

**NYS OMH Request For Comments
Class 8 Tractors with Refrigerated Trailers
RFC #T16030029**

Note: This is a Request For Comments. Please submit comments directly to the requesting agency. Do not submit bids at this time.

**HEAVY DUTY TRUCK TRACTORS, TANDEM AXLE FOR DOUBLE HAULING
GENERAL SPECIFICATIONS/MINIMUM FEATURES**

Truck tractors shall be certified by the manufacturer as suitable for New York State Thruway operation for tandem tractor requirements at 143,000 lb. gross weight and at a sustained 40 mph on a 3% grade. The entire manufacturer's standard equipment shall be furnished, except for the items otherwise specifically described herein. No deviations from the standards of the component manufacturers will be accepted unless such deviations are certified as approved by the engineering department of the respective manufacture. All components shall be as recommended by the chassis manufacturer for application. All trucks delivered under this contract shall be identical and no mid-production changes shall be made. Vehicles and engines shall comply with the regulations of Federal Government and New York State (NTCRR) governing the Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines in effect the date of manufacture. No stickers or banners shall appear on any equipment.

CAB-CHASSIS:

Wheel Base: 185" plus or minus 1", tandem
Set-Back Front Axle GCW: See "Front Axle" section.

SEATS: Two identical front driver's seats must be provided, mounted as far back as possible; one located in the front driver's area and one located in the front passenger's area (instead of one driver's seat and one passenger's seat). Both seats must be interchangeable as replacements for each other.

1. Seats must be wide air ride w/lumbar support with 2 arm rests on both sides of each seat (National #233227E or equal)
2. Driver's/passenger's sides and tilt XC model or equal
3. High back cloth w/cloth insert (No vinyl seat material)
4. Seat belt retractors are required for both seats

CAB: Non-sleeper, conventional type day cabs are required with heavy-duty aerodynamically-sloping hood approximately **6" drop or more** from level, 90° tilt hood when open with tilt forward hood/fender and minimum 60" interior cab width. Cab construction must be aluminum, fiberglass, or galvanized lightweight construction. Engine shall be front mounted equal to Detroit DD15 (meeting New York State Thruway Doubles Operation), and access shall be provided for normal outside servicing of air, oil, fuel filter, injectors and valve adjustment.

1. Cab rear window shall be approximately 48" W x 20" H plus or minus 1".

2. A full width sun shield shall be mounted over windshield area with adequate opening between shield and cab roof to allow air movement.
3. No bug shields wanted
4. 18" minimum steering wheel
5. Dual inside sun visors (driver's/passenger's)
6. Gauge, fuel level, right tank.
7. Increased visibility passenger's door feature.
8. Wiper motor, two-speed, electric with intermittent wipers.
9. Exterior grab handles driver's/passenger's side.
10. Door-activated/dome/reading light overhead door and door courtesy, map light driver side.
11. Four-way motorized, heated driver's/passenger's mirrors with control for both on driver's side; 90 degrees turning.
12. Power side-windows right/left with central control for both windows on driver's side; individual controls on passenger's side.
13. Spot mirrors 8" convex mounted on left and right fenders and spot mirrors mounted to main mirrors left and right side; pedestrian mirror (bus type). All brackets and mirrors must be stainless steel.
14. Rear cab air suspension.
15. Padded headliner.
16. Coat hook behind right driver's seat or center between seats.
17. Black rubber floor mats with two (2) floor liners with tall ridges right/left sides, winter style bit "Full carpeting for noise control inside cab including doors"
18. Power source for two (2) cell phone chargers
19. AM/FM radio with weatherband and Bluetooth capability; dash mounted.
20. Radio and CB antennas; roof or dash-capability mounted.
21. CB radio, overhead mounted or dash, with tuned fiberglass antenna-Cobra 25-40 channel. Minimum distance: must be 3 miles to reach.
22. Heater with temperature and fan speed controls/air conditioner integral
23. Deluxe fresh air heater, dual defrosters and carousel-mounted air diffuser
24. Fresh air ventilation system, driver controlled, with adjustable airflow patterns.
25. Driver's/passenger's doors must have power locks and power windows.
26. All units must have keyed alike ignitions with kill switch (auxiliary-run switch motor can run without key).
27. Fire extinguisher must have aggregate rating of 20BC or greater per New York State Thruway requirement
28. Cab toggle switch - see Electric
29. Tinted windshield and side windows: operable vent windows shall be operable if so equipped.
30. Two (2) air horns, Bendix-Westinghouse or equal, roof-mounted with left hand pull chain control
31. Electric horns, dual
32. A minimum 42" catwalk of safety treat aluminum shall be mounted across the frame rails directly behind the cab to 5th wheel

33. Auxiliary driving lights with white lens, recess mounted in front bumper
34. 15' Air-coiled hose and electric wire for trailer connection shall be retractable coil type with cab mounted storage bracket. Must have holder for electric tailgate cord, to be stored out of the way. Electric tailgate cord must be included on ALL tractors.
35. Trailer Electrical Connector: A weatherproof electrical connection socket fully wired for all trailer requirements shall be installed at the rear of the cab. A trailer light interrupter switch shall be installed (dash mounted). A trailer air hose support slide bar mounted to back of cab must be 36" or greater in length.
36. Identical Battery box installed on passenger side of frame left empty for use as a storage box.
37. First Aid Kit mounted in cab
38. Four flush mounted LED Lights (red) on rear of cab
39. License plate holder
40. Back up cameras to increase visibility for the driver

INSTRUMENTS AND CONTROLS: Dash mounted instruments and controls shall include at least the following:

1. Gauge type (battery condition voltmeter)
2. Fuel level gauge and DEF gauge
3. Engine water temperature gauge
4. Engine oil pressure gauge
5. Transmission oil temperature gauge
6. Air pressure gauges
7. Manual Dump valve for air suspension with indicator light and buzzer. Without guage

FRONT AXLE:

- a. SET BACK AXLE - 12,000# GAWR minimum, 14,000# maximum.
- b. Pre-set aluminum front hubs
- c. Shock absorbers (heavy-duty 10,000# total pad capacity)

REAR AXLE:

1. 40,000 # GAWR minimum
2. Gear ratio 1,450 RPM @ 65 MPH maximum
3. Magnetic drain and fill plugs
4. Parking brakes - two axles
5. Four (4) shock absorbers (minimum 40,000# capacity)
6. Four (4) air bag type 40,000 # minimum capacity compatible with drive ratio, with engine/transmission selection compatible with New York State Thruway Doubles Operation
7. Hub piloted wheel hubs
8. Rear axles posi-lock drive.
9. single air rear suspension leveling valve

ENGINE: Shall be liquid cooled diesel, turbo charged with low RPM, fuel-efficient design. Rating shall be minimum 525 HP with minimum 1650 lbs. ft. torque at 1,200 RMPs. Engine shall be (Detroit DD15) or equal; ATAAC, and shall be equipped with the following:

1. Dry type air cleaner, with condition indicator
2. Fuel oil/water separator
3. Dual(2)Vertical mufflers and exhaust stacks, chrome and corrosion resistant with 45° turnouts on each side of cab and overall height not exceeding 12'6". Heat shield shall be effective in the prevention of personal injury to operation driver, passenger, or repair personnel.
4. Automatic shut down, with distinctive audible alarm, for low oil pressure, low water level and overheating with means for manual or automatic override.
5. 1500 Watt engine, block water heater, 120V wire to block heater, with weatherproof receptacle, front driver's side plug-in.

COOLING SYSTEM: The engine cooling system shall include the following:

1. Radiator of adequate cooling capacity to efficiently allow intended double trailer hauling.
2. Anti-freeze, permanent type set at -40° F and so tagged.

TRANSMISSION:

1. The transmission shall have a torque rating of not less than that of the engine furnished. Transmission shall be 13 speed.
2. Permanent diagram of transmission shift pattern provided in a convenient location

DRIVE LINE: Posi-lock drive switch in cab

CLUTCH: Clutch shall be minimum 15.5" diameter, dampened multiple disc type, with torque limiting clutch/brake.

STEERING: Tilt/telescoping, steering wheel, minimum 18" hydraulic power steering.

WHEELS:

1. Wheel system shall be hub-pilot disc type with 10-hole polished-Alum Bright aluminum rims.
2. Ten 22.5 x 8.25 ACCU- Alum bright/Dura bright or equal; aluminum wheels
3. Rear mud flaps and brackets, anti-spray type behind second axle

TIRES: Tires shall be brand new/not retreads, steel belted, radial ply, tubeless type 295/75R 22.5 low profile front and rear.

BRAKES:

1. Air brakes shall conform to MVSS121 requirements, and shall include a minimum 16 CFM compressor and heated air dryer, complete with all auxiliary controls and braking protection equipment required for trailer-hauling operations. All brakes shall be cam-operated design with non-asbestos lining. Slack adjusters shall be self-adjusting style.
2. The parking brake shall be piggyback, spring set type with means for manual release in the event of a loss of air pressure. Means

shall be provided to permit changing the system from an independent air supply.

3. An emergency brake/stoplight switch shall be provided which will light the trailer stoplights when trailer air falls below normal.
4. 15' coiled trailer hoses - see CAB #34.
5. ABS system
6. Front 15" x 4" Q-plus
7. Rear 16.5" x 7" Q-plus
8. Two (2) dummy light holders
9. Hand control valve (trolley valve)

ELECTRICAL:

1. The charging system shall include a 12-volt, minimum 125/135 maximum amperes, alternator and full output at approximately 75% of the governed engine speed. The system shall include a fully transistorized regulator with field relay and polarity guard.
2. Storage batteries shall be maintenance-free type, rated minimum 2500CCA @ 12 volts. Batteries shall be secured in an easily-accessible, sturdy stainless steel battery box with cover and quick release cover retainers.
3. Hook-up light shall be installed on rear of cab, approximately 3 feet above frame rail, located so as to provide adequate lighting to air hose and electrical hook-up. Toggle switch for unit shall be inside cab on dash-cab.
4. Audible, external back-up alarm shall be installed
5. CB unit, Cobra model #25-40 channel with fiberglass antenna installed (on cab roof-or left mirror bracket) and tuned for CB use with a minimum three (3) mile reach
6. Tractor must be wired to run a power tailgate. Gate will be 12 volts and a direct plug must be used to run gate. This plug and line will supply only the power tailgate on the trailer. **Must be single prong plug** for electric cord for power tailgate.
7. Daytime running lights.
8. All vehicle lights (interior and exterior) need to be LED.

FUEL TANKS: Two (2) fuel tanks, aluminum construction, frame mounted (one each side), minimum 200 gallon total capacity and shall be furnished with a safety tread step and top surface. The following inscription shall be provided in a clearly visible location convenient to the fill ports - "NO. 2 DIESEL FUEL ONLY." Fuel tanks shall be designed and installed to permit convenient access to the fill ports and caps. All fuel tanks must have locking fuel caps keyed alike; left hand/right hand fuel tank heaters. Fuel tanks must meet all standards set forth by the Diesel Emission Reduction Act.

SPLASH GUARDS: Tandem front axle will have a $\frac{1}{4}$ fender over it. The second axle will have flaps at the end of the tractor (see Wheels).

FIFTH WHEEL: Fifth wheel shall be air-released slider with valve to be dash mounted. Unit shall be frame-mounted with positioning that will allow for 10" behind OD axle centerline. Must be able to slide far enough to the rear to ensure trailer's landing legs do not strike.

Coupler shall be approximately 48". Fifth wheel shall be **Holland Hitch AAIR RELEASE SYSTEM Model #3500 series or equal**. This will be an in-cab air release system. Driver's side pull.

REFLECTIVE KIT: The reflective kit shall consist of three bi-directional, reflective triangles, conforming to Federal regulations, in a reusable protective container (rigid box).

PAINT FINISH (Imron or equal): All cab parts shall be cleaned and prime coated, and shall be painted. The frame rails/axles and chassis shall be prime coated and painted black.

REAR CROSS MEMBER: The rear cross member will have a pintle hook mounted in the center with two (2) chain holders on each side. The pintle hook will be used to move dollies when hooking up tandem units. There will be a seven (7) way plug mounted to the rear cross member to supply lights to the dollies; this will include stop, signal and tail lights. Hooks will be large enough to accommodate all of Nutritional Services dollies.

REEFER TRAILERS
GENERAL SPECIFICATIONS/MINIMUM FEATURES

No stickers or banners shall appear on any equipment.

REEFERS

Length

36'

Height:

12'6 ground to roof

AXLES

TANDEM SLIDES/AIR RIDE

BRAKES - AIR

NYS D.O.T. - NO HALDEX SYSTEMS; BENDEX OR EQUAL

BUMPER ICC

HEAVY DUTY WITH VERTICAL AND HORIZONTAL MEMBERS ON 88", WIDE 22" GROUND HEIGHT, STAINLESS STEEL WITH NON-SKID SURFACE ON HORIZONTAL LEG, S/S PERMANENT CERTIFICATION

COUPLER - UPPER

FULL WIDTH KINGPIN PLATE

EXTERIOR ALUMINUM COVER PLATE ON (1) PIECE-1875" FULL WIDTH FACE OF APPROACH PLATE

4-1/4" HD KINGPIN ASSEMBLY

TRACTOR TIRE WEAR PLATES

2-12 GAUGE X 22" X 48"

TRACTOR WEAR PLATES

CROSS MEMBERS

4" ALUMINUM I-BEAM ON 12" CENTERS BETWEEN LANDING GEAR AND COUPLER

4" STEEL I-BEAM ON 12" OVER LANDING GEAR AND SUSPENSION

ALUMINUM 6" X 4" J BEAM ON 12" CENTERS IN BAY AREA

INSTALL EXTRA CROSS MEMBERS AT REAR TO GIVE 6" CENTERS LAST 58" OF TRAILER

IF POSSIBLE ALL GALVANIZED FRAME

DOORS - REAR

TODCO OR EQUAL 2-1/2" POLAR GUARD R/U REAR DOOR

FIBERGLASS FACE, PAINTED TO MATCH TRAILER

TOP, BOTTOM AND VERTICAL

SIDE BRUSH SEALS

OVERHEAD DOOR WHEELS NEOPRIME ONLY OR EQUAL

ALL "STAINLESS STEEL" HINGES, RAILS AND HARDWARE

ELECTRICAL RECEPTACLES

7-WAY RECEPTACLE AND 1 POLE RECEPTACLE FOR TAILGATE TRAILERS
OFFSET TO ROADSIDE

FLOOR

1.25" HD ALUMINUM DRY CARGO FLOOR
WELDED 16,000# FT TRUCK AXLE
3/16" X 6" FLOOR TURNUP WITH GUTTERS FRONT AND REAR AND (4) DRAINS (2
FRONT AND 2 REAR) WITH KAZOOS
3/4" X 48" PLYWOOD BEARING SHEET OR COMPOSITE UNDER FLOOR AT REAR
36" ALUMINUM I-BEAM INSERTS IN FLOOR CORRUGATIONS
HARDWOOD STRINGERS OR COMPOSITE, FULL LENGTH
BES-285 KEMLITE SUBFLOOR

FRAME-REAR

TYPE 304 BRUSHED STAINLESS STEEL WITH 1/2" PROTECTOR BARS AND
WATERPROOF HOUSING FOR REAR LIGHTS
21" STAINLESS STEEL GUSSET
An Additional PAIR of LED TURN AND STOP LIGHTS MOUNTED IN HEADER S/S
BRACKETS

PAINT

PREPAINTED WHITE PANELS
ALUMINUM PARTS, NATURAL FINISH
STEEL PARTS, PAINTED WHITE
UNDER STRUCTURE, GRAY or BLACK RPC

PANELS - SIDE

Minimum. .040" aluminum flat side panels

POSTS - SIDE

1" heavy duty aluminum side posts with 16" maximum center line from
front to rear of support legs with 24" center line legs to rear TWO(2)
additional posts each side over front subframe

MUD FLAPS

Must be Plain NO LOGOS
ANTI-SPRAY MOUNTED ON SLIDE IN DOUBLE SHEET
MUD FLAPS ALL THE WAY ACROSS SLIDER = 4 TOTAL

TANDEM

NEWAY RLSA SLIDE ASSEMBLY OR EQUAL
SLIDE WITH (4) LOCK PINS
SLIDE RANGE 63"-165"
IN 6" INCREMENTS

TIRES

LOW PROFILE
8-295/75R 22.5 14 PR

WHEELS

8-22.5 X 8/25 HUB-PILOTED (ALUMINUM-ALCO DMA BRIGHT RIMS OR EQUAL)
HUB MILEAGE METER - DRIVERS SIDE - REAR AXLE

INSIDE TRAILER

2 ROWS, GALVANIZED E. TRACK; 1ST ROW 21" CENTER, PLUS OR MINUS 1"); 2ND
ROW 36" CENTER PLUS OR MINUS 1" FROM FLOOR
EACH SIDE RECESSED IN PAN
TO CENTERLINE - SIDE SKID PLATES - FLOOR TO E-TRACK-ALUM. APPROXIMATE
28" PLUS OR MINUS 1"
FRONT BULK HEAD UNBREAKABLE COMPOSITE MATERIAL OR EQUAL NON-METAL
REAR DOOR "STAINLESS STEEL" OVERHEAD
DOOR TRACK GUARDS 36" HIGH RH AND LH SIDES
2 AIR CHUTES - MOUNTED TOP; 1 RIGHT SIDE; 1 LEFT SIDE; MOUNTED 38'-40'
FROM FRONT (PRIM AIR)

REAR TRAILER

PINTLE HOOK WITH QUICK GUIDES SAFETY
CHAIN HOOKS OUTSIDE OF FRAME-7 POLE ELEC-PLUG-FEMALE
MUST MEET NYS THRUWAY AUTHORITY TANDEM SPECIFICATIONS
GLAD HANDS VALVES ON THE OUTSIDE OF FRAME W/DUST COVERS/PACIFIERS
W/CABLES ON STRAPS/GLAD HAND PLUGS
RECESSED GRAB HANDLE CURBSIDE REAR MIN-48" STAINLESS STEEL
(1) REAR STEP BETWEEN BUMPER AND TRAILER FLOOR
RAIN GUTTER 1" REAR OF ROOF 102"

TAILGATES

TO FIT 96" WIDE TRAILERS
ELEC OVER HYDRAULIC 84" DECK
ALUMINUM NON-SKID SURFACE W/CART STOPS 2-32" EACH LEFT AND RIGHT SIDES
2-OPERATOR SWITCHES, 1 HIGH, 1 LOW
NO HAND HELD
"MARINE DUTY TOGGLE SWITCHES"
CAP 4500#, MUST BE ALL STAINLESS STEEL FRAME WITH ALUMINUM DECK; ALL
JOINTS MUST HAVE GREASE FITTINGS DUE TO THE NORTHEAST WINTER SALT
ALUMINUM RETENTION RAMP
ALL TAILGATE GATES WILL BE RAIL TYPE WITH FULL "DOCK SEAL"/HEADER KIT
ALL WIRING-ALL LIGHTS ON GATES, WEATHER-TIGHT CONNECTORS TO WITHSTAND
EXTREME MOISTURE
BATTERY BOXES WILL BE STAINLESS STEEL SEALED FOR MOISTURE. ALL
HARDWARE WILL BE STAINLESS STEEL-NUTS, BOLTS, HINGES, ETC.
GATES MUST HAVE 3 YEARS-MECHANICAL AND ELECTRICAL AND HYDRAULIC
SYSTEMS,PARTS AND LABOR WARRANTY.
GATES MUST BE DESIGNED SO WHEN IN FOLD POSITION, YOU CAN LOWER FOR
DOCK LOADING.
IF POSSIBLE A FULLY GALVANIZED TAILGATE.
Tailgates must be Solid Rail system comparable to the WALTCO MODEL
373. With a minimum of 3000 lb Capacity

CUT AND BRACE FOR REEFER UNIT

ROOF .032 ALUMINUM-ONE PIECE

ROOF BOWS

EXTRUDED ALUMINUM "Z" SECTIONS

1-3/8" EXTRUDED ALUMINUM "Z" ON 32" minimum Centers. FULL LENGTH

STRIPING-CONSPICUITY

Install Primary decals per D.O.T. REQUIREMENTS

BOTTOM RAIL 18"

15" SPACE BETWEEN BACK STRIP

SUPPORT LEGS

51,000 2-SPEED WITH SAND SHOES

CRANK HANDLE-ROADSIDE

LOCATED 141" FT/CENTERLINE

SUSPENSION

BENDIX NEWAY NS225 AIR RIDE OR EQUAL

SINGLE HEIGHT CONTROL VALVE

GLADHAND DUMP VALVE

AIR RIDE MUST GO DOWN WHEN PARKING BRAKES ARE APPLIED-48" DOCK HEIGHT

SEALS: GUARDIAN

REEFER UNITS - NEW 2016 OR 2016 MODEL YEARS

50 GAL. FUEL TANK - ALUMINUM - FILL MOUNTED DRIVER SIDE

ELEC STANDBY W/REAR S/S OUTLETS FOR ELEC HOOKUP 240V 3 PHASE-50 AMP -
PASSENGER SIDE 15 TO 20" FROM REAR.

Must be equal to Thermo King 1C-600 with Electronic Throttling Valve
for better fuel efficiency.

UNIT MUST HAVE SILENCE PACKAGE

VECTOR 8500 OR EQUAL

TEMPERATURE SET POINTS MINIMUM RANGE OF -10° F to 70° F

ELEC. WIRE FROM UNIT TO REAR PLUG-6/4 TYPE 500W 90C-600 VOLT CAROL P-
7K-123033 OR EQUAL-WIRE MUST GO THROUGH CROS MEMBER WITH RUBBER
GROMETTES.

FRAME FRONT

STAINLESS 6" or 10" RADIUS EXTR CONTROLS AND FRONT PANEL-STAINLESS AND
REGISTRATION] HOLDER

GLAD HANDS

FIXED OFFSET TO ROADSIDE

INSULATION

3.5" FRONT

3" SIDES

3" ROAD

3" FLOOR

REAR DOORS 2-1/2"

KINGPIN

36" SETTING

LIGHTS

All trailer lights (interior and exterior) need to be LED
(3) RECTANGULAR SHAPED LED TYPE LIGHTS FLUSH MOUNTED IN INTERIOR
CEILING w/ Switch in Rear
LED FLUSH MOUNT 8 DIODE INTERIOR LIGHTING-IN ROOF-FROM FRONT; 1ST 5',
2ND 18', 3RD 32' CENTER OF ROOF
ALL LIGHTS TO BE INSTALLED STAINLESS STEEL SCREWS AND DIELECTRIC
GREASE AT ALL CONNECTIONS
ALL LIGHTS INTERNALLY GROUNDED.
ANY BRACKETS CLAMPS HOLDERS MUST BE STAINLESS STEEL
SEALED WIRING SYSTEM
LED LIGHTS TO D.O.T. REQUIREMENTS
LED MARKER LIGHTS
EXTRA LED MARKER/ Turn Signal LIGHTS MOUNTED ON BOTTOM SIDES OF
TRAILER (4 for 36")
(2) AMBER TOP RAIL FRONT SIDES
(5) LED RED LIGHTS MOUNTED ON REAR HEADER - 2 OUTSIDE LIGHTS MUST HAVE
STOP AND TURN CAPABILITY
(2) LED RED REAR TRACKING
LIGHT AT BOTTOM RAIL REAR SIDES
LED LICENSE LIGHT-SEALED LAMP R.S.
REAR W/BRACKET AND S/S BACK UP PLATE
STOP TAIL TURN LED STAINLESS STEEL MOUNTING FLANGE
TURN SIGNAL/MARKER AMBER
COMBO MID-TURN SIGNAL/MARKER MOUNTED ON STAINLESS STEEL BRACKETS
BRACKET BELOW BOTTOM RAIL
EACH SIDE WIRING HARNESS

LINING-INTERIOR

.070 SMOOTH KEMLITE FIBERGLASS SIDES, FRONT & REAR RIVETLESS
BONDED TO FOAM INSULATION-ONE PIECE
LINING STARTS TOP OF TURN UP 060"
FIBERGLASS CEILING LINING
HD ALUM SCUFF-RH/LH SIDES FRT-FLOOR TO E-TRACK full length

MUD FLAPS

ANTI-SPRAY MOUNTED ON SLIDE IN DOUBLE SHEER-4 TOTAL

TANDEM

NEWAY RLSA SLIDE ASSEMBLY OR EQUAL
SLIDE WITH (4) LOCK PINS
SLIDE RANGE 63"-165"
IN 6" INCREMENTS

LICENSE PLATE BRACKET

BACK-UP CAMERA TO ASSIST WITH DRIVER'S RANGE OF VISIBILITY