STATE OF NEW HAMPSHIRE
Department of Administrative Services
Division of Procurement and Support Services
Bureau of Purchase and Property
State House Annex
Concord, New Hampshire 03301

NOTICE OF CONTRACT

Date: 02/04/2020

COMMODITY: CONTRACT – TRUCK CAB AND CHASSIS – 36,000, 60,000 AND 64,000 GVWR

CONTRACT NO.: 8002661 NIGP: 072-800

VENDOR: LIBERTY INTERNATIONAL VENDOR #: 159019 B001
1400 SOUTH WILLOW STREET
MANCHESTER NH 03103

CONTACT PERSON: JAMES RAMSEY
Telephone No.: 800-562-3814
Telephone No.: 603-665-2009
Cell Phone: 603-703-8941
Facsimile No.: 603-623-0653
E-Mail: jim@libertyinternationaltrucks.com

EFFECTIVE FROM: PRESENT Through: MANUFACTURER’S BUILD DOWN DATE OR UNTIL THE VEHICLES ARE NO LONGER AVAILABLE AT THE PRICE QUOTED

PAYMENT & TERMS: Payments shall be made via ACH.

INVOICING & PAYMENTS: Invoices shall be submitted after completion of work to the requesting agency. Payment shall be paid in full within thirty (30) days after receipt of invoice and acceptance of the work to the State’s satisfaction.

DELIVERY TIME: Within 180 days from placement of order.

F.O.B.: F.O.B. Destination to any location within the State of New Hampshire

ORDERING PROCEDURE: State agencies will place their orders by electronic order entry
Eligible participants will utilize their own individually established ordering procedures.

MINIMUM ORDERS: There is no minimum order required under this contract

QUESTIONS: Alan Hofmann, Purchasing Manager
Phone: 603-271-2550
E-Mail: alan.hofmann@das.nh.gov
## PRICING:

### 36,000 # GVWR TRUCK CAB AND CHASSIS

<table>
<thead>
<tr>
<th>Description</th>
<th>Delivered Unit Price</th>
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<tbody>
<tr>
<td>NEW 2021 MODEL YEAR OR NEWER, 36,000 # GVWR TRUCK CAB AND CHASSIS AS PER STATE OF NEW HAMPSHIRE SPECIFICATION #2018-48 DOT DATED JUNE 25th, 2019</td>
<td>$121,955.00</td>
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### Description

NEW 2021 MODEL YEAR OR NEWER, 36,000 # GVWR TRUCK CAB AND CHASSIS AS PER STATE OF NEW HAMPSHIRE SPECIFICATION #2018-48 DOT DATED JUNE 25th, 2019

Clam Shell cab and chassis with a Wheelbase of 199” a Cab Axle of 124” with an AFT of 63”

### ADD FOR OPTIONS:

1. CAB TO AXLE DIMENSION 96”
   - $ NO CHARGE
2. CAB TO AXLE DIMENSION 108”
   - $ NO CHARGE
3. CAB TO AXLE DIMENSION 120”
   - $550.00
4. HEATED WINDSHIELD
   - $475.00
5. STAINLESS STEEL OIL PAN
   - $1,500.00
6. OVER THE AIR PROGRAMMING SOFTWARE LINK
   - $400.00
7. 5 LB ABC FIRE EXTINGUISHER DELIVERED WITH EACH TRUCK, SHIPPED LOOSE
   - $125.00
8. 1 YEAR ADD-ON SOFTWARE SUBSCRIPTION L-9 / ALLISON AS STATED BELOW
   - $1,600.00

DIAGNOSTIC SOFTWARE AND ALL REQUIRED LAPTOP COMPUTER CABLES AND OR CONNECTIONS FOR DIAGNOSIS OF ENGINE (INCLUDING KEY ON AND KEY OFF TEST, CYLINDER CUT OUT TEST, INJECTOR DISABLE TEST), CHASSIS & ELECTRICAL SYSTEM, AND ABS SYSTEM. LATEST VERSION OF ALLISON TRANSMISSION SOFTWARE FOR PROGRAMMING WITH ONE DAY ON SITE PROGRAMMING INSTRUCTION.

### DEDUCT FOR OPTIONS:

- REMOVE LEFT OR RIGHT FRONT DRIVER CONTROLLED OVERLOAD AIR BAG ($475.00)
- REMOVE SOFTWARE REQUIREMENT ($31,000.00)

ENGINE TYPE CUMMINS L9

MANUFACTURER/MODEL INTERNATIONAL HV507

**DELIVERY NOT TO EXCEED 180 CALENDAR DAYS ARO**
# 60,000 # GVWR TRUCK CAB AND CHASSIS

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<tr>
<td>STATE OF NEW HAMPSHIRE SPECIFICATION #2018-50 DATED JUNE 25, 2019</td>
<td>$ 149,980.00</td>
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**ADD FOR UPGRADES / OPTIONS:**

1. STAINLESS STEEL OIL PAN                                                $ 1,500.00
2. HEATED WINDSHIELD                                                     $ 475.00
3. OVER THE AIR PROGRAMMING SOFTWARE LINK                                 $ 400.00
4. 5 LB ABC FIRE EXTINGUISHER DELIVERED WITH EACH TRUCK, SHIPPED LOOSE    $ 125.00
5. 1 YEAR ADD-ON SOFTWARE SUBSCRIPTION, ENGINE / TRANSMISSION AS STATED  $ 1,200.00

DIAGNOSTIC SOFTWARE AND ALL REQUIRED LAPTOP COMPUTER CABLES AND OR CONNECTIONS FOR DIAGNOSIS OF ENGINE (INCLUDING KEY ON AND KEY OFF TEST, CYLINDER CUT OUT TEST, INJECTOR DISABLE TEST), CHASSIS & ELECTRICAL SYSTEM, AND ABS SYSTEM. LATEST VERSION OF ALLISON TRANSMISSION SOFTWARE FOR PROGRAMMING WITH ONE DAY ON SITE PROGRAMMING INSTRUCTION.

**DEDUCT FOR OPTIONS**

- REMOVE SOFTWARE REQUIREMENT                                             ($ 26,000.00)

ENGINE TYPE: INTERNATIONAL A26
MANUFACTURER/MODEL: INTERNATIONAL HV513

**DELIVERY NOT TO EXCEED 180 CALENDAR DAYS ARO**
**64,000 # GVWR CAB & CHASSIS TRUCK**

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<td>NEW 2021 MODEL YEAR OR NEWER, 64,000 # GVWR TRUCK CAB AND CHASSIS AS PER STATE OF NEW HAMPSHIRE SPECIFICATION #2018-51 DOT DATED JUNE 25, 2019</td>
<td>$150,945.00</td>
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**ADD FOR UPGRADES / OPTIONS:**

1. CAB TO AXLE DIMENSION 138"
   - $0 NO CHARGE
2. CAB TO AXLE DIMENSION 150"
   - $0 NO CHARGE
3. STAINLESS STEEL OIL PAN
   - $1,500.00
4. HEATED WINDSHIELD
   - $475.00
5. OVER THE AIR PROGRAMMING SOFTWARE LINK
   - $400.00
6. 5 LB ABC FIRE EXTINGUISHER DELIVERED WITH EACH TRUCK, SHIPPED LOOSE
   - $125.00
7. 1 YEAR ADD-ON SOFTWARE SUBSCRIPTION, ENGINE / TRANSMISSION AS STATED BELOW
   - $1,200.00

DIAGNOSTIC SOFTWARE AND ALL REQUIRED LAPTOP COMPUTER CABLES AND OR CONNECTIONS FOR DIAGNOSIS OF ENGINE (INCLUDING KEY ON AND KEY OFF TEST, CYLINDER CUT OUT TEST, INJECTOR DISABLE TEST), CHASSIS & ELECTRICAL SYSTEM, AND ABS SYSTEM. LATEST VERSION OF ALLISON TRANSMISSION SOFTWARE FOR PROGRAMMING WITH ONE DAY ON SITE PROGRAMMING INSTRUCTION.

**DEDUCT FOR OPTIONS:**

1. REMOVE SOFTWARE REQUIREMENT
   - ($26,000.00)

**ENGINE TYPE**

INTERNATIONAL A26

**MANUFACTURER/MODEL**

INTERNATIONAL HV513

**DELIVERY NOT TO EXCEED 180 CALENDAR DAYS ARO**
STATE OF NEW HAMPHIRE
NH SPECIFICATION NO. 2020-48 DOT
DEPARTMENT OF TRANSPORTATION
BUREAU OF MECHANICAL SERVICES

STANDARD SPECIFICATION – 2021 TRUCK, CAB & CHASSIS –36,000 #

GROSS VEHICLE WEIGHT RATING MINIMUM 36,000 POUNDS

CAB
- CONVENTIONAL 3-POINT ACCESS CAB, ADDITIONAL GRAB HANDLE TO BE MOUNTED ON THE EXTERIOR OF DRIVER AND PASSENGER SIDE CAB CORNER
- BUTTERFLY HOOD OR HATCHES TO ALL SERVICE POINTS
- STATIONARY GRILLE
- DUAL FACTORY INSTALLED 7” FENDER MOUNTED HEATED CONVEX MIRRORS
- ONE PIECE WINDSHIELD
- DRIVER AND PASSENGER DOOR OPERATING VENT WINDOWS OR FACTORY INSTALLED VENT SHADES
- CAB NOISE SUPPRESSION ON INSIDE OF FIREWALL AND ENGINE COMPARTMENT AND ADDITIONAL FRONT DIRECTIONAL TURN SIGNAL LIGHTS TO BE MOUNTED ON TOP OF OR IN FENDERS.
- INNER FENDER SPLASH GUARDS
- CAB SUSPENSION TO BE AIR BAG TYPE
- AUX, HEADLIGHT HARNESS TO BE LOCATED IN THE FRONT OF THE HOOD AT THE LEFT SIDE OF THE FRAME AND EASILY ACCESSIBLE BY THE TECHNICIAN FOR PLOW LIGHTS & TURN SIGNALS CONSISTING OF THREE (3) EA. # 1157 BULBS ON EACH SIDE AND SWITCHED INSIDE THE CAB
- OUTER FENDER EXTENSIONS
- OUTSIDE AIR / TEMPERATURE MONITOR
- WIPER FORCED TO INTERMITTENT WHEN SERVICE BRAKE IS APPLIED
- IGNITION KEY SHALL BE UNIQUE AND NOT KEYED ALIKE FROM THE FACTORY

CAB HEIGHT
- MINIMUM 59-1/2” (EXTERIOR FRAME TO TOP OF CAB)

CAB – AXLE DIMENSION
- 88” USABLE

BBC DIMENSION
- 106” – 110”

TRANSMISSION
- ALLISON AUTOMATIC – 3500 RDS, FIVE SPEED, PRE SELECT FOR SELECT ONE (1) GEAR DOWN VARIABLE COMPRESSION ENGINE BRAKE 3RD GEAR HOLD WITHOUT (LBSS) LOAD BASED SHIFT SCHEDULE
- RIGHT SIDE DASH MOUNTED TOUCH PAD CONTROL OR STEERING WHEEL PADDLE SHIFTER
- AUTO NEUTRAL WHEN PARKING BRAKE IS APPLIED
- INTEGRAL OIL LEVEL SENSOR
- TES 295 APPROVED SYNTHETIC FLUID
- EXTENDED TRANSMISSION WARRANTY COVERAGE- PARTS, LABOR AND TOWING FOR FIVE (5) YEARS, UNLIMITED MILEAGE FROM IN-SERVICE DATE
- AUXILIARY COOLING

PTO AND PUMP
- ALSO INCLUDED: DRIVERS SIDE INSTALLED CHELSEA WET SPLINE PTO MODEL #280GCFJW-B5RF TO INCLUDE HOSE KIT #329130-1 AND A HYDRAULIC PUMP THAT SHALL BE A PARKER MODEL #324-9110-448 AND MOUNTED TO THE PTO BY THE MEANS OF TWO 1/2” X 1-1/2” STAINLESS STEEL ALLEN HEAD CAP SCREWS
- A FACTORY IN DASH ILLUMINATED SWITCH SHALL BE INSTALLED, LABELED “PTO”. THE SOURCE OF THE POWER SHALL BE THROUGH THE VEHICLE’S BODY CONTROLLER

COOLING
- HEAVY DUTY WITH LONG LIFE ANTIFREEZE AND A COOLANT RECOVERY TANK
- AIR CONDITIONING TO BE FACTORY INSTALLED

BATTERY & ALTERNATOR
- THREE (3) -BATTERIES EACH HAVING 180 AMP HOUR RATING (9N COMBINATION) WITH 2,775 CCA
- DELCO 24 SI OR LEECE-NEVILLE 160 AMP ALTERNATOR
- BATTERY BOX MOUNTED FOR CLEAN C.A. IF AVAILABLE
BRAKES
- POWER - ABS, ALL WHEEL, AIR BRAKES, CAM
- AIR BRAKE PROVISIONS TO REAR OF CHASSIS
- COMPRESSOR CAPACITY (13 CUBIC FT. MIN.)
- AUTOMATIC SLACK ADJUSTERS FRONT AND REAR
- ANCHORLOCK PARKING BRAKE (OR EQUIVALENT), MGM BRAND, MERITOR OR BENDIX SEALED LONG STROKE CHAMBERS WITH STAINLESS STEEL PINS
- ADIP AIR DRYER LOCATED ON OUTSIDE OF FRAME
- DUST SHIELDS – ALL WHEELS

ENGINE – DIESEL
- CUMMINS L9 300 HP @ 2,000 RPM, 860 FT LB @ 1,300 RPM
- PACCAR PX-9 300 HP @ 2200 RPM, 860 FT LB @ 1,400 RPM
- SHALL INCLUDE ENGINE BRAKE
- FUEL/WATER SEPARATOR LOCATED ON OUTSIDE OF FRAME OR UNDER HOOD
- FUEL FILTER
- ENGINE BLOCK HEATER
- 2 POSITION PROGRAMMABLE STEP UP THROTTLE (PRE-SET AT 1,000 RPM & 1,200 RPM)
- AUDIBLE ALARM
- STEEL, CAST ALUMINUM OR A COMPOSITE SUMP OIL PAN
- DEF TANK MIN SIX (6) GALLON

EXTENDED ENGINE WARRANTY
- A SEVEN (7) YEAR, OR 150,000 miles 100% PARTS, LABOR AND 5 YEAR TOWING WARRANTY SHALL COVER COMPUTERS, MODULES, ELECTRICAL CONNECTIONS, CONNECTORS, WIRING HARNESS, INJECTORS, INJECTOR LINES, TURBOS, WATER PUMPS, FUEL FILTER ASSY, STARTERS, CLUTCH FANS, ALTERNATORS, OIL AND FUEL PRESSURE PUMPS, OIL AND WATER SEALS, ALL ENGINE MECHANICAL PARTS AND EMISSION RELATED COMPONENTS TO INCLUDE EXHAUST AND AFTER TREATMENT. MAINTENANCE COMPONENTS SUCH AS BELTS, HOSES AND FILTERS ARE EXCLUDED

EXTENDED BASE CHASSIS WARRANTY
- A FIVE (5) YEAR OR 100,000 MILE CHASSIS WARRANTY SHALL CONSIST OF BUT NOT LIMITED TO CLIMATE CONTROL SYSTEM COVERING THE HEAT AND AC SYSTEM, ELECTRICAL COMPONENTS, LINES WIRING, AMBIENT AIR TEMPERATURE SENSOR, AND RECEIVER DRYER.
- COOLING SYSTEM
- SUSPENSION FRONT AND REAR
- STEERING SYSTEM
- STARTER & ALTERNATOR
- DRIVELINES
- CHASSIS WIRING AND CONNECTORS
- GAUGES AND SWITCHES
- CHARGE AIR COOLER
- AIR SYSTEM
- BRAKING SYSTEM
- INTERIOR COMPONENTS
- FACTORY INSTALLED ACCESSORIES

STEERING
- HYDRAULIC POWER STEERING WITH DUAL STEERING BOXES
- STEERING WHEEL DIAMETER MINIMUM 16" WITH TILT ADJUSTABLE COLUMN

ELECTRICAL
- ALL ELECTRONIC CONTROLLERS, EXCEPT ENGINE ECM AND THE TRANSMISSION CONTROL MODULE, TO BE LOCATED IN THE CAB AND NOT TO INTERFERE WITH SPACE BETWEEN SEATS.
- SINGLE HARNESS IN TRUCK FOR VEHICLE SPEED AND GROUND SPEED SENSING.
- AUX. PARK BRAKE ALARM
HEADLIGHTS ON W/ WIPERS
CB RADIO PREP PACKAGE WITH 2 FT. SPRING MOUNTED ANTENNA (S)
12V ACCESSORY PORT
PRE-WIRED CIRCUIT FOR ELECTRIC TRAILER BRAKES
SEVEN WIRE HARNESS TO REAR OF FRAME FOR A TWO (2) LIGHT (COMBINATION STOP/TURN/TAIL) SYSTEM WITH A PACKARD CONNECTOR #12124685 & #12124686 INSTALLED AND A SUPPLIED PHILLIPS STA-DRY PLUG ASSY PART # 48NA33-036

A MINIMUM OF SIX OPTIONAL IN-DASH SWITCHES WITH INDICATOR LIGHTS SHALL BE PROVIDED, KEY POWERED AND TERMINATING @ FIREWALL. ARRANGED AND LABELED IN THE FOLLOWING CONFIGURATION. FIVE SWITCHES SHALL BE ARRANGED AND MARKED “PTO”, “SPREADER LIGHT”, “LEFT SPREADER LIGHT”, “RIGHT SPREADER LIGHT”, “PTO OVERRIDE SWITCH”; ONE SWITCH MARKED SPARE. TWO INDICATOR LIGHTS SHALL BE PROVIDED FOR THE “BODY UP (RED)”, “HYDRAULIC LOW OIL AND “HI-TEMPERATURE SHUTDOWN (RED)”. 

CHASSIS MANUFACTURER ON SITE SUPPORT

SPREADER LIGHT
1. DEPRESSED, IF THE SWITCH IS ACTIVATED AND THE OUTPUT IS GOOD THE GREEN INDICATOR LIGHT IN THE SWITCH WILL ILLUMINATE STEADY ON.
2. IF THE SWITCH IS ACTIVATED AND THE OUTPUT IS BAD THE GREEN INDICATOR LIGHT IN THE SWITCH WILL FLASH. THE OUTPUT IS TIED TO THE EXTERIOR LAMP CHECK. WHEN THE EXTERIOR LAMP CHECK IS REQUESTED THIS OUTPUT WILL BE ON.

LOW OIL INDICATOR

TO GIVE THE OPERATOR A WARNING THE HYDRAULIC OIL IS LOW.
1. THE BODY COMPANY WILL PROVIDE A GROUND SIGNAL TO THE REMOTE POWER MODULE (RPM). WHEN THIS SIGNAL IS RECEIVED THE CLUSTER BEEP WILL SOUND AND THE RED LIGHT IN THE DASH WILL BE ON STEADY INDICATING LOW OIL IN THE RESERVOIR.
2. WHEN THE HYDRAULIC OIL IS HIGH IN TEMPERATURE OVER 200 DEGREE FAHRENHEIT THE SAME OIL INDICATOR LIGHT WILL FLASH QUICKLY AND SHUT DOWN THE PTO AT A PRE-DETERMINED TIME.

PTO
1. WHEN THE SWITCH IS ACTIVATED THE LETTERS PTO LIGHT UP IN THE INSTRUMENT CLUSTER ALERTING THE OPERATOR THAT THE PTO IS ON. PTO ACTIVATION REQUIRES THE ENGINE SPEED TO BE LESS THAN 900 RPM NO OTHER ENGAGEMENT CONDITIONS ARE REQUIRED.
2. THE PTO WILL AUTOMATICALLY DIS-ENGAGE IF ANY OF THE FOLLOWING ARE ACTIVE
3. PTO SWITCH IS OFF
4. LOW OIL INPUT SIGNAL ACTIVE
5. ENGINE SPEED IS GREATER THAN 2500 RPM
6. IGNITION KEY IS OFF
7. HI-TEMP IS ACTIVE AND THE TIMER HAS EXPIRED. IT HAS A LOW OIL SHUTDOWN FEATURE BUILT INTO IT THAT WHEN THE OIL LEVEL INDICATOR IS ACTIVATED IT AUTOMATICALLY SHUTS OFF THE PTO. THERE IS AN OVERRIDE SWITCH LOCATED IN THE DASH. THIS IS WILL BE A MOMENTARY OVER RIDE SWITCH. THE OVERRIDE SWITCH WILL ALLOW FOR PTO OPERATION AS LONG AS THE SWITCH IS HELD DOWN. THE OVERRIDE FUNCTION WILL ONLY WORK ONCE. TO ALLOW THE OVERRIDE FUNCTION A SECOND TIME THE KEY MUST BE CYCLED.

FAULT DETECTION MANAGEMENT
1. THE FAULT DETECTION MANAGEMENT FOR THE PTO SWITCH IS AN INDICATOR LIGHT BUILT INTO THE SWITCH IT WILL FLASH FAST GREEN WHEN THERE IS A FAULT WITH THE PTO OUTPUT. THE VIRTUAL FUSING IS SET FOR 20 AMPS

REAR STROBES
1. THE REQUIREMENT IS THAT THE REAR STROBE LIGHTS BE OFF WHEN THE RIGHT OR LEFT TURN SIGNALS ARE ACTIVE. THE STROBE LIGHTS ARE CONTROLLED BY THE WHELEN MODULE. WHEN THE RIGHT OR LEFT TURN SIGNAL IS ACTIVE THE OUTPUT TO THE STROBES IS CANCELED. THE FUNCTION WORKS WITH KEY ON OR OFF.

BODY UP
BACK UP CAMERA
1. KEY IGNITION POWERED.
2. WHEN THE VEHICLE IS ENGAGED INTO REVERSE THE CAMERA WILL AUTOMATICALLY ACTIVATE AND TURN ON. WHEN PUT INTO DRIVE THE CAMERA WILL AUTOMATICALLY TURN OFF UNLESS YOU HAVE POWERED THE MONITOR ON MANUALLY.

SUSPENSION

FRONT AXLE
- 16,000 # WITH WET TYPE OIL SEALS

FRONT SPRINGS
- 16,000 # COMBINED RATING @ GROUND, MULTI-LEAF, SEMI-ELLiptIC
- NOTE: IF SETBACK FRONT AXLE IS OFFERED, ADD 2,000 # TO MAIN SPRING/AXLE GROUND RATING
- RIGHT OR LEFT FRONT (AS SPECIFIED) DRIVER CONTROLLED AIR BAG OVERLOAD

REAR AXLE
- 23,000 # EATON, MERITOR OR SPICER, MINIMUM 18” RING GEAR
- DRIVER CONTROLLED LOCKING DIFFERENTIAL
- SINGLE SPEED AXLE (RATIO TO BE DETERMINED BY USING AGENCY)

REAR SPRINGS
- 30,000 # TOTAL COMBINED RATING @ GROUND, INCLUDES REAR MAIN MULTI LEAF, AND 2,250 # AUXILIARY SPRINGS

DRIVELINE
- SPICER SERIES 1710 SERIES

TIRES: TYPE, WHEEL/TIRE SIZE
- SIX (6) – HEAVY DUTY ACCURIDE 24.5” X 8.25”, POWDER COATED STEEL, HUB PILOTED, 0.472” DISC WHEELS WITH GUARDS FRONT & REAR
- SIX (6) – 11R24.5 (H) TUBELESS RADIALS
- WHEEL WRENCH AND HANDLE

ACCEPTABLE BRAND TIRES
FRONT
- GOODYEAR G287 MSA, GOODYEAR G751 MSA OR MICHELIN XZY-3

REAR
- GOODYEAR G282 MSD OR MICHELIN XDS-2

FRAME
- HEAT TREATED ALLOY STEEL FRAME WITH MINIMUM YIELD STRENGTH OF 120,000 PSI AND MINIMUM SECTION MODULUS OF 20.6
- 1 PIECE, FULL DEPTH FRAME TO EXTEND A MINIMUM OF 12” BEYOND FRONT OF GRILLE.
- AF-MINIMUM 48”
- EXCLUDING FUEL TANK INTRUSION, BOTH OUTSIDE FRAME RAILS TO BE FREE OF OBSTRUCTIONS FOR TWENTY FOUR (24) INCHES BEHIND THE CAB TO ALLOW ROOM FOR MOUNTING A WING CABINET NO CROSSMEMBER IN SAME TWENTY FOUR INCH (24") AREA.
- MINIMAL OBSTRUCTIONS FOR NEXT THIRTY (30) INCHES FOR PIPE BRACES

INSTRUMENTS/CONTROLS
- SPEEDOMETER, TACHOMETER, AMMETER/VOLT-METER, FUEL GAUGE (S), OIL PRESSURE GAUGE, TEMPERATURE GAUGE AND AIR PRESSURE GAUGE
- ALL NECESSARY ELECTRICAL SWITCHES
- HOUR METER, ACTUATED BY ENGINE OPERATION
- DASH MOUNTED AIR RESTRICTION INDICATOR

FUEL SUPPLY
- STAINLESS STEEL OR ALUMINUM TANK WITH STAINLESS STEEL STRAPS HAVING A MINIMUM CAPACITY OF 70 GALLONS
- STEP TYPE FUEL TANK. NOT TO EXCEED 8” BEYOND REAR OF CAB
STANDARD SPECIFICATION – 2021 TRUCK, CAB & CHASSIS 36,000# - CONTINUED

EXHAUST SYSTEM
• HORIZONTAL, VERTICAL (OR COMBINATION) MUFFLER SYSTEM SHALL BE CONFIGURED NOT TO INTERFERE WITH PTO’S OR HYDRAULIC CABLES.
• STACK (INCLUDING 90 DEGREE TURN OUT) MUST NOT EXTEND ABOVE TOP OF CAB. AND NOT TO EXCEED 4” BEYOND REAR OF CAB

PAINT
• CLEAR COAT OMAHA ORANGE (SAME AS DUPONT DULUX 93-082) LEAD FREE
• NOTE: SEE INDEPENDENT PAINT TESTING REQUIREMENTS AS PART OF THIS SPECIFICATION

RADIO/SPEAKERS (FACTORY)
• AM/FM WITH WEATHER BAND

SEATS-DRIVER/PASSENGER
• BUCKET, AIR SUSPENSION, HIGH BACK, HEAD REST, DRIVER’S ARM REST (RH) (NATIONAL CUSHION-AIRE OR EQUAL), HD CLOTH MORDURA, MILLIKEN (NGV) OR EQUAL.

FLOOR COVER
• VINYL WITH FACTORY RUBBER AUXILIARY MATS

LIGHTING, REQUIRED
• DAYTIME RUNNING, PRE-TRIP INSPECTION LIGHT TEST

MIRRORS, OUTSIDE RIGHT AND LEFT
• HEATED 6” X 15” EXTENDING TO 96” WITH A HEATED 7” CONVEX MIRROR
• DUAL FACTORY INSTALLED 7” FENDER MOUNTED HEATED CONVEX MIRRORS
• PASSENGER SIDE “LOOK DOWN” CONVEX MIRROR

BUMPERS -FRONT
• NONE REQUIRED

BACK UP ALARM
• ELECTRIC

HORNS
• AIR AND ELECTRIC – DUAL NOTE, BOTH MOUNTED UNDER CAB

TOW PACKAGE
• TRAILER TOW PACKAGE SHALL BE PROVIDED AND INCLUDE TRAILER LIGHT PACKAGE, HAND OPERATED CONTROL VALVE, AND AIR LINES TO REAR OF FRAME

SOFTWARE
• ALL SOFTWARE TO INCLUDE FREE UPDATES AND RENEWALS OF ALL SUBSCRIPTIONS FOR A PERIOD OF TEN (10) YEARS BEYOND MODEL YEAR. THIS SPECIFICATION SHALL REQUIRE A QUANTITY OF NINE ( 9 EACH ) COMPLETE SETS OF THE

SYSTEMS CALIBRATIONS
UPON FINAL AWARD, THE SUCCESSFUL VENDOR WILL PRESENT A COMPLETE LIST OF DEFAULT ENGINE, ELECTRICAL, FUEL AND TRANSMISSION SYSTEM CALIBRATIONS FOR REVIEW AND ADJUSTMENT WITH THE END USER

SERVICE AND PARTS MANUALS
• FOR THE LIFE OF THE VEHICLE (S), THE VENDOR SHALL PROVIDE WEB BASED ACCESS TO ALL TRUCK-SPECIFIC SERVICE MANUALS, TECHNICAL SPECIFICATIONS AND PARTS CATALOGS FOR A MINIMUM OF NINE (9) NHDOT VEHICLE MAINTENANCE LOCATIONS.

• EACH VEHICLE SHALL COME WITH A VALID STATE OF NH INSPECTION STICKER AND TEMPORARY REGISTRATION
STATE OF NEW HAMPSHIRE  
NH SPECIFICATION NO. 2020-50 DOT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF MECHANICAL SERVICES

STANDARD SPECIFICATION –2021 TRUCK, CAB & CHASSIS –60,000 #

GROSS VEHICLE WEIGHT RATING   MINIMUM 60,000 POUNDS

CAB

- CONVENTIONAL 3-POINT ACCESS CAB, ADDITIONAL GRAB HANDLE TO BE MOUNTED ON THE EXTERIOR OF DRIVER AND PASSENGER SIDE CAB CORNER
- BUTTERFLY HOOD OR HATCHES TO ALL SERVICE POINTS
- STATIONARY GRILLE
- DUAL FACTORY INSTALLED 7” FENDER MOUNTED HEATED CONVEX MIRRORS
- ONE PIECE WINDSHIELD
- DRIVER AND PASSENGER DOOR OPERATING VENT WINDOWS OR FACTORY INSTALLED VENT SHADES
- CAB NOISE SUPPRESSION ON INSIDE OF FIREWALL AND ENGINE COMPARTMENT
- ADDITIONAL FRONT DIRECTIONAL TURN SIGNAL LIGHTS TO BE MOUNTED ON TOP OF OR IN FENDERS
- INNER FENDER SPLASH GUARDS
- CAB SUSPENSION TO BE AIR BAG TYPE.
- AUX. HEADLIGHT HARNESS TO BE LOCATED IN THE FRONT OF THE HOOD AT THE LEFT SIDE OF THE FRAME AND EASIBLE ACCESSIBLE BY THE TECHNICIAN FOR PLOW LIGHTS & TURN SIGNALS CONSISTING OF THREE (3) EA. # 1157 BULBS ON EACH SIDE AND SWITCHED INSIDE THE CAB
- RUBBER FENDER EXTENSIONS
- OUTSIDE AIR / TEMPERATURE MONITOR
- WIPER FORCED TO INTERMITTENT WHEN SERVICE BRAKE IS APPLIED
- IGNITION KEY SHALL BE UNIQUE AND NOT KEYED ALIKE FROM THE FACTORY

CAB HEIGHT   MINIMUM 59-1/2” (EXTERIOR FRAME TO TOP OF CAB)

CAB – TRUNION DIMENSION   MIN 120” TO MAX 126”

BBC DIMENSIONS   MIN 105” TO MAX 117”

TRANSMISSION

- ALLISON AUTOMATIC – 4500 RDS, SIX SPEED, PRE SELECT FOR SELECT ONE (1) GEAR DOWN VARIABLE COMPRESSION ENGINE BRAKE 3RD GEAR HOLD WITHOUT (LBSS) LOAD BASED SHIFT SCHEDULE
- RIGHT SIDE DASH MOUNTED TOUCH PAD CONTROL OR STEERING WHEEL PADDLE SHIFTER
- AUTO NEUTRAL WHEN PARKING BRAKE IS APPLIED
- INTEGRAL OIL LEVEL SENSOR
- TES 295 APPROVED SYNTHETIC FLUID
- EXTENDED TRANSMISSION WARRANTY COVERAGE- PARTS, LABOR AND TOWING FOR FIVE (5) YEARS, UNLIMITED MILEAGE FROM IN-SERVICE DATE.
- AUXILIARY COOLING

PTO AND PUMP

- ALSO INCLUDED: DRIVERS SIDE INSTALLED CHELSEA WET SPLINE PTO MODEL #280GCFJW-B5RF TO INCLUDE HOSE KIT #329130-1X AND A HYDRAULIC PUMP THAT SHALL BE A PARKER PUMP # MODEL #324-9110-448 AND MOUNTED TO THE PTO BY THE MEANS OF TWO 1/2” X 1-1/2” STAINLESS STEEL ALLEN HEAD CAP SCREWS
- A FACTORY IN DASH ILLUMINATED SWITCH SHALL BE INSTALLED, LABELED “PTO”. THE SOURCE OF POWER SHALL BE THROUGH THE VEHICLE’S BODY CONTROLLER

COOLING

- HEAVY DUTY WITH LONG LIFE ANTIFREEZE AND A COOLANT RECOVERY TANK
- AIR CONDITIONING TO BE FACTORY INSTALLED

BATTERY & ALTERNATOR

- THREE (3), 12-VOLT-BATTERIES EACH HAVING 180 AMP HOUR RATING WITH 2,775 CCA
- DELCO 28 SI, BOSCH LH160, OR LEECE-NEVILLE 160 AMP ALTERNATOR WITH MINIMUM 25 AMP OUT @ 1,250 ALTERNATOR RPM
STANDARD SPECIFICATION – 2021 TRUCK, CAB & CHASSIS 60,000# - CONTINUED

- **BATTERY BOX MOUNTED FOR CLEAN C.A. IF AVAILABLE.**

**BRAKES**
- **POWER - ABS, ALL WHEEL, AIR BRAKES, CAM**
- **AIR BRAKE PROVISIONS TO REAR OF CHASSIS**
- **COMPRESSOR CAPACITY (13 CUBIC FT. MIN.)**
- **AUTOMATIC SLACK ADJUSTERS FRONT AND REAR**
- **ANCHORLOCK PARKING BRAKE (OR EQUIVALENT), MGM BRAND, BENDIX OR HALDEX SEALED LONG STROKE CHAMBERS WITH STAINLESS STEEL PINS**
- **ADIP AIR DRYER LOCATED ON OUTSIDE OF FRAME**
- **DUST SHIELDS – ALL WHEELS**

**ENGINE – DIESEL**
- **INTERNATIONAL A26, 410 HP @1,700 RPM, 1,450 FT LB @ 1,000 RPM**
- **CUMMINS ISX 12L, 400 HP @ 2,100 RPM, 1,450 FT LB @ 1,200 RPM**
- **MACK MP7- 405M MAXIDYNE, 405 HP @ 1,500 RPM 1,480 FT LB @ 1,200 RPM**
- **DETOIT DIESEL DD13, 12.8L, 410 HP @ 1,625 RPM, 1,550 FT LB @ 975 RPM**
- **PACCAR MX,13.0L, 405 HP @1900 RPM, 1450 FT LB @ 1100 RPM**
- **VARIABLE COMPRESSION ENGINE BRAKE**
- **FUEL/WATER SEPARATOR LOCATED ON OUTSIDE OF FRAME OR UNDER HOOD**
- **FUEL FILTER**
- **ENGINE BLOCK HEATER**
- **2 POSITION PROGRAMMABLE STEP UP THROTTLE (PRE-SET AT 1,000 RPM & 1,200 RPM)**
- **AUDIBLE ALARM**
- **STEEL, CAST ALUMINUM OR A COMPOSITE SUMP OIL PAN**
- **DEF TANK MIN SIX (6) GALLON**

**EXTENDED ENGINE WARRANTY**
- **A SEVEN (7) YEAR, OR 8,000 HOUR 100% PARTS, LABOR AND 5 YEAR TOWING WARRANTY SHALL COVER COMPUTERS, MODULES, ELECTRICAL CONNECTIONS, CONNECTORS, WIRING HARNESSES, INJECTORS, INJECTOR LINES, TURBOS, FUEL FILTER ASSY, WATER PUMPS, STARTERS, CLUTCH FANS, ALTERNATORS, OIL AND FUEL PRESSURE PUMPS, OIL AND WATER SEALS, ALL ENGINE MECHANICAL PARTS AND EMISSION RELATED COMPONENTS TO INCLUDE EXHAUST AND AFTER TREATMENT. MAINTENANCE COMPONENTS SUCH AS BELTS, HOSES AND FILTERS ARE EXCLUDED. WARRANTIES TO BEGIN ON THE IN-SERVICE DATE OF THE CHASSIS**

**EXTENDED BASE CHASSIS WARRANTY**
- **A SEVEN (7) YEAR OR 150,000 MILE CHASSIS WARRANTY SHALL CONSIST OF BUT NOT LIMITED TO**
  - **CLIMATE CONTROL SYSTEM COVERING THE HEAT AND AC SYSTEM, ELECTRICAL COMPONENTS, LINES WIRING, AMBIENT AIR TEMPERATURE SENSOR, AND RECEIVER DRYER.**
  - **COOLING SYSTEM**
  - **SUSPENSION FRONT AND REAR**
  - **STEERING SYSTEM**
  - **STARTER & ALTERNATOR**
  - **DRIVESLINES**
  - **CHASSIS WIRING AND CONNECTORS**
  - **GAUGES AND SWITCHES**
  - **CHARGE AIR COOLER**
  - **AIR SYSTEM**
  - **BRAKING SYSTEM**
  - **INTERIOR COMPONENTS**
  - **FACTORY INSTALLED ACCESSORIES**

**STEERING**
- **HYDRAULIC POWER STEERING WITH DUAL STEERING BOXES**
- **STEERING WHEEL DIAMETER MINIMUM 18” WITH TILT ADJUSTABLE COLUMN**
ELECTRICAL

- ALL ELECTRONIC CONTROLLERS, EXCEPT ENGINE ECM AND THE TRANSMISSION CONTROL MODULE, TO BE LOCATED IN THE CAB AND NOT TO INTERFERE WITH SPACE BETWEEN SEATS
- SINGLE HARNESS IN TRUCK FOR VEHICLE SPEED AND GROUND SPEED SENSING
- A MINIMUM OF SIX OPTIONAL IN-DASH SWITCHES AND INDICATOR LIGHTS. KEY POWERED, TERMINATING @ FIREWALL ARRANGED AND LABELED IN THE FOLLOWING CONFIGURATION “PTO”, “SPREADER LIGHT”, “RIGHT SPREADER LIGHT”, “BODY UP LIGHT (RED)”, “HYDRAULIC SHUTDOWN (RED)”, “PTO OVERIDE SWITCH”.
- AUX PARK BRAKE ALARM
- HEADLIGHTS ON W/WIPERS
- CB RADIO PREP PACKAGE WITH 2 FT. SPRING MOUNTED ANTENNA (S)
- 12V ACCESSORY PORT. PRE-WIRED CIRCUIT FOR ELECTRIC TRAILER BRAKES
- SEVEN WIRE HARNESS TO REAR OF FRAME FOR A FOUR (4) LIGHT (ALL RUNNING LIGHTS WITH SEPARATE STOP AND TURN SIGNAL) SYSTEM WITH A PACKARD CONNECTOR #12124685 & #12124686 INSTALLED AND A SUPPLIED PHILLIPS STA-DRY PLUG ASSY PART # 48NA33-036

Chassis Manufacturer on Site Support

SPREADER LIGHT

1. DEPRESSED, IF THE SWITCH IS ACTIVATED AND THE OUTPUT IS GOOD THE GREEN INDICATOR LIGHT IN THE SWITCH WILL ILLUMINATE STEADY ON.
2. IF THE SWITCH IS ACTIVATED AND THE OUTPUT IS BAD THE GREEN INDICATOR LIGHT IN THE SWITCH WILL FLASH. THE OUTPUT IS TIED TO THE EXTERIOR LAMP CHECK. WHEN THE EXTERIOR LAMP CHECK IS REQUESTED THIS OUTPUT WILL BE ON.

LOW OIL INDICATOR

1. TO GIVE THE OPERATOR A WARNING THE HYDRAULIC OIL IS LOW.
2. THE BODY COMPANY WILL PROVIDE A GROUND SIGNAL TO THE REMOTE POWER MODULE (RPM). WHEN THIS SIGNAL IS RECEIVED THE CLUSTER BEEP WILL SOUND AND THE RED LIGHT IN THE DASH WILL BE ON STEADY INDICATING LOW OIL IN THE RESERVOIR.
3. WHEN THE HYDRAULIC OIL IS HIGH IN TEMPERATURE OVER 200 DEGREE FAHRENHEIT THE SAME OIL INDICATOR LIGHT WILL FLASH QUICKLY AND SHUT DOWN THE PTO AT A PRE-DETERMINED TIME.

PTO

1. WHEN THE SWITCH IS ACTIVATED THE LETTERS PTO LIGHT UP IN THE INSTRUMENT CLUSTER ALERTING THE OPERATOR THAT THE PTO IS ON. PTO ACTIVATION REQUIRES THE ENGINE SPEED TO BE LESS THAN 900RPM NO OTHER ENGAGEMENT CONDITIONS ARE REQUIRED.
2. THE PTO WILL AUTOMATICALLY DIS-ENGAGE IF ANY OF THE FOLLOWING ARE ACTIVE
3. PTO SWITCH IS OFF
4. LOW OIL INPUT SIGNAL ACTIVE
5. ENGINE SPEED IS GREATER THAN 2500 RPM
6. IGNITION KEY IS OFF
7. HI-TEMP IS ACTIVE AND THE TIMER HAS EXPIRED. IT HAS A LOW OIL SHUTDOWN FEATURE BUILT INTO IT THAT WHEN THE OIL LEVEL INDICATOR IS ACTIVATED IT AUTOMATICALLY SHUTS OFF THE PTO. THERE IS AN OVERRIDE SWITCH LOCATED IN THE DASH. THIS IS WILL BE A MOMENTARY OVER RIDE SWITCH. THE OVERRIDE SWITCH WILL ALLOW FOR PTO OPERATION AS LONG AS THE SWITCH IS HELD DOWN. THE OVERRIDE FUNCTION WILL ONLY WORK ONCE. TO ALLOW THE OVERRIDE FUNCTION A SECOND TIME THE KEY MUST BE CYCLED.

FAULT DETECTION MANAGEMENT

1. THE FAULT DETECTION MANAGEMENT FOR THE PTO SWITCH IS AN INDICATOR LIGHT BUILT INTO THE SWITCH IT WILL FLASH FAST GREEN WHEN THERE IS A FAULT WITH THE PTO OUTPUT. THE VIRTUAL FUSING IS SET FOR 20 AMPS.

REAR STROBES

1. THE REQUIREMENT IS THAT THE REAR STROBE LIGHTS BE OFF WHEN THE RIGHT OR LEFT TURN SIGNALS ARE ACTIVE. THE STROBE LIGHTS ARE CONTROLLED BY THE WHELEN MODULE. WHEN THE RIGHT OR LEFT TURN SIGNAL IS ACTIVE THE OUTPUT TO THE STROBES IS CANCELED. THE FUNCTION WORKS WITH KEY ON OR OFF.

BODY UP

STANDARD SPECIFICATION – 2021 TRUCK, CAB & CHASSIS 60,000# - CONTINUED

BACK UP CAMERA
1. KEY IGNITION POWERED.
2. WHEN THE VEHICLE IS ENGAGED INTO REVERSE THE CAMERA WILL AUTOMATICALLY ACTIVATE AND TURN ON. WHEN PUT INTO DRIVE THE CAMERA WILL AUTOMATICALLY TURN OFF UNLESS YOU HAVE POWERED THE MONITOR ON MANUALLY.

3. SUSPENSION

FRONT AXLE
• 20,000 # WITH WET TYPE OIL SEALS

FRONT SPRINGS
• 20,000 # COMBINED RATING @ GROUND, MULTI-LEAF SEMI-ELLiptIC

REAR AXLE
• 46,000 # DANA DD463P, MERITOR RT46-160P, MACK S462 AXLES (RATIO TO BE DETERMINED BY USING AGENCY) HENDRICKSON HMX-460-54 SUSPENSION
• MANUALLY CONTROLLED INTER-AXLE POWER DIVIDER LOCKOUT SHALL BE FURNISHED WITH EATON, MERITOR OR MACK AXLES
• WARNING LIGHT TO BE PROVIDED TO INDICATE LOCKOUT ENGAGEMENT
• REARWARD TANDEM DRIVER CONTROLLED DIFFERENTIAL LOCK

TIRES: TYPE, WHEEL/TIRE SIZE
• TEN (10) – HEAVY DUTY ACCURIDE 24.5” X 8.25”, POWDER COATED STEEL, HUB PILOTED, 0.472” DISC WHEELS WITH GUARDS F&R
• TEN (10) 11R24.5(H) TUBELESS RADIALS
• WHEEL WRENCH AND HANDLE

ACCEPTABLE BRAND TIRES

FRONT
• GOODYEAR G287 MSA, GOODYEAR G751 MSA OR MICHELIN XZY-3

REAR
• GOODYEAR G282 MSD OR MICHELIN XDS-2

FRAME
• HEAT TREATED ALLOY STEEL FRAME WITH MINIMUM YIELD STRENGTH OF 120,000 PSI AND MINIMUM SECTION MODULUS OF 20.6.
• 1 PIECE FULL DEPTH FRAME TO EXTEND A MINIMUM OF 12” BEYOND FRONT OF GRILLE
• A-F-MINIMUM 48”
• EXCLUDING FUEL TANK INTRUSION, BOTH OUTSIDE FRAME RAILS TO BE FREE OF OBSTRUCTIONS FOR TWENTY FOUR (24) INCHES BEHIND THE CAB TO ALLOW ROOM FOR MOUNTING A WING CABINET NO CROSS MEMBER IN SAME TWENTY FOUR Inch (24”) SPACE
• MINIMAL OBSTRUCTIONS FOR THE NEXT THIRTY (30) INCHES FOR PIPE BRACES

INSTRUMENTS/CONTROLS
• SPEEDOMETER, TACHOMETER, AMMETER/VOLT-METER, FUEL GAUGE (S), OIL PRESSURE GAUGE, TEMPERATURE GAUGE, AIR PRESSURE GAUGE WITH LOW PRESSURE WARNING
• ALL NECESSARY ELECTRICAL SWITCHES
• HOUR METER ACTUATED BY ENGINE OPERATION
• DASH MOUNTED AIR RESTRICTION INDICATOR

FUEL SUPPLY
• STAINLESS STEEL OR ALUMINUM TANK WITH STAINLESS STEEL STRAPS HAVING A MINIMUM CAPACITY OF 80 GALLON
• STEP TYPE FUEL TANK, NOT TO EXCEED 8” BEYOND REAR OF CAB
EXHAUST SYSTEM

- HORIZONTAL, VERTICAL (OR COMBINATION) MUFFLER SYSTEM SHALL BE CONFIGURED NOT TO INTERFERE WITH PTO’S OR HYDRAULIC CABLES
- STACK (INCLUDING 90 DEGREE TURN OUT) MUST NOT EXTEND ABOVE TOP OF CAB AND NOT TO EXCEED 4” BEYOND REAR OF CAB

PAINT

- CLEAR COAT OMAHA ORANGE (DUPONT DULUX 93-082 OR EQUIVALENT) LEAD FREE
- NOTE: SEE INDEPENDENT PAINT TESTING REQUIREMENTS AS PART OF THIS SPECIFICATION

RADIO/SPEAKERS (FACTORY)

- AM/FM WITH WEATHER BAND

SEATS-DRIVER/PASSENGER

- BUCKET, AIR SUSPENSION, HIGH BACK, HEAD REST, DRIVER’S ARM REST (RH) (NATIONAL CUSHION-AIRE OR EQUAL), HD CLOTH MORDURA, MILLIKEN (NGV) OR EQUAL

FLOOR COVER

- VINYL WITH FACTORY RUBBER AUXILIARY MATS

LIGHTING, REQUIRED

- DAYTIME RUNNING, PRE-TRIP INSPECTION LIGHT TEST

MIRRORS, OUTSIDE RIGHT AND LEFT

- 6” X 15” EXTENDING TO 102” WITH A HEATED 7” CONVEX MIRROR
- DUAL FACTORY INSTALLED 7” FENDER MOUNTED HEATED CONVEX MIRRORS
- PASSENGER SIDE “LOOK DOWN” CONVEX MIRROR

BUMPERS -FRONT

- NONE REQUIRED

BACK UP ALARM

- ELECTRIC

HORN

- AIR AND ELECTRIC – DUAL NOTE

TOW PACKAGE

- TRAILER TOW PACKAGE SHALL BE PROVIDED AND INCLUDE TRAILER LIGHT PACKAGE, HAND OPERATED CONTROL VALVE, AND AIR LINES TO REAR OF FRAME

SOFTWARE

- DIAGNOSTIC SOFTWARE AND ALL REQUIRED LAPTOP COMPUTER CABLES AND OR CONNECTIONS FOR DIAGNOSIS OF ENGINE (INCLUDING KEY ON AND KEY OFF TEST, CYLINDER CUT OUT TEST, INJECTOR DISABLE TEST), CHASSIS & ELECTRICAL SYSTEM, AND ABS SYSTEM. LATEST VERSION OF ALLISON TRANSMISSION SOFTWARE SHALL BE PROVIDED FOR PROGRAMMING WITH ONE DAY ON SITE (DOT) PROGRAMMING INSTRUCTION. ALL SOFTWARE TO INCLUDE FREE

- UPDATES AND RENEWALS OF ALL SUBSCRIPTIONS FOR A PERIOD OF TEN (10) YEARS BEYOND MODEL YEAR. THIS SPECIFICATION SHALL REQUIRE A QUANTITY OF NINE (9 EACH) COMPLETE SETS OF THE ABOVE SOFTWARE BE SUPPLIED AND DELIVERED TO NHDOT MECHANICAL SERVICES AS PART OF THIS SOLICITATION AND INCLUDED IN THE UNIT COST

SYSTEMS CALIBRATIONS

- UPON FINAL AWARD, THE SUCCESSFUL VENDOR WILL PRESENT A COMPLETE LIST OF DEFAULT ENGINE, ELECTRICAL, FUEL AND TRANSMISSION SYSTEM CALIBRATIONS FOR REVIEW AND ADJUSTMENT WITH THE END USER

SERVICE AND PARTS MANUALS

- FOR THE LIFE OF THE VEHICLE (S), THE VENDOR SHALL PROVIDE WEB BASED ACCESS TO ALL TRUCK-SPECIFIC SERVICE MANUALS, TECHNICAL SPECIFICATIONS AND PARTS CATALOGS FOR A MINIMUM OF NINE (9) NHDOT VEHICLE MAINTENANCE LOCATIONS.

EACH VEHICLE SHALL COME WITH A VALID STATE OF NH INSPECTION STICKER AND TEMPORARY REGISTRATION
STATE OF NEW HAMPSHIRE
NH SPECIFICATION NO. 2020-51
DEPARTMENT OF TRANSPORTATION
BUREAU OF MECHANICAL SERVICES

June 25th, 2019

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STANDARD SPECIFICATION – 2021 TRUCK, CAB & CHASSIS – 64,000 # CRANE TRUCK

GROSS VEHICLE WEIGHT RATING MINIMUM 64,000 POUNDS

CAB
- CONVENTIONAL 3-POINT ACCESS CAB, ADDITIONAL GRAB HANDLE TO BE MOUNTED ON THE EXTERIOR OF DRIVER AND PASSENGER SIDE CAB CORNERS
- STATIONARY GRILLE
- DUAL FACTORY INSTALLED 7" FENDER MOUNTED HEATED CONVEX MIRRORS
- ONE PIECE WINDSHIELD
- DRIVER AND PASSENGER DOOR OPERATING VENT WINDOWS OR FACTORY INSTALLED VENT SHADES
- CAB NOISE SUPPRESSION ON INSIDE OF FIREWALL AND ENGINE COMPARTMENT
- ADDITIONAL FRONT DIRECTIONAL TURN SIGNAL LIGHTS TO BE MOUNTED ON TOP OF OR IN FENDERS
- INNER FENDER SPLASH GUARDS
- CAB SUSPENSION TO BE AIR BAG TYPE
- AUX. HEADLIGHT HARNESS SWITCHED IN CAB TO FRONT OF VEHICLE FOR PLOW LIGHTS & TURN SIGNALS CONSISTING OF THREE (3) EA. # 1157 BULBS ON EACH SIDE
- RUBBER FENDER EXTENSIONS
- OUTSIDE AIR / TEMPERATURE MONITOR
- WIPER FORCED TO INTERMITTENT WHEN SERVICE BRAKE IS APPLIED

CAB HEIGHT MINIMUM 59-1/2" (EXTERIOR FRAME TO TOP OF CAB)

CAB – TRUNION DIMENSION TO BE 192"

BOC – EOF TO BE 255"

BBC DIMENSIONS MIN 105" TO MAX 117

TRANSMISSION
- ALLISON AUTOMATIC – 4500 RDS, SIX SPEED, PRE SELECT FOR SELECT ONE (1) GEAR DOWN VARIABLE COMPRESSION ENGINE BRAKE 3RD GEAR HOLD WITHOUT (LBSS) LOAD BASED SHIFT SCHEDULE
- RIGHT SIDE DASH MOUNTED TOUCH PAD CONTROL OR STEERING WHEEL PADDLE SHIFTER
- AUTO NEUTRAL WHEN PARKING BRAKE IS APPLIED
- INTEGRAL OIL LEVEL SENSOR
- TES 295 APPROVED SYNTHETIC FLUID
- EXTENDED TRANSMISSION WARRANTY COVERAGE- PARTS, LABOR AND TOWING FOR FIVE (5) YEARS, UNLIMITED MILEAGE FROM IN-SERVICE DATE (DETERMINED BY STATE)
- AUXILIARY COOLING

COOLING
- HEAVY DUTY WITH LONG LIFE ANTIFREEZE AND A COOLANT RECOVERY TANK
- AIR CONDITIONING TO BE FACTORY INSTALLED

BATTERY & ALTERNATOR
- THREE (3), 12-VOLT-BATTERIES EACH HAVING 180 AMP HOUR RATING WITH 2775 CCA
- DELCO 28 SI, BOSCH LH160, OR LEECE-NEVILLE 160 AMP ALTERNATOR WITH MINIMUM 25 AMP OUT @ 1,250 ALTERNATOR RPM
- BATTERY BOX MOUNTED FOR CLEAN C.A. IF AVAILABLE OR LOCATION TO BE DETERMINED BY STATE.

BRAKES
- POWER - ABS, ALL WHEEL, AIR BRAKES, CAM
- AIR BRAKE PROVISIONS TO REAR OF CHASSIS
- COMPRESSOR CAPACITY (13 CUBIC FT. MIN.)
- AUTOMATIC SLACK ADJUSTERS FRONT AND REAR
STANDARD SPECIFICATION – 2021 TRUCK, CAB & CHASSIS 64,000# - CONTINUED

- ANCHORLOCK PARKING BRAKE (OR EQUIVALENT), MGM BRAND, BENDIX OR HALDEX SEALED LONG STROKE CHAMBERS WITH STAINLESS STEEL PINS
- ADIP AIR DRYER LOCATED ON OUTSIDE OF FRAME LOCATION DETERMINED BY STATE
- DUST SHIELDS – ALL WHEELS

ENGINE – DIESEL
- INTERNATIONAL A26, 410 HP @ 1,700 RPM, 1,450 FT LB @ 1,000 RPM
- CUMMINS ISX 12L, 400 HP @ 2,100 RPM, 1,450 FT LB @ 1,200 RPM
- MACK MP7-405M MAXIDYNE, 405 HP @ 1,500 RPM 1,480 FT LB @ 1,200 RPM
- DETROIT DIESEL DD13, 12.8L, 410 HP @ 1,625 RPM, 1,550 FT LB @ 975 RPM
- PACCAR MX, 13.0L, 405 HP @ 1900 RPM, 1450 FT LB @ 1100 RPM
- VARIABLE COMPRESSION ENGINE BRAKE
- FUEL/WATER SEPARATOR LOCATED ON OUTSIDE OF FRAME OR UNDER HOOD
- FUEL FILTER
- ENGINE BLOCK HEATER
- 2 POSITION PROGRAMMABLE STEP UP THROTTLE (PRE-SET AT 1,000 RPM & 1,200 RPM)
- AUDIBLE ALARM
- STEEL, CAST ALUMINUM OR A COMPOSITE SUMP OIL PAN
- DEF TANK MIN SIX (6) GALLON, LOCATION TO BE DETERMINED BY STATE.

EXTENDED ENGINE WARRANTY
- A SEVEN (7) YEAR, OR 8,000 HOUR 100% PARTS, LABOR AND 5 YEAR TOWING WARRANTY SHALL COVER COMPUTERS, MODULES, ELECTRICAL CONNECTIONS, CONNECTORS, WIRING HARNESS, INJECTORS, INJECTOR LINES, TURBOS, FUEL FILTER ASSY, WATER PUMPS, STARTERS, CLUTCH FANS, ALTERNATORS, OIL AND FUEL PRESSURE PUMPS, OIL AND WATER SEALS, ALL ENGINE MECHANICAL PARTS AND EMISSION RELATED COMPONENTS. MAINTENANCE COMPONENTS SUCH AS BELTS, HOSES AND FILTERS ARE EXCLUDED. WARRANTIES TO BEGIN ON THE IN-SERVICE DATE OF THE CHASSIS AS DEFINED BY THE STATE.

EXTENDED BASE CHASSIS WARRANTY
- A SEVEN (7) YEAR OR 150,000 MILE CHASSIS WARRANTY SHALL CONSIST OF BUT NOT LIMITED TO
- CLIMATE CONTROL SYSTEM COVERING THE HEAT AND AC SYSTEM, ELECTRICAL COMPONENTS, LINES WIRING, AMBIENT AIR TEMPERATURE SENSOR, AND RECEIVER DRYER.
- COOLING SYSTEM
- SUSPENSION FRONT AND REAR
- STEERING SYSTEM
- STARTER & ALTERNATOR
- DRIVELINES
- CHASSIS WIRING AND CONNECTORS
- GAUGES AND SWITCHES
- CHARGE AIR COOLER
- AIR SYSTEM
- BRAKING SYSTEM
- INTERIOR COMPONENTS
- FACTORY INSTALLED ACCESSORIES

STEERING
- HYDRAULIC POWER STEERING WITH DUAL STEERING BOXES
- STEERING WHEEL DIAMETER MINIMUM 18” WITH TILT ADJUSTABLE COLUMN

ELECTRICAL
- ALL ELECTRONIC CONTROLLERS, EXCEPT ENGINE ECM AND THE TRANSMISSION CONTROL MODULE, TO BE LOCATED IN THE CAB AND NOT TO INTERFERE WITH SPACE BETWEEN SEATS
- SINGLE HARNESS IN TRUCK FOR VEHICLE SPEED AND GROUND SPEED SENSING
- A MINIMUM OF SIX OPTIONAL IN-DASH SWITCHES AND INDICATOR LIGHTS, KEY POWERED, TERMINATING @ FIREWALL
- AUX PARK BRAKE ALARM
- HEADLIGHTS ON W/WIPERS
- CB RADIO PREP PACKAGE WITH 2 FT. SPRING MOUNTED ANTENNA (S)
- 12V ACCESSORY PORT. PRE WIRED CIRCUIT FOR ELECTRIC TRAILER BRAKES
STANDARD SPECIFICATION – 2021 TRUCK, CAB & CHASSIS 64,000# - CONTINUED

- SEVEN WIRE HARNESS TO REAR OF FRAME FOR A FOUR (4) LIGHT (ALL RUNNING LIGHTS WITH SEPARATE STOP AND TURN SIGNAL) SYSTEM WITH A PACKARD CONNECTOR #12124685 & #12124686 INSTALLED AND A SUPPLIED PHILLIPS STA-DRY PLUG ASSY PART # 48NA33-036

SUSPENSION

FRONT AXLE
- 20,000 # WITH WET TYPE OIL SEALS

FRONT SPRINGS
- 20,000 # COMBINED RATING @ GROUND, MULTI-LEAF SEMI-ELLIPTIC

REAR AXLE
- 46,000 # DANA DD463P, MERITOR RT46-160P, MACK S462 AXLES (RATIO TO BE DETERMINED BY USING AGENCY) HENDRICKSON HMX-460-54 SUSPENSION
- MANUALLY CONTROLLED INTER-AXLE POWER DIVIDER LOCKOUT SHALL BE FURNISHED WITH EATON, MERITOR OR MACK AXLES
- WARNING LIGHT TO BE PROVIDED TO INDICATE LOCKOUT ENGAGEMENT
- REARWARD TANDEM, DRIVER CONTROLLED DIFFERENTIAL LOCK

TIRES: TYPE, WHEEL/TIRE SIZE
- EIGHT (8) – HEAVY DUTY ACCURIDE 24.5” X 8.25”, POWDER COATED STEEL, HUB PILOTED, 0.472” DISC WHEELS WITH GUARDS F&R
- EIGHT (8) 11R24.5(H) TUBELESS RADIALS
- THREE (3) HEAVY DUTY ACCURIDE 22.5” X 9.00” DC POWDER COATED STEEL, HUB PILOTED .500” DISC WHEELS
- WHEEL WRENCH AND HANDLE

ACCEPTABLE BRAND TIRES

FRONT
- GOODYEAR G289 WHA 315/80R22.5 LOAD RANGE (L) 20 PLY

REAR
- GOODYEAR G282 MSD OR MICHELIN XDS-2 LOAD RANGE (H)

FRAME
- HEAT TREATED ALLOY STEEL FRAME WITH MINIMUM YIELD STRENGTH OF 120,000 PSI AND MINIMUM SECTION MODULUS OF 29.84.
- AF-MINIMUM 63”
- EXCLUDING FUEL TANK INTRUSION, BOTH OUTSIDE FRAME RAILS TO BE FREE OF OBSTRUCTIONS FOR SIXTY (60) INCHES BEHIND THE CAB TO ALLOW ROOM FOR MOUNTING A TRUCK CRANE

INSTRUMENTS/CONTROLS
- SPEEDOMETER, TACHOMETER, AMMETER/VOLT-METER, FUEL GAUGE (S), OIL PRESSURE GAUGE, TEMPERATURE GAUGE, AIR PRESSURE GAUGE WITH LOW PRESSURE WARNING
- ALL NECESSARY ELECTRICAL SWITCHES
- HOUR METER ACTUATED BY ENGINE OPERATION
- DASH MOUNTED AIR RESTRICTION INDICATOR

FUEL SUPPLY
- STAINLESS STEEL OR ALUMINUM TANK WITH STAINLESS STEEL STRAPS HAVING A MINIMUM CAPACITY OF 80 GALLON
- STEP TYPE FUEL TANK. NOT TO EXCEED 8” BEYOND REAR OF CAB

EXHAUST SYSTEM
- HORIZONTAL, VERTICAL (OR COMBINATION) MUFFLER SYSTEM SHALL BE CONFIGURED NOT TO INTERFERE WITH PTO’S OR HYDRAULIC CABLES
- STACK (INCLUDING 90 DEGREE TURN OUT) MUST NOT EXTEND ABOVE TOP OF CAB AND NOT TO EXCEED 4” BEYOND REAR OF CAB
PAINT
- CLEAR COAT OMAHA ORANGE (DUPONT DULUX 93-082 OR EQUIVALENT) LEAD FREE
- NOTE: SEE INDEPENDENT PAINT TESTING REQUIREMENTS AS PART OF THIS SPECIFICATION

RADIO/SPEAKERS (FACTORY)
- AM/FM WITH WEATHER BAND

SEATS-DRIVER/PASSENGER
- BUCKET, AIR SUSPENSION, HIGH BACK, HEAD REST, DRIVER’S ARM REST (RH) (NATIONAL CUSHION-AIRE OR EQUAL), HD CLOTH MORDURA, MILLIKEN (NGV) OR EQUAL.

FLOOR COVER
- VINYL WITH FACTORY RUBBER AUXILIARY MATS

LIGHTING, REQUIRED
- DAYTIME RUNNING, PRE-TRIP INSPECTION LIGHT TEST

MIRRORS, OUTSIDE RIGHT AND LEFT
- 6” X 15” EXTENDING TO 102” WITH A HEATED 7” CONVEX MIRROR
- PASSENGER SIDE “LOOK DOWN” CONVEX MIRROR

BUMPERS -FRONT
- YES

BACK UP ALARM
- ELECTRIC

HORN
- AIR AND ELECTRIC – DUAL NOTE

TOW PACKAGE
- TRAILER TOW PACKAGE SHALL BE PROVIDED AND INCLUDE TRAILER LIGHT PACKAGE, HAND OPERATED CONTROL VALVE, AND AIR LINES TO REAR OF FRAME

SOFTWARE
- DIAGNOSTIC SOFTWARE AND ALL REQUIRED LAPTOP COMPUTER CABLES AND OR CONNECTIONS FOR DIAGNOSIS OF ENGINE (INCLUDING KEY ON AND KEY OFF TEST, CYLINDER CUT OUT TEST, INJECTOR DISABLE TEST), CHASSIS & ELECTRICAL SYSTEM, AND ABS SYSTEM. LATEST VERSION OF ALLISON TRANSMISSION SOFTWARE SHALL BE PROVIDED FOR PROGRAMMING WITH ONE DAY ON SITE (DOT) PROGRAMMING INSTRUCTION. ALL SOFTWARE TO INCLUDE FREE UPDATES AND RENEWALS OF ALL SUBSCRIPTIONS FOR A PERIOD OF TEN (10) YEARS BEYOND MODEL YEAR. THIS SPECIFICATION SHALL REQUIRE A QUANTITY OF NINE (9 EACH) COMPLETE SETS OF THE ABOVE SOFTWARE BE SUPPLIED AND DELIVERED TO NHDOT MECHANICAL SERVICES AS PART OF THIS SOLICITATION AND INCLUDED IN THE UNIT COST

SYSTEMS CALIBRATIONS
- UPON FINAL AWARD, THE SUCCESSFUL VENDOR WILL PRESENT A COMPLETE LIST OF DEFAULT ENGINE, ELECTRICAL, FUEL AND TRANSMISSION SYSTEM CALIBRATIONS FOR REVIEW AND ADJUSTMENT WITH THE END USER

SERVICE AND PARTS MANUALS
- FOR THE LIFE OF THE VEHICLE (S), THE AWARDED BIDDER SHALL PROVIDE WEB BASED ACCESS TO ALL TRUCK-SPECIFIC SERVICE MANUALS, TECHNICAL SPECIFICATIONS AND PARTS CATALOGS FOR A MINIMUM OF ELEVEN (11) NHDOT VEHICLE MAINTENANCE LOCATIONS.

APPLICATION: THIS SPECIFICATION COVERS THE STATE OF NEW HAMPSHIRE’S MINIMUM REQUIREMENT FOR A VOCATIONAL CAB & CHASSIS, INTENDED FOR THE SOLE PURPOSE OF PLOWING, SANDING AND OTHER HIGHWAY MAINTENANCE OPERATIONS. TO FACILITATE THE MOUNTING OF PLOW EQUIPMENT, AMPLE SPACE MUST BE AVAILABLE FOR LEFT AND RIGHT POWER TAKE OFFS. CLEAR SPACE BENEATH AND TO THE REAR OF THE CAB FOR HYDRAULIC CABLES AND WING CABINET. ALL EXPOSED CONNECTIONS SHALL BE SEALED AND 100% WATER TIGHT. THE MANUFACTURER WILL BE SOLELY RESPONSIBLE FOR MEETING THIS REQUIREMENT.

- EACH VEHICLE SHALL COME WITH A VALID STATE OF NH INSPECTION STICKER AND TEMPORARY REGISTRATION