

City of Willoughby Hills

(1) – New Never Used Model 2016 Heavy Duty Single Axle Dump Truck Chassis GVW Rating –41,000 lbs

1. Engine

- a. 6-cylinder diesel
 1. 300 HP @ 2100 gov. RPM- Min. 325 HP Peak @ 1500 – 1900 RPM
 2. Maximum Torque: 1200 lb/ft @ 1100 - 1300 RPM, 60% Torque Rise
 3. 659 cu. In. displacement (minimum)
 4. Lube oil system, Two full flow ESI spin on oil filters
 5. Extended service interval
 6. Centrifugal oil filter - Inverted
 7. Flywheel housing – Die Cast Aluminum
 8. Hand Primer Pump
 9. Silicone hoses and tubing on engine
 10. Air compressor, 18.7 cfm. Minimum Rating
 11. Crankshaft PTO – 1350 Series
 12. Oil Pan – Corrosion Resistant Oil Pan
 13. Engine brake
 14. Engine shall be positioned low in the chassis, providing a lower center of gravity
 15. Electrical pre-heater
 16. Davco 382 (Fluid HTD) Fuel Heater/Water Separator
 17. Fan drive, Borg Warner Cool Logic Fan Drive (HDMS) Variable Electronically Controlled
 18. Diesel Particulate Filter and SCR Burn Tank must be mounted RH side under cab

Comply or Exception COMPLY

2. Starting System

- a. Starter, 12-volt – Gear Reduction
- b. Electronic starter interlock
- c. Batteries, (3) 12 volt, 1950 total CCA

- d. Alternator, 12V 160A, Delco (24 SI)

Comply or Exception COMPLY

3. Air Intake System:

- a. Air Cleaner – Single element dry type with both hood side intake, inside/outside with in cab control for snow plows
- b. Air restriction monitor to be part of enhanced dash board electronic maintenance monitoring
- c. Diesel Particulate Filter Vertical – R.H. under cab
- d. Radiator mounted bug screen

Comply or Exception COMPLY

4. Exhaust/Emissions -For use W/Clear Back of Cab Package

- a. Exhaust after treatment diesel particulate filter, ceramic catalyzed
 - 1. DPF, Cleartech HHF DPF RH Side under Cab W/SCR Frame MTD RH Side under cab.
 - 2. Battery Box LH Frame Rail, Air Tank(s) under Battery Box – Remaining between Frame rails.
 - 3. The engine shall be compliant and certified to meet the 2015 Federal EPA Emissions standards without using Federal EPA credits. The engine shall meet 2015 Federal Emissions standards using selective catalyst reduction.
 - 4. Exhaust after-treatment system-Exhaust after-treatment system diesel particulate filter ceramic passive regeneration
 - 5. DPF Smart Switch, No inhibit DPF Regeneration Switch
 - 6. Exhaust, Single stanchion or single cab MTD, single (R/S) vertical exhaust cab mounted, lower venturi diffuser, turned end.
 - 7. Single, Bright finish heat shield and stack
 - 8. Exhaust shall provide clear CA with no interference for body installation

Comply or Exception COMPLY

5. Cooling System – Shutterless Type

- a. Radiator 900 sq. in. frontal area – minimum – aluminum core
 - 1. Anti-freeze to –34 degree Fahrenheit
 - 2. Fan drive, Borg Warner Cool Logic Electronically Controlled
 - 3. Hoses, heater and radiator, silicone
 - 4. Poly V Fan Belt w/Automatic Tensioner

5. Coolant Conditioner

Comply or Exception COMPLY

6. Transmission:

a. Allison 3000-RDS-6 (3.49/0.65) Rugged Duty Series Gen 5 6-speed Automatic Transmission

1. Includes Transmission Oil Cooler, External oil Cooler, Internal Filter and Oil level sensor
2. Driveline - Main: Spicer SPL170XL "Extended Lube Series"
3. Allison Transmission Shift to neutral when Parking Brake Engaged.
4. Transynd Synthetic Lube for Allison Transmission

Comply or Exception COMPLY

7. Cab: Interior

a. Custom trim level – Above base level

1. Coat hook
2. Cigar Lighter
3. Dispatch box
4. Overhead console including location for radio and in dash storage
5. Instrument cluster driver display with enhanced 4.5" diagonal graphic LCD display with 4 button stack control which includes routine maintenance monitoring of chassis
6. Visibility doors with passenger side peep window
7. Air conditioner, Heater & defroster
8. (4) Dome lights with self contained switch
9. Brake and accelerator pedal to be of "suspended" type
10. Adjustable Tilt / Telescopic steering column

b. Seats:

1. Driver's Bostrom Talladega 915 (Hi-Back) Air Suspension
2. Arm rest, inboard mounted arm rest – drivers seat only
3. Rider's seat non-suspension.
4. Diagonal grab handle on inside drivers door
5. Vinyl seat trim

- 6. Seat Belts – Driver's and Rider's - Lap & Shoulder with seat belt retractor
 - c. Sun Visor, LH & RH
 - d. Floor mats, polyurethane with closed cell vinyl nitrile backing
 - e. Form fitting noise control firewall mats shall be placed over the in cab dog house
 - f. AM/FM premium stereo CD with Weather band, MP3, Weatherband, Handsfree interface, Bluetooth
 - g. CB – 5-way binding posts
- Comply or Exception comPLY

8. Operational:

- a. Wrap-around instrument panel, standard finish and driver & passenger side cup holders (HVAC Mtd). All dash controls are to be placed within easy reach of the driver.
 - 1. Air pressure gauge
 - 2. Voltmeter
 - 3. Fuel level gauge
 - 4. Engine oil pressure gauge
 - 5. Engine coolant temperature gauge
 - 6. Low air pressure indicator (light & buzzer)
 - 7. Speedometer/Trip odometer – electronic
 - 8. Tachometer/hour meter – electronic
 - 9. "Parking Brake On" indicator
- b. Provide (6) Assignable body builder dash switches (5 on-off, one momentary)
- c. 5 lb fire extinguisher between LH seat base and door with valve aimed rearward
- d. Emergency triangle kit parallel to inside surface of rider's seat base
- e. Key type starting
- f. Engine shut-off, key type control
- g. Courtesy light switch (head & clearance) – in cab lighting shall consist of 4 overhead lamps

- h. Directional signal switch, manual canceling
- i. Electric window lift – RH & LH w/power door locks
- j. All Internal cab lights to turn blue when headlights are turned on for easier night time driving
- k. Power outlets – Two (2) additional 12 Volt
- l. Dash control power supply for local installation of plow lamps w/lead at grille

Comply or Exception COMPLY

9. Cab/Hood: (exterior features) Welded steel shell, galvanized

- 1. Rust preventative procedures
- a. Vents, screened
 - 1. Fresh Air Inlet for heater
- b. Cab step, RH – Two Step frame mounted aluminum
- c. Safety glass windows
 - 1. 1-Piece - Heated / Tinted windshield, side and rear glass tinted
 - 2. Windshield wipers – two, fixed arm & blade
 - 3. Wiper motor (electric), (1) two speed, intermittent
 - 4. Windshield washers, electric, wiper mounted with 5 qt. Reservoir
- d. Mirrors, Heated West Coast, Bright Finish
 - 1. Heated west coast mirrors with chrome shell both RH & LH
 - 2. Convex mirrors bright finish LH & RH 8.0" Diameter Heated. Mounted below arm of west coast mirror.
 - 3. Driver's view looking out the passenger side rear view
West Coast mirror shall not be blocked by the RH exhaust
- e. Headlights, halogen flush mounted with integral turn signal
 - 1. Identification & clearance lamps (5)
 - 2. Side markers – lamps & reflectors
 - 3. Front turn signals
 - 4. 4-way flashers

5. Daytime running lights
 - f. Horns electric (single tone)
 1. Air, single trumpet with snow shield
 - g. Doors – galvanized steel with peep window RH
 1. Aluminum grab handles, RH & LH behind door
 2. Diagonal Grab Handle on inside of driver's door
 - h. Cab mounting: trunnion front, air suspended rear
 - i. Hood and fenders, one piece molded fiberglass - camoplast
 1. Tilts forward 75 degrees minimum
 2. Stationary grill – Bright finish bars w/bright finish surround
 3. Grill – Hood air intake w/bright finish surround grill
 4. Hood insulation
- Comply or Exception COMPLY

10. Frame:

- a. Wheelbase: 174"
 1. Load platform: 148"
 2. Usable cab to axle: 84". Clear Frame
 3. Axle to end of frame: 62"
- b. Frame rails – steel
 1. Cross section, 11.811" x 3.54" x .44"
 2. Section modulus – 23.50 cu.in. (minimum), single channel frame rail
 3. RBM 2,820,000 in. lb. Per rail (minimum), 120,000 PSI yield strength
 4. Cross members: Back of cab to rear axle; Heavy duty back to back channels, extended behind rear axle; Single channel type
 5. Bumper: Steel, swept back channel
 6. Towing hooks – Front
 7. The space between the frame rails needs to be 8.5 inches wider at the front of the frame at engine compartment than it is at the cab firewall.
8. Front Frame Extension - 20 inches – for snow plow mount (continued Parent Rail), with tilt, without inspection hatches.

Comply or Exception COMPLY

11. Fuel Tanks:

- a. Aluminum 26" D-Shaped
 - 1. Capacity/location: 72 gallon LH W/Sleeved DEF Tank
 - b. Standard Finish Steps and Bright Finish Straps
- Comply or Exception COMPLY

12. Front Axle:

- a. 18,000 lb. Capacity – Forged I-Beam construction
- b. Brakes, "S" Cam (16.5 x 6Q+) Cast Spider
 - 1. Meritor
 - 2. Haldex Automatic slack adjusters
 - 3. Dust shields
 - 4. Unitized wheel hubs – requires no maintenance – permanently sealed with grease
- c. Sealed tapered kingpins and bearings
- d. Suspension, Multi-Leaf Spring Heavy Duty
 - 1. 18,000 lb, ground load rating
 - 2. 32.5" spring centers
 - 3. Shock Absorbers
- e. Steering, Sheppard SD110 power
 - 1. Wheel equipment, Aluminum disc – 22.5 x 9.0 Alcoa – Clean Buffed
 - 2. Hub Pilot – 10 Hole
 - 3. Front hubs, ferrous

Comply or Exception COMPLY

13. Rear Axle:

- a. 23,000 lb. Capacity axle
 - 1. Carrier – RA23R Single Drive, Dual Reduction
 - 2. Ratio: 5.04
 - 3. Locking Main Differential, Driver Controlled
- b. 23,000 lb. Suspension – Rear, 23,000 lb. AL231 Air Ride Suspension
- c. Brakes -Meritor 16.5 x 7Q+ – cast outboard mounted
 - 1. Bendix Anti-Lock Brake System with Traction Control

2. Automatic slack adjusters – Haldex
 3. Auxiliary spring brake chambers – Tamper resistant – MGM Model TR-T
 4. 30/30 double diaphragm type
 5. Mechanical spring release
 6. Dust Shields
- d. Wheel equipment, Aluminum disc – 22.5 x 8.25
1. (10 hole hub-piloted)(two hand-hole)
 2. Rim – 8.25" x 22.5"
 3. Clean Buffed

Comply or Exception COMPLY

14. Tires:

a. Front (singles), Size: 315/80R22.5 – 20 Ply, Tread: M-860, XZA2-Energy
Vendor: Michelin

b. Rear (duals), Size: 11R22.5 – 16 ply, Tread: XDS2 (Traction)
Vendor: Michelin

Comply or Exception COMPLY

15. Brakes:

a. Anti-Lock System, Bendix with Traction Control

b. Air dryer – Meritor/Wabco Heated, 1200 W/Coalescing Oil Filter

c. Air Reservoir – Two, aluminum, standard finish

d. Trailer Air Brake Connections, end of Frame

e. Trailer Electrical Receptacle – Single 7 Pins Std, SAE Type, End of Frame

Comply or Exception COMPLY

16. Electrical:

a. Negative ground

b. 12-volt electrical circuits & bulbs

c. Circuit protection, all circuits breaker protected

d. Battery Box Covers – Polished aluminum

e. Battery shock pads

f. Electrical connections, waterproof, sprayed with protective coating

g. Cab floor pass thru hole / rubber boot

h. Flaming River Big Switch Wired on Positive Side

- i. Truck to meet 2015 On Board Diagnostic Requirement

Comply or Exception COMPLY

17. Paint:

- a. Cab, hood & fenders, Color: School Bus
Yellow – high gloss with Cab urethane clear coat
- b. Chassis running gear, Color: Black – Urethane

Comply or Exception COMPLY

18. Chassis

Wiring:

a. Body link electrical interface system for installation of dump body shall consist of a single HP2029 pin Deutch connector, located under the cab body where it cannot interfere with body installation to provide a quick connection for commonly used bodybuilder electrical needs. The mating "female" connector must also be provided. A label must be provided that clearly identifies all electrical pinouts of all analog wiring. Multiplex wiring is not allowed.

b. The wiring shall have a polyester jacket for abrasion resistance that allows for quick and easy application and removal without disturbing connectors or fittings.

19. Base Warranty:

- a. Base warranty of chassis must be 12 months or 100,000 miles.
- b. Base warranty of engine must be 24 months or 250,000 miles.
- c. Base warranty of major engine components must be 60 months, 500,000 miles.
- d. Base warranty of DPF system must be 24 months, 250,000 miles
- e. Base warranty of DPF/SCR system components must be 60 months, 100,000 miles

20. Miscellaneous:

- a. Dealer to state warranty and any recommended optional extended warranties and cost of each on bid price sheet
 - b. Literature & Factory Computer Printouts
 - c. Dealer to furnish all available printed literature on chassis & individual drive train components with bid
 - d. Dealer to furnish computer analysis with bid, Indicating performance, operating range – MPH
 - e. Parts and Service, Must be available at bidders facility within a radius of 35 miles
- **Subject to approval of City of Willoughby Hills
**

**CITY OF WILLOUGHBY HILLS
 HEAVY DUTY SINGLE AXLE CAB AND CHASSIS
 BID QUESTIONNAIRE**

The following bid proposal questionnaire is to be filled out in its entirety for proper bid evaluation. Failure to do so will cause your proposal to be rejected for lack of information: Literature must also be supplied with your bid proposal.

1. Make and model year of chassis MACK 2016
2. Chassis GVRW (by axle rating) 41,000 lbs.
3. Chassis GVWR (by tire rating) 43,200 lbs.
4. Chassis wheelbase dimension 174"
5. Chassis cab to axle dimension 84"
6. Will chassis have "Clear Frame?" YES
7. Will chassis have an integral front frame extension? YES
8. Engine make and model MACK MP7-325
9. Engine cubic inch displacement 659 CU. INCHES
10. Engine horsepower at 1500-1900 RMP at 2100 RPM 325 HP @ 1500-1900 RPM
300 HP @ 2100 RPM
11. Engine output torque at RPM 1200 lb. FT. TORQUE @ 1100-1350 RPM
12. Transmission make and model ALLISON 3000-RDS-6 SPEED
13. Rear axle/differential make and model 23,000 lbs. MACK RA13 R
14. Is rear axle/single or double reduction? DOUBLE REDUCTION
15. Is rear axle/differential rated for heavy-duty severe service? YES
16. Rear axle ratio 5.04
17. Rear axle rating 23,000 lbs.
18. Front axle rating 18,000 lbs.
19. Front tire manufacturer and size MICHELIN 315/80R 22.5 20L X2A2
20. Rear tire manufacturer and size MICHELIN 11R-22.5 16H XDS2 (TRACTION)

PROPOSAL PRICE PAGE

COST OF ONE SINGLE AXLE CAB AND
CHASSIS \$ 108,230.00

DELIVERY TIME OF ONE (1) SINGLE AXLE CAB AND CHASSIS

NUMBER OF DAYS AFTER RECEIPT OF ORDER 100-120 WORKING DAYS AFTER
RECEIPT OF ORDER

Please list and optional equipment and warranties including the additional cost of each option and warranty that would be incurred if City of Willoughby Hills so chooses to accept any or all of these additional options and warranties.

ANY AND ALL ADDITIONAL WARRANTIES ARE AVAILABLE
UPON REQUEST

Name of
Company: SIDLEY TRUCK & EQUIPMENT

Address: 7123 MADISON ROAD - P.O. BOX 10, THOMPSON, OHIO 44686

Sales Person's
Name BILL GOLDEN

Phone No.: (440) 343 - 0435

Authorized
Signature Bill Golden Dated 5/6/2015

Sworn and subscribed before me this 6TH day of MAY, 2015.

Jennifer L. Greig
SIGNATURE OF NOTARY PUBLIC

A Notary Public in and for GEAUGA County, State of Ohio

My Commission
Expires _____

JENNIFER L. GREIG
Notary Public, STATE OF OHIO
My Commission Expires Sept 3, 2019
Recorded in Geauga County, Ohio

{SEAL}

Power of Attorney

WESTCHESTER FIRE INSURANCE COMPANY

Know all men by these presents: That WESTCHESTER FIRE INSURANCE COMPANY, a corporation of the Commonwealth of Pennsylvania pursuant to the following Resolution, adopted by the Board of Directors of the said Company on December 11, 2006, to wit:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such persons written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested.

Does hereby nominate, constitute and appoint Delores Senkowski, Jacqueline Kleinpeter, Melissa Hamood, all of the City of CLEVELAND, Ohio, each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof in penalties not exceeding Fifteen million dollars & zero cents (\$15,000,000.00) and the execution of such writings in pursuance of these presents shall be as binding upon said Company, as fully and amply as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office.

IN WITNESS WHEREOF, the said Stephen M. Haney, Vice-President, has hereunto subscribed his name and affixed the Corporate seal of the said WESTCHESTER FIRE INSURANCE COMPANY this 23 day of April 2015.

WESTCHESTER FIRE INSURANCE COMPANY

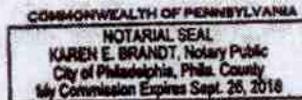


Stephen M. Haney
Stephen M. Haney, Vice President

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF PHILADELPHIA ss.

On this 23 day of April, AD. 2015 before me, a Notary Public of the Commonwealth of Pennsylvania in and for the County of Philadelphia came Stephen M. Haney, Vice-President of the WESTCHESTER FIRE INSURANCE COMPANY to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same, and that the seal affixed to the preceding instrument is the corporate seal of said Company, that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year first above written.



Karen E. Brandt
Notary Public

I, the undersigned Assistant Secretary of the WESTCHESTER FIRE INSURANCE COMPANY, do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a substantially true and correct copy, is in full force and effect.

In witness whereof, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of the Corporation, this 4 day of MAY, 2015



William L. Kelly
William L. Kelly, Assistant Secretary

THIS POWER OF ATTORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCEPTION DATE AFTER April 23, 2017.





MACK

GU712

**OUT HERE,
TRUCKS ARE BORN.
AND LEGENDS MADE.**

GU712



STANDARD POWERTRAIN SPECIFICATIONS

ENGINE: MACK MP7-325M

- Peak Horsepower – 325HP at 1500-1900 RPM
- Horsepower – 300 HP at 2100 Gov. RPM
- Max. Torque – 1200 lb/ft at 1100-1350 RPM
- V-MAC IV – Total Vehicle Electronics
- Air Compressor – 318 (18.7 cfm)
- Air Cleaner – 11" Single Element
- Alternator – Delco 12V 130A (24SI)
- Batteries, (3) Mack 12V 650/1950 CCA Threaded Stub Type
- Bug Screen – Radiator Mounted
- Coolant Protection, -34°F (-37°C)
- Mack Coolant Conditioner
- Diesel Particulate Filter – Vertical RH Side Under Cab
- Exhaust After Treatment System – Ceramic
- Mack PowerLeash™ Engine Brake
- Silicone Engine Hoses and Tubing
- Poly-V Fan Belt w/ Automatic Tensioner
- Fan Drive, Electronically Modulated Multi-Speed Viscous
- Flywheel Housing – Aluminum (Lightweight)
- Fuel Water Separator w/ Manual Drain
- Mack EPDM Radiator & Heater Hoses
- Radiator – Aluminum Core
- Starter – Delco 12V 39MT
- Electronic Starter Interlock

TRANSMISSION: MACK *m*DRIVE HD PREMIUM W/ OVERDRIVE

- Rock Free
- Power Launch
- PTO Splitter Options
- Powerleash Engine Brake
- Enhanced Construction Shift
- Heavy Haul Shift
- Auto Neutral
- Grade Gripper
- MackCellerator
- 12-Speed, Ratios: 11.73 Low – 0.78 High
- Clutch – Meritor/Sachs, Single Plate 17" Organic Material
- Transmission Bell Housing – Aluminum
- Transmission Oil Cooler – *m*DRIVE Gear Box Mounted LH Side Water to Oil Cooler
- Main Driveline – Spicer Extended Lube Series
- Interaxle Driveline – Spicer "Life Series"

REAR AXLE: MACK RA23R

- 23,000 lb Capacity
- Tires – 11R 22.5
- Carrier – CRD151
- Wheels – Alum Disc (4) 22.5" x 8.25" 10-Hole Hub Piloted
- Hub Material – Iron Preset w/ Integrated Spindle Nut
- Brakes – Bendix ES165-07D 16.5" x 7" Cast Spider
- Brake Drums – Cast Outboard Mounted
- Rear Brake Lining
- Rear Wheel Seals
- Slack Adjusters – Automatic
- Suspension – Multileaf Springs No Anti-Sway 23,000 lb Rating
- Spring Brake Chambers – (2) 30/30 Double Diaphragm Type/Mechanical Spring Release

FRONT AXLE: MACK FXL12

- 12,000 lb. Capacity
- Tires – 11R 22.5
- Wheels – Alum Disc (2) 22.5" x 8.25" 10-Hole Hub Piloted
- Hub Material – Iron
- Brakes – Bendix ES165-05D 16.5" x 5" Cast Spider
- Brake Drums – Cast Outboard Mounted
- Front Brake Lining
- Front Wheel Seals – Integrated
- Shock Absorbers – Double Acting Type
- Slack Adjusters – Automatic
- Suspension – Mack Taperleaf 12,000 lb. Ground Load Rating (2 Leaf Spring)
- Steering – TAS66 TRW Integral Power Steering

GU712



STANDARD CAB INTERIOR/EXTERIOR SPECIFICATIONS

CAB: CA68 CONVENTIONAL

- Air Conditioner w/ Integral Heater
- Ash Tray
- Cab Mounting – Four Point System w/2 Air Bags and Shocks at Rear
- Cigar Lighter
- Coat Hook
- Co-Pilot Enhanced Driver Display with Button and Stalk Control and GuardDog Maintenance System
- Cup Holders – Driver's & Rider's Side
- Dome Lights – 2 Lamps LH/ 2 Lamps RH
- Galvanized Steel Visibility Doors
- Door Trim – Padded w/ Vinyl Arm Rest Pads
- Engine Shutoff – Key Type
- Fenders – Fiberglass w/ Wheel Splash Aprons and Black Polyarmour Mud Flaps
- Floor Mats – Mack Signature Polyurethane
- Gauges – Air Pressure, Engine Coolant Temperature, Engine Oil Pressure, Engine Oil Temperature, Speedometer, Tachometer, Fuel Level
- Gauge Cluster – Exhaust Pyrometer & Transmission Oil Temperature Gauges
- Grab Handles – Aluminum RH & LH Behind Door
- Grille – Silver Painted w/o Grille Surround
- Hood – One Piece Insulated Fiberglass with Forward tilt 75°
- Horn – Mack Rectangular Single Trumpet Air Horn, Single Tone w/ Snow Shield
- Identification and Clearance Lights (5)
- Instrument Panel – Charcoal w/ Black Gage Bezel
- Interior Trim: Purebred – Sandstone
- Keys – (2) Keyed at Random
- Low Air Pressure Indicator Light and Buzzer
- Exterior Mirrors – RH & LH Bright Finish Mack Bulldog w/Stainless Steel Arms
- Overhead Console, 2 Storage Compartments w/ Net Retainers
- Parking Brake On Indicator Light
- 12 Volt Auxiliary Power Outlets (2) – Dash Mounted
- AM/FM Premium Stereo, CD Player, MP3, Weatherband, Hands Free Interface, Bluetooth
- CB – 5 way Binding Post
- Driver Seat – Bostrom Talladega 915 Mid-Back Air Suspension
- Rider Seat – Mack Fixed Mid-Back Non-suspension
- Seat Belts – Lap and Shoulder w/ Cab Mounted Shoulder Belt
- Key Type Starter Switch
- Steering Column, Adjustable Tilt Telescope
- Steering Wheel – Two Spoke Urethane Grip Painted Spokes & Bulldog Horn Cap
- Rear Storage Pouch
- Interior Sun Visor Both Sides
- RH Door Peep Window
- Window Control – Hand Crank Operation
- Windshield – Safety Tinted 2 Piece
- Safety Tinted Side and Rear Windows
- Windshield Washers – Electric Wiper w/ Reservoir Mounted under Hood
- Windshield Wipers – 2 Speed Electric Motor w/Intermittent Feature
- Paint Color – Mack White (Cab, Hood & Fenders), Mack Black (Chassis Running Gear)

ADDITIONAL STANDARD SPECIFICATIONS

AIR/BRAKE

- Dual Air Brake System
- Air Dryer – 1200P w/ Coalescing Filter
- Air Reservoirs – Steel
- Anti-Lock Brake System w/o Traction Control
- Parking Brake Control – Single Valve System

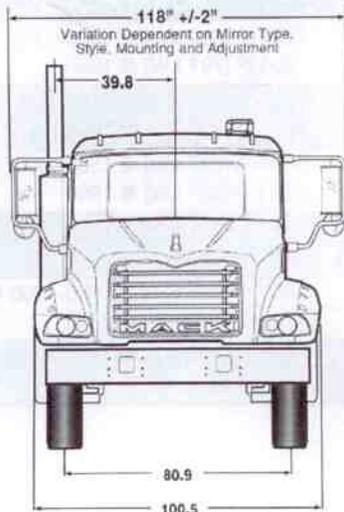
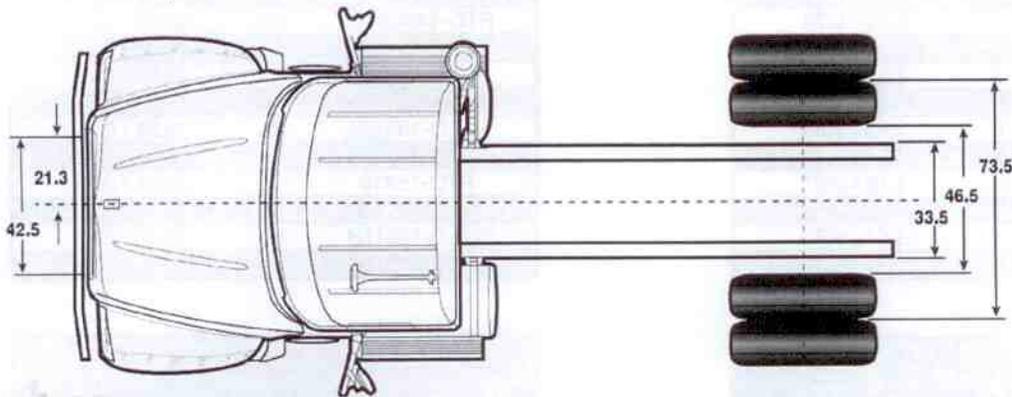
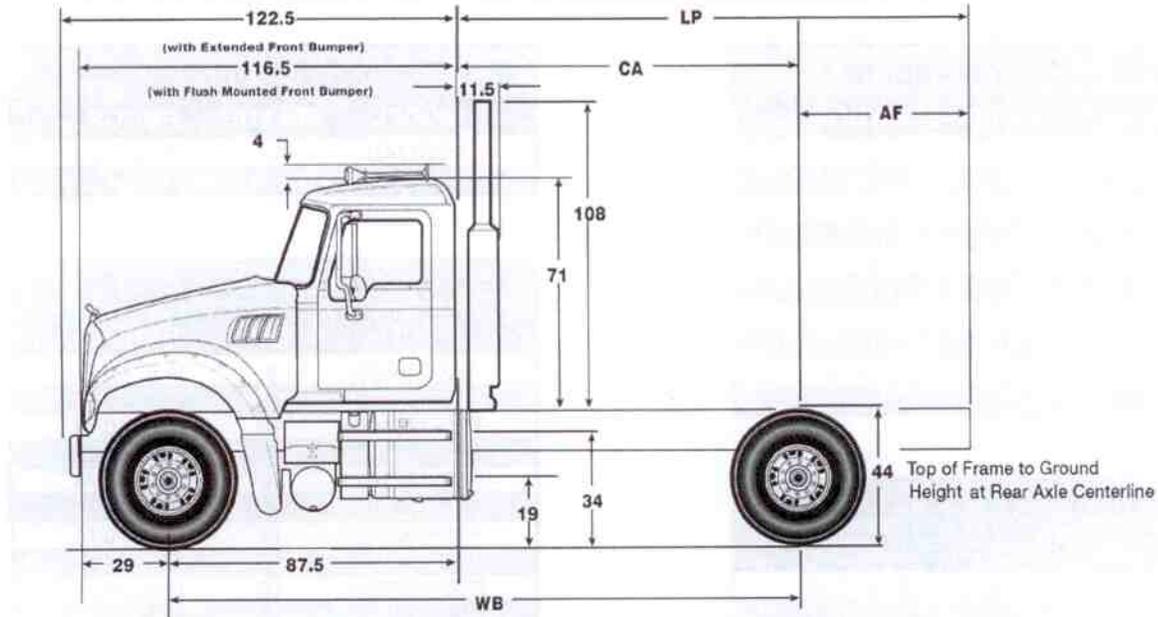
ELECTRICAL

- 12 Volt Electrical System
- Battery Box – Steel w/ Molded Plastic Cover Mounted LH Rail
- Courtesy Light Switch – Headlamp and Clearance
- GuardDog Connect Diagnostics
- Daytime Running Lights
- Electric Circuit Protection Package
- Body Link III
- Waterproof Electrical Connections
- Headlights – Halogen Flush
- Solid State Turn Signal Flasher

GU712



STANDARD CHASSIS DIMENSIONS



FRAME EQUIPMENT/FUEL TANKS

- Frame Rail w/out Liner – 11.81" x 3.54" x .32" Steel
- Section Modulus – 17.7 in³
- RBM (per rail) – 2,120,000 lb. in.
- Front Bumper – Extended Swept Back Steel Channel
- Bumper to Back of Cab (BBC) – 122.5"
- Crossmembers – BOC & Intermediate(s) Steel HD Back-to-Back Channel
- Front Frame Extension
- Front Tow Hooks
- Fuel Tanks – 50 Gallon LH Steel 22" dia.
- Diesel Exhaust Fluid (DEF) Tank - 11.8 Gallon, 22" Diameter, Frame Mounted on Left Side with Painted Cover

STANDARD WHEELBASE/LOAD PLATFORM

- For standard wheelbase and load platform information refer to your current version of MACKTRAQ



AVAILABLE DRIVELINE COMPONENTS

| MACK TRANSMISSIONS | | |
|--------------------|--------|--------------------------------|
| MODEL | SPEEDS | RATIOS <small>(LOW/Hi)</small> |
| T309 | 9 | 11.40 / 0.71 |
| T309LR | 9 | 13.93 / 0.71 |
| T310 | 10 | 13.81 / 0.73 |
| T310M | 10 | 17.35 / 0.73 |
| T310ME | 10 | 17.35 / 0.73 |
| T310MLR | 10 | 27.31 / 0.71 |
| T313 | 13 | 13.44 / 0.74 |
| T313LR | 13 | 16.42 / 0.71 |
| T318 | 18 | 13.44 / 0.71 |
| T318LR | 18 | 16.42 / 0.71 |

| MACK <i>m</i> DRIVE TRANSMISSIONS | | |
|-----------------------------------|--------|--------------------------------|
| MODEL | SPEEDS | RATIOS <small>(LOW/Hi)</small> |
| TmD12AD | 12 | 14.94 / 1.00 |
| TmD12AO | 12 | 11.73 / 0.78 |

| ALLISON TRANSMISSIONS | | |
|-----------------------|--------|--------------------------------|
| MODEL | SPEEDS | RATIOS <small>(LOW/Hi)</small> |
| 3000-EVS | 5 | 3.49 / 0.75 |
| 4000-EVS | 5 | 3.51 / 0.74 |
| 4500-EVS | 5 | 4.70 / 0.76 |
| 3000-RDS | 5 | 3.49 / 0.75 |
| 4000-RDS | 5 | 3.51 / 0.74 |
| 4500-RDS | 5 | 4.70 / 0.76 |
| 3000-EVS | 6 | 3.49 / 0.65 |
| 4000-EVS | 6 | 3.51 / 0.64 |
| 4500-EVS | 6 | 4.70 / 0.67 |
| 3000-RDS | 6 | 3.49 / 0.65 |
| 4000-RDS | 6 | 3.51 / 0.64 |
| 4500-RDS | 6 | 4.70 / 0.67 |

| EATON FULLER TRANSMISSIONS | | |
|----------------------------|--------|--------------------------------|
| MODEL | SPEEDS | RATIOS <small>(LOW/Hi)</small> |
| RTX-14609B | 9 | 12.57 / 0.73 |
| RTX-16709B | 9 | 12.46 / 0.73 |
| FRO-12210C | 10 | 12.69 / 0.74 |
| FRO-13210C | 10 | 12.69 / 0.74 |
| FRO-14210C | 10 | 12.69 / 0.74 |
| FRO-15210C | 10 | 12.69 / 0.74 |
| FRO-16210C | 10 | 12.69 / 0.74 |
| FRO-18210C | 10 | 12.94 / 0.74 |
| RTO-14908LL | 10 | 14.56 / 0.74 |
| RTO-16908LL | 10 | 14.56 / 0.74 |
| RTO-14909ALL | 11 | 26.08 / 0.73 |
| RTO-16909ALL | 11 | 26.08 / 0.73 |
| RTLO-14913A | 13 | 12.31 / 0.73 |
| RTLO-16913A | 13 | 12.31 / 0.73 |
| RTLO-18913A | 13 | 12.31 / 0.73 |
| RTO-14915 | 15 | 13.31 / 0.79 |
| RTO-16915 | 15 | 13.31 / 0.79 |
| RTLO-14918B | 18 | 14.40 / 0.73 |
| RTLO-16918B | 18 | 14.40 / 0.73 |
| RTLO-18918B | 18 | 14.40 / 0.73 |

| MP7 ENGINES | |
|-------------|---|
| MODEL | HORSEPOWER |
| MP7-345A | 345 HP [257 kW] @ 1500-1700 RPM 320 HP [239 kW] @ 1950 |
| MP7-345C | 345 HP [257 kW] @ 1500-1700 RPM 320 HP [239 kW] @ 1950 |
| MP7-365C | 365 HP [272 kW] @ 1500-1700 RPM 340 HP [254 kW] @ 1950 |
| MP7-395C | 395 HP [295 kW] @ 1500-1700 RPM 370 HP [276 kW] @ 1950 |
| MP7-325M | 325 HP [242 kW] @ 1500-1900 RPM 300 HP [224 kW] @ 2100 |
| MP7-365M | 365 HP [272 kW] @ 1500-1900 RPM 335 HP [250 kW] @ 2100 |
| MP7-405M | 405 HP [302 kW] @ 1500-1900 RPM 370 HP [276 kW] @ 2100 |

| MP8 ENGINES | |
|-------------|---|
| MODEL | HORSEPOWER |
| MP8-415C | 415 HP [309 kW] @ 1500-1700 RPM 390 HP [291 kW] @ 1950 |
| MP8-445C | 445 HP [332 kW] @ 1500-1700 RPM 420 HP [314 kW] @ 1950 |
| MP8-505C | 505 HP [377 kW] @ 1500-1700 RPM 430 HP [321 kW] @ 1950 |
| MP8-425M | 425 HP [317 kW] @ 1500-1800 RPM 340 HP [254 kW] @ 2100 |
| MP8-455M | 455 HP [339 kW] @ 1500-1700 RPM 420 HP [313 kW] @ 2100 |
| MP8-505M | 505 HP [377 kW] @ 1500-1700 RPM 339 HP [253 kW] @ 2100 |

GU712



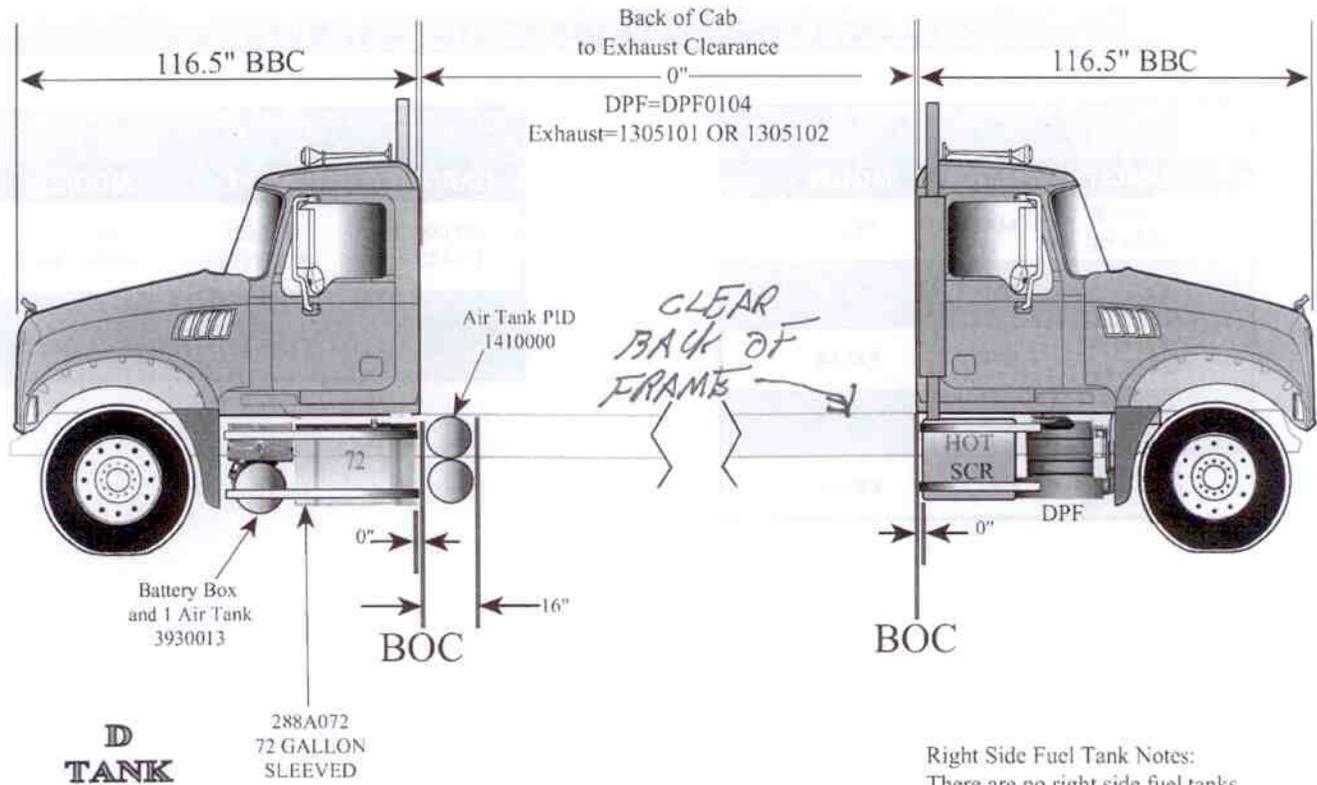
AVAILABLE DRIVELINE COMPONENTS CONTINUED

| FRONT AXLES | | |
|--------------------------|------|---------|
| CAPACITY | MAKE | MODEL |
| 12,000 lb. [5443 kg] | MACK | FXL12 |
| 14,600 lb. [6600 kg] | MACK | FXL14.6 |
| 18,000 lb. [8165 kg] | MACK | FXL18 |
| 20,000 lb. [9072 kg] | MACK | FXL20 |
| 23,000 lb. [10400 kg] | MACK | FXL23 |

| REAR AXLES | | |
|--------------------------|------------------------|---------------------|
| CAPACITY | MAKE | MODEL |
| 23,000 lb. [10433 kg] | MACK MERITOR | RA23R RS23-160 |
| 30,000 lb. [13608 kg] | MERITOR DANA SPICER | RS30-185 S30-190 |

The information in this document was accurate as of the date of the publication. Illustrations may not be representative of current product. Mack Trucks, Inc. reserves the right to make changes in specifications, equipment or design, or to discontinue models or options without notice at any time.

Chassis Package Solution - PK7CB7A
Granite Axle Forward - US2010
Single Sleeved 72 Gallon D Fuel Tank Only



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PK7CB7A

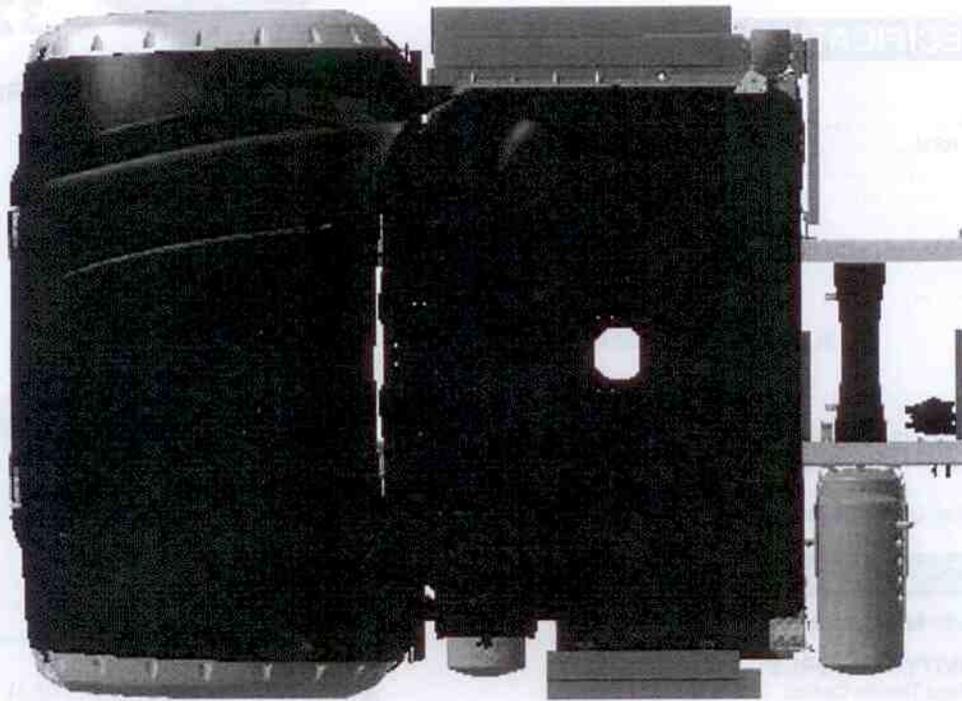
PACKAGE 10A

INCLUDES:

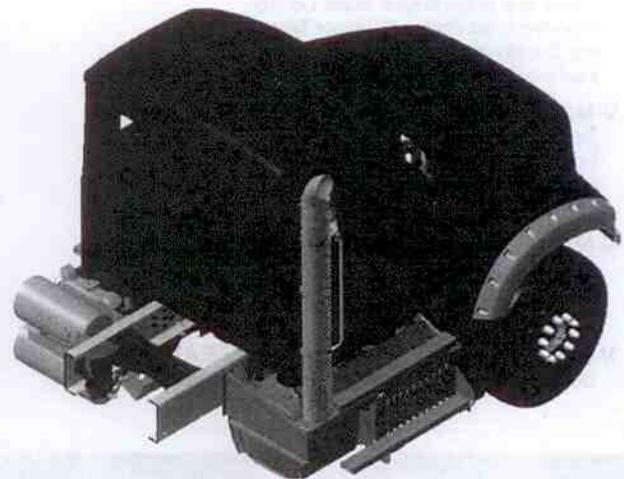
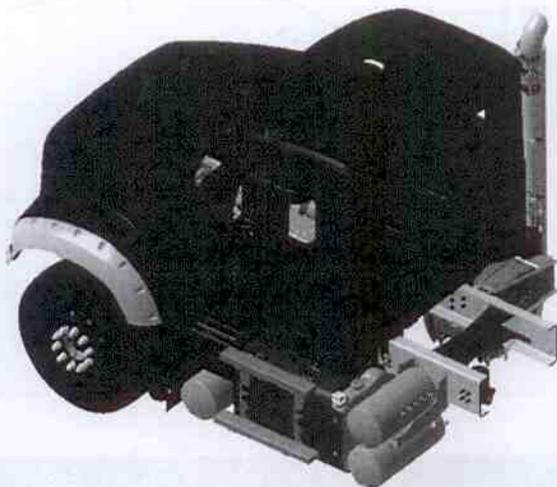
HHF EMISSION, BATTERY BOX LH RAIL, AIR TANK(S) UNDER BATTERY BOX - REMAINING ON RAIL, CAB MOUNTED EXHAUST.

REQUIRES:

72 GALLON LH SLEEVED FUEL TANK AND OMIT RH TANK.



AIR DRYER
TO BOC IS 23"
(TYPICAL)



MACK

ClearTech™ MP7 ENGINE

FEATURES

- High Torque MAXIDYNE™ Diesel Engine
- Cooled Exhaust Gas Recirculation (CEGR)
- Maximum Horsepower 325 BHP [242 kW]
- Electronic Unit Fuel Injection with Rate Shaping
- V-MAC IV Total Vehicle Electronics System
- Wide Operating Range 1100-2100 RPM
- Chassis Mounted Charge Air Cooled
- Variable Geometry Turbocharger
- Extended Service Intervals
- MACKPowerLeash Engine Brake

SPECIFICATIONS

| | |
|---|-----------------------------------|
| Peak HP (kW) @ RPM | 325 [242] @ 1500-1900 |
| HP [kW] @ Governed RPM | 300 [223] @ 2100 |
| Max. Torque lb. ft. [N•m] @ RPM | 1,200 [1627] @ 1100-1350 |
| Type | Direct Injection Diesel |
| Number of Cylinders | 6, In-Line |
| Bore & Stroke, in. [mm] | 4.84 x 5.98 [123 x 152] |
| Displacement, in. ³ [L] | 659 [11] |
| Compression Ratio | 16:1 |
| Firing Order | 1-5-3-6-2-4 |
| Torque Rise | 60% |
| Clutch Engagement | .983 lb. ft. [1333 N•m] @ 800 RPM |
| Idle Speeds: | |
| Low | Adjustable; 600 RPM |
| High | 2100 RPM |
| Engine Brake Retarding Power (If Applicable) | |
| | 420 HP [313 kW] @ 2100 RPM |
| Weight, Dry: (Approx.) | 2,286 lbs. [1 037 kg] |
| Greenhouse Gas 2014 Certified, OBD 2013 Certified | |

V-MAC IV® FUNCTIONS

4th Generation Vehicle Management And Control System

V-MAC IV PRODUCTIVITY FEATURES:

- PTO (4) and Electronic Hand Throttle Control
- Engine "Smart Fan Control"
- "Smart Idle" Speed Regulator
- GuardDog Routine Maintenance Monitoring †

V-MAC IV DRIVER CONVENIENCE FEATURES:

- Full Featured Cruise Control
- Cruise and Brake Engine Brake Control
- Programmable Engine Governor Type
- Idle Cooldown
- Daytime Running Light (DRL) Override †

V-MAC IV FUEL ECONOMY FEATURES:

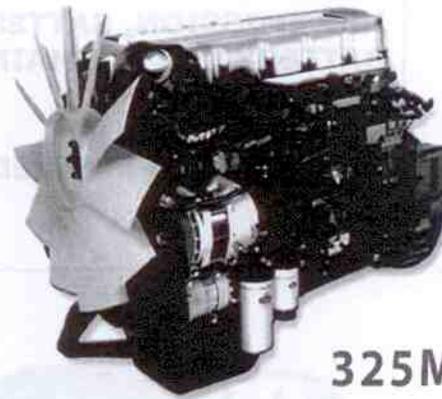
- Vehicle Speed Limiting
- Engine "Sweet Spot Indicator"
- Fuel Economy Incentive Program
- Idle Shutdown

V-MAC IV RELIABILITY FEATURES:

- Engine Protection
- Starter Protection
- Differential Lock Auto Control

V-MAC IV FLEET MANAGEMENT FEATURES:

- DataMax Comprehensive On-Board Data Logger



325M

V-MAC IV SAFETY AND SECURITY FEATURES:

- Speed Sensor Tamper Resistance
- Theft Deterrence
- 5th Wheel Slide Unlocked Vehicle Speed Limiting
- Air Suspension Deflated Vehicle Speed Limiting

V-MAC IV SERVICEABILITY FEATURES:

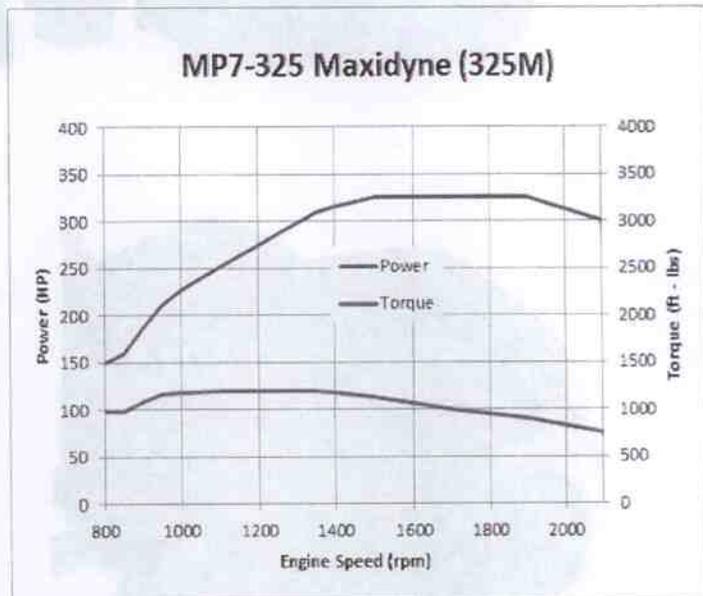
- SAE J1587 and J1939 Diagnostic Port
- Electronic Fault Logging with Fault Reporter
- VCADS PC Based Service Software

† Denotes an available option.

ENGINE PERFORMANCE

Maxidyne

In Vocational duty cycle type chassis with Maxidyne, startability and gradability must be considered when determining an optimized engine cruise RPM.



AIA[®] Document A310[™] – 2010

Bid Bond

CONTRACTOR:

R.W. Sidley, Inc.
7123 Madison Rd.
P.O Box 10
Thompson, OH 44086

SURETY:

Westchester Fire Insurance Company
436 Walnut Street - WA10G
Philadelphia, PA 19106

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:

The City of Willoughby Hills, Finance Department
35405 Chardon Rd.
Willoughby Hills, OH 44094

BOND AMOUNT: \$108,230.00

PROJECT:

The City of Willoughby Hills, Finance Department
for 2016 Model Heavy Duty Single Axle Dump Truck and Chassis
2016 Mack GU712

Project Number, if any:

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

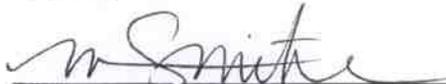
If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 4th day of May, 2015

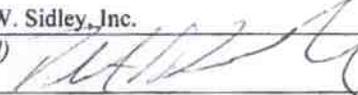


(Witness)

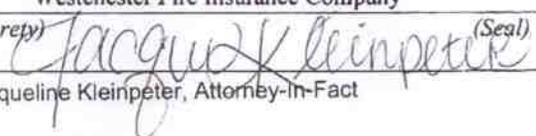


(Witness)

R.W. Sidley, Inc.

(Principal)  (Seal)

(Title) V.P.
Westchester Fire Insurance Company

(Surety)  (Seal)
Jacqueline Kleinpeter, Attorney-In-Fact

Init.

LEGAL NOTICE

NOTICE FOR BIDS:
2016 MODEL HEAVY DUTY SINGLE AXLE DUMP TRUCK AND CHASSIS

Sealed bids will be received at The City of Willoughby Hills, Finance Department, 35405 Chardon Road, Willoughby Hills, OH 44094 until noon on Friday, May 8, 2015, for a 2016 Model Heavy Duty Single Axle Dump Truck and Chassis.

Detailed specifications may be obtained from the City of Willoughby Hills or online at www.willoughbyhills-oh.gov.

Each sealed bid shall be marked "Bid for Single Axle Dump Truck and Chassis". Each bid must be accompanied by a bid bond as guarantee that if the bid is accepted, a contract pursuant thereto will be entered into.

Bid opening is Friday, May 8, 2015 at noon at Willoughby Hills City Hall. The City of Willoughby Hills reserves the right to reject any and all bids. The lowest and best bid as determined by the City of Willoughby Hills will be accepted.

Publish: 5/2/15 News Herald