/w shock absorbers. Front axle to be setback 12" to 14" from normal in order to obtain more equitable weight distribution when loaded and to accommodate a shorter radius to facilitate sanding/plowing operations in tight areas. Front Axle Setback: 50"	
b)	The front suspension of the truck shall allow for the weight of the wing attachment and shall keep the truck can in a level position at all times. Right hand side spring build-up or right auxiliary airbag option required.	
Rear Axles		
a)	Rear axle capacity to be a minimum of 46,000 lbs. with a 56" spread. Rear axles to be equipped with driver controlled differential lock-up.	
b)	Rear axles to be equipped with inter-axle power divider controlled by air from a dash-mounted switch.	

c)	Rear axles shall be single speed type with optimal gear ratio for operating on grades in excess of 12% while plowing snow and carrying a full load of road salt. NOTE: The Town shall approve the gear ratio and have the option to change the gear ratio prior to ordering at no additional charge if necessary.	
d)	Rear axles to be equipped with 46,000 lb. Hendrickson HMX suspension Tuff-Trac or pre-approved equal. No spring type suspension permitted on rear axle.	
Brakes		
a)	The chassis shall be equipped with a minimum 19.0 CFM compressor and full air brake (linings to be asbestos free). Front brake size: 16.5" x 6" minimum.	
b)	Low pressure warning alarm required complete with an air pressure protection valve to ensure air pressure priority for the truck air brake system.	
c)	Drain valves on all air tanks with actuating cords extended for easy access to operator and clearly identified.	
d)	Piggy back spring loaded park brake shall be supplied c/w anchor lock chambers and Bendix automatic slack adjustors, or pre-approved equal, (linings to be asbestos free). Park brake control to be located in centre of dashboard and be conveniently accessible.	
Steering		
a)	Steering shall be full power.	
b)	Air brake inversion valve to prevent compounding of rear brakes.	
c)	Stemco type seals, or equivalent, shall be installed on front and rear axles.	
Fuel Tank		
a)	Truck shall be equipped with one step type fuel tank. Minimum capacity of tank shall be 90 US gallons. Tank shall be made of aluminum.	
Air Dryer		
a)	Bendix AD-9, or equivalent, air dryer shall be supplied for the air brake system.	
Tire/Wheels		

a)	Rear: 16 ply - 11R x 22.5 M/S XDE Michelin Radials, or pre-approved equal, c/w white steel wheels with 8.5" rims (Hub Piloted). Size of tires and wheels to meet or exceed the maximum axle GAWR. Rear: Specify Type and size: _____	
b)	Front: 20 ply - 445-65R x 22.5 BridgestoneM844F Tubeless Radials, or pre-approved equal, c/w white steel wheels with 12.25" rims (Hub Piloted). Size of tires and wheels to meet or exceed the maximum axle GAWR. Front: Specify type and size: _____	
c)	All wheels to be equipped with fluorescent "wheel checks" on each wheel lug prior to delivery.	
Chassis		
a)	Truck chassis must be double channel frame with frame extension as required.	
b)	Chassis to be equipped with our two tow hooks at the front and two tow hooks at the rear for a total of four unobstructed tow hooks.	
c)	Chassis to be equipped with heavy-duty shock absorbers.	
Frame		
a)	Heavy-duty frame for service as snow plow.	
b)	High strength steel with the following minimums: - RBM - 282,462 N. m. (2,500,000 lbf. In) RBM: _____ - Section Modulus - 328cm cubed (20 inches cubed). Section Modulus: _____ - Chassis frame must extend 304.8mm (12") from the front of the truck. Frame extension must be double frame as well.	
c)	Reinforcement, if necessary, must be consistent with the whole chassis.	
d)	Bolt-on chassis extension is unacceptable.	
e)	Front bumper to be supplied.	
Transmission		
	The engine shall be equipped with Allison RDS series automatic or	

a)	Eaton Fuller FO-16E308LL Ultra Shift Plus Transmission, or equivalent - preference is programmed with a third gear hold when PTO is engaged.	
Electrical		
a)	This work is to be completed at factory.	
b)	Minimum three maintenance batteries.	
c)	Batteries to be mounted on passenger side as follows: - Option 1: Under front passenger side door (preffered). - Option 2: Along outsdie chassis rail, approximately 3'from back of cab and must not interfere with wing mast.	
d)	Battery box to be well sealed against weather and have external battery posts intalled.	
e)	Battery cables to have sufficient slack and be wrapped in wire loom where necessary in order to prevent chafing.	
f)	Battery terminals to be fully insualted and color coded.	
g)	Alternator - Minimum 160 amp 33SI	
h)	Starter- MT 42, or equivalent, with over-crank protection.	
i)	Block heater - Minimum 115-200 volts 1500 watts - to be installed in block, not tank heater.	
Auxiliary Wiring		
a)	Truck must clearly indicate where auxiliary wiring connections for snow equipment should be wired to truck.	
b)	Connectors for auxiliary wiring for snow equipment to be wqeather type plug in.	
Reverse Alarm		
a)	Back up warning light and alarm.	
b)	Audible at the rear of the truck and engaged by shifting the vehicle into reverse.	
c)	Alarm to be mounted in protected area.	
d)	Separate switch for lights.	

Lighting		
a)	Halogen headlights, or equivalent.	
b)	Halogen plow lights including signal lights in metal housing, or equivalent.	
c)	Cab mounted strobe light (blue).	
d)	Blue strobe lights mounted at rear top sides of dump.	
e)	All signal lights, tail lights, and flashing lights to be LED type.	
f)	Halogen driving lights to be mounted on mirrors.	
Hitch		
a)	35 ton towing package with quick connect electric and quick connect air for trailer.	
b)	Must have chassis tow hooks on front and rear.	
Driveline		
a)	Truck driveline and inter-axle to be Spicer heavy-duty, or pre-approved equal, complete with lifetime sealed and lubricated joints designed to meet severe duty applications, i.e. snow clearing operations, etc.	
Truck Engine		
a)	The engine shall be six cylinder diesel, wet sleeved fully rebuildable engine model using DEF technology to meet emissions standards.	
b)	Horsepower - Minimum 450 HP. Horsepower: _____ HP @ _____ RPM	
c)	Torque - Minimum 1650 ft-lbs. Torque: _____ HP @ _____ 975 RPM	
d)	Specify engine warranty: _____	
e)	Engine extended warranty for 7 years / 250,000 miles to be priced as option. Option Price: _____	

f)	<p>Engine to be compliant with all emissions standards applicable for operation in the Province of Newfoundland and Labrador. Note: This vehicle may be operated for extended periods at low speeds.</p>	
g)	<p>The engine shall be equipped with (Yes or No): - Dry element air cleaner. _____ - Full flow replacement canister type of oil filter. _____ - One block heater, installed. _____ - Locking type hand throttle or an electronic, programmable engine RPM system. _____ - Heavy-duty radiator. _____ - Engine fan to be two speed clutch type fan or a modulating electronic controlled fan. _____ - Engine brake. _____ - Low oil pressure - high coolant temperature engine shut off or warning system. _____ - Intake heater to be grid type, or equivalent. _____</p>	
h)	<p>The engine electrical system shall be 12 volts with a minimum of 160 amp brushless alternator, a minimum of three batteries having a minimum total 2775 CCA at 0 degrees F and a 320 minute reserve capacity at 80 degrees F, and a heavy-duty electric start. _____</p>	
i)	<p>The engine shall have antifreeze protection to -40 degrees C. _____</p>	
j)	<p>Unit to come equipped with external transmission oil cooler and filter. _____</p>	
k)	<p>Engine and transmission oil base pans to be coated with epoxy paint (glass shield or equivalent if applicable). Aluminum and composite material base pans will not require glass shield. _____</p>	
l)	<p>All lighting to be LED where possible c/w waterproof connectors.</p>	
m)	<p>Batteries and battery box located away from tire and road spray or otherwise sealed to prevent erosion. Battery to be located in a sealed and vented non-corrosive container.</p>	
n)	<p>Lighting shall conform to the Province of Newfoundland and Labrador Motor Vehicle Act and Industrial Safety Act.</p>	
	<p>Protection, in addition to the standard cover, must be provided</p>	

o)	for batteries to keep salt, etc., from gathering on top or entering box. Supplier to ensure location and protection with minimum corrosion including additional mud flaps where possible.	
Truck Cab		
a)	Must have fully enclosed safety cab, steel with fibreglass tilt bonnet and fenders. Fenders to be outfitted with flexible full coverage rubber fender extension around the entire wheel opening. Hood must have hood latches for easy maintenance, i.e. oil checks. Aluminum cab may be considered with suitable warranty.	
b)	Driver's seat shall be premium quality air suspension type with multiple adjustments for height, suspension, back support and high quality cloth construction.	
c)	Passenger's seat shall be non-suspension type matching the driver's seat and be able to seat one person.	
d)	Cab shall be equipped with heavy-duty rubber floor mats conforming to the truck floor.	
e)	Cab shall be equipped with driver and passenger arm rests	
f)	Cab shall be equipped with dual, lighted, heated, adjustable, stainless steel, breakaway style west coast mirrors, size in range 6" x 16"	
g)	Extra heated mirrors must be installed on driver and passenger side below west coast mirror so driver can see spinner and passenger's side blind spot. Mirrors to be approximately 8" convex type.	
h)	Cab shall be equipped with a heated mirror mounted to the front passenger side of the hood to allow the operator to view the wing. Final location of this mirror to be approved by the Town.	
i)	Cab shall be equipped with driver and passenger grab handles.	
j)	Cab shall be equipped with a 3-speed heater/defroster and air conditioner.	
k)	Cab shall be equipped with driver and passenger sun visors.	
l)	Cab shall be equipped with dual air horns and snow shields.	
m)	Cab shall be equipped with a quiet custom interior package with heavy-duty installation.	
n)	Cab shall be equipped with AM/FM CD radio	

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o)	Cab instruments shall include the following: tachometre, speedometre and odometre, voltage meter or ammeter, oil pressure guage, transmission temperature guage, air pressue guage, fuel gauge, and key start switch.	
p)	Cab shall be equipped with two sets of seat belts and have lap and shoulder harnesses.	
q)	Cab shall be equipped with electric powered door windows that are operated by switches accessible from the driver's seat.	
r)	Passenger's door to be equipped with a lower visibility window. Passenger side look-down mirror acceptable.	
s)	Cab shall be equipped with adjustable tilt steering column.	
t)	Right cab door to be equipped with a lower blind spot safety window or a look-down heated mirror - to be installed if first option isn't available. Specify: _____	
u)	Cab to have suitable means of access and egress by means of appropriate steps and grab handles to allow 3-point entry and	
v)	Cab to be equipped with cup holders in centre console.	
w)	First aid kit, flare kit, and fire extinguisher to be supplied.	
Paint		
a)	All paint to be compatible and come from same manufacturer.	
b)	All metal to be sand blasted to a minimum of 1.5 mil.	
c)	All metal to be cleaned, degreased, and primed.	
d)	Primer to be high build epoxy 5 mils dry film.	
e)	Top coat to be high gloss urethane 2 mils dry film.	
f)	Finished color to be municipal.	
g)	Paint warranty coverage against craching and checking, blistering, peeling, fading, or significant loss of color, hazing, or chalking leading to a loss of gloss.	
Other		

a)	One safety prop provided to support tilt section when in maximum raised position and one body prop to support the dump body when raised to a 35 degree angle.	
b)	Side board extension pockets required.	
c)	Tarpaulin hooks to be mounted on top of dump in such a manner as to facilitate the complete coverage of material in the dump.	

Snow Clearing Equipment

a)	14 Ft. spreader/dump, 12.35 yd3 capacity	
b)	Mailhot G4 hoist	
c)	Standard H345 front hitch with manual pin attachment	
b)	11 ft one way, 3/16 in moldboard, 55 in discharge height, carbide edge	
c)	11 ft side wing with 3/16 in moldboard and carbide edge	
c)	48 in front post, 30 degree trip, air travel positioner, 22 in push arms and patrol style rear attachment with limited shelving	
c)	Compu-spread CS520 controller	
c)	Galtech air-operated in-cab control valves	
c)	Enclosure for valve sections	
c)	Hella plow lamps and Grote LED blue beacon lamp and body work lamps	
c)	2 stage dry-valve, fixed displacement pump	
c)	Hoses, fittings, mud flaps and all misc. materials to make the unit ready for service.	



New Equipment Information Sheet

Supplier	Tender Number	P.O Number	Purchase Price
Model Year	Make	Model	

Serial Number	Dealer Location	Dealer Contact Number

Engine			Axles			Transmission		
Make:			Drive Train Type:			Type:	Auto	Manual
Model:			Differential Make:			Transmission Make:		
Serial #:			Differential Model:			Transmission Model:		
Displacement (L):			Differential Axle Ratio:			Meter Type		
Horsepower (KW/BHP):			Front Axle Capacity (kg):			KM	MI	HRS
Torque (N-m/ft-lbs):			Rear Axle Capacity (kg):			Meter Reading:		
Type			Front Tire Size:			Front:		
Gas	Diesel	Propane						
Number of Cylinders			Rear Tire Size:			Rear:		
4	6	8						

Fluid Capacities (L)		
Engine Oil:	Transmission:	Fuel Tank:
Fuel Economy (L/100 or L/HR):		

Noise Measurements (dba)	At Source	2.5m From Source	10m From Source
Operator Exposure		-	-
Public/External Exposure			

Specifications Included			Service Manuals Included			Operator Manuals Included		
YES		NO	YES		NO	YES		NO

NOTES: