

City of Willoughby Hills

(1) – New Never Used Model 2017 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
19. Engine Block Heater – 120V 1500 Watt

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 130A, 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 , stack and SCR Cover
 - 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
5. Furnish For Allison Transmission W/Direct Mount Cooler & Stainless Steel Coolant

Tubes

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 (Mid-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, Sirius/XM Satellite
- 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. Switch in Dash W/Wiring Routed To Cab Roof, Above LH & RH Doors for Local installation of Strobe Lights
- 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 w/power door lock, LH Crank
- 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 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. Power Divider To Be Fully Automatic
- 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,
Vendor: Bridgestone
- b. Rear (duals), Size: 11R22.5 – 16 ply, Tread: L320 (Traction)
Vendor: Bridgestone

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. Work Lights, RH/LH LED Work Light (Steps & Ground) on Both Sides of Truck
- i. Truck to meet 2015 On Board Diagnostic Requirement

Comply or Exception COMPLY

17. Paint:

- a. Cab, hood & fenders, Color: White – 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 HP20 29 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 **

F. The City Of Willoughby Hills Would Like To Have A Completed Cab Chassis & Body Package By The End Of Fiscal Year 2017. An In-Stock Chassis Would Be Preferred.

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.

- | | |
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| 1. Make and model year of chassis | MACK 2017 |
| 1. Chassis model | GU712 |
| 2. Chassis GVRW (by axle rating) | 4,600 lb. |
| 3. Chassis GVWR (by tire rating) | 43,360 lb. |
| 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 MP7-325M |
| 9. Engine cubic inch displacement | 659 CU. INCHES |
| 10. Engine horsepower @ 1500-1900 RPM @ 2100 RPM | 325 HP @ 1500-1900 RPM |
| 11. Engine output torque @ rpm | 300 HP @ 2100 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 lb. MACK RA23R |
| 14. Is rear axle / Single/or double reduction? | DOUBLE REDUCTION |
| 15. Is rear axle / differential rated for heavy-duty <u>severe service</u> ? | YES |
| 16. Rear axle ratio | 5.04 |
| 17. Rear axle rating | 23,000 lb. |
| 18. Front axle rating | 18,000 lb. |
| 19. Front tire manufacturer and size | BRIDGESTONE 315/80R-22.5 20L
M860A |
| 20. Rear tire manufacturer and size | BRIDGESTONE 11R-22.5 14G L370
(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 - THIS CHASSIS IS IN STOCK AND CAN BE DELIVERED WITHIN 2 WEEKS
NUMBER OF DAYS AFTER RECEIPT OF ORDER DELIVERY, BUT IF NEEDED CAN BE DELIVERED WITHIN ONE WEEK OF RECEIVING 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: SITLEY TRUCK & EQUIPMENT

Address: 7123 MADISON ROAD - P.O. BOX 10, THOMPSON, OHIO 44086

Sales Person's Name: BILL GOLDEN

Phone No.: (440) 343 - 6435

Authorized Signature Bill Golden Dated 05/05/2017

Sworn and subscribed before me this 5 day of MAY, 2017

Jennifer L. Greig
SIGNATURE OF NOTARY PUBLIC

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

A Notary Public in and for _____

My Commission Expires _____ {SEAL}



CHASSIS SPECIFICATIONS SUMMARY

May 01, 2017

2017 MACK GU712

SNOW PLOW On Hwy
 STRAIGHT TRUCK WITH TRAILER

Engine	MACK MP7-325M 325HP	Transmission	3000-RDS-6
		Clutch	OMIT CLUTCH
Front Axle	18,000# FXL18	Rear Axle	23,000# RA23R Ratio 5.04
Suspension	18,000#	Suspension	23,000# <i>AIR RIDE</i>
Tires	Front: 315/80R22.5 Rear: 11R22.5	Wheels	22.5x9.0 ALUMINUM DISC 22.5x8.25 ALUMINUM DISC
Ratings	GVW: 41,000# GCW: 60,000#	Fuel Tanks	LH: 72gal
Fifth Wheel		Sleeper	

Total Quantity: 1

Estimated Total Weight: 13,808#

Reference#: AFZG031616B

X _____
 Customer Signature Date

X *Bill Golden* 5/01/2017
 Dealer Signature Date

Prepared For:
 City of Willoughby Hills
 35405 Chardon Road
 Willoughby Hills, Oh 44094
 Phone: 440-918-8742
 Fax: 440-918-8744

Presented By:
 Bill Golden
 Sidley Truck & Equipment
 7123 Madison Road
 Thompson, Ohio 44086
 440-298-3227