

INVITATION TO BID 2019-86 TRUCK SPECIFICATIONS

Price Level:

1. M2 PRL-17M (EFF:11/14/17)

Data Version:

1. SPECPRO21 DATA RELEASE VER 007

Vehicle Configuration:

2. M2 106 CONVENTIONAL CHASSIS
3. 2020 MODEL YEAR SPECIFIED
4. SET BACK AXLE – TRUCK
5. LH PRIMARY STEERING LOCATION

General Service:

1. TRUCK CONFIGURATION
2. DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)
3. REFUSE SERVICE
4. SERVICES BUSINESS SEGMENT
5. LIQUID BULK COMMODITY
6. TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS
7. SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE
8. MEDIUM TRUCK WARRANTY
9. EXPECTED FRONT AXLE(S) LOAD : 12000.0 lbs
10. EXPECTED REAR DRIVE AXLE(S) LOAD : 23000.0 lbs
11. EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 35000.0 lbs

Truck Service:

1. TANK BODY
2. YOUNGS TANK
3. EXPECTED BODY/PAYLOAD CG HEIGHT ABOVE FRAME "XX" INCHES : 32.0 in

Engine:

1. CUM B6.7 250 HP @ 2400 RPM, 2600 GOV, 660 LB/FT @ 1600 RPM

Electronic parameters:

1. 75 MPH ROAD SPEED LIMIT
2. CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT
3. PTO MODE ENGINE RPM LIMIT - 1100 RPM
4. PTO MODE THROTTLE OVERRIDE - LIMIT TO 1100 RPM
5. PTO MODE BRAKE OVERRIDE - SERVICE BRAKE APPLIED
6. PTO RPM WITH CRUISE SET SWITCH - 900 RPM
7. PTO RPM WITH CRUISE RESUME SWITCH - 900 RPM
8. PTO MODE CANCEL VEHICLE SPEED - 5 MPH
9. PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND

10. TWO REMOTE PTO SPEEDS
11. PTO SPEED 1 SETTING - 900 RPM
12. PTO SPEED 2 SETTING - 1100 RPM
13. PTO MINIMUM RPM – 700
14. REGEN INHIBIT SPEED THRESHOLD - 5 MPH

Engine Equipment

1. 2016 ONBOARD DIAGNOSTICS/2010 EPA/CARB/FINAL GHG17 CONFIGURATION
2. 2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR)
3. STANDARD OIL PAN
4. ENGINE MOUNTED OIL CHECK AND FILL
5. ONE PIECE VALVE COVER
6. SIDE OF HOOD AIR INTAKE WITH FIREWALL MOUNTED DONALDSON AIR CLEANER
7. DR 12V 160 AMP 28-SI QUADRAMOUNT PAD ALTERNATOR WITH REMOTE BATTERY VOLT SENSE
8. (2) ALLIANCE MODEL 1231XOE, GROUP 31, 12 VOLT MAINTENANCE FREE 2250 CCA THREADED STUD BATTERIES
9. BATTERY BOX FRAME MOUNTED
10. STANDARD BATTERY JUMPERS
11. SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB
12. WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN
13. NON-POLISHED BATTERY BOX COVER
14. NO CAB AUXILIARY POWER WIRING
15. POSITIVE AND NEGATIVE POSTS FOR JUMPSTART LOCATED ON FRAME NEXT TO STARTER
16. CUMMINS TURBOCHARGED 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE
17. STANDARD MECHANICAL AIR COMPRESSOR GOVERNOR
18. AIR COMPRESSOR DISCHARGE LINE
19. ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM
20. CUMMINS EXHAUST BRAKE INTEGRAL WITH VARIABLE GEOMETRY TURBO WITH ON/OFF DASH SWITCH
21. RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH HORIZONTAL TAILPIPE
22. ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND DASH MOUNTED REGENERATION REQUEST SWITCH
23. STANDARD EXHAUST SYSTEM LENGTH
24. RH STANDARD HORIZONTAL TAILPIPE
25. GALLON DIESEL EXHAUST FLUID TANK 6
26. 100 PERCENT DIESEL EXHAUST FLUID FILL
27. LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION
28. STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING
29. STANDARD DIESEL EXHAUST FLUID TANK CAP
30. BORG WARNER VISCOUS FAN DRIVE
31. CUMMINS SPIN ON FUEL FILTER
32. FULL FLOW OIL FILTER
33. 950 Square Inch Aluminum Radiator

34. ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT
35. Gates Blue Stripe Coolant Hoses or Equivalent
36. Constant Tension Hose clamps for Coolant hoses
37. Radiator Drain Valve
38. Lower Radiator Guard
39. Phillips-Temro 750 Watt/115Volt block Heater
40. BLACK PLASTIC ENGINE HEATER RECEPTACLE MOUNTED UNDER LH DOOR
41. ALUMINUM FLYWHEEL HOUSING
42. ELECTRIC GRID AIR INTAKE WARMER
43. DELCO 12V 29MT STARTER WITH INTEGRATED MAGNETIC SWITCH

Transmission:

1. ALLISON 3500 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION

Transmission Equipment:

1. ALLISON VOCATIONAL PACKAGE 142 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL RDS
2. ALLISON VOCATIONAL RATING FOR REFUSE APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES
3. PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY
4. SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY
5. S6 PERFORMANCE 2 LIMITING PRIMARY SHIFT SCHEDULE, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY
6. 2600 RPM Primary Mode shift
7. 2200 RPM Secondary Mode Shift Speed
8. DISABLE - LOAD BASED SHIFT SCHEDULE, DISABLE - VEHICLE ACCELERATION CONTROL
9. NEUTRAL AT STOP - DISABLED, FUELSENSE – DISABLED
10. DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES
11. VEHICLE INTERFACE WIRING CONNECTOR WITHOUT BLUNT CUTS, AT BACK OF CAB
12. ELECTRONIC TRANSMISSION CUSTOMER ACCESS CONNECTOR FIREWALL MOUNTED
13. CUSTOMER INSTALLED CHELSEA 277 SERIES PTO
14. PTO MOUNTING, LH SIDE OF MAIN TRANSMISSION
15. MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN
16. PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED
17. TRANSMISSION PROGNOSTICS - ENABLED 2013
18. WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK
19. TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK
20. SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)

Front Axle and Equipment

1. DETROIT DA-F-12.0-3 12,000# FF1 71.5 KPI/3.74 DROP SINGLE FRONT AXLE
2. MERITOR 16.5X5 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES
3. NON-ASBESTOS FRONT BRAKE LINING

4. CONMET CAST IRON FRONT BRAKE DRUMS
5. FRONT OIL SEALS
6. VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS – OIL
7. Standard Spindle Nuts for all axles
8. Meritor automatic Front slack Adjusters
9. TRW THP-60 POWER STEERING
10. POWER STEERING PUMP
11. 2 QUART SEE THROUGH POWER STEERING RESERVOIR
12. Synthetic 75W-90 Front Axle Lube

Front Suspension

1. 12,000# Dual TaperLeaf Front Suspension
2. MAINTENANCE FREE RUBBER BUSHINGS - FRONT SUSPENSION
3. FRONT SHOCK ABSORBERS

Rear Axle and Equipment:

1. RS-23-160 23,000# R-SERIES SINGLE REAR AXLE
2. 6.43 Rear Axle Ratio
3. IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING
4. MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES
5. MERITOR 16.5X7 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES
6. NON-ASBESTOS REAR BRAKE LINING
7. BRAKE CAMS AND CHAMBERS ON FORWARD SIDE OF DRIVE AXLE(S)
8. CONMET CAST IRON REAR BRAKE DRUMS
9. REAR OIL SEALS
10. WABCO TRISTOP D LONGSTROKE 1-DRIVE AXLE SPRING PARKING CHAMBERS
11. MERITOR AUTOMATIC REAR SLACK ADJUSTERS
12. SYNTHETIC 75W-90 REAR AXLE LUBE
13. 23,000# 52 INCH VARIABLE RATE MULTI-LEAF SPRING REAR SUSPENSION WITH LEAF SPRING HELPER
14. SPRING SUSPENSION - NO AXLE SPACERS
15. STANDARD AXLE SEATS IN AXLE CLAMP GROUP

Brake System:

1. Air Brake Package
2. WABCO 4S/4M ABS WITHOUT TRACTION CONTROL
3. Reinforced Nylon, Fabric Braid and Wire Braid Chassis Air Lines
4. Fiber Braid Parking Brake Hose
5. Standard Brake Systems Valves
6. Standard air System Pressure Protection System
7. STD U. S. Front brake Valve
8. RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE
9. BW AD-9 Brake Line Air Dryer with Heater
10. Air Dryer Mounted Under Hood
11. STEEL AIR BRAKE RESERVOIRS
12. CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD
13. PULL CABLE ON WET TANK, PETCOCK DRAIN VALVES ON ALL OTHER AIR TANKS

Trailer connections:

1. UPGRADED CHASSIS MULTIPLEXING UNIT
2. Upgraded Bulkhead Multiplexing unit.

Wheelbase & Frame:

1. 5250MM (207 INCH) WHEELBASE
2. 11/32X3- 1/2X10-3/16 Inch Steel Frame (8.73MM X 258.8 MM/0.344 X10.19 Inch) 120KSI
3. 2275MM (90 INCH) REAR FRAME OVERHANG
4. FRAME OVERHANG RANGE: 81 INCH TO 90 INCH
5. CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 141.45 in
6. Calculated Effective Back of Cab to Rear Suspension C/L (CA): 138.45 in
7. CALC'D FRAME LENGTH - OVERALL : 325.69
8. CALC'D SPACE AVAILABLE FOR DECKPLATE : 141.45 in
9. Calculated Frame Space LH Side: 121.84 in
10. CALCULATED FRAME SPACE RH SIDE : 121.81 in
11. SQUARE END OF FRAME
12. Front Closing Crossmember
13. Standard Weight Engine Crossmember
14. Standard Crossmember back of Transmission
15. Standard Midship #1 Crossmember(s)
16. Standard Rearmost Crossmember
17. Standard Suspension Crossmember

Chassis Equipment:

1. THREE-PIECE 14 INCH CHROMED STEEL BUMPER WITH COLLAPSIBLE ENDS
2. FRONT TOW HOOKS - FRAME MOUNTED
3. BUMPER MOUNTING FOR SINGLE LICENSE PLATE
4. FENDER AND FRONT OF HOOD MOUNTED FRONT MUDFLAPS
5. GRADE 8 THREADED HEX HEADED FRAME FASTENERS
6. TANK BODY 1501 TO 3000 GALLONS

Fuel Tanks:

1. 50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LH
2. RECTANGULAR FUEL TANK(S)
3. POLISHING OF FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS
4. FUEL TANK(S) FORWARD
5. PLAIN STEP FINISH
6. FUEL TANK CAP(S)
7. DETROIT FUEL/WATER SEPARATOR WITH WATER IN FUEL SENSOR AND HAND PRIMER
8. EQUIFLO INBOARD FUEL SYSTEM
9. NO NATURAL GAS VEHICLE FUEL TANK VENT LINE/STACK
10. HIGH TEMPERATURE REINFORCED NYLON FUEL LINE

Tires:

1. HANKOOK AL11 11R22.5 14 PLY RADIAL FRONT TIRES
2. HANKOOK DL11 11R22.5 14 PLY RADIAL REAR TIRES

Hubs:

1. CONMET PRESET PLUS PREMIUM ALUMINUM FRONT HUBS
2. CONMET PRESET PLUS PREMIUM IRON REAR HUBS

Wheels:

1. ALCOA LVL ONE 88367X 22.5X8.25 10-HUB PILOT 5.79 INSET ALUMINUM DISC FRONT WHEELS
2. ALCOA LVL ONE 88367X ALUMINUM OUTSIDE, ACCURIDE 51637 STEEL INSIDE; 22.5X8.25 10-HUB PILOT DISC REAR WHEELS
3. FRONT WHEEL MOUNTING NUTS
4. REAR WHEEL MOUNTING NUTS

Cab Exterior:

1. 106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
2. RUBBER CAB MOUNTS
3. LH AND RH GRAB HANDLES
4. HOOD MOUNTED CHROMED PLASTIC GRILLE
5. CHROME HOOD MOUNTED AIR INTAKE GRILLE
6. FIBERGLASS HOOD
7. SINGLE 14 INCH ROUND HADLEY AIR HORN UNDER LH DECK
8. DUAL ELECTRIC HORNS
9. SINGLE HORN SHIELD
10. DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME WITH (4) KEYS
11. REAR LICENSE PLATE MOUNT END OF FRAME
12. INTEGRAL HEADLIGHT/MARKER ASSEMBLY WITH CHROME BEZEL
13. LED AERODYNAMIC MARKER LIGHTS
14. DAYTIME RUNNING LIGHTS
15. INTEGRAL STOP/TAIL/BACKUP LIGHTS
16. STANDARD FRONT TURN SIGNAL LAMPS
17. DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LH AND RH REMOTE
18. DOOR MOUNTED MIRRORS
19. 102 INCH EQUIPMENT WIDTH
20. LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS
21. RH DOWN VIEW MIRROR
22. STANDARD SIDE/REAR REFLECTORS
23. COMPOSITE EXTERIOR SUN VISOR
24. 63X14 INCH TINTED REAR WINDOW
25. TINTED DOOR GLASS LH AND RH WITH TINTED NON-OPERATING WING WINDOWS
26. RH AND LH ELECTRIC POWERED WINDOWS
27. TINTED WINDSHIELD
28. 2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT FLUID LEVEL INDICATOR, FRAME MOUNTED

Cab Interior:

1. OPAL GRAY CLOTH INTERIOR
2. MOLDED PLASTIC DOOR PANEL
3. MOLDED PLASTIC DOOR PANEL
4. BLACK MATS WITH SINGLE INSULATION

5. FORWARD ROOF MOUNTED CONSOLE WITH UPPER STORAGE COMPARTMENTS WITHOUT NETTING
6. IN DASH STORAGE BIN
7. (2) CUP HOLDERS LH AND RH DASH
8. GRAY/CHARCOAL FLAT DASH
9. SMART SWITCH EXPANSION MODULE
10. HEATER, DEFROSTER AND AIR CONDITIONER
11. STANDARD HVAC DUCTING
12. MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH
13. STANDARD HEATER PLUMBING
14. DENSO HEAVY DUTY AIR CONDITIONER COMPRESSOR
15. BINARY CONTROL, R-134A
16. STANDARD INSULATION
17. SOLID-STATE CIRCUIT PROTECTION AND FUSES
18. 12V NEGATIVE GROUND ELECTRICAL SYSTEM
19. DOME LIGHT WITH 3-WAY SWITCH ACTIVATED BY LH AND RH DOORS
20. LH AND RH ELECTRIC DOOR LOCKS
21. (2) 12 VOLT POWER RECEPTACLES MOUNTED IN DASH
22. BASIC HIGH BACK AIR SUSPENSION DRIVER SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION
23. 2 MAN TOOL BOX MID BACK NON SUSPENSION PASSENGER SEAT
24. INBOARD DRIVER SEAT ARMREST, NO PASSENGER SEAT ARMREST
25. LH AND RH INTEGRAL DOOR PANEL ARMRESTS
26. VINYL WITH VINYL INSERT DRIVER SEAT
27. VINYL WITH VINYL INSERT PASSENGER SEAT
28. BLACK SEAT BELTS
29. FIXED STEERING COLUMN
30. 4-SPOKE 18 INCH (450MM) STEERING WHEEL
31. DRIVER AND PASSENGER INTERIOR SUN VISORS

Instruments & Controls:

1. GRAY DRIVER INSTRUMENT PANEL
2. GRAY CENTER INSTRUMENT PANEL
3. ENGINE REMOTE INTERFACE WITH PARK BRAKE AND NEUTRAL INTERLOCKS
4. BLACK GAUGE BEZELS
5. LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM
6. 2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES
7. INTAKE MOUNTED AIR RESTRICTION INDICATOR WITHOUT GRADUATIONS
8. ELECTRONIC CRUISE CONTROL WITH SWITCHES IN LH SWITCH PANEL
9. KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY
10. ICU3S, 132X48 DISPLAY WITH DIAGNOSTICS, 28 LED WARNING LAMPS AND DATA LINKED
11. HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH
12. 2 INCH ELECTRIC FUEL GAUGE
13. ENGINE REMOTE INTERFACE WITH MULTIPLE SET SPEEDS
14. ENGINE REMOTE INTERFACE CONNECTOR AT BACK OF CAB
15. ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE
16. 2 INCH TRANSMISSION OIL TEMPERATURE GAUGE
17. ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY

18. (1) DASH MOUNTED PTO SWITCH WITH INDICATOR LAMP
19. ELECTRIC ENGINE OIL PRESSURE GAUGE
20. AM/FM/WB WORLD TUNER RADIO WITH BLUETOOTH AND USB AND AUXILIARY INPUTS, J1939
21. DASH MOUNTED RADIO
22. (2) RADIO SPEAKERS IN CAB
23. AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF
24. ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER
25. STANDARD VEHICLE SPEED SENSOR
26. ELECTRONIC 3000 RPM TACHOMETER
27. IDLE LIMITER, ELECTRONIC ENGINE
28. PRE-TRIP LAMP INSPECTION, ALL OUTPUTS FLASH, WITH SMART SWITCH
29. DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY
30. SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY
31. MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT SWITCH
32. ONE VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR
33. SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE
34. INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS

Design:

1. PAINT: ONE SOLID COLOR

Color:

2. CAB COLOR A: L0006EB WHITE ELITE BC
3. BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT
4. POWDER WHITE (N0006EA) REAR WHEELS/RIMS (PKWHT21, TKWHT21, W, TW)
5. SUNVISOR PAINTED SAME AS CAB COLOR A
6. STANDARD E COAT/UNDERCOATING

Certification / Compliance:

1. U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS

Secondary Factory Options:

1. CORPORATE PDI CENTER IN-SERVICE ONLY

Extended Warranty:

1. TOWING: 2 YEARS/UNLIMITED MILES/KM EXTENDED TOWING COVERAGE \$550
CAP FEX APPLIES