

COUNCIL MEETING AGENDA REQUEST FORM

COUNCIL MEETING DATE: April 23, 2024

SUBJECT/REASON FOR AGENDA ITEM: _____

Temporarily Alcohol Permit Waiver | Open Container Law Waiver
Other: _____

Please be specific about the reason to be on the agenda.

A Resolution for the Street Department to purchase a regenerative air street sweeper for \$320,000.00 RFP 24-23

Requested By: Street Dept.
NAME: Lacy Landrum
ADDRESS _____
PHONE # _____ CELL PHONE: _____
EMAIL: _____ FAX: _____

Please note that the Hammond City Council meets the Second and Fourth Tuesday of the Month at 5:30pm, 312 East Charles Street, Hammond, LA 70401, All requests have to be submitted to the City Council Clerk by the Wednesday prior of the meeting no later than 4:30pm, All requests can be submitted electronically to cockerham_la@hammond.org or fax (985) 277-5611. If you have any questions please call (985) 277-5610

BELOW TO BE FILLED OUT BY COUNCIL CLERK

DATE RECEIVED: _____ TIME RECEIVED: _____

Council Clerk: Lisa Cockerham Agenda Item Number _____

Approved: _____ (Yes) _____ (No)

Remarks: _____

Kip Andrews
Council President

Lisa Cockerham

Date

CITY OF HAMMOND

RFP 24-23

Six Wheel Regenerative Air Street Sweeper Mid Dump Hopper or Equivalent

Proposals due in on 4/12/2024 At 10:00 a.m.

Opened on 4/12/2024 at 10:00 a.m.

<u>Company</u>	<u>Total Cost</u>	<u>Delivery Time</u>	<u>Make/Model</u>
<u>Scott Equipment Company</u>	<u>\$288,500.00</u>	<u>22/24 - Months</u>	<u>Elgin Regenx-RM-33k ALTS Freightliner M2</u>
<u>River City Hydraulics (RCH)</u>	<u>\$314,700.00</u>	<u>240 Days</u>	<u>Tymco/600 Freightliner M-2106T</u>
<u>Covington Sales & Service</u>	<u>\$320,000.00</u>	<u>7-10 Days</u>	<u>Schwarze/A900 Freightliner M2</u>

Present at opening on 4/12/2024 at 310 East Charles Street (Purchasing Department):

Jana Soileau –Purchasing Director

Krystle Noto –Assistant Purchasing Agent

Robert Williams –Street Department Director



A9 Monsoon™

Multi-Purpose Regenerative Air Sweeper



* Sweepers shown with optional equipment

NON-STRUCTURAL BEST MANAGEMENT PRACTICES:



VACUUM AND BRUSH
REMOVAL OF DEBRIS



CATCH BASIN CLEANING
OF DEBRIS AND POLLUTANTS



POWERFUL MAGNET TO
COLLECT FERROUS MATERIAL



HIGH PRESSURE WASHDOWN
TO CLEAN ADA RAMPS

Your Schwarze Dealer.

Covington Sales & Scv., Inc.
P.O. Box 1144
Denham Spings, LA 70727
(225)664-7427 (800)349-8000

Street sweeping is a best management practice (BMP) that can serve the entire community. With catch basin cleaner equipped you can go to work immediately after purchase as opposed to structural BMPs like storm ponds that only serve a dedicated area and require engineering and construction. This makes sweeping the most cost effective BMP per impervious acre treated [King, Hagen, 2011]



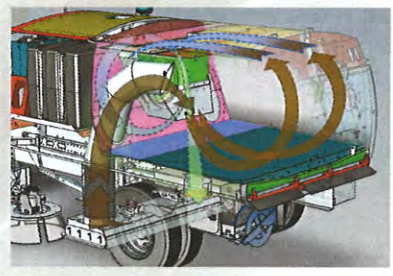
MADE IN THE USA



A9 Monsoon™ 9.6 Cubic Yard Multi-Purpose Regenerative Air Sweeper

Effective January of 2017, the EPA Final MS4 General Permit Remand Rule requires “clear, specific, and measurable permitting” conditions for measuring BMP implementation. In addition, MS4s that discharge to impaired waters must develop a total maximum discharge limit (TMDL) strategy and plan to reduce sediment, phosphorous, and nitrogen discharged into protected watersheds. The new ruling also requires greater public participation in the NPDES permitting process.

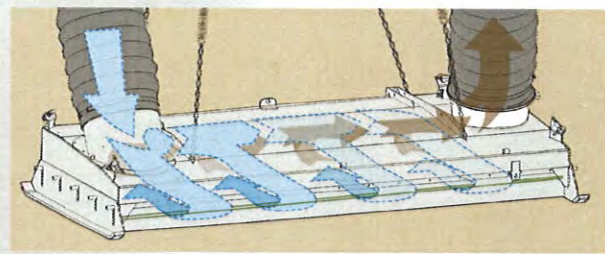
Schwarze regenerative air technology makes use of both positive pressure and vacuum airflow, this maintains the compressed air in a sealed loop and is not returned to the atmosphere like traditional vacuum sweepers.



Regenerative Air Technology

Regenerative air sweepers generally only need 100KW to do the same amount of work as pure vacuum sweepers with 200KW.

The blast and recovery cycle continues indefinitely with no air leakage.



Pressurized air is forced across an “air knife” approximately 2.5 meters wide across the sweeping head. This scrapes the roadway surface with a sheet of pressurized air, lifting dirt and debris off the pavement.

Schwarze and its global dealer network understands your challenges and helps stormwater managers meet these conditions while being good stewards of taxpayer dollars.



- We make sure the correct features are included to optimize municipal sweeping programs such as:
- Reducing trips to the landfill so you can continue working and keep earning credits.
 - Catch basin suction hoses with high pressure water.
 - Telematics for integration with your GIS system to document work for compliance and show citizens that their streets and catch basins have been cleaned.

A9 Monsoon™ Multi-Purpose Regenerative Air Sweeper



90" Pickup Head

Up to 144" Sweep Width



Large Saw-Tooth Increased Hopper Screen Design



Powerful Height Adjustable, Cab Controlled Self-Dumping Front Magnet

High Pressure Water Spraygun



CAN-Bus Control Panel with Backlit Switches, Text and Icons



44" Recessed Gutter Brooms with Shielded Broom Motor



Heavy Duty Catch Basin Vacuum Hose with Hand Controls

Backup Camera

Bolt-On Tubes

Sweepers are also a great traveling billboard. We work with your program to design wraps that promote "clean streets, clean stream" initiatives, or our popular "only rain in the storm drain" promotion.



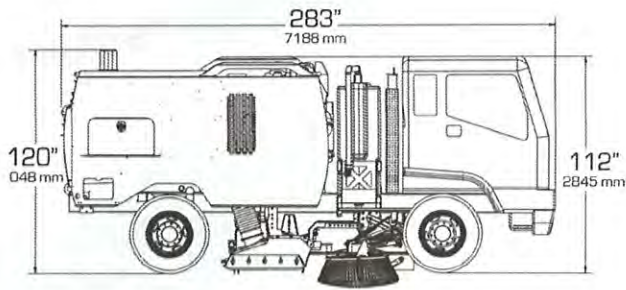
Sweeper shown with optional equipment.

Additional Available Regenerative Air Sweepers:



*Ask us about our optional:





*TYPICAL MEASUREMENTS SHOWN, EXACT DIMENSIONS DEPENDING ON OPTIONS AND TRUCK MANUFACTURER

SWEEPING PATH

Pickup head only	90 in (2286 mm)
Head and 1 broom	117 in (2972 mm)
Head and 2 brooms	144 in (3658 mm)

CHASSIS

Mounts on various chassis to meet requirements

SWEEPER BODY

Construction	Welded 10-gauge stainless steel plate
Safety props	Lift spacers

STANDARD ENGINE

Model/type	4045T in-line 4 cylinder
Aspiration	Tier 4 Final turbo-charged diesel
Manufacturer	John Deere
Displacement	275 cu. in. (4.5 L)
Brake horsepower	134 hp (100 kw) @ 2400 rpm
Torque	398 ft lb (540 Nm) @ 1600 rpm
Air cleaner	Centrifugal precleaner; dry type with safety element and restriction indicator
Oil filter	Full-flow/spin-on
Stroke	5 in (127 mm)
Bore	4.20 in (106 mm)
Compression ratio	19 to 1
Safety shutdown	Three-point automatic
Throttle control	Electronic

SWEEPER ELECTRICAL SYSTEM

Voltage	12 V
Engine alternator	90 amp

DUST CONTROL SYSTEM

Type	Run dry diaphragm
Capacity	250 gallon (946 L)
Tank construction	Polyethylene filter; 50 mesh; cleanable
Fill diameter	2.5 in (63.5 mm)
Fill hose	25 ft (7620 mm)
Controls	Electric; in-cab
Nozzles	2 on each broom; 5 around suction head; 2 inside suction nozzle; 2 on front axle; 4 inside hopper
Water level gauge	In-cab

INSTRUMENTATION

Auxiliary engine	Flat panel display; tachometer; hourmeter; voltmeter; temperature gauge; oil pressure gauge; warning icons
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FAN SYSTEM

Type	Closed-face radial
Drive	Direct via 5 groove; banded power belt
Construction	Hardox steel
Balance	1.5 grams on 2 sides
Diameter	32.75 in (832 mm)
Housing lining	Bolt-in corded rubber
Mounting	2 regreaseable sealed bearings
Vacuum enhancer	For heavy/light material; in-cab indicator

PICKUP HEAD

Type	Dual chambered full-width blast orifice
Operating direction	Forward and reverse
Suspension	Adjustable spring balanced
Length	90 in (2286 mm)
Pressure hose diam	14 in (355.6 mm)
Suction hose diam	14 in (355.6 mm)
Hose construction	3/8" (9.5 mm) wire-reinforced molded rubber
Head area	3240 sq in (20903 sq cm)
Controls	Hydraulic raise and lower
Skids	Double wide tungsten carbide
Construction	Abrasion-resistant steel inlet and outlet transitions.

SIDE BROOMS

Type	Vertical steel digger
Location	Right; left; forward of pickup head
Diameter	44 in (1118 mm)
Drive	Hydraulic
Suspension	Torque-sensing spring
Wear adjustment	Automatic
Pressure	Manual
Speed	Variable; non-reversing
Segments	5 each side; disposable
Tilt angle adjustment	In-cab controls

DEBRIS HOPPER

Volumetric capacity	9.6 cu yd (7.3 cu m)
Usable Capacity	8.0 cu yd (6.1 cu m)
Dump angle	53 degrees
Floor angle	3 degrees
Lifting	Twin hydraulic cylinders
Hopper dump door	hydraulic open, close, lock
Inspection doors	1 on each side, pressure vessel lock
Hopper dump height	33 in (838 mm)
Screens	Sawtooth drop down

HYDRAULIC SYSTEM

Type	Dual output 2 section
Pump capacity	8 gpm @ 1800 rpm (30 lpm) per section for 16 gpm total
Drive	Direct gear
Maximum pressure	2750 psi (190 bar)
Reservoir	25 gal (94 L)
Filter	10 micron; spin on
Protection	Pressure relief valve
Controls	Electro-hydraulic

AUXILIARY HYDRAULIC SYSTEM

Type	Gear type; driven by electric motor
Function	Lower hopper; open/close hopper door; raise brooms and pickup head

PAINT

One coat of sealer/primer and two coats of in standard white color.	
Paint	White; Sherwin Williams Genesis G2 #100268977

OPTIONAL SWEEPER EQUIPMENT

Special Paint
Front Mounted Magnet Bar
Amber Beacon
Strobe Light Kit
Arrowboard Kit
Additional Flood Lights
Hopper Hand Hose
Remote Drop Down Screens
Hopper Dump Assist Shaker
12-volt Auxiliary Hydraulic System
Dual Steeling and Controls
Extra Water
High Pressure Front Spraybar
High Pressure Wash Dow
Side Air Blast Head
Hopper Deluge
Head Drain
Dual Outside Hopper Controls
Lifetime Hopper Warranty
Short Wheelbase Chassis

Note: Design and specifications subject to change without notice.

Sourcewell

Awarded Contract

Contract #093021-SW2

HGACBuy
THE SMART PURCHASING SOLUTION



© 2022 Schwarze Industries
1055 Jordan Road
Huntsville, AL 35811
800.879.7933
An Alamo-Group Company



SCHWARZE SWEEPER 12 MONTH LIMITED WARRANTY

UNIT MODEL	UNIT SERIAL NUMBER	ENGINE MODEL	ENGINE SERIAL NUMBER	ORDER NUMBER
CHASSIS MAKE	CHASSIS MODEL	YEAR	VEHICLE IDENTIFICATION NUMBER	

Schwarze Industries, seller, provides warranty coverage to the original purchaser for all new equipment manufactured by Schwarze Industries, Inc. Schwarze-built sweepers are warranted to be free from defects in materials and/or workmanship under normal operating conditions, and when used in a proper application, for a period of twelve (12) consecutive months from the date placed into service, or twelve hundred (1200) hours of operation, whichever occurs first, provided all recommended maintenance is performed as scheduled.

WHAT WE WILL DO: Seller's sole obligation with respect to this Warranty shall be to replace or repair, at Seller's option, any part, parts or workmanship which may prove to be defective during the Warranty Period. Warranty work shall be performed at Seller's home office (1055 Jordan Road, N.E., Huntsville, Alabama 35811) or, at Seller's sole option, at the Schwarze authorized Dealer nearest to the purchaser's location.

WHAT IS NOT COVERED: This warranty shall not apply to damage or defects caused by negligence, carelessness, unauthorized repair work, use of unauthorized repair parts or to damage due to accident, misuse or abuse on the part of the purchaser or his or her or its servants, agents, representatives or employees, or to damage caused by acts of God. This Warranty shall not apply to routine maintenance, repair and adjustments, or to the wear parts, including but not limited to the following:

A-Series & S-Series Sweepers: flaps, drive belt, hoses, broom bristles, seals, low arms, throttle cable, fan housing liner, door trim, filters, light bulbs, tires, water nozzles, spray tips, screens, springs, switches, batteries, mud flaps and mirrors.

M-Series Sweepers: brooms, rubber sprockets, bearings, flaps, drive couplings, drag brush, caster wheels, light bulbs, tires, water nozzles, spray tips, belts, control cables, filters, switches, batteries, mud flaps and mirrors.

WARRANTY DISCLAIMER

Except for the warranties stated herein, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SELLER SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES SUCH AS, BUT NOT LIMITED TO, DAMAGE OR LOSS OF OTHER PROPERTY OR EQUIPMENT, LOSS OF PROFITS OR REVENUE, COST OF CAPITAL, COST OF PURCHASE OR REPLACEMENT GOODS, OR CLAIMS OF CUSTOMERS OF PURCHASER FOR SERVICE INTERRUPTIONS.

The remedies of the Purchaser set forth herein are exclusive, and the liability of Seller with respect to the manufacture, sale, delivery, resale, installation or use of any goods covered by or furnished under this Limited Warranty shall not, in any event, exceed the price of the goods upon which such liability is based. Any parts or accessories not manufactured by Schwarze are warranted only to the extent that the manufacturer's Warranty may be passed on to Purchaser, and such parts and accessories are not subject to this Warranty or to any other warranty, expressed or implied. The limitations of remedies to repair or replacement and the disclaimer of all special, incidental or consequential damages are intended to be separate and independent limitations of Seller's liability.

HOW TO OBTAIN SERVICE: If a problem that is covered by this Warranty develops with this Schwarze Sweeper during the Warranty Period, PURCHASER MUST NOTIFY THE SCHWARZE IN WRITING PRIOR TO THE EXPIRATION OF THE WARRANTY PERIOD OR WAIVE ALL CLAIMS. Purchaser must then deliver the unit, at Purchaser's expense and risk of loss during transport, to Seller's Huntsville, Alabama address, or to the nearest Schwarze Industries, Inc. authorized Dealer. In lieu of presenting the unit for service, parts covered under this Warranty will be shipped at Purchaser's expense if the total weight of the parts is less than 25 lbs. If the Purchaser agrees to pay \$10.00 over the normal freight charges, parts covered under this 12 Month Warranty will be shipped via air freight for next-day delivery, when available. Those parts not shipped on an expedited basis, or weighing more than 25 lbs, will be shipped by Seller's normal methods (U.P.S. ground, common carrier, etc.) at the Purchaser's expense unless Purchaser specifies differently, and agrees to be liable for any additional shipping and freight charges. All parts covered under Warranty will be shipped C.O.D. unless the Purchaser has previously established an account with Schwarze and provided that such account is not past due and that the Purchaser has not exceeded his/ her/its credit limit. Warranty credit will be available only on parts which are received by Seller within thirty (30) days of the Purchaser's receipt, and if the replacement or repaired part is returned freight prepaid, and only if the component manufacturer approves it for warranty replacement. In NO case will credit be available for defective parts received by Seller later than (30) days after Schwarze ships the replacement part.

TRANSFER OF WARRANTY: This Warranty is nontransferable without prior approval, in writing, by Schwarze Industries, Ind., 1055 Jordan Road, N.E., Huntsville, Alabama, 35811. To be considered, any Transfer request must include the following information.

1. The vehicle identification number of the chassis.
2. Model and serial number of the sweeper
3. Original purchaser's name and address
4. Name and address of the current registered owner .
5. Name and address of the party to whom the Warranty is requested to be reassigned.

No employee or agent of Seller is authorized to alter or extend this Warranty or to assume any other liability on Seller's behalf. Any alterations or extensions shall not be valid or binding upon Schwarze. To get further help, notify the Schwarze Warranty Department by calling 1-800-879-7933, and identify yourself as a bearer of the Schwarze Sweeper 30 Day Limited Warranty.



**City Of Hammond
Purchasing Department**

RFP #24-23

**SIX WHEEL REGENERATIVE AIR STREET SWEEPER
with MID DUMP HOPPER OR EQUIVALENT**

**Sealed Proposals Shall Be Received by the Purchasing Department,
City of Hammond
310 East Charles Street
P.O. Box 2788
Hammond, Louisiana 70404-2788
Until**

10:00 A.M. April 12, 2024

**Proposals shall be accepted only on the RFP forms furnished by the City of
Hammond Purchasing Department.**

**Advertisement in the Official Journal, Daily Star,
to be published Three (3) Times
March 14, 21 & 28, 2024**

PURCHASING DEPARTMENT

P.O. BOX 2788 | HAMMOND, LOUISIANA 70404 | PURCHASING@HAMMOND.ORG

985-277-5633 | WWW.HAMMOND.ORG

This is the Proposal of:

Date: April 11, 2024
Company: Covington Sales & Service, Inc.
Section 3 Business/WBE/SBE/MBE/DBE: N/A
Address: 7868 Florida Blvd.
City: Denham Springs State: LA ZIP Code: 70726
Person to Contact: Jay Robertson
Phone: 225-664-7427 Fax: 225-665-1567
Email: pat@covingtonsales.com/jay@covingtonsales.com

Your Proposal is important to us.

However, should you choose NOT to submit a Proposal for this project, the City would still ask you to complete this sheet and indicate "No Proposal". This shall NOT affect your participation in future RFPs, but only serve as a means of verifying you received notification of this RFP.

Section 3 Business/WBE/SBE/MBE/DBE

The City encourages Proposals from Section 3 businesses, Woman Business Enterprises, Minority Business Enterprises, Small Business Enterprises, and other potentially Disadvantaged Business Enterprises. If your company is one of these types of businesses, please indicate "Section 3," "WBE," "SBE," "MBE," or "DBE" in the space provided above.

Nondiscrimination Requirements

By submitting and signing this Proposal, the Proposer agrees to comply with Title VI and VII of the Civil Rights Act of 1964 as amended; the Vietnam Era Veterans Readjustment Assistance Act of 1974; Section 503 of the Rehabilitation Act of 1973; Section 202 of Executive Order 11246 as amended; and the Americans with Disabilities Act of 1990.

The Proposer also agrees to keep informed of and comply with all federal, State, and local laws, ordinances, and regulations which affect the Proposer's employees or prospective employees.

Instructions to proposers

PROPOSERS ARE URGED TO PROMPTLY REVIEW THE REQUIREMENTS OF ALL SPECIFICATIONS AND SUBMIT QUESTIONS FOR RESOLUTION AS EARLY AS POSSIBLE DURING THE SUBMITTAL PERIOD. QUESTIONS OR CONCERNS MUST BE SUBMITTED TO THE PURCHASING MANAGER DURING THE PROPOSAL PERIOD AND SHALL BECOME PART OF YOUR PROPOSAL PACKAGE. OTHERWISE, THIS WILL BE CONSTRUED AS ACCEPTANCE BY THE PROPOSERS THAT THE INTENT OF THE SPECIFICATIONS IS CLEAR AND THAT COMPETITIVE PROPOSALS MAY BE OBTAINED AS SPECIFIED HEREIN. PROTESTS WITH REGARD TO THE SPECIFICATION DOCUMENTS SHALL NOT BE CONSIDERED AFTER PROPOSALS ARE OPENED.

RFP Packages are mailed only as a courtesy. The City of Hammond does not assume responsibility for proposers to receive RFP packages. Proposers should rely on advertisements in the local newspaper, City Website www.hammond.org, online at www.bidexpress.com or personally pick up RFP packages with specifications. Full information may be obtained, or questions answered, by contacting the Purchasing Department, Hammond City Hall Complex, 310 East Charles Street.

These specifications are written in a manner to invite open competition. Any manufacturer's names, trade names, brand names, or catalog numbers used in the specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive unless the RFP states that only the brand name will be considered for reasons of compatibility, etc.

The RFP number, Proposers name, address and RFP opening date shall be clearly printed or typed on the outside of the Proposal envelope, if mailed. Only one (1) proposal shall be accepted from each proposer. Alternates shall not be accepted unless specifically requested in the RFP specifications. Proposals can be delivered mailed or electronically submitted through bid express.

The method of delivery of proposals is the responsibility of the proposer. All proposals shall be received by the Purchasing Department, Hammond City Hall Complex, 310 East Charles Street Hammond, Louisiana on or before the specified RFP opening date and time. Normally, bid bonds will not be required on bids for materials, supplies, annual contracts or small labor contracts. If a bid bond is required, it will be specifically requested on the RFP form and included in the specifications.

Proposals shall be accepted only on the RFP forms furnished by the City of Hammond Purchasing Department. The City of Hammond shall only accept proposals from those proposers in whose name the RFP forms and or specifications were issued. Altered or incomplete proposals forms, or use of substitute forms or documents, shall render the proposal non-responsive and subject to rejection. The RFP, including the specifications and acknowledgement of addenda issued shall be submitted to the Purchasing Department as THE RFP.

All proposals must be typed or written in **BLUE/BLACK INK**. Any erasures, strikeover and/or changes to prices shall be initialed by the proposer. Failure to initial shall be cause for rejection of the proposal as non-responsive.

All proposals shall be signed. Failure to do so shall cause the proposal to be rejected as non-responsive.

Where one (1) or more vendor's exact products or typical workmanship is designated as the level of quality desired or equivalent, the Streets Director after study and review, reserves the right to determine the acceptability of any equivalent offered. The decision, after study and review, shall be final and binding.

If proposing "equivalent" products, specifications, illustrative literature and any deviations shall be submitted with proposal. Representative samples shall be submitted upon request, if appropriate.

Liability:

The Contractor at all times during the term of the contract shall maintain and pay for property damage and public liability insurance with limits of at least (\$1,000,000.00) one million dollars inclusive of bodily injury and property damage for any one occurrence.

Prior to commencing work under this contract the Contractor must file with the City a "certificate of insurance" meeting aforementioned requirements with the City of Hammond named insured by added endorsement. All premiums and expense incurred with this insurance shall be paid for by the Contractor.

The Contractor shall assume the defense of and indemnify and save harmless the City and its Officers and Agents from all claims relating to work.

The Contractor shall be responsible for any and all damages or claims for damages or injuries or accidents done or caused by him or his employees, or resulting from the execution of the work, or any operations, or caused by reason of existence or location or condition of facilities or of any materials, supplies, or machinery used thereon or therein, or neglect or omission on his part, or all of the several acts or things required to be done by them, under and by these conditions, and covenants, and agrees to hold the City harmless and indemnified for all such damages and claims for damages.

The Contractor shall indemnify and save harmless the City from and against all losses and all claims, demands, payments, suits, actions, recoveries, all attorney fees, and judgments of every nature and description made, brought or recovered against the City by reason of any act or omission of the Contractor, his agents or employees, in the execution of his work.

Worker's Compensation:

The Contractor shall, at all times, pay or cause to be paid, any assessment or compensation required to be paid pursuant to the Worker's Compensation Act.

The Contractor shall, at the time of entering into a Contract with the City, provide satisfactory proof that all assessments or compensation payable to the Worker's Compensation Board have been paid and the City may, at any time during the performance or upon the completion of such Contract require a further declaration such Contract require a further declaration that such assessments or compensations have been paid.

COMPLY
Yes No

✓

2.0 EQUIVALENT PRODUCT

Proposals will be accepted for consideration on any make or model that is equal or superior to the sweeper specified. Decisions of equivalency will be at the sole interpretation of the City of Hammond Director of Streets. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. Original manufacturer's brochures of the proposed unit are to be submitted with the proposal.

All modifications made to the standard production unit described in the sweeper manufacturer's brochures must have written chassis manufacturer approval and submitted with the proposal, or the proposal will be deemed "non-responsive" and rejected without further review. Proposer must be prepared to demonstrate a unit similar to the one proposed, if requested.

COMPLY
Yes No

✓

3.0 INTERPRETATIONS

In order to be fair to all proposers, no oral interpretations will be given to any proposer as to the meaning of the specification documents or any part thereof. Every request for such a consideration shall be made in writing to the Purchasing Director. Based upon such inquiry, the City of Hammond Purchasing Department may choose to issue an Addendum.

Handwritten signature

COMPLY
Yes No

✓

4.0 GENERAL

The specification herein states the minimum requirements of The City of Hammond. All proposals must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The City of Hammond will consider as "non-responsive" any proposal not prepared and submitted in accordance with the RFP documents and specifications, or any proposal lacking sufficient technical literature to enable the City of Hammond to make a reasonable determination of compliance to the specifications.

It shall be the proposer's responsibility to carefully examine each item of the specification. Failure to offer a completed proposal or failure to respond to each section of the technical specification (COMPLY: YES NO) will cause the proposal to be rejected without review as "non-responsive". All variances, exceptions and/or deviations shall be fully described in the appropriate section. Deceit in responding to the specification will be cause for rejection.

**TECHNICAL SPECIFICATIONS
FOR
SIX WHEEL REGENERATIVE AIR STREET SWEEPER with MID DUMP
HOPPER**

Section A - Chassis

1.0 CHASSIS Freightliner M2 (Dual) OR EQUAL

		COMPLY	
		Yes	No
1.1	Chassis shall be conventional design with 33,000 GVW rating. State chassis make, model and point of manufacture:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2	Wheelbase shall not exceed 176 inches.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.3	Cab to axle shall be not more than 110 inches.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.4	Yield strength of the Rail, High Strength, 80,000 PSI, 9/32" X 3 7/16" X 10 1/8".	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.5	For safety, the rear of the sweeper shall be equipped with a rear adjustable bumper to provide under ride protection and maintains clearance from adjacent ground level containers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.6	Front tow hooks shall be provided	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.7	One - (1) 50-gallon fuel tank shall be shared by both engines and shall be easily accessible without raising or shifting any components. A fuel gauge, in cab, shall be supplied. Sight tube is not acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.8	Diesel emissions shall be 2021 - 2016 on board diagnostics/2010 EPA/CARB/Final GHG21 and have a minimum capacity of 6 U.S. gallons diesel emissions fluid	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.0 CHASSIS ENGINE

		COMPLY	
		Yes	No
2.1	Cummins ISB 6.7-200 or equivalent, turbocharged diesel, 200 HP @ 2400 RPM, 520ft-lbs. @ 1600 RPM.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.2	Truck engine shall be equipped with a single LH b-pillar vertical exhaust system.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.3	The cooling system shall be protected to -34° F.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.4	Engine shall be equipped with a 750 watt block heater.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.0 TRANSMISSION, AXLES, WHEELS & BRAKES

COMPLY
Yes No

- | | | | |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 3.1 | An Allison 2500 RDS series (or approved equal) automatic transmission shall be provided. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.2 | The single speed rear axle shall have a ratio of 6.43:1 for proper sweeping speeds. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.3 | Front axle shall be 12,000 and be equipped with taperleaf front suspension and shock absorbers. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.4 | The rear axle shall be 21,000 lb. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.5 | For safety, and to allow the emergency interchange of tires at a job site, the front and rear tires and rims shall be interchangeable. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.6 | Tires shall be tubeless radial tires 14 ply 11R22.5 "G" load rated. The rear axle shall include dual tires for load capacity; singles will not be acceptable. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.7 | Rims shall be 10 hole steel hub piloted 22.5 x 8.25 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.8 | Parking brake shall be spring applied rear wheel drum and shoe. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.9 | Brakes shall be full air brakes S Cam with a 18.7 CFM capacity compressor, with automatic slack adjusters and ABS. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3.10 | Air system shall include a Bendix AD-9 air dryer with heater. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

4.0 CAB

COMPLY
Yes No

- | | | | |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 4.1 | Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator shall not exceed 8 feet for an SAE 98 th percentile size operator. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.2 | Steering shall be full power with dual operator controls. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.3 | Passenger (RH) seat shall be adjustable, high back, air-suspension, Cordura cloth covered for air circulation and include 3 point seat belt. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.4 | Driver (LH) seat shall be high back, non-suspension, Cordura cloth covered for air circulation and include 3 point seat belt. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.5 | Sweeper shall include two (2) heated and remote control, outside west coast type mirrors with lower 8 inch convex lens for easy viewing of the side broom during sweeping. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.6 | To maximize operator visibility of the curb and sweeping gear, an 8" outside RH fender mirror shall be mounted forward of the front wheels. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.7 | For safety during night sweeping, switches shall be illuminated so that they can be readily identified without the use of the cab dome light. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

4.8	Switches shall be clearly identified by name and symbol.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.9	Cab interior environment shall be fully air-conditioned including a fresh air heater/ventilator/defroster.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.10	Cab shall have full flow through ventilation for optimal temperature control and operator comfort.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.11	Wipers shall have intermittent feature.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.12	Interior of cab shall have acoustical insulation for low operating noise, automotive type trim, and center sweeper console.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.13	Dash shall be faced with soft molded plastic.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.14	All glass shall be tinted safety glass.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.15	Each operator position shall have adjustable sun visor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.16	LH and RH doors shall be keyed alike.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.17	Door windows shall be roll up type.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.18	Side windows shall have defogger.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.19	Cab shall include 12V power supply	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.20	Cab shall include two speakers, roof mounted antenna, and AM/FM radio equipped with Bluetooth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.21	Dual Electric horns shall be provided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5.0 INSTRUMENTS

COMPLY
Yes No

5.1	Chassis left side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, odometer, trip odometer, hour meter, fuel gauge, water temperature gauge, oil pressure gauge, transmission temperature gauge, air pressure gauge, and volt gauge.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.2	Chassis right side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, fuel gauge, water temperature gauge, oil pressure gauge, transmission temperature gauge, air pressure gauge, and volt gauge.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.3	Chassis engine instruments shall include warning light and chime for low coolant level and high coolant temperature to warn the operator of a potential problem before any damage to the engine occurs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.4	Console shall have left/right primary driver switch.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.5	Hydraulic functions shall be controlled by rocker switches located in the cab mounted control panel.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- 5.6 Truck instruments shall include warning lights for battery. ✓
- 5.7 All chassis console switches including transmission controls and all gauges shall be illuminated. ✓
- 5.8 Intake mounted air restriction indicator with graduations. ✓

6.0 ELECTRICAL

COMPLY
Yes No

- 6.1 Batteries should be in an enclosed accessible environment for long life and ease of service. ✓
- 6.2 Chassis shall have two (2) maintenance free batteries rated at not less than 1850 CCA total, 12 volt. ✓
- 6.3 Chassis engine shall have a 160 amp alternator. ✓
- 6.4 Chassis lighting shall include sealed multi-beam halogen head-lights, stop lights, tail lights, backup lights, license plate lights, clearance lights, signal lights, illuminated gauges and instrument panel, and directional lights with hazard switch. ✓

Section B - Sweeper Module

COMPLY
Yes No

1.0 INTENT

It is the intent of this specification to provide for the purchase of one (1) new and unused regenerative air street sweeper having a six-wheeled, truck chassis with dual diesel engines, sweeper controls and switches, 8.0 cubic yard hopper with minimum 56" dump height, automatic transmission, 265 gallon water tank, and left and right side broom with variable down pressure controlled from cab.

EXCEEDS 9.6 cubic
8.2 USEABLE -
OK.

6.5. USEABLE?

The following specification is based upon an ELGIN REGENX Part Number REGENX-RM-33K street sweeper, mounted on a Freightliner Conventional Chassis. The City of Hammond has evaluated different types of street sweepers and has determined that this product is best suited for the City of Hammond Street Department needs in safety, quality, performance, and standardization. This specification is not to be interpreted as restrictive, but rather as a measure of the safety, quality and performance against which all sweepers proposal will be compared.

In comparing proposals, consideration will not be confined to price only. The successful proposer will be one whose product is judged as best serving the interests of the City of Hammond when price, product performance, safety, quality and delivery are considered. The City of Hammond reserves the right to reject any or all proposals or any part thereof, and to waive any minor technicalities. A contract will be awarded to the Proposer submitting the lowest responsible proposal meeting the requirements of this specification.

are not acceptable.

- | | | | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|
| 6.5 | Blower housing shall have an inspection door for access to blower without removing the blower housing or looking into the air exhaust opening. | ✓ | ___ |
| 6.6 | Blower housing shall not be an integral part of the hopper. Replacement of the blower housing must be possible without any cutting and/or welding of the housing and or hopper. | ✓ | ___ |
| 6.7 | The blower shall be mounted and supported using a singular heavy-duty sealed bearing assembly. <i>2 bearing for more support.</i> | ✓ | EXCEED |
| 6.8 | The blower is mounted on a keyed & tapered shaft, with singular castle nut, for repeatability of balance and ease of replacement. | ✓ | ___ |
| 6.9 | Replacement of the blower shall be service friendly; requiring minimal tools and can be removed independently of shaft support bearing. | ✓ | ___ |
| 6.10 | The blower belt drive system shall be easily accessible and shall not require the removal of more than two (2) fasteners. | ✓ | ___ |
| 6.11 | The blower belt change shall not require tools and shall not exceed five (5) minutes of labor. Belt tension shall not exceed 20 Hz. | ___ | ✓ |
| 6.12 | The blower housing shall include Flow Blocker feature which provides automatic enhanced dust control through eliminating airflow prior to raising the pickup head for transport, reversing, and prior to deployment of sweep gear. | N/A. | ___ |
| 6.13 | Flow Blocker feature shall use an effective method of shutting off system airflow via an automated, pneumatically actuated, butterfly valve located at fan housing exhaust/outlet; preventing dust and organics from blowing out from under the sweeper in instances prior to the pickup head breaking its seal with the sweeping surface. | N/A | ___ |
| 6.14 | The Flow Blocker feature shall eliminate the need for sweeping in reverse, with the pickup head lowered, during instances where fugitive dust is not desired. <i>Our Unit sweeps in Reverse. EXCEEDS</i> | ✓ | ___ |

7.0 PICKUP HEAD

- | | | COMPLY | |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|
| | | Yes | No |
| 7.1 | The pickup head is a spring-supported, all steel fabricated pickup head with separated upper and lower chambers where pressurized air is blasted from the upper chamber through an elongated blast orifice, to the lower vacuum chamber. | ✓ | ___ |
| 7.2 | The pickup head shall not be less than ⁹⁰ inches wide and ³⁶ inches long for a total area of ³²⁴⁰ 2700 square inches. | ✓ | EXCEED |
| 7.3 | The pickup head shall have a minimum of 14 inch diameter pressure hose that connects the blower outlet with the pickup head. Urethane transition pieces between the pressure hose and the pickup head are not acceptable. | ✓ | ___ |
| 7.4 | The pickup head shall have a minimum 13 inch diameter suction hose with a quick | ✓ | ___ |

5.0 SWEEPER

COMPLY
Yes No

- 5.1 Diesel engine shall be 4 cylinder, turbocharged, dynamically counter balanced 276 CID (John Deere 4045T or equal). Engine must be EPA Tier 4 FINAL Emission compliant. ✓
- 5.2 Horsepower rating shall not be higher than 74 (55 kW) @ 2400 RPM, torque 224 lb-ft @1600 RPM; without Diesel Exhaust Fluid (DEF). *134 H.P.* ✓ EXCEEDS
- 5.3 Auxiliary engine shall drive the blower "fan" by a heavy-duty two (2) "V" groove power belt for simplicity and ease of maintenance. ✓
- 5.4 A fluid coupler shall be installed between the auxiliary engine and the power belt drive, which allows for smooth starting and stopping of the engine, while preventing the momentum of the fan system from driving the engine when the engine is turned off. *(NOT APPLICABLE FOR OUR DESIGN.)* N/A EQUAL PERFORMANCE.
- 5.5 There shall be no control modules required for sweeper functionality. ✓
- 5.6 Auxiliary engine shall be protected by a dual safety element dry type air cleaner & restriction indicator that indicates it is time to service the filter element. ✓
- 5.7 Auxiliary engine shall be filled with 50/50 mixture anti-freeze/water for cold weather storage and or operation. ✓
- 5.8 For greater heat dissipation, less noise and lower cost of maintenance, auxiliary engine shall have individually replaceable wet sleeve cylinder liners. ✓

6.0 BLOWER

COMPLY
Yes No

- 6.1 Blower shall be driven by a two (2) "V" groove power belt for maximum performance and simplicity of construction, with spring-loaded tensioner; not requiring repositioning of the auxiliary engine for adjustment. *5 GROOVE V-BELT (H.D.)* ✓ EXCEEDS.
- 6.2 Blower speed shall not exceed 3050 RPM to minimize strain on the drive system while still effectively conveying the bulk of material into the debris hopper; debris types such as but not limited to trash, sand, gravel, dirt, leaves and other organics. *17,000 CFM @ 2400 RPM* ✓ EXCEEDS
- 6.3 Blower shall be a closed face turbine type, 33 3/8 in. diameter, with 9 vanes constructed of Hardox® steel for optimal combination of hardness and abrasion resistance for maximum service life. An open faced fan will not provide adequate combination of air flow and vacuum, and is not acceptable. Blowers constructed of material other than Hardox® steel will not be accepted. For longevity of the fan and maximum bearing life, the impeller must be balanced to within .5 ounce-inches. ✓ EXCEEDS AIR FLOW.
- 6.4 The blower shall be constructed using a robotic arc welder for accuracy and repeatability to a minimum of 0.0225 in., including features such as touch sensing, weaving and seam tracking information to precisely lay a quality weld that's in accordance with AWS D1.1 standards. Blowers constructed from cast aluminum ✓ OK.

disconnect coupling at the lower end near the pickup head and the higher end near the hopper inlet. The quick disconnect enables the operator to inspect the suction hose as well as the inlet area of the pickup head without tilting the hopper. The steel portion of this suction tube shall be no shorter than 19 inches to enable smooth airflow transition from pickup head to debris hopper.

- | | | | |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|
| 7.5 | The pressure side shall be equipped with an in-cab steel cable-controlled pressure relief valve/vacuum enhancer/leaf bleeder no smaller than 116 square inches for optimum settings for leaf and light debris sweeping. | ✓ | ___ |
| 7.6 | The suction chamber shall be equipped with a washout port that does not restrict the sizing of washout nozzle(s) used. | ✓ | ___ |
| 7.7 | The front and rear debris curtains shall be removable through the loosening of four (4) slotted bolts without removing the pickup head from the unit. | ✓ | ___ |
| 7.8 | The pressure slot shall be rigid steel and adjustable without the use of curtains; protected by a steel ramp with hardox wear plates. | ✓ | ___ |
| 7.9 | Sweeping paths: | | |
| | Pickup head only = 90 inches | ✓ | ___ |
| | One side broom and pickup head = 117 inches | ✓ | ___ |
| | Two side brooms and pickup head = 144 inches | ✓ | ___ |
| 7.10 | The pickup head shall be equipped with side-mounted adjustable steel runners with carbide inserts with a minimum width of 1 1/8 inches for long life. Both LH and RH side-mounted steel runners shall be reversible and interchangeable to minimize inventory and maximize runner wear & usage. | ✓ | ___ |
| 7.11 | The pickup head shall be raised and lowered hydraulically by a rocker switch on the control panel inside the cab. | ✓ | ___ |

8.0 SIDE BROOMS

COMPLY
Yes No

- | | | | |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|
| 8.1 | The right and left side broom shall be a free floating trailing arm design intended to prevent damage when sweeping and encountering a fixed obstacle. The trailing arm shall be of a parallelogram design for simple, non-binding action/motion and for constant bristle and wear pattern. | ✓ | ___ |
| 8.2 | The side brooms shall be 42-inch diameter minimum, with hydraulically driven rotation. | ✓ | ___ |
| 8.3 | Brooms shall be pneumatically raised, lowered and suspended. | ✓ | ___ |
| 8.4 | Adjustable down pressure shall be pneumatically controlled by the operator from the cab in order to maintain proper surface contact consistently during vertical broom travel. | ✓ | ___ |
| 8.5 | The broom hydraulic motor drive shall provide not less than 6045 in-lbs. of torque for superior digging power and speed. | ✓ | ___ |
| 8.6 | The side broom assemblies shall have greaseless pivot pins, and only one (1) grease | ✓ | ___ |

44
Hydraulically RAISED, lowered

EXCEEDS
EXCEEDS

zerk for the side-to-side tilt plate.

- 8.7 The side broom assemblies shall be held in the storage position by a positive means to support broom during travel. ✓
- 8.8 Each side broom shall be controlled from in the cab by rocker switches. ✓

9.0 HOPPER

9.6 with 8.2 usable. *OK*

COMPLY
Yes No

- 9.1 Volumetric capacity shall be 8 cubic yards class hopper with all fore-and-aft edges being minimum of 6" radius to provide ease of cleaning and debris evacuation. ✓
- 9.2 Hopper shall be constructed of 10 gauge steel sides, and ¼ in. steel floor. ✓
- 9.3 The hopper floor angle when dumping shall be a minimum of 50°. Dumping shall be accomplished by tilting the hopper via two (2) single-stage telescoping cylinders. Relying solely on a moving raker bar, which is attached to the rear door inside the hopper, in lieu of tipping the hopper for dumping shall not be acceptable. ✓
- 9.4 The hopper shall have external hopper props. No exception to this feature shall be accepted. ✓
- 9.5 The hopper inlet shall be a bolt-on design, external of the hopper for ease of replacement. ✓
- 9.6 A removable, steel deflector shall be located at the suction inlet. This deflector is to direct material to the rear-center of the hopper for optimal loading. ✓
- 9.7 The hopper rear door shall be locked by 2 hydraulic cylinders. The hopper door shall open first prior to tilting the hopper. The hopper rear door should open at a minimum angle of 100°. The O has evaluated many styles and considers this design to be the most effective for dumping and cleaning. No exceptions to this requirement will be acceptable. ✓
- 9.8 Dump control shall consist of weatherproof toggle switches located on the exterior right side of sweeper along with optional in-cab dump switches – hopper raise/lower and hopper door open/close – shall also be available. ✓
- 9.9 The rear hopper door shall have an external door prop. No exception to this feature shall be accepted. ✓
- 9.10 The hopper rear door shall include an automatic locking-pins mechanism for a tight fit and optimal sealing between the hopper and the rear door. Removable spacers shall be provided to easily adjust the hopper door to retain a tight seal throughout the useful life of the door seal. ✓
- 9.11 The rear door seal shall be a water resistant heavy-duty reinforced D style rubber seal for optimal sealing. Foam seals that can absorb moisture and freeze are not acceptable. ✓
- 9.12 A single screen assembly with total surface area of 3970 square inches, constructed of not less than 11 gauge steel, shall be installed to allow air to move freely from

EXCEEDS
EXCEEDS 5/5

OK STAINLESS STEEL IN LIEU OF MILD STEEL. EXCEEDS

the hopper into the centrifugal dust separator. The hopper screen shall be hinged and easily lowered via a pneumatically controlled cable drop-down system for easy cleaning and inspection without tools or pin's removal. Standard screen drop system must be controlled from outside the hopper for safety.

10.0 DUST SEPARATOR

COMPLY
Yes No

- 10.1 Dirt separation from the air stream shall be accomplished by means of a centrifugal style dust separator that is installed external to the hopper and bolted on for ease of servicing and replacement. The separator shall be designed so that it will not plug with debris. ✓
- 10.1.a To allow inspection and cleaning of the separator interior, the dust separator shall have minimum of two hinged inspection doors. Both doors are self-opening when tilting the hopper. ✓
- 10.1.b To allow automatic discharge of debris when tilting the hopper, the dust separator shall have a self-opening door made of steel. Cable or other manual/mechanical means required for discharging the separator are not allowed. ✓

STAINLESS Steel
EXCEEDS

11.0 SPRAY WATER SYSTEM

COMPLY
Yes No

- 11.1 The water tank shall be a removable, 265 gal. total capacity. Constructed of rust-proof polyethylene. ✓
- 11.2 The water tank shall be frame mounted with no part sharing any common wall with the hopper and shall not rise during hopper dumping for better weight distribution. ✓
- 11.3 A 16 ft. 8 inch fill hose with NST coupling with strainer shall be supplied. ✓
- 11.4 An external water level gauge that is visible from the operator's position shall be provided. ✓
- 11.5 All water lines shall be color coded for easy identification. ✓
- 11.6 The water filter must be accessible and cleanable from ground level without tilting the hopper. A ball valve must be provided at the filter inlet to allow cleaning of the filter without the loss of water from the water tank. ✓
- 11.7 All water piping shall be external to the operator cab. No water lines capable of leaking or bursting shall be within the cab. ✓
- 11.8 Three (3) water spray nozzles are located at each side broom for optimal dust control. A pivoting bracket is provided to allow for optimum positioning of the side broom spray nozzles. ✓
- 11.10 Three (3) removable water spray nozzles are located at the lower portion of the suction hose for lubrication of the suction hose and to further enhance dust control. ✓
- 11.11 One (1) electric 12 volt, diaphragm type pump will provide a capacity of 4 GPM to ✓

600 GALLONS. ER

20ft. ER

EXCEEDS

EXCEEDS

the pickup head, the suction hose and the side brooms. The system pressure shall be sized for 40 PSI operation.

- 11.12 Water pump must have two flow rates, selectable by the operator from within the cab and capable of running dry without damage. ✓
- 11.13 Water system shall be capable of winterization without the use of an air purge system. ✓

12.0 HYDRAULIC SYSTEM

COMPLY
Yes No

- 12.1 Hydraulic pump shall be a gear driven, gear style pump for maintenance free operation, having a flow capacity of 7.0 GPM @ 2100 RPM and 8.3 GPM @ 2500 RPM. ✓
- 12.2 Reservoir capacity shall be not less than 11 gallons and have an exterior sight gauge. The reservoir must be located for quick inspections without tilting the hopper. *25 gallons* ✓
- 12.3 All hydraulic circuits shall have quick disconnect pressure check ports for ease of maintenance. ✓
- 12.4 Hydraulic oil cooler shall be standard to provide adequate cooling with fresh air intake and accessible without raising the hopper. The hydraulic system shall operate below 200°F. ✓
- 12.5 To minimize the hazards of potential leakage, all high pressure fittings shall be O-Ring Face Seal (ORFS) type. Other systems shall not be acceptable. ✓

13.0 PNEUMATIC SYSTEM

NO PNEUMATIC Required. OK

COMPLY
Yes No

- 13.1 There shall be a PR4 protector type pressure protector for the chassis air system. *N/A*
- 13.2 All pneumatic cylinders shall be interchangeable. *N/A*
- 13.3 All pneumatic cylinders must be rated to 150 PSI and have a separate rod seal and wiper to prevent contamination entering the cylinder. *N/A*
- 13.4 Each cylinder shall be controlled by a single, two position, solenoid valve mounted on a manifold with common input and exhaust. *N/A*
- 13.5 There shall be a filter with a polycarbonate bowl to filter out contaminants down to 5 microns to prevent contamination in the air system. *N/A*

EXCEEDS All these functions use hydraulics.

14.0 ELECTRICAL SYSTEM

COMPLY
Yes No

- 14.1 Sweeper shall have an electronic back-up alarm for additional warning and safety when chassis is in reverse. ✓
- 14.2 Sweeper shall have a rear facing back-up camera for additional safety and operator awareness of surroundings. ✓
- 14.3 Sweeper shall have a pickup head camera for visibility of the front of the pickup ✓

head while sweeping.

- | | | | |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 14.4 | Sweeper lighting shall include rear identification lights and rear clearance lights. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 14.5 | Sweeper warning lights shall include hopper up and hopper door open (when equipped with in-cab tilt), screen down, and hopper full load. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 14.6 | Sweeper wiring harnesses shall be color-coded and "function stamped" with appropriate circuit name every four inches, i.e. "Ignition", "Side Broom" on each wire. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 14.7 | All electrical circuits must be protected by automotive style blade fuses. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

15.0 CONTROLS

COMPLY
Yes No

- | | | | |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 15.1 | All sweeper controls shall be mounted on a stationary central console that allows for use and visibility from either right or left operating positions. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 15.2 | The controls shall include sweep, spray water and lighting functions. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 15.3 | The controls for sweeping, spray water, and lighting functions shall be rocker switches. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 15.4 | Controls for auxiliary engine ignition and throttle, side broom down pressure shall be located in the control console. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 15.5 | Controls for the auxiliary engine throttle is a pre-set rotary knob, and shall include individual settings for "idle," "light," "medium," "medium/heavy," and "heavy" to provide clarity to the operator of proper throttle setting for any given application. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 15.6 | Controls for sweep system shall include sweep/resume feature; allowing the automatic raise when chassis transmission gear selector is put into reverse of side brooms and pickup head. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

16.0 INSTRUMENTS

COMPLY
Yes No

- | | | | |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 16.1 | Sweeper engine instruments shall include tachometer, hour meter, oil pressure, voltage, and coolant temperature for complete information for the operator on the condition of the auxiliary engine, visible from both operator positions. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 16.2 | Sweeper engine to include an auxiliary engine air intake restriction gauge for ease of maintenance (mounted external at air filter). | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 16.3 | Sweeper instruments shall include diagnostic information for the sweeper engine and sweeper functional information to sweeping mode and transport mode. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 16.4 | Sweeper instruments shall include a "raised" hopper indicator and "open" hopper door indicator (when equipped with in-cab dump) and a "full" hopper indicator to notify the operator. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

17.0 PAINT

COMPLY
Yes No

- 17.1 All visible exterior metallic surfaces shall be coated prior to assembly with polyester powder coat. The paint must be a minimum of 2 mils thick. The uses of acrylic enamels and/or polyurethane's are not acceptable.
- 17.2 Color shall be the 0 of 0's color or "White".
- 17.3 Vehicle shall have an accent color of Grey on the components and lower portions of the unit.

18.0 MANUALS

COMPLY
Yes No

- 18.1 An operation manual shall be provided.
- 18.2 A parts manual shall be provided.

19.0 WARRANTY

COMPLY
Yes No

- 19.1 Manufacturer's warranty shall be not less than one (1) year on entire sweeper, including all parts and labor.
- 19.2 Manufacturer's warranty shall be not less than three (3) years on chassis engine, including all parts and labor.
- 19.3 Manufacturer's warranty shall be not less than lifetime protection against rust-through of the water tank.
- 19.4 Proposer's submitting literature stating warranties which do not fully comply with warranty requirements of this specification, must submit a letter from the manufacturer certifying warranty compliance as an integral part of their proposal. Failure to comply may cause the proposal shall be deemed "non-responsive" and rejected without further review.

20.0 SERVICE AND TRAINING

COMPLY
Yes No

- 20.1 Vendors shall have a full parts and service facility within a reasonable distance from The City of Hammond Maintenance Yard. State location and distance. 26 miles
- 20.2 A qualified technician shall provide complete training to The City of Hammond personnel at the City of Hammond Maintenance Yard. Training shall include safety, operation, maintenance and service.

PROPOSAL FORM

I hereby acknowledge that I have received the following Addenda (If Applicable) and they are reflected as part of this proposal.

List by date and Addendum number _____

NONE CR

The undersigned hereby declares that they have carefully examined the requirements of the specifications contained herein, and propose to deliver FOB destination to The City of Hammond new equipment in accordance with the RFP specifications for the following price.

ONE (1) New and Unused Six Wheel Regenerative Air Street Sweeper

BODY MAKE: SCHWARZE MODEL: A-9000

CHASSIS MAKE: FREIGHTLINER MODEL: M2 AS SPECIFIED.

TOTAL PURCHASE PRICE: \$ 320,000.00 XX

(In Words) Three Hundred Twenty Thousand dollars XX

Signature of Proposer Signature removed for Security Purposes

Name of Company Covington Sales & Service, Inc. Date April 11, 2024

The above signature on this sealed Proposal certifies that proposer has carefully examined the instructions to proposers, terms and specifications applicable to and made a part of this proposal Package. Any exceptions must be clearly identified. Proposer further certifies that the prices shown are in full compliance with the conditions, terms and specifications of this Proposal.

Items the Schwarze A9 Monsoon Exceeds the Advertised Specifications

1. Larger Hopper - We are providing approximately 2 more yards of usable space per dump. Our 9.6 yard hopper will load 2 to 3 loads a day. The smaller unit will require 1 to 2 more trips to the dump. (Average dump time 1 hour per dump). The A9 will save 1 to 2 hours a day with dump process.
2. Larger Water Capacity - We are providing 600 gallon in lieu of 265 gallon for sweeping. Our 600 gallon system will require a minimum of 2 fills per day, at 30 minutes per fill. The small system will require 4 to 5 fills per day, at 30 minutes per fill. The time is in the set-up and tear down to fill the unit. You just can't short cut a hydrant pre-flush and fill. The small unit will require a minimum of 2 plus hours each day to fill. Option supplied Cost \$5,700.00
3. Larger Screen Area in Hopper - Just allow to move more material without plugging up and losing performance to pick up material.
4. Approximately Double the Auxiliary Engine H.P. and Performance - This allows us to move more air at higher volumes for heavy sweeping. Less time to have to re-sweep the same area twice.
5. Larger Sweeper Head - Just more head on the ground to help move material.
6. Stainless Steel Hopper and Screen - This is a priceless option. The mild steel hopper and screens rust out in 4 to 6 years. . Back-side hopper replacement is 25 Thousand dollars to replace / 8 Thousand to 15 Thousand to repair. Up front cost is 12 Thousand more for stainless steel
7. 8" Catch Basin Hose on Hydraulic Boom on Rear Door for Cleaning Catch Basins - This is an 8 Thousand dollar option. **With the 8" hose you have a dual purpose sweeper/catch basin cleaner.**
8. Electric over Hydraulic system to operate all movement of brooms, hopper dump, without the engine running. We have this option in lieu of the Airflow System requested. Option supplied Cost is \$6,400.00.
9. The A9 unit can sweep in Reverse to give the operator full control while sweeping without having to turn around and go back over the same area. (Huge time saver) Standard option for the A9. This is huge for Cities. Elgin can't sweep in Reverse.
10. GEO - Supplied not requested. Each gutter broom has an extension override (GEO) with in-cab controls to be able to extend and retract while in sweeping mode. Explained in Item J of our attached specifications. Option supplied Cost is \$4,300.00.

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City of Hammond
April 11, 2024

The cities objective is to clean as many road miles as possible each day. The average sweeper as specified will need an average of 2 hours to fill 4 to 5 times at 265 gallons.

The A9 with 600 gallons will require 1 hour for 2 fill-ups with 600 gallon, 1 hour per trip. The large hopper will save drive time and fuel. 1 to 2 hours saved with larger hopper per day.

In conclusion, every day you can gain 1.5 to 2.5 hours of more potential sweeping time. The smaller unit will average 2 hours a day, 10 hours a week less sweeping time to just fill and dump. Technically you will gain a full day of sweeping hours in the curb each week by just having the ability to carry more material and water per trip.

SUGGESTED STREET SWEEPER SPECIFICATIONS

Intent

It is the intent of these specifications to describe a regenerative air street sweeper with hydraulic drives, 9.6 cubic yard hopper, 90" wide pickup head. The head must be capable of sweeping in reverse with the head down without causing damage to the pickup head or its components. Blower shall be belt driven via auxiliary engine. The unit must be equipped with vertical digger-type gutter brooms, pressurized dust control spray system and an independent engine to power the sweeping functions. The chassis for this sweeper is to be sufficiently rated to transport a full load of sweeping debris at speeds up to 55 MPH. For safety and comfort of the operator and for quick, local service along with local availability of repair parts, the chassis will NOT be a purpose built chassis built by the sweeper manufacturer. The chassis shall be equipped with spring suspension on both axles, dual steering, dual operator controls, and an automatic transmission. All tires shall be the same size and have dual tires on each side of the rear axle (six-wheel configuration).

The unit shall be new of current manufacture. No prototype, demo, used, vacuum type, or mechanical type sweepers will be accepted.

Manufacturer shall have a current ISO 9001:2015 Management certification that is certified and audited by an ANAB internationally accredited registrar.

All parts not specifically mentioned which are necessary to provide a complete street sweeper shall be included in the bid and shall conform in strength, quality of materials, and workmanship to what is normally provided to the trade in general.

No deviations to these specifications will be allowed.

Bidders must indicate compliance for each item throughout the bid by writing "YES" or "NO". Failure to do so may be cause to reject the bid. All "NO" answers must be fully explained on a separate sheet of paper and be attached to and submitted with bid. Failure to explain "NO" answers may be cause to reject bid.

SUGGESTED STREET SWEEPER SPECIFICATIONS

SWEEPER ENGINE

- _____ A. An auxiliary diesel engine shall be provided to power the sweeper. The engine shall be a John Deere turbo charged four-cylinder with Tier IV final emission control with a horsepower rating of not less than 134 hp @ 2400 RPM and shall provide a peak torque rating of not less than 398 ft/lb at 1,600 RPM. Minimum displacement shall be not less than 275 cubic inches. Engine shall be made in North America.
- _____ B. Engine shall be equipped with a full-flow spin-on oil filter, fuel filter and fuel water separator.
- _____ C. In order to have the cleanest air possible, the air intake shall be at least 8 feet above the ground level.
- _____ D. Engine to be equipped with a 3-point safety engine shutdown device that shuts down the engine for low oil pressure, high coolant temperature, and low coolant level.
- _____ E. Auxiliary engine shall be warranted by engine manufacturer for not less than 2 years or 2,000 hrs (whichever occurs first). Emissions shall be warranted for not less than 5 years or 3,000 hrs (whichever occurs first).
- _____ F. Twelve (12) volt electrical system, electrical starter and 90 amp alternator shall be provided. Sweeper shall have resettable circuit breakers and automotive fuses.
- _____ G. Sweeper auxiliary engine shall share a 50-gallon fuel tank minimum and batteries with chassis engine. No exceptions.
- _____ H. Auxiliary engine, muffler, fuel tank, battery box, hydraulic tank and cooler to be protected by a shroud.
- _____ I. Daily engine maintenance points, including engine oil dipstick removal, engine air cleaner removal, visual check of hydraulic oil and engine coolant must be able to be performed from ground level without the aid of a ladder or steps or lifting the hopper.
- _____ J. Hopper shall include an expanded metal screen engine cover to protect the engine and reduce buildup of leaves in the engine compartment. This engine cover shall also include three tree limb protection bars.

SUGGESTED STREET SWEEPER SPECIFICATIONS

HYDRAULIC SYSTEM

- _____ A. Hydraulic power shall be used to operate all broom rotation and lifting functions. Systems incorporating pneumatic-type controls will not be accepted.
- _____ B. Hydraulic pressure shall be set at 2500 PSI for all hydraulic functions.
- _____ C. Sweeper shall utilize a multi-stage gear driven hydraulic pump, minimum 25 gallon vented hydraulic reservoir, a spin-on 10 micron return filter, and high pressure hoses and fittings. Hydraulic reservoir to have tank mounted level and temperature indicator. Hydraulic reservoir shall be mounted above the hydraulic pump.
- _____ D. Hydraulic system to have a 9,000 BTU oil to air radiator type hydraulic oil cooler.
- _____ E. Hydraulic tank shall have shut-off valves for hydraulic oil filter change.
- _____ F. Hydraulic system shall have quick disconnect relief pressure check ports mounted in the hydraulic manifold(s).
- _____ G. For safety of the operator, no sweeper hydraulic lines to run into or through the cab.
- _____ H. Hydraulic valves shall have built-in diagnostic system lighting for troubleshooting hydraulic flow and electrical power.
- _____ I. A 12-volt DC hydraulic backup system shall be provided which may be used to operate all hydraulic functions without starting the auxiliary engine.
- _____ J. The hydraulic system shall have an extended warranty that includes 2 years on motors and valves and 5 years on pumps and fittings.

DUST SEPARATOR

- _____ A. A centrifugal dust separator with a minimum 29,000 cubic inch volumetric area shall be supplied inside hopper to remove airborne dust from the air stream. The dust separator shall be designed so that it will not plug with normally encountered debris.

SUGGESTED STREET SWEEPER SPECIFICATIONS

- _____ B. The dust separator shall have a clean-out door that opens automatically and discharges debris from the separator when the hopper is raised.
- _____ C. Cable or other manual/mechanical means required for discharging debris in the separator shall not be allowed.

HOPPER

- _____ A. The volumetric capacity of the hopper shall not be less than 9.6 cubic yards. The usable capacity shall not be less than 8.0 cubic yards.
- _____ B. Hopper screen to be a two piece, stainless steel, saw-tooth design such that airflow will not be interrupted even in difficult sweeping conditions. Flat screens are unacceptable due to premature clogging of the screen. Hopper screen shall be a minimum of 7634 square inches.
- _____ C. Hopper screens must have 2 hinges on each screen, allowing the screen to drop down from one side, providing extra safety for the operator during cleanup.
- _____ D. Dumping shall be accomplished hydraulically by tilting the hopper a minimum of 48 degrees. Contents shall be dumped to the rear of the vehicle at a height of 36 inches. Dumping system shall include twin dumping cylinders with dimensions of 4" X 16". Hopper floor shall be sloped 3 degrees making a total dump angle of 51 degrees.
- _____ E. Hopper roof, sides, floor, rear door, separator, separator screens and bulkheads to be constructed from high strength stainless steel.
- _____ F. Dump door to be hydraulically opened, closed, and locked. Operation of the hopper dump door to be accomplished from inside or outside the cab. Sweeper shall include a hopper dump assist shaker to vibrate the hopper while dumping. The shaker shall be controlled from the operator console and have an automatic shutoff timer.
- _____ G. Large 15" X 32" inspection doors shall be provided on left and right sides of hopper. These doors shall provide an easy way to manually load debris and provide a convenient access for hopper inspection and cleaning.
- _____ H. Hopper shall be airtight through the use of rubber seals on all doors and openings. Sweeper shall include a hopper deluge equipped with a 2 ½ camlock hose fitting to flush hopper. Sweeper shall be equipped with a hopper spraybar with 4 spray nozzles. The spraybar shall be controlled from the operator console.

SUGGESTED STREET SWEEPER SPECIFICATIONS

- _____ I. Weatherproof dump switches to be located outside directly behind cab for visibility and safety during the dumping process. There shall be one switch for each function: raising and lowering the hopper to the dump position, opening and closing the dump door, and turning the 2 rear bumper mounted flood lights on for night dumping.
- _____ J. Sweepers that use a no tilt method of dumping hopper or use an inside of hopper mechanical means of pushing debris out of the hopper (raker bar) will not be accepted.
- _____ K. Hopper shall have a shroud enclosing the auxiliary engine, muffler, blower housing, fuel tank, and hydraulic tank and cooler. Shroud shall be designed to help protect components from the elements and vandals.
- _____ L. The hopper shroud shall also be designed to reduce auxiliary engine noise by having a minimum of 1" thick sound dampening material attached to the inside of shroud in the engine compartment area. Sound deadening material must consist of at least 48 Square feet of material. Shroud must be an integral part of the hopper and lift when the hopper is raised. The shroud shall give the sweeper a neat, well thought out streamlined appearance. In the interest of sweeper protection, public safety and sweeper noise reduction, sweepers that do not meet all of these requirements will not be accepted.
- _____ M. The hopper roof shall be higher at the center to allow water to run off and to reduce corrosion. Hoppers with flat roofs will not be accepted.
- _____ N. The suction tube entering hopper shall be bolt on for easy replacement and constructed of abrasion resistant steel.
- _____ O. A hopper door open/close switch shall be mounted on console to allow rear door to be operated from inside cab. Hopper shall have drop down screens that lower automatically when the rear hopper door is opened.
- _____ P. Hopper floor to be constructed with high strength stainless steel. The roof, bulkhead, rear door, and sides shall be constructed of 10 gauge high strength stainless steel. The hopper floor shall slope 3 degrees towards the rear door.
- _____ Q. The hopper body structure, excluding the inlet and outlet wear tubes, water nozzles and mounts, deluge plumbing, hand hose components, and suction screens, shall be warranted against rust perforation and

SUGGESTED STREET SWEEPER SPECIFICATIONS

corrosion perforation for the "LIFETIME" of the sweeper, as defined as the ownership period by the original purchaser of the new sweeper.

BLOWER

- _____ A. Heavy-duty steel blower shall be used to create air pressure and suction (regenerative air) for removing debris from road surface. Sweepers that clean road surfaces by using suction only (pure vacuum) will not be accepted.
- _____ B. Blower to be powered by the sweeper auxiliary engine via a heavy-duty 5-groove v-belt. A belt safety guard shall be supplied.
- _____ C. The blower shall be a closed face turbine type with 10 curved blades, and shall be 32.75 inch diameter by 5 inches wide. The blower shall be constructed of 500 brinell hardness abrasion resistant steel. Fan to be fully balanced within 1.5 grams on both sides for long fan and bearing life. A die-cast aluminum alloy open face blower, either covered with rubber or not, or a die cast steel open face blower will not be acceptable.
- _____ D. Blower shall have a minimum rated performance of negative 65 inches of water column and 17,000 CFM. Documentation must be included with the bid packet that states that the Air Movement and Control Association has tested the fan and certifies the fan is equal to or greater than the performance data listed above. Since the rated fan performance is directly related to the performance of the sweeper, no sweeper will be considered without the fan being certified by the Air Movement and Control Association.
- _____ E. Must be Whisper Wheel equipped to provide a 360 degree average dB(a) rating of 72.0 or less at an unobstructed distance of 50 feet at 2000 engine RPM. Sound dampening material is required in the area of the auxiliary engine and blower to aid in soundproofing.
- _____ F. The blower housing shall be constructed of 3/16" abrasion resistant steel with the inside of the housing covered by a replaceable rubber wear liner.
- _____ G. Blower housing shall have a vacuum enhancer for discharging a portion of the blast air for sweeping light materials such as leaves and paper. The vacuum enhancer shall be electrically powered by a DC actuator and controlled from a switch located on the control panel inside the

SUGGESTED STREET SWEEPER SPECIFICATIONS

cab. The vacuum enhancer shall be capable of 0 - 80% air diversion for maximum control.

- _____ H. Blower housing shall not be an integral part of the hopper and shall be mounted parallel with the front of the hopper.
- _____ I. Blower shall be mounted on sealed self-aligning anti-friction bearings. Blower shaft shall have greaseable bearings requiring 1/4 ounce of grease every 250 hours to ensure maximum life expectancy. Non-greaseable bearings are unacceptable due to sweeper environment. Blower shaft shall be a minimum of 36 inches long and 2 1/4" diameter to reduce stress or premature bearing wear. Grease points shall be accessible from ground level.

PICKUP HEAD

- _____ A. Pickup head shall be spring balanced all steel fabricated with separate upper and lower chambers where pressurized air is blasted from the upper chamber through an elongated blast orifice to the lower chamber.
- _____ B. The blast orifice shall be a replaceable and shall have a replaceable rubber leading edge and be angled a minimum of 3 degrees towards the suction side of the pickup head. This will ensure a smooth transfer of debris by increasing pressure as the debris moves toward the suction tube. Sweepers with blast orifices that are not angled toward the suction tube will not be acceptable.
- _____ C. The pickup head shall not be less than 90 inches wide and 36 inches long giving a total head area of 3240 square inches.
- _____ D. Pressure and suction hoses shall be fourteen inches in diameter and be constructed from 3/8 inch thick heavy duty molded wire reinforced molded rubber.
- _____ E. Sweeping paths shall be:
Pickup head only = 90 inches
Pickup head and one gutter broom = 117 inches
Pickup head and two gutter brooms = 144 inches
- _____ F. Sweeper shall have Sweeps-in-Reverse which allows it to sweep in both forward and reverse with the head down without causing damage to the head or other components. NO EXCEPTIONS. Sweeping heads that are not designed to sweep-in-reverse and that require add-on devices such as chains attached to the head and chassis axle to meet this requirement, will not be acceptable. Sweeper must be able to sweep in reverse while making turns.

SUGGESTED STREET SWEEPER SPECIFICATIONS

- _____ G. Pickup head shall be equipped with doublewide full length virgin carbide drag shoes for maximum life. Front and rear of drag shoe to be snowshoe design to follow road contour without damage. Shoes shall be interchangeable from either the left or right side. Sweepers that utilize tool grade carbide drag shoes shall not be considered.
- _____ H. Drag shoes shall be warranted against wear-out for a minimum of two years/2000 hours, prorated.
- _____ I. Sweeping head shall be raised and lowered hydraulically by a single switch located in the cab.
- _____ J. Head to have a quick disconnect at the lower section of the head suction tube. Pickup head shall feature a head deluge for flushing the head with 2 1/2" hose equipped with a camlock coupler.
- _____ K. Suction transition shall include two high volume water nozzles to lubricate the suction tube to reduce clogging during sweeping operations.
- _____ L. Head inlet and outlet tubes shall be bolt-in for easy replacement.

GUTTER BROOMS

- _____ A. Dual gutter brooms shall be 44" minimum diameter, flattened wire filled vertical digger type for removing debris from gutter area.
- _____ B. Gutter brooms to be hydraulic motor driven and shall be positioned laterally and vertically by a hydraulic cylinder and springs.
- _____ C. Each gutter broom shall have an adjustment to allow downward compensation for bristle contact, pattern and wear and shall be full floating to follow street contour.
- _____ D. Each gutter broom shall have lateral flexibility to swing inward 15" under the chassis when encountering the impact of an immovable object thus avoiding damage to the broom assembly.
- _____ E. Each gutter broom shall be held in the up and transit position by use of a hydraulic cylinder and an electric lock valve attachment.

SUGGESTED STREET SWEEPER SPECIFICATIONS

- _____ F. Upward motion for gutter broom storage shall be regulated by an adjustable flow control valve.
- _____ G. Gutter broom disk to be recessed to prevent such items as string and small rope like material from being wrapped around and damaging the gutter broom motor shaft seal. Disk shall be designed as to allow water to drain off, therefore eliminating water damage to the gutter broom motor seals.
- _____ H. A center deflector shall be provided to direct debris thrown by the gutter brooms into the path of the pickup head. Deflector shall be positioned under the belly of the sweeper and in between the gutter brooms. Deflector shall raise and lower with the pick-up head.
- _____ I. Each gutter broom shall additionally incorporate a hydraulically actuated tilt capability of 27 degrees, remotely controlled from the console in the cab to allow instant adjustment for debris removal from deep gutters (such as those resulting from multiple overlays of blacktop).
- _____ J. Each gutter broom shall be equipped with Gutter Broom Extension Override (GEO) with in-cab controls to be able to extend and retract while in sweeping mode. This will allow the gutter brooms to scrub the pavement surface in front of the pickup head. This system shall be adjustable from full extension to the curb with in-cab variable adjustments to a full retraction under the sweeper. Sweepers that only have a full extension and full traction without variable in-cab adjustments will not be acceptable. All controls shall be in-cab. At no time shall the operator have to leave the cab to activate this function. The system shall be activated by an electric linear actuator.
- _____ K. Each gutter broom motor shall have a heavy duty seal, seal slinger/protector and heavy duty bearing to extend life.
- _____ L. Each gutter broom shall have an in-cab variable speed control independent of the sweeper auxiliary engine RPM. This shall include a rocket switch for each gutter mounted on the sweeper console.

DUST CONTROL SYSTEM

- _____ A. Water spray to be supplied by twin electric diaphragm water pumps. The water pumps to produce a minimum of 60 PSI, with a minimum 5.88 gpm each. The water pumps to automatically disengage when the water supply is depleted or the pre-filter is clogged. A pre-filter filter

SUGGESTED STREET SWEEPER SPECIFICATIONS

minder shall also be provided. Pumps shall be mounted below water tank bottom level.

- _____ B. Water tank capacity not to be less than 600 gallons and shall be constructed of polyethylene for strength and corrosion resistance.
- _____ C. A minimum 25-foot long fire hydrant fill hose shall be provided with 2.5" NST coupling to fill water tank. A minimum 2" air gap shall be provided between water fill tube and water tank. Hydrant hose shall include a hydrant wrench and hose storage rack.
- _____ D. Water system to be filtered by a 50 mesh cleanable filter with restriction indicator located between tank and water pump. For ease of cleaning, water filter to be at ground level. Water shut-off valve shall be provided to allow cleaning filter without losing water supply.
- _____ E. 2 each adjustable spray nozzles shall be located at each gutter broom.
- _____ F. Dust suppression system to include two spray nozzles at the front axle. Left nozzle to come on when left gutter broom water is in use and right nozzle to come on when right gutter broom water is in use.
- _____ G. Each water spray function to have its own independent on/off cab controlled solenoid valve.
- _____ H. An in-cab water level gauge and an in-cab low water level alarm located on the sweeper console must give operator constant visibility of water system levels.
- _____ I. Water spray nozzles shall be provided as follows: five nozzles at pickup head, two nozzles inside hopper, two nozzles at right gutter broom, two nozzles at left gutter broom, two nozzles in the suction tube, and two at the front axle.
- _____ J. No part of the water system shall be made with ferrous metal.
- _____ K. The water system shall incorporate an air purge system for flushing water lines during freezing conditions.
- _____ L. Sweeper to be equipped with a front spray bar with 7 nozzles. Spray bar to be mounted on front bumper.

OPERATING CONTROLS AND DISPLAYS

- _____ A. Sweeper shall be equipped with dual steering and controls for left or right side operation of the sweeper. The dual steering and controls

SUGGESTED STREET SWEEPER SPECIFICATIONS

not be installed by the sweeper manufacturer.

- _____ B. Auxiliary engine control and gauges shall be mounted on a left to right rotating control console inside the cab. Fixed base, non rotating consoles are not acceptable. They shall consist of: keyed ignition, electronic throttle control, leaf bleeder control, oil pressure gauge, water temperature gauge, voltmeter, tachometer, and hour meter. All gauges to be full color, high resolution display. The display shall include a diagnostic gauge with the ability to read and record engine error codes and engine load and fuel consumption.
- _____ C. Hydraulic temperature, dust control water level, leaf bleeder position indicator, hopper tilt status, parking brake status, and sweeper standby controller status shall be displayed on a full color, high resolution display mounted on the sweeper console.
- _____ D. Console to have independent switches for operating left gutter broom, tilt, GEO and variable speed, right gutter broom, tilt, GEO and variable speed, and pickup head. All switches to be lighted and have international symbols for easy identification.
- _____ E. Console to have individual switches water pump on/off switch and low water level warning light. Independent water control switches for left gutter broom, right gutter broom, pickup head, hopper, front bumper, and nozzles at front axles. All switches shall be lighted and have international symbols for easy identification.
- _____ F. Console to have independent switches for each gutter broom light, rear dump light, and safety strobes.
- _____ G. All sweeper main electrical systems to be separately fused at the systems locker.
- _____ H. The console shall feature a “stand by” control that allows one touch return to sweeping after equipment selection. The standby feature shall be switch selectable to provide lift in reverse or sweep in reverse.
- _____ I. Instrument readings that are out of range including low hydraulic oil level, hydraulic oil filter restriction, communication error, spray water filter dirty, spray water low, high dump angle warning, unsafe dump angle lock out, parking brake not set shall display an warning icon and sound a warning chime. Non safety chimes may be acknowledged for 90 seconds.

HAND HOSE EQUIPMENT

SUGGESTED STREET SWEEPER SPECIFICATIONS

- _____ A. Sweeper to have an auxiliary hand hose, including engine throttle, for cleaning remote areas inaccessible to the sweeping head and for cleaning out catch basins.
- _____ B. Hand hose to be 8" in diameter, 12' long, with an electric over hydraulic power boom and 52" long serrated tip collection nozzle. Hand hose shall be stored on the rear of the sweeper. Hand hose shall be rubber.
- _____ C. A block off plate to divert airflow to the hand hose shall be provided. Block off plate to fit in tool box. For operator safety, no sweeper will be accepted that requires the block off plate to be stored in the cab.

SAFETY EQUIPMENT

- _____ A. Sweeper to meet all federal motor vehicle safety standards. All lighting must be LED.
- _____ B. Sweeper shall include two hopper safety struts that lock hopper in the raised position during maintenance. Safety struts to be permanently mounted to sweeper. Operator to manually engage and disengage struts.
- _____ C. Sweeper shall to be equipped with an LED amber strobe light with limb guard. LED Strobe to be mounted at the highest point at the rear of the sweeper. Sweeper chassis shall have an LED 56" Class 1 and California title 8 programmable bar light with guard mounted on the top of the cab.
- _____ D. The sweeper shall have two lower LED stoplights mounted into the rear bumper at a height of 35 inches. The sweeper shall also have two integral high mounted LED stoplights mounted at a height of approximately 94 inches. For protection of the lights and to make cleanup easier, the lights shall be integrally mounted in the sweeper body.
- _____ E. Two rear high mounted integral yellow alternating LED flashing lights to be provided. Light shall be mounted at a height of approximately 94 inches above the ground.
- _____ F. Sweeper shall be equipped with rear mounted slow moving vehicle emblem, backup alarm, cab mounted 5-lb fire extinguisher, and a warning triangle kit.
- _____ G. Permanent warning labels shall be provided at all hazard areas.

SUGGESTED STREET SWEEPER SPECIFICATIONS

- _____ H. Sweeper shall be equipped with rear view camera, two additional cameras and 7" cab-mounted color flat screen monitor with sound. System shall be capable of night vision with auto dimming monitor. Capable of continuous viewing or activated when chassis is shifted into reverse.

ACCESSORIES

- _____ A. Sweeper must have a full width steel rear bumper mounted to frame.
- _____ B. 12" chrome cab mounted parabolic mirrors shall be provided to aid operator in observing gutter brooms. They shall be mounted below the west coast mirrors on chassis doors.
- _____ C. An 18 7/8" wide X 10 1/2" tall X 24 5/8" deep lockable toolbox shall be provided. Access shall be from the curb side of sweeper.

PAINT COLOR

- _____ A. The sweeper shall be painted with 1 coat of sealer/primer and 2 coats of DuPont Imron Elite polyurethane paint in the manufacturer's standard white color. Paint shall be lead free.
- _____ B. Gutter brooms, pickup head, sweeper and truck frame to be painted a semi-gloss polyurethane textured black for long life.

SWEEPER WARRANTY

- _____ A. Per manufacturers published warranty, sweeper shall be warranted to be free of defective materials and workmanship for a period of 12 months or 1,200 hours from date of delivery. No exceptions.
- _____ B. Sweeper auxiliary engine shall be warranted for not less than 24 months or 2000 hours, whichever occurs first from date of delivery.
- _____ C. The hydraulic system shall have an extended warranty that includes 2 years on motors and valves and 5 years on pumps and fittings.

DELIVERY

- _____ A. The unit shall be delivered completely assembled, serviced, and ready to operate. The bidder shall have a qualified service representative in attendance with the sweeper during start up operations to make any

SUGGESTED STREET SWEEPER SPECIFICATIONS

adjustments needed and to give operator instruction on the proper operation of the sweeper.

- _____ B. Bidder to state delivery date.
- _____ C. The bidder shall supply a complete sweeper manual. Manual shall include system/component descriptions, sweeper operation, maintenance, troubleshooting, illustrated parts listing with part numbers, and schematics for the sweeper. Manual shall also include reproducible periodic maintenance schedules.
- _____ D. Auxiliary engine manuals to be provided. They are to consist of operations & maintenance, maintenance schedules, component technical manual, and an illustrated parts catalog.

STREET SWEEPER CHASSIS SPECIFICATIONS

Intent

It is the intent of these specifications to describe a conventional chassis which is sufficiently rated to transport a full load of sweeping debris at speeds up to 72 MPH. For safety and comfort of the operator and for quick, local service along with local availability of repair parts, the chassis will NOT be a purpose built chassis built by the sweeper manufacturer. The chassis shall be equipped with dual steering and operator controls and an automatic transmission. All tires shall be the same size and have dual tires on each side of the rear axle (six-wheel configuration).

No deviations to these specifications will be allowed

Bidders must indicate compliance for each item throughout the bid by writing "YES" or "NO". Failure to do so may be cause to reject the bid. All "NO" answers must be fully explained on a separate sheet of paper and be attached to and submitted with bid. Failure to explain "NO" answers may be cause to reject bid.

STREET SWEEPER CHASSIS SPECIFICATIONS

CHASSIS ENGINE

Compliance

- _____ Engine shall be a Cummins ISB 6.7 liter turbo-charged electronic diesel engine. EPA/CARB emissions GHG17.
- _____ Horsepower rating shall be a minimum of 200 HP @ 2400 RPM. Torque rating shall be 520 LB/FT @ 1600 RPM.
- _____ Engine shall be equipped with an after treatment device, automatic over the road regeneration and dash mounted regeneration request switch.
- _____ Engine exhaust and after treatment device shall be between the rail mounted.
- _____ After treatment device / muffler and tailpipe shield shall be constructed of stainless steel.
- _____ A 6 gallon diesel exhaust fluid (DEF) tank shall be provided and mounted under left hand side of cab.
- _____ Engine shall have an electronic integral automatic shutdown system. The system is to provide protection from damage from low engine oil pressure, high coolant temperature and low coolant level.
- _____ Donaldson two-stage heavy duty air cleaner with a pop up restriction indicator shall be mounted on the firewall with a side of hood intake.
- _____ Intake shall be equipped with an electric grid air intake warmer.
- _____ Alternator shall be 160 Amp.
- _____ Two maintenance free batteries shall be provided with 1900 total CCA. Batteries shall be mounted in a frame mounted left hand side location under the cab.
- _____ Engine cooling fan shall be a Horton HT650 electric electro-magnetic on/off fan clutch.
- _____ Engine radiator shall be 950 square inches and constructed of aluminum.
- _____ Antifreeze shall be -34F, ethylene glycol pre-charged SCA heavy duty Coolant.
- _____ Engine to have 750 watt, 115 VAC block heater

STREET SWEEPER CHASSIS SPECIFICATIONS

_____ Engine radiator shall be equipped with Gates Blue Stripe radiator hoses with constant pressure tension hose clamps and a lower radiator rock guard.

_____ Chassis engine to share 50-gallon fuel tank and batteries with auxiliary engine. No exceptions. Fuel tank and batteries shall be mounted under left hand side of cab and not extend past back of cab.

_____ Engine shall be equipped with a full flow oil filter and spin on fuel filter. Engine shall also be equipped with a magnetic oil drain plug.

_____ Chassis to include fuel/water separator mounted on engine and fuel filter in a single assembly.

_____ Chassis engine to include turbocharger brake with selector switch

TRANSMISSION

_____ Transmission shall be an electronic 6-speed automatic Allison 2500 RDS with T-handle shifter. 6-speed transmission allows broader gear range and eliminates the need for 2-speed rear axle.

_____ Transmission to have oil filter mounted on transmission.

_____ Transmission shall be equipped with a magnetic transmission drain plug.

_____ Transmission to have transmission oil temperature gauge mounted in dash.

_____ Transmission shall be equipped with water to oil transmission cooler in radiator end tank.

DUAL SIT-DOWN STEERING

_____ Chassis shall have dual steering with 4 spoke, 18" diameter steering wheels.

_____ No dual steering installed by the sweeper manufacturer. No exceptions.

_____ Dual steering package shall include a complete dual gauge package for both driving stations.

STREET SWEEPER CHASSIS SPECIFICATIONS

_____ Dual steering shall have accelerator and brake controls, self-canceling turn signal, horn, headlight dimmer switch with flash-to-pass feature, and four way flasher controls at each driving position.

_____ Both driving positions shall have tilt steering wheel.

_____ Ignition switch and air brake control shall be located to the center of dash.

_____ Single or center mounted steering will not be accepted. Dual steering must not be installed by sweeper manufacturer.

_____ SAE Turning radius to be a maximum of 18.1 feet.

FRONT AXLE & SUSPENSION

_____ Front axle shall be Minimum 12,000 lb capacity with automatic aligning slack adjusters and cam front brakes

_____ Front suspension to be a minimum 12,000 lb. capacity taper leaf spring and maintenance free rubber bushings.

_____ Front axle shall be equipped with Chicago Rawhide Scotseal Plus XL front oil seals with vented front hub caps and standard spindle nuts.

_____ Front suspension to have shock absorbers.

REAR AXLE & SUSPENSION

_____ Rear axle shall be a minimum capacity of 21,000 lbs. No exceptions.

_____ Rear suspension shall be flat leaf rear spring suspension with helper and radius rod.

_____ Sweepers that require the operator to make adjustments in the cab to the suspension to allow the sweeper to sweep or travel at highway speeds will not be accepted. Air-bag suspension will not be acceptable.

_____ Rear axle to be single speed having ratio of 6.43

BRAKE SYSTEM EQUIPMENT

_____ Brakes to be air brake system. No hydraulic brake system will be accepted.

STREET SWEEPER CHASSIS SPECIFICATIONS

- _____ Anti-lock braking system shall be provided.
- _____ Front brakes to be 15" X 4". Rear brakes to be 16.5" X 8.62".
- _____ Spring actuated parking brake chambers shall be provided with a center dash control accessible from either driving station
- _____ Air compressor to be Cummins with 18.7 CFM with internal safety valve.
- _____ Front & rear brakes to have automatic slack adjusters.
- _____ Front & rear brakes to have brake dust shields.
- _____ All air reservoirs to have air tank twist-type drain valves with pull cables.

FRAME & WHEELBASE

- _____ Wheelbase shall be 164" and usable cab to axle shall be 95.5".
- _____ Frame rails to be 10 15/16" x 3 1/2" x 11/32" high strength steel alloy steel (80,000 PSI yield). Any chassis not meeting or exceeding these minimum standards will not be accepted.
- _____ GVW shall be minimum of 33,000 lb.
- _____ Front tow hooks to be frame mounted.

TIRES & WHEELS

- _____ Tires shall be a size of 11R 22.5 and be 14 ply.
- _____ Rear axle shall have dual tires and wheels on each side of axle.
- _____ Wheels shall be 10-stud steel disc hub piloted 22.5 X 8.25.
- _____ Wheels shall be interchangeable to allow emergency change at the job site.

CAB EXTERIOR

- _____ Cab shall be conventional type with aluminum cab and fiberglass tilting front end.
- _____ Door/ignition locks shall be keyed alike.

STREET SWEEPER CHASSIS SPECIFICATIONS

- _____ Headlights shall be halogen. Five (5) amber marker lamps shall be provided on the top of the cab.
- _____ Chassis to have dual bright finish remote control heated west coast mirrors mounted on doors.
- _____ 8" diameter bright finish parabolic mirrors to be mounted under west coast mirrors.
- _____ 8" diameter chrome parabolic mirrors to be mounted on front fenders for viewing gutter brooms.
- _____ Chassis must have power locks.
- _____ Chassis shall be equipped with dual electric horns.
- _____ Chassis shall be equipped with single air horn.
- _____ Door windows shall be tinted and power roll down with non-operating wing windows. No sliding windows.
- _____ Rear window to be 63" x 14" tinted glass. Front windshield to be tinted.
- _____ Chrome towel bar-type exterior grab handles to be provided on each side of cab. No exceptions.

CAB INTERIOR

- _____ Interior shall be gray charcoal finish
- _____ Air conditioner shall be provided with integral heater and defroster with a Denso heavy duty air compressor.
- _____ Both seats shall be high-back, air suspension seats with fore and aft adjustment. Seat cover material shall be Cordura plus cloth. Both seats shall have right and left armrests.
- _____ Three point, lap and shoulder seat belts shall be provided.
- _____ Left and right side arm rests to be provided on each door.
- _____ Ashtray, cigar lighter and two (2) cup holders shall be provided.
- _____ Dome light to be door activated.

STREET SWEEPER CHASSIS SPECIFICATIONS

_____ Cab shall be provided with cab insulation and gray vinyl mats with insulation

_____ Cab shall include a forward roof mounted console with upper storage compartments without netting. An in dash storage bin shall also be provided.

INSTRUMENTS & CONTROLS

_____ Chassis gauges to include speedometer, tachometer, oil pressure, water temperature, air pressure for air brakes, voltmeter, fuel, and transmission temperature at both driving positions. Right side gauges to match factory gauge cluster on the left side.

_____ Odometer shall have trip, hour, diagnostic, voltage display

_____ Chassis shall have electronic cruise control.

_____ AM/FM/WB CD player radio with blue tooth, USB and aux input and forward left hand side roof mounted antenna and two (2) speakers in cab shall be provided.

_____ Two-speed windshield wiper control with wash and intermittent feature at both driving positions shall be provided. Reservoir shall be 8 liter.

PAINT COLOR

_____ The chassis and wheels shall be painted white in color.

_____ Chassis frame to be painted black.

CHASSIS WARRANTY

_____ Basic vehicle warranty to be 24 months/unlimited distance.

_____ Drive train components warranty to be 24 months/unlimited distance.

_____ Cab structure and sheet metal, cab corrosion, and frame rails & cross members warranty to be 60 months/unlimited distance.

DELIVERY

STREET SWEEPER CHASSIS SPECIFICATIONS

_____ The unit shall be delivered completely assembled, serviced, and ready to operate.

_____ Bidder to state delivery date.

_____ The bidder shall supply chassis operators manual. Service manual on CD ROM, and parts manual shall be provided.



A9 Monsoon™

Multi-Purpose Regenerative Air Sweeper



*Sweepers shown with optional equipment

NON-STRUCTURAL BEST MANAGEMENT PRACTICES:



VACUUM AND BRUSH
REMOVAL OF DEBRIS



CATCH BASIN CLEANING
OF DEBRIS AND POLLUTANTS



POWERFUL MAGNET TO
COLLECT FERROUS MATERIAL



HIGH PRESSURE WASHDOWN
TO CLEAN ADA RAMPS

Your Schwarze Dealer:

Covington Sales & Scv., Inc.
P.O. Box 1144
Denham Spings, LA 70727
(225)664-7427 (800)349-8000

Street sweeping is a best management practice (BMP) that can serve the entire community. With catch basin cleaner equipped you can go to work immediately after purchase as opposed to structural BMPs like storm ponds that only serve a dedicated area and require engineering and construction. This makes sweeping the most cost effective BMP per impervious acre treated [King, Hagen, 2011]



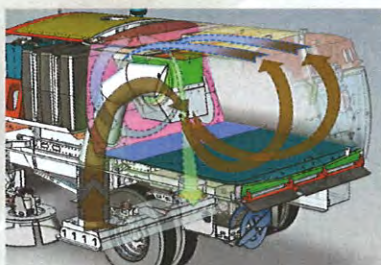
MADE IN THE USA



A9 Monsoon™ 9.6 Cubic Yard Multi-Purpose Regenerative Air Sweeper

Effective January of 2017, the EPA Final MS4 General Permit Remand Rule requires “clear, specific, and measurable permitting” conditions for measuring BMP implementation. In addition, MS4s that discharge to impaired waters must develop a total maximum discharge limit (TMDL) strategy and plan to reduce sediment, phosphorous, and nitrogen discharged into protected watersheds. The new ruling also requires greater public participation in the NPDES permitting process.

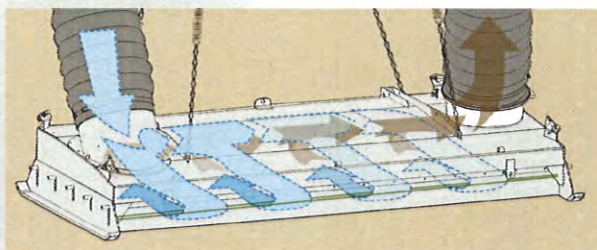
Schwarze regenerative air technology makes use of both positive pressure and vacuum airflow, this maintains the compressed air in a sealed loop and is not returned to the atmosphere like traditional vacuum sweepers.



Regenerative Air Technology

Regenerative air sweepers generally only need 100KW to do the same amount of work as pure vacuum sweepers with 200KW.

The blast and recovery cycle continues indefinitely with no air leakage.



Pressurized air is forced across an “air knife” approximately 2.5 meters wide across the sweeping head. This scrapes the roadway surface with a sheet of pressurized air, lifting dirt and debris off the pavement.

Schwarze and its global dealer network understands your challenges and helps stormwater managers meet these conditions while being good stewards of taxpayer dollars.



We make sure the correct features are included to optimize municipal sweeping programs such as:

- Reducing trips to the landfill so you can continue working and keep earning credits.
- Catch basin suction hoses with high pressure water.
- Telematics for integration with your GIS system to document work for compliance and show citizens that their streets and catch basins have been cleaned.

A9 Monsoon™ Multi-Purpose Regenerative Air Sweeper



90" Pickup Head

Up to 144" Sweep Width



Large Saw-Tooth Increased Hopper Screen Design



Powerful Height Adjustable, Cab Controlled Self-Dumping Front Magnet

High Pressure Water Spraygun



CAN-Bus Control Panel with Backlit Switches, Text and Icons



44" Recessed Gutter Brooms with Shielded Broom Motor



Heavy Duty Catch Basin Vacuum Hose with Hand Controls

Backup Camera

Bolt-On Tubes

Sweepers are also a great traveling billboard. We work with your program to design wraps that promote "clean streets, clean stream" initiatives, or our popular "only rain in the storm drain" promotion.



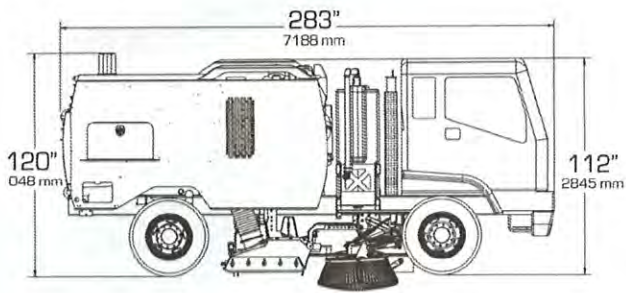
Sweeper shown with optional equipment.

Additional Available Regenerative Air Sweepers:



*Ask us about our optional:





*TYPICAL MEASUREMENTS SHOWN, EXACT DIMENSIONS DEPENDING ON OPTIONS AND TRUCK MANUFACTURER

SWEEPING PATH

Pickup head only	90 in (2286 mm)
Head and 1 broom	117 in (2972 mm)
Head and 2 brooms	144 in (3658 mm)

CHASSIS

Mounts on various chassis to meet requirements

SWEEPER BODY

Construction	Welded 10-gauge stainless steel plate
Safety props	Lift spacers

STANDARD ENGINE

Model/type	4045T in-line 4 cylinder
Aspiration	Tier 4 Final turbo-charged diesel
Manufacturer	John Deere
Displacement	275 cu. In. (4.5 L)
Brake horsepower	134 hp (100 kw) @ 2400 rpm
Torque	398 ft lb (540 Nm) @1600 rpm
Air cleaner	Centrifugal precleaner; dry type with safety element and restriction indicator
Oil filter	Full-flow/spin-on
Stroke	5 in (127 mm)
Bore	4.20 in (106 mm)
Compression ratio	19 to 1
Safety shutdown	Three-point automatic
Throttle control	Electronic

SWEEPER ELECTRICAL SYSTEM

Voltage	12 V
Engine alternator	90 amp

DUST CONTROL SYSTEM

Type	Run dry diaphragm
Capacity	250 gallon (946 L)
Tank construction	Polyethylene filter; 50 mesh; cleanable
Fill diameter	2.5 in (63.5 mm)
Fill hose	25 ft (7620 mm)
Controls	Electric; in-cab
Nozzles	2 on each broom; 5 around suction head; 2 inside suction nozzle; 2 on front axle; 4 inside hopper
Water level gauge	In-cab

INSTRUMENTATION

Auxiliary engine	Flat panel display; tachometer; hourmeter; voltmeter; temperature gauge; oil pressure gauge; warning icons
------------------	------------------------------------------------------------------------------------------------------------

FAN SYSTEM

Type	Closed-face radial
Drive	Direct via 5 groove; banded power belt
Construction	Hardox steel
Balance	1.5 grams on 2 sides
Diameter	32.75 in (832 mm)
Housing lining	Bolt-in corded rubber
Mounting	2 regreaseable sealed bearings
Vacuum enhancer	For heavy/light material; in-cab indicator

PICKUP HEAD

Type	Dual chambered full-width blast orifice
Operating direction	Forward and reverse
Suspension	Adjustable spring balanced
Length	90 in (2286 mm)
Pressure hose diam	14 in (355.6 mm)
Suction hose diam	14 in (355.6 mm)
Hose construction	3/8" (9.5 mm) wire-reinforced molded rubber
Head area	3240 sq in (20903 sq cm)
Controls	Hydraulic raise and lower
Skids	Double wide tungsten carbide
Construction	Abrasion-resistant steel inlet and outlet transitions.

SIDE BROOMS

Type	Vertical steel digger
Location	Right; left; forward of pickup head
Diameter	44 in (1118 mm)
Drive	Hydraulic
Suspension	Torque-sensing spring
Wear adjustment	Automatic
Pressure	Manual
Speed	Variable; non-reversing
Segments	5 each side; disposable
Tilt angle adjustment	In-cab controls

DEBRIS HOPPER

Volumetric capacity	9.6 cu yd (7.3 cu m)
Usable Capacity	8.0 cu yd (6.1 cu m)
Dump angle	53 degrees
Floor angle	3 degrees
Lifting	Twin hydraulic cylinders
Hopper dump door	hydraulic open, close, lock
Inspection doors	1 on each side, pressure vessel lock
Hopper dump height	33 in (838 mm)
Screens	Sawtooth drop down

HYDRAULIC SYSTEM

Type	Dual output 2 section
Pump capacity	8 gpm @ 1800 rpm (30 lpm) per section for 16 gpm total
Drive	Direct gear
Maximum pressure	2750 psi (190 bar)
Reservoir	25 gal (94 L)
Filter	10 micron; spin on
Protection	Pressure relief valve
Controls	Electro-hydraulic

AUXILIARY HYDRAULIC SYSTEM

Type	Gear type; driven by electric motor
Function	Lower hopper; open/close hopper door; raise brooms and pickup head

PAINT

One coat of sealer/primer and two coats of in standard white color.	
Paint	White; Sherwin Williams Genesis G2 #100268977

OPTIONAL SWEEPER EQUIPMENT

- Special Paint
- Front Mounted Magnet Bar
- Amber Beacon
- Strobe Light Kit
- Arrowboard Kit
- Additional Flood Lights
- Hopper Hand Hose
- Remote Drop Down Screens
- Hopper Dump Assist Shaker
- 12-volt Auxiliary Hydraulic System
- Dual Steeling and Controls
- Extra Water
- High Pressure Front Spraybar
- High Pressure Wash Dow
- Side Air Blast Head
- Hopper Deluge
- Head Drain
- Dual Outside Hopper Controls
- Lifetime Hopper Warranty
- Short Wheelbase Chassis

Note: Design and specifications subject to change without notice.



Awarded Contract

Contract # 093021-SWZ



© 2022 Schwarze Industries
1055 Jordan Road
Huntsville, AL 35811
800.879.7933
An Alamo-Group Company



SCHWARZE SWEEPER 12 MONTH LIMITED WARRANTY

UNIT MODEL	UNIT SERIAL NUMBER	ENGINE MODEL	ENGINE SERIAL NUMBER	ORDER NUMBER
CHASSIS MAKE	CHASSIS MODEL	YEAR	VEHICLE IDENTIFICATION NUMBER	

Schwarze Industries, seller, provides warranty coverage to the original purchaser for all new equipment manufactured by Schwarze Industries, Inc. Schwarze-built sweepers are warranted to be free from defects in materials and/or workmanship under normal operating conditions, and when used in a proper application, for a period of twelve (12) consecutive months from the date placed into service, or twelve hundred (1200) hours of operation, whichever occurs first, provided all recommended maintenance is performed as scheduled.

WHAT WE WILL DO: Seller's sole obligation with respect to this Warranty shall be to replace or repair, at Seller's option, any part, parts or workmanship which may prove to be defective during the Warranty Period. Warranty work shall be performed at Seller's home office (1055 Jordan Road, N.E., Huntsville, Alabama 35811) or, at Seller's sole option, at the Schwarze authorized Dealer nearest to the purchaser's location.

WHAT IS NOT COVERED: This warranty shall not apply to damage or defects caused by negligence, carelessness, unauthorized repair work, use of unauthorized repair parts or to damage due to accident, misuse or abuse on the part of the purchaser or his or her or its servants, agents, representatives or employees, or to damage caused by acts of God. This Warranty shall not apply to routine maintenance, repair and adjustments, or to the wear parts, including but not limited to the following:

A-Series & S-Series Sweepers: flaps, drive belt, hoses, broom bristles, seals, low arms, throttle cable, fan housing liner, door trim, filters, light bulbs, tires, water nozzles, spray tips, screens, springs, switches, batteries, mud flaps and mirrors.

M-Series Sweepers: brooms, rubber sprockets, bearings, flaps, drive couplings, drag brush, caster wheels, light bulbs, tires, water nozzles, spray tips, belts, control cables, filters, switches, batteries, mud flaps and mirrors.

WARRANTY DISCLAIMER

Except for the warranties stated herein, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SELLER SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES SUCH AS, BUT NOT LIMITED TO, DAMAGE OR LOSS OF OTHER PROPERTY OR EQUIPMENT, LOSS OF PROFITS OR REVENUE, COST OF CAPITAL, COST OF PURCHASE OR REPLACEMENT GOODS, OR CLAIMS OF CUSTOMERS OF PURCHASER FOR SERVICE INTERRUPTIONS.

The remedies of the Purchaser set forth herein are exclusive, and the liability of Seller with respect to the manufacture, sale, delivery, resale, installation or use of any goods covered by or furnished under this Limited Warranty shall not, in any event, exceed the price of the goods upon which such liability is based. Any parts or accessories not manufactured by Schwarze are warranted only to the extent that the manufacturer's Warranty may be passed on to Purchaser, and such parts and accessories are not subject to this Warranty or to any other warranty, expressed or implied. The limitations of remedies to repair or replacement and the disclaimer of all special, incidental or consequential damages are intended to be separate and independent limitations of Seller's liability.

HOW TO OBTAIN SERVICE: If a problem that is covered by this Warranty develops with this Schwarze Sweeper during the Warranty Period, PURCHASER MUST NOTIFY THE SCHWARZE IN WRITING PRIOR TO THE EXPIRATION OF THE WARRANTY PERIOD OR WAIVE ALL CLAIMS. Purchaser must then deliver the unit, at Purchaser's expense and risk of loss during transport, to Seller's Huntsville, Alabama address, or to the nearest Schwarze Industries, Inc. authorized Dealer. In lieu of presenting the unit for service, parts covered under this Warranty will be shipped at Purchaser's expense if the total weight of the parts is less than 25 lbs. If the Purchaser agrees to pay \$10.00 over the normal freight charges, parts covered under this 12 Month Warranty will be shipped via air freight for next-day delivery, when available. Those parts not shipped on an expedited basis, or weighing more than 25 lbs, will be shipped by Seller's normal methods (U.P.S. ground, common carrier, etc.) at the Purchaser's expense unless Purchaser specifies differently, and agrees to be liable for any additional shipping and freight charges. All parts covered under Warranty will be shipped C.O.D. unless the Purchaser has previously established an account with Schwarze and provided that such account is not past due and that the Purchaser has not exceeded his/ her/its credit limit. Warranty credit will be available only on parts which are received by Seller within thirty (30) days of the Purchaser's receipt, and if the replacement or repaired part is returned freight prepaid, and only if the component manufacturer approves it for warranty replacement. In NO case will credit be available for defective parts received by Seller later than (30) days after Schwarze ships the replacement part.

TRANSFER OF WARRANTY: This Warranty is nontransferable without prior approval, in writing, by Schwarze Industries, Inc., 1055 Jordan Road, N.E., Huntsville, Alabama, 35811. To be considered, any Transfer request must include the following information.

1. The vehicle identification number of the chassis.
2. Model and serial number of the sweeper
3. Original purchaser's name and address
4. Name and address of the current registered owner .
5. Name and address of the party to whom the Warranty is requested to be reassigned.

No employee or agent of Seller is authorized to alter or extend this Warranty or to assume any other liability on Seller's behalf. Any alterations or extensions shall not be valid or binding upon Schwarze. To get further help, notify the Schwarze Warranty Department by calling 1-800-879-7933, and identify yourself as a bearer of the Schwarze Sweeper 30 Day Limited Warranty.

JOHN DEERE NEW OFF-HIGHWAY ENGINE WARRANTY



JOHN DEERE

Warranty Duration

Unless otherwise provided in writing, John Deere* makes the following warranty to the first retail purchaser and each subsequent purchaser (if purchase is made prior to expiration of applicable warranty) of each John Deere new off-highway engine marketed as part of a product manufactured by a company other than John Deere or its affiliates and on each John Deere engine used in an off-highway repower application:

- 12 months, unlimited hours of use, or
- 24 months and prior to the accumulation of 2000 hours of use

Note: In the absence of a functional hour meter, hours of use will be determined on the basis of 12 hours of use per calendar day.

Warranty Coverage

This warranty applies to the engine and to integral components and accessories sold by John Deere, and delivered to the first retail purchaser on or after 1 May 2010.

All John Deere-warranted parts and components of John Deere engines which, as delivered to the purchaser, are defective in materials and/or workmanship will be repaired or replaced, as John Deere elects, without charge for parts or engine repair labor, including reasonable costs of labor to remove and reinstall non-engine parts or components of the equipment in which the engine is installed, and, when required, reasonable costs of labor for engine removal and reinstallation, if such defect appears within the warranty period as measured from the date of delivery to the first retail purchaser.

Emissions Warranty

Emissions warranties appear in the Operator's Manual, that is furnished with the engine/machine.

Obtaining Warranty Service

Warranty service is to be performed by a local John Deere engine service outlet before the expiration of the warranty. An authorized service outlet is a John Deere engine distributor, a John Deere engine service dealer, or a John Deere equipment dealer selling and servicing equipment with an engine of the type covered by this warranty. Authorized service outlets will use only new or remanufactured parts or components furnished or approved by John Deere.

Authorized service locations can be found by using the dealer locator on www.johndeere.com, or by calling 1-800-JDENGINE (800-533-6446).

At the time of requesting warranty service, the purchaser must be prepared to present evidence of the engine's delivery date.

John Deere reimburses authorized service outlets for limited travel expenses incurred in making warranty service repairs in non-John Deere applications when travel is actually performed. Contact your local authorized service dealer for current travel reimbursement limits. If distances and travel times are greater than reimbursed by John Deere, the service outlet will charge the purchaser for the difference.

Purchaser's Responsibilities

The cost of normal maintenance and depreciation.

Periodic cleaning of the Diesel Exhaust Filter.

Consequences of negligence, misuse, or accident involving the engine, or improper application, installation, or storage of the engine.

Consequences of service performed by someone other than a party authorized to perform warranty service, if such service, in John Deere's judgment, has adversely affected the performance or reliability of the engine.

Consequences of any modification or alteration of the engine not approved by John Deere, including, but not limited to, tampering with fuel and air delivery systems.

Consequences of fuels, lubricants or coolant that fails to meet the specifications and requirements listed in the Operator's Manual.

* "John Deere" means John Deere Power Systems with respect to users in the United States, John Deere Limited with respect to users in Canada, and Deere & Company or its subsidiary responsible for marketing John Deere equipment in other countries where the user is located.

The effects of cooling system neglect as manifested in cylinder liner or block cavitation ("pitting", "erosion", "electrolysis").

Any premium for overtime labor requested by the purchaser.

Costs of transporting the engine or the equipment in which it is installed to and from the location at which the warranty service is performed, if such costs are in excess of the maximum amount payable to the service location were the warranty service performed at the engine's location.

Costs incurred in gaining access to the engine; i.e., overcoming physical barriers such as walls, fences, floors, decks or similar structures impeding access to the engine, rental of cranes or similar, or construction of ramps or lifts or protective structures for engine removal and reinstallation.

Incidental travel costs including meals, lodging, and similar.

Service outlet costs incurred in solving or attempting to solve non-warrantable problems.

Services performed by a party other than an authorized John Deere engine service dealer, unless required by law.

Charges by dealers for initial engine start-up and inspection, deemed unnecessary by John Deere when operation and maintenance instructions supplied with the engine are followed.

Costs of interpretation or translation services.

Periodic cleaning of the Diesel Exhaust Filter.

John Deere will not be responsible for the cost of Exhaust Filter or Diesel Particulate Filter (DPF) cleaning unless:

- The need for cleaning resulted from the failure of a part that is covered by the engine's Standard Product Warranty or Extended Warranty, or
- The engine is located in California and the need for cleaning was caused by a failure covered under applicable CARB emissions regulations.

No Representations or Implied Warranty

Where permitted by law, neither John Deere nor any company affiliated with it makes any guaranties, warranties, conditions, representations or promises, express or implied, oral or written, as to the nonoccurrence of any defect or the quality or performance of its engines other than those set forth herein, and DOES NOT MAKE ANY IMPLIED WARRANTY OR CONDITIONS OF MERCHANTABILITY OR FITNESS otherwise provided for in the Uniform Commercial Code or required by any Sale of Goods Act or any other statute. This exclusion includes fundamental terms. In no event will a John Deere engine distributor or engine service dealer, John Deere equipment dealer, John Deere or any company affiliated with John Deere be liable for incidental or consequential damages or injuries including, but not limited to, loss of profits, loss of crops, rental of substitute equipment or other commercial loss, damage to the equipment in which the engine is installed or for damage suffered by purchaser as a result of fundamental breaches of contract or breach of fundamental terms, unless such damages or injuries are caused by the gross negligence or intentional acts of the foregoing parties.

Remedy Limitation

The remedies set forth in this warranty are the purchaser's exclusive remedies in connection with the performance of, or any breach of guaranty, condition, or warranty in respect of new John Deere engines. In the event the above warranty fails to correct purchaser's performance problems caused by defects in workmanship and/or materials, purchaser's exclusive remedy shall be limited to payment by John Deere of actual damages in an amount not to exceed the cost of the engine.

No Seller's Warranty

No person or entity, other than John Deere, who sells the engine or product in which the engine has been installed makes any guaranty or warranty of its own on any engine warranted by John Deere unless it delivers to the purchaser a separate written guaranty certificate specifically guaranteeing the engine, in which case John Deere shall have no obligation to the purchaser. Neither original equipment manufacturers, engine or equipment distributors, engine or equipment dealers, nor any other person or entity, has any authority to make any representation or promise on behalf of John Deere or to modify the terms or limitations of this warranty in any way.

Additional Information

For additional information concerning the John Deere New Off-Highway Engine Warranty, see the Operator's Manual

Time and Distance Table

1.1 Freightliner Medium Truck

Description	Coverage ¹	
	Time ²	Distance ²
Basic Vehicle	2 Years	Unlimited
Batteries (Low Voltage)	1 Year	100,000 mi/161 000 km
Brightwork	6 Months	Unlimited
Cab Corrosion/Perforation	5 Years	Unlimited
Cab Structure	5 Years	Unlimited
Corrosion	6 Months	Unlimited
Crossmembers	5 Years	Unlimited
Detroit Assurance ³	3 Years	300,000 mi/483 000 km
Emission Regulations ⁴		
CARB 2022 (Medium Heavy Duty Trucks) ⁵	5 Years	150,000 mi/241 500 km
Diesel Emission 2010 ⁶	5 Years	100,000 mi/161 000 km
GHG21 (Light Heavy Duty Trucks) ⁷	5 Years	50,000 mi/80 500 km
GHG21 (Medium Heavy Duty to Heavy Heavy Duty Trucks/Tractors) ⁷	5 Years	100,000 mi/161 000 km
GHG21 Tire (File Direct) ⁷	2 Years	24,000 mi/38 400 km
Frame Rails	5 Years	Unlimited
Front/Steer Axle ⁸		
Detroit ⁹	2 Years	Unlimited
Non-Detroit	2 Years	Unlimited
Paint	1 Year	100,000 mi/161 000 km
Paint, Chassis	6 Months	Unlimited
Rear Axle ¹⁰		
Detroit ⁹	2 Years	Unlimited
Non-Detroit	2 Years	Unlimited
Transfer Case	2 Years	Unlimited

DISCLAIMER: Failure to read or distribute this information does not provide exemption from compliance with the information contained herein. Specifications are subject to change without notice. Intended for general information only, not offered as customer's Warranty.

Coverage ¹		
Description	Time ²	Distance ²
Transmission ¹¹		
Detroit ⁹	2 Years	Unlimited
Eaton Hybrid	3 Years	150,000 mi/240 000 km
Non-Detroit	2 Years	Unlimited

¹ Because Warranty coverage is determined by a unit's specifications, gross combination weight rating, road surface, and vocation, coverage may vary. For unit-specific coverage, Dealers should enter a product serial number or vehicle identification number on the *Coverage Info* screen in OWL; for customers without access to OWL, see ordering Dealer for more information.

² Time or distance, whichever comes first.

³ Applies if units spec'd with Detroit Assurance.

⁴ See *Emission Regulations* subsection that follows or separate engine owner's manual for regulatory information.

⁵ Applies to products spec'd with CARB engine and domicile certification codes.

⁶ Applies to vehicles equipped with EPA 2010 compliant diesel engines.

⁷ GHG21 applies to units built on or after January 1, 2021. Units built prior to January 1, 2021, have GHG14/GHG17 coverage, respectively.

⁸ Customers will have only one (1) type of front/steer axle coverage, either Detroit or non-Detroit, depending on how the unit is spec'd. Front axle coverage is also applicable to gliders. Detroit coverage may vary due to vocation, unit specifications, etc.; table shows the minimum coverage possible. For instructions on accessing unit-specific coverage, please see footnote 1 above.

⁹ Access Detroit parchments at *DTNA Portal > Coverages > Detroit*; for customers without access, see ordering Dealer for more information.

¹⁰ Customers will have only one (1) type of rear axle coverage, either Detroit or non-Detroit, depending on how the unit is spec'd. Detroit coverage may vary due to vocation, unit specifications, etc.; table shows the minimum coverage possible. For instructions on accessing unit-specific coverage, please see footnote 1 above.

¹¹ Customers will have only one (1) type of transmission coverage, depending on how the unit is spec'd. Detroit coverage may vary due to vocation, unit specifications, etc.; table shows the minimum coverage possible. For instructions on accessing unit-specific coverage, please see footnote 1 above.

DISCLAIMER: Failure to read or distribute this information does not provide exemption from compliance with the information contained herein. Specifications are subject to change without notice. Intended for general information only, not offered as customer's Warranty.

Coverage Descriptions

Based on a unit's specifications, New Product Limited Warranty (Warranty) coverage applies. For unit-specific coverage information (time/distance amounts and component descriptions), enter a product serial number or vehicle identification number (VIN) on the *Check Info/Check Coverage* screen in Online Warranty Link (OWL). Use time and distance tables in conjunction with the coverage description paragraphs; if a coverage is applicable, it will be included as a row in the table.

2.1 Axles

Front/Steer Axle

Detroit

A steer axle is non-powered. Coverage includes all axle components supplied/manufactured by Detroit Diesel Corporation (Detroit). Warrantable components could include, but not be limited to, I-beam, steering knuckles, spindles, kingpins, kingpin bearings, and steering arms. Tie rod assembly and boots may have a different coverage period; see specific coverage row. *Excluded components could include, but not be limited to, wheel end equipment and steering linkage components.*

Non-Detroit

A front/steer axle can be a front powered or non-powered axle. Coverage applies to factory-installed axles and includes I-beam, steering knuckles, differential on drive steer axle, spindles, kingpins, kingpin bearings, and steering arms. *Excludes wheel end equipment, tie rod ends, steering linkage components, driveline(s), U-joints, kingpin bushings, kingpin seals, tag axle(s), pusher axle(s), and any axle installed by a service location or body builder.*

Pusher Axle

A pusher axle is a non-driven, weight-bearing axle that can be raised when not required to bear a portion of the load. Since the pusher axle can be of many different configurations, Warranty coverage applies to factory-installed axles and includes all components included in the individual build specification of each individual application. *Excludes any axle installed by a service location or body builder.*

Rear/Drive Axle

Detroit

A rear drive axle can be a single or tandem axle configuration. Coverage includes all axle components supplied/manufactured by Detroit. Warrantable components could include, but not be limited to, axle housing, carrier assembly, differential assembly, power divider, and axle shafts. Seals and gaskets may have a different coverage period; see specific coverage row. *Excluded components could include, but not be limited to, suspension and torque rod brackets, wheel end equipment, wiring, yokes, and attaching hardware.*

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Non-Detroit

A rear axle could be a drive, non-drive, or tandem axle. Coverage applies to factory-installed axles and includes axle housing, carrier assembly, differential assembly, power divider, axle shafts, and gaskets and seals. *Excludes suspension and torque rod brackets, tie rod ends, wheel end equipment, wiring, yokes, driveline(s), U-joints, attaching hardware, tag axle(s), pusher axle(s), and any axle installed by a service location or body builder.*

Tag Axle

A tag axle is a non-driven, continuous weight-bearing axle. Since the tag axle can be of many different configurations, Warranty coverage applies to factory-installed axles and includes all components included in the individual build specification of each individual application. *Excludes any axle installed by a service location or body builder.*

2.2 Basic Chassis/Vehicle

Note: Basic Chassis applies to units without a factory-installed cab, usually Freightliner Custom Chassis Corporation (FCCC) products. Basic Vehicle applies to units with a factory-installed cab, usually Freightliner and Western Star products.

Coverage includes all factory-installed components of the chassis/vehicle that are not excluded elsewhere in the Warranty or described as having a different time, or distance, or hours, or listed separately on each new vehicle coverage table. See the Warranty Manual for a complete list of exceptions and exclusions. Also excluded are components warranted directly by component manufacturer.

2.3 Batteries (Low Voltage)

Cranking Batteries

Coverage applies to these brands: Alliance, East Penn labeled as Alliance, Detroit, DTNA Genuine, and EnerSys (NorthStar, Odyssey); claims for all other brands must be submitted directly to the supplier. Cranking battery warranty includes factory-installed cranking (starter) battery assemblies only. *Excludes APU battery assemblies, battery cables, battery mounting box, and hardware.*

Auxiliary Batteries

Coverage applies to these brands: Alliance, East Penn labeled as Alliance, Detroit, DTNA Genuine, and EnerSys (NorthStar, Odyssey); claims for all other brands must be submitted directly to the supplier. Auxiliary battery warranty includes factory-installed APU battery assemblies only. *Excludes cranking (starter) battery assemblies, battery cables, battery mounting box, and hardware.*

2.4 Brightwork

Coverage includes all factory-installed components with chrome, polished aluminum, or polished stainless steel surfaces. *Excludes any damage to backside of bumpers, and concealed or inner surfaces.*

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2.5 Cab Corrosion/Perforation

Coverage is limited to rust-through or perforation of the cab and integral sleeper structure and sleeper box due to corrosion from within. *Excludes all conditions of rust or corrosion that have not resulted in rust-through or perforation as well as surface rust or corrosion caused by non-adhesion and any damage to paint such as chips or scratches.*

2.6 Cab Structure

Coverage includes cab and integral sleeper structural components, structural components of factory-installed sleeper boxes, sheet metal panels, doors, and hoods. *Excludes all bolt-on components including door and hood hinges, latches, guides, and other mounting hardware.*

2.7 Corrosion

Coverage includes Warranty against corrosion to any metal or metal alloy part of the vehicle.

Excludes:

- Corrosion caused by general rust (e.g., rust on the unfinished backside of a bumper)
- Surface rust caused by chips or scratches in the paint or chrome surfaces
- Corrosion caused by severe wash solutions, cleaning solvents, detergents, compounds
- Corrosion caused by salinity in the environment or corrosive salts and/or chemicals used on the road surface
- Corrosion due to improper use, misuse, or abuse, negligence, including improper or insufficient maintenance
- Corrosion due to ocean spray
- Corrosion due to environmental damage, including airborne fallout (includes chemicals, tree sap, etc.), or other atmospheric conditions, or other acts of nature
- Corrosion due to damage caused by high-pressure washing
- Corrosion caused by acid rain or other industrial fallout
- Corrosion due to improper prevention measures during storage or use
- Corrosion or rust on tone rings, rotors, or drums

2.8 Crossmembers

Coverage includes crossmembers, gussets, and huck-mounting bolts that attach gussets to crossmembers and gussets/crossmembers to frame rails. *Excludes any bolt-on item attached with either conventional or huck bolts.*

2.9 Detroit Assurance

Coverage includes these factory-installed components: radar sensor, camera, wiring harness, and video radar decision unit (VRDU) controller. *Excludes connecting components to the vehicle or mating systems.*

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2.10 Frame Rails

Coverage is limited to breaking or cracking of factory-installed frame rails, frame rail liners, frame rail extensions, and any item(s) factory welded to them. *Excludes all bolt-on items attached with either conventional or huck bolts.*

2.11 Glider

A glider is a vehicle that may be ordered without major components. Coverage includes all components identified on the build specification.

2.12 Paint (Body, Cab, Cowl)

Body Paint

Coverage includes all factory-painted exterior body surfaces and defects such as orange peel, peeling/delaminating, cracking/checking, or loss of gloss due to cracking, checking, or hazing. *Excludes lack of gloss issues on vehicles painted with low gloss colors; the undersides of hoods and roofs and side mounted air fairings; and any damages to the paint or painted surface such as chips and scratches.*

Cab Paint

Coverage includes all factory-painted surfaces (except those included in chassis paint coverage) and defects such as orange peel, peeling/delaminating, cracking/checking, or loss of gloss due to cracking, checking, or hazing. *Excludes lack of gloss issues on vehicles painted with low gloss colors; the undersides of hoods and roofs and side mounted air fairings; and any damages to the paint or painted surface such as chips and scratches.*

Cowl Paint

Coverage includes all factory-painted exterior surfaces of cowl structure (except those included in chassis paint coverage) and defects such as orange peel, peeling/delaminating, cracking/checking, or loss of gloss due to cracking, checking, or hazing. *Excludes lack of gloss issues on vehicles painted with low gloss colors; the undersides of hoods and roofs and side mounted air fairings; and any damages to the paint or painted surface such as chips and scratches.*

2.13 Paint (Chassis)

Coverage includes all factory-painted surfaces on frame rails, crossmembers/gussets, front and rear bumpers, suspension components, powertrain components, drivelines, fuel tanks, air tanks, wheel end equipment, tool boxes, battery boxes, access steps, attaching brackets and hardware, and defects such as peeling or non-adhesion. *Excludes U-joints and any damages to paint or painted surface such as chips and scratches.*

2.14 Transfer Case

Coverage includes housing and all internally lubricated parts. *Excludes broken synchronizer pins, power take-offs (PTOs), airlines, gauge, clutch assemblies, driveline(s), and U-joints.*

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2.15 Transmission

Detroit

Coverage includes all transmission components supplied/manufactured by Detroit. *Excludes maintenance items.*

Eaton Hybrid

Eaton requires that only hybrid-authorized dealerships work on units equipped with Eaton hybrid parts. Pre-authorization is required prior to repair of these vehicles in order to obtain technical assistance and a pre-authorization number for replacement parts. Eaton hybrid parts will be shipped directly from Eaton and will not be stocked in the Parts Distribution Centers (PDCs) due to the short shelf life and low volume. The following hybrid parts are covered under this Warranty: power electronics carrier (PEC), motor generator, inverter, AC/DC converter, hybrid control module (HCM), transmission control module (TCM), clutch, and electronic clutch actuator (ECA). Coverage does NOT include oil cooler or cooling systems. Please refer to Roadranger Warranty Guide TCWY0900 for more information on complete listing of limits and exclusions, as well as terms and conditions.

Non-Detroit

Coverage does not include Allison transmissions or Eaton Hybrid transmissions. Coverage includes housing and all internally lubricated parts, electric/air shift/control units, valves, gaskets, and seals. *Excludes broken synchronizer pins, PTOs, airlines, gauge, clutch assemblies, driveline(s), and U-joints.*

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New Product Limited Warranty Statements

The following section outlines standard Limited Warranty (Warranty) statements for all new Daimler Truck North America LLC (DTNA; Company) products sold by DTNA and domiciled in the USA (50 states and Washington, D.C.) and Canada. As necessary, information below may be divided by DTNA product type; this information is also included in the applicable Owner's Warranty Information Booklet.

Based on a product's specifications, Warranty coverage varies. For product-specific coverage information (time/distance amounts and component descriptions), enter a product serial number or vehicle identification number (VIN) on the *Coverage Information* screen in the OWL. General time/distance amounts and coverage descriptions are available by DTNA brand at [DTNA Portal](#) > [Coverages](#).

3.1 New Vehicle Limited Warranty Statement

Under this New Vehicle Limited Warranty, DTNA warrants that each new vehicle will be free from defects in material and workmanship that occur under normal use within the applicable Warranty period, subject to certain limitations and exclusions as specified in this document.

This Limited Warranty applies only to new vehicles sold by an Authorized DTNA Service Location or ordered directly from DTNA; vehicles sold at auction or as a result of repossession retain the Warranty coverage from the original in-service date or factory invoice date if the vehicle has not been warranty registered.

DTNA reserves the right to reduce or remove coverage on vehicles in salvage condition.

This Warranty covers all components and parts unless specifically covered by other warranties or otherwise excluded by this document.

3.2 New Powertrain Component Statements

Engine components are covered by two types of warranties, the standard Limited Warranty and the Emission Control Systems Warranty, a requirement of the U.S. (Federal) Clean Air Act and Canada Motor Vehicle Safety Act. Axle and transmission components are covered by the standard Limited Warranty.

New Powertrain Component Limited Warranty

The New Product Limited Warranty covers product repairs to correct any malfunction occurring during the Warranty period resulting from defects in material or workmanship. This Limited Warranty applies to the first retail purchaser and subsequent retail owners during the applicable Warranty period of new powertrain components manufactured by Detroit Diesel and/or supplied by Detroit Diesel or Detroit Diesel of Canada Limited (all which are collectively referred to as Detroit), subject to certain limitations and exclusions as specified in this document.

The Warranty period begins on the date the product is delivered to the first retail purchaser or put in use prior to sale at retail, whichever occurs first, and ends at the specified time or distance limits.

The cost of service supplies which are not reusable due to needed repairs is covered by this Warranty. Reasonable towing costs to the nearest authorized service facility are covered when due to warrantable failure, the powertrain component is either inoperable, cannot be safely operated, or continued operation would cause further damage to the product. Detroit will pay reasonable travel expenses for the repairing mechanic to travel to and from the repair site.

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Engine Major Component Warranty Coverage

Engine major component warranty covers casting defects. Casted engine major components are: cylinder block/head, crankshaft, camshaft, main bearing bolts, flywheel housing, connecting rod assemblies, oil cooler housing, oil coolant module casting, water pump housing, and air inlet housing. Coverage is for the failed engine major component only; labor and additional parts are excluded. Progressive damage is limited to only the engine major component(s) affected by the failure.

Engines used in the on-highway application may carry longer coverage on engine major components; review the applicable Warranty parchment for coverage:

- MBE4000, Series 60, DD13, DD15, DD16 diesel fueled engines in on-highway applications (on-highway refers to a truck or coach designed and used to carry passengers and/or cargo, primarily on streets or paved highways)

Emission Control Systems Warranty

For detailed information about product compliance with U.S. and Canadian law regarding design, build, and equipment, see the [Emission Regulations \(Diesel Vehicles\)](#) section. Please note that emission-related components no longer covered under the Limited Warranty described above may still be covered under the Emission Control Systems Warranty.

Certified Engines and Engine Parts

The Warranty period shall begin on the date the vehicle is delivered to the first retail purchaser or, if the vehicle is first placed in service as a demonstrator prior to sale at retail, on the date the vehicle is first placed in such service. Emission related defects in the genuine Company components listed in the [Emission Regulations \(Diesel Vehicles\)](#) section, including reasonable related diagnostic costs, are covered by this Warranty.

Covered components and component terminology varies from engine to engine. Some scheduled maintenance is required (refer to the Owner's Emission Control Maintenance Service Chart which is included in the Warranty Information booklet). Please check the specific Warranty Information Booklet to determine which components are covered by the emissions control systems warranty.

Service Locations should refer to the applicable Engine Warranty Information booklet to determine if a particular component is covered by the Emission Control Systems Warranty, as the components covered differ on each engine type as well as from year to year.

3.3 Limitations

This Warranty does not apply to products that are sold or domiciled outside of the United States (50 states and Washington, D.C.) or Canada.

This Warranty does not apply to non-Detroit engines, Allison transmissions, tires, or other components or parts that are not manufactured by Company and that are warranted directly by their respective manufacturers. Progressive damage caused by these manufacturers' components to any other parts including, but not limited to, parts installed by Company is excluded from Company warranty coverage. With respect to the foregoing, Company makes no Warranty whether express, implied, statutory or otherwise including, but not limited to, parts installed by Company is excluded from Company Warranty coverage. With respect to the foregoing, Company makes no Warranty whether express, implied, statutory, or otherwise including, but not limited to, any Warranty of merchantability or fitness for a particular purpose.

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THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OF ANY KIND WHETHER WRITTEN, ORAL, OR IMPLIED INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY SPECIFICALLY EXCLUDES ANY OTHER WARRANTIES OR CONDITIONS PROVIDED FOR BY LAW, WHETHER STATUTORY OR OTHERWISE.

COMPANY'S SOLE OBLIGATION UNDER THIS WARRANTY SHALL BE TO REPAIR OR REPLACE, IN COMPANY'S SOLE DISCRETION, ANY DEFECTIVE COMPONENT OR PART. SUCH REPAIR OR REPLACEMENT SHALL BE WITHOUT COST TO PURCHASER WHEN PERFORMED WITHIN THE APPLICABLE WARRANTY PERIOD (TIME, DISTANCE, OR HOUR LIMIT, WHICHEVER OCCURS FIRST).

Purchaser must notify Company, within the applicable Warranty period, of any failure of the product to comply with this Warranty and Purchaser must, at Purchaser's expense, promptly return the unit to an Authorized Service Facility for inspection and repair or replacement of any defect in material or workmanship occurring within the applicable Warranty period. During New Product coverage, Warranty reimbursement will not be paid on repairs performed by customers on their own vehicles without a current Customer Performed Warranty Agreement (CPWA).

The product must be maintained and serviced according to the prescribed schedules outlined in the Driver's/ Operator's and Maintenance Manuals. Receipted bills and other evidence showing that required maintenance and service have been performed are required by Company as a condition of this Warranty.

After the Company's obligations under this Warranty expire, all liabilities of Company to Purchaser under this Warranty shall terminate. Repairs made under this Warranty do not constitute an extension of the original Warranty period for the vehicle or for any specific component or part.

To the extent that any provision of this Warranty contravenes the law of any jurisdiction, such provision shall be inapplicable in such jurisdiction, and the remainder of the Warranty shall not be affected.

3.4 Purchaser's Exclusive Remedy

THIS WARRANTY SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST COMPANY, WHETHER IN CONTRACT, UNDER STATUTE (INCLUDING STATUTORY PROVISIONS AS TO CONDITIONS AS TO QUALITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF GOODS SUPPLIED PURSUANT TO THE CONTRACT OF SALE), WARRANTY, TORT, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY.

3.5 Limitation of Liability

COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE COST TO REPAIR OR REPLACE, IN COMPANY'S SOLE DISCRETION, THE DEFECTIVE COMPONENT OR PART THAT IN NO EVENT SHALL EXCEED THE FAIR MARKET VALUE OF THE PRODUCT AT THE TIME THE DEFECT IS DISCOVERED.

IN NO EVENT SHALL COMPANY BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, INJURIES TO PERSONS OR DAMAGE TO PROPERTY, LOSS OF PROFITS OR ANTICIPATED PROFITS, OR LOSS OF PRODUCT USE.

3.6 Emission Regulations (Diesel Vehicles)

Vehicles and engines are designed, built, and equipped so as to conform, at the time of sale, with requirements of manufacturers whose vehicles and engines are designed to meet applicable Greenhouse Gas (GHG) and Fuel Efficiency Standards of the U.S. (Federal) Environmental Protection Agency (EPA), Emission Regulations under the Canada Motor Vehicle Safety Act in Canada, and the California Air Resources Board (CARB). Engines and vehicles

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are free from defects in material and workmanship which cause the engine or vehicle to fail to conform with those regulations for the Warranty period.

Coverage is determined based on engine and vehicle emissions model year. To determine an engine's emissions model year, refer to the EPA/CARB certification label on the engine. To determine the vehicle's emissions model year, refer to the EPA/CARB certification label on the driver's door or door jamb.

The GHG warranty period is 5 years/100,000 miles (whichever occurs first) of operation or the New Product Warranty, if the product warranty is longer for all emission-related components except tires and 2 years/24,000 miles (whichever occurs first) for the tires.

For CARB 2022, diesel engines certified to California model year 2022 and later standards come with emission warranty periods of 5 years/150,000 miles (whichever occurs first) if medium heavy duty and 5 years/350,000 miles (whichever occurs first) if heavy heavy duty.

The Warranty obligations are not dependent upon the use of any particular brand of replacement parts. The Owner may elect to use non-Genuine Company Parts for replacement purposes. Use of replacement parts which are not of equivalent quality may impair the effectiveness of emission control systems. If other than Genuine Company Parts are used for maintenance replacements or for the repair of components affecting emission controls, the Owner should assure himself/herself that such parts are warranted by their manufacturer to be equivalent to Genuine Company Parts in performance and durability.

Coverage exclusions are listed in *Coverage Exclusions* elsewhere in this section.

Components ¹	Diesel Emission 2010		Gasoline Evaporative Emission 2011 ²	GHG21 ³	
	Detroit Engine	DTNA Installed ⁴	DTNA Installed	Detroit Engine	DTNA Installed ⁵
A-Pillar Turning Vane					X
Aerodynamic Quarter Fenders					X
Aerodynamic Roof Fairings					X
Aerodynamic Roof Fairings (Adjustable Height)					X
Aerodynamic Side Fairings					X
Aerodynamic Wheel Covers					X
Aftertreatment System (ATS) Aftertreatment Control Module (ACM)	X			X	
Air Cleaner (Excludes Filter Element)			X		
Air Conditioning Component Leakage					X
Air Intake Pipes			X		
Air Intake Resonator			X		
Ambient Air Temperature (AAT) Sensor					X
ATS Aftertreatment Device (ATD) Wiring Harness	X			X	
ATS Diesel Exhaust Fluid (DEF) Coolant Supply Valve & DEF Coolant Lines		X			

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Components ¹	Diesel Emission 2010		Gasoline Evaporative Emission 2011 ²	GHG21 ³	
	Detroit Engine	DTNA Installed ⁴	DTNA Installed	Detroit Engine	DTNA Installed ⁵
ATS DEF Pump	X			X	
ATS DEF Fuel Rail Pressure Sensor	X			X	
ATS DEF Fuel Pressure Sensor (Low)	X			X	
ATS DEF Low Dosing Unit	X			X	
ATS DEF System Air Pressure Regulator & Associated Air Lines		X			
ATS DEF System Chassis Interface Harness		X			
ATS DEF Tank		X			
ATS DEF Tank DEF Level Gauge		X			
ATS DEF Tank DEF Temperature Sensor		X			
ATS DEF Tank Heater Tubing		X			
ATS DEF Temperature Sensor NOX Sensors	X			X	
ATS Diesel Oxidation Catalyst (DOC) Inlet Temperature Sensor	X			X	
ATS DOC Outlet Temperature Sensor	X			X	
ATS Diesel Particulate Filter (DPF) Inlet Pressure Sensor	X			X	
ATS DPF Outlet Pressure Sensor	X			X	
ATS DPF Outlet Temperature Sensor	X			X	
ATS Doser Block Assembly	X			X	
ATS Electrically-Heated DEF Lines		X			
ATS Fuel Doser Valve	X			X	
ATS Oxidation Catalyst	X			X	
ATS Particulate Filter	X			X	
ATS Selective Catalytic Reduction (SCR) Catalyst	X			X	
Automatic Engine Shutdown Timer - Sleep Cab Tractors: Includes Auxiliary Technologies (Battery or Diesel Auxiliary Power Unit, Fuel-Operated Heater, Engine Start-Stop)					X
Automatic Engine Shutdown Timer - Vocational					X
Automatic Tire Inflation System					X
Cam Sensor			X		
Camshaft Position Sensor	X			X	

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Components ¹	Diesel Emission 2010		Gasoline Evaporative Emission 2011 ²	GHG21 ³	
	Detroit Engine	DTNA Installed ⁴	DTNA Installed	Detroit Engine	DTNA Installed ⁵
Catalytic Converter			X		
Charge Air Cooler		X			
Charge Air Cooler Outlet Sensor	X			X	
Chassis Fairing Skirts					X
Coolant Outlet Temperature Sensor	X			X	
Coolant Sensor			X		
Crank Sensor			X		
Crankshaft Position Sensor	X			X	
Data Link Connector		X	X		X
Delta P Sensor	X			X	
Drive Wheel Fairings					X
Engine Coolant Temp Sensor			X		
Engine Control Module (ECM)			X		
Engine Start/Stop System					X
Evap Canister & Evap Canister Vent Solenoid			X		
Exhaust Gas Piping from the Turbocharger out to the Last ATD		X			
Exhaust Gas Recirculation (EGR) Cooler	X			X	
EGR Valve & Actuator	X			X	
Exhaust Manifold & Exhaust Manifold Gaskets			X		
Exhaust Pipes (Between Exhaust Manifold & Catalyst)			X		
Fuel Injectors	X		X	X	
Fuel Lines			X		
Fuel Rail			X		
Fuel Tank			X		
Fuel Tank Fairings (Chassis Fairings)					X
Fuel Tank Pressure Sensor			X		
Fuel Temperature Sensor	X			X	
Gap Reducing Fairings					X
Gas Cap			X		

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Components ¹	Diesel Emission 2010		Gasoline Evaporative Emission 2011 ²	GHG21 ³	
	Detroit Engine	DTNA Installed ⁴	DTNA Installed	Detroit Engine	DTNA Installed ⁵
High Pressure Fuel Pump	X			X	
Ignition Coils			X		
Intake Manifold Pressure Sensor	X			X	
Intake Manifold Temperature Sensor	X			X	
Intake Throttle Valve & Adaptor	X			X	
Knock Sensors			X		
Malfunction Indicator Lamp (MIL)		X	X		X
Manifold Absolute Pressure (MAP) Sensor			X		
Mass Air Flow Sensor			X		
Motor Control Module (MCM)	X			X	
Neutral at Stop - Allison Automatic Transmissions ⁶					X
Neutral Coast - Detroit eCoast, Cummins/Eaton Smart-Coast ⁶					X
Oxygen (O ₂) Sensors			X		
Oil Fill Cap			X		
Oil Temperature Sensor	X			X	
Positive Crankcase Ventilation (PCV) Hose (Engine to Air Intake Pipe)			X		
Predictive Cruise Control - Detroit Intelligent Powertrain Management (IPM), Cummins Predictive Cruise Control					X
Purge Control Valve			X		
Rear Axles ⁶					X
Roof Spoilers					X
Side Extenders					X
Spark Plugs ⁷			X		
Spark Plug Wires			X		
Temperature-Barometric Air Pressure Sensor					X
Throttle Body			X		
Throttle Pedal			X		
Tire Pressure Monitoring System					X

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Components ¹	Diesel Emission 2010		Gasoline Evaporative Emission 2011 ²	GHG21 ³	
	Detroit Engine	DTNA Installed ⁴	DTNA Installed	Detroit Engine	DTNA Installed ⁵
Tires ⁸					X
Transmissions ⁶					X
Transmission Control Module			X		
Transmission Speed Sensor			X		
Turbo Speed Sensor	X			X	
Turbocharger	X			X	
Vapor Lines			X		
Vehicle Speed Limiter					X
Vehicle Speed Sensor (Transmission Main Shaft)		X			X
Wait to Start Indicator/Lamp					X

¹ Per California Emission Control Systems Warranty Statement, DTNA must warrant the emission control system components for the vehicle in accordance with either Diesel Emission 2010 or Gasoline Evaporative Emission 2011, whichever is applicable.

² Coverage period is 5 years/50,000 miles (80 500 km), whichever occurs first.

³ GHG21 applies to units built on or after January 1, 2021. Units built prior to January 1, 2021, have GHG14/GHG17 coverage, respectively.

⁴ The following are excluded under Emissions coverage but are covered under standard New Vehicle Warranty coverage:

- ATS ACM Mounting Bracket and Protective Cover
- DEF Tank Mounting Brackets/Hardware
- DEF Pump Mounting and Protective Cover

⁵ Diesel Emission 2010 components and emission-related defects in the marked components listed are included in this coverage. Coverage duration:

- Spark-ignition engines and light heavy-duty vehicles – 5 years/50,000 miles (80 500 km), whichever occurs first
- Compression ignition engines and medium and heavy heavy-duty vehicles – 5 years/100,000 miles (161 000 km), whichever occurs first

⁶ To the extent warranted under component manufacturers’ GHG21 emission-related warranty responsibilities, as detailed in warranty documentation.

⁷ Spark plugs are warranted under Basic Chassis coverage or until the first required maintenance, whichever comes first.

⁸ Coverage period is 2 years/24,000 miles, whichever occurs first. File claims directly to tire manufacturer.

3.7 Coverage Exclusions

The following components, parts, or conditions are specifically excluded from coverage under this Warranty.

Note: Parts found defective prior to installation must be filed as a Parts Adjustment Request (PAR) to the Parts Distribution Center (PDC).

Aerodynamic Wheel Covers

Aerodynamic wheel covers are excluded from coverage under Warranty.

Note: Mounting loose covers on Freightliner Cascadia trucks may be reimbursed; varies by model/specifications.

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Air Springs

Tolerance buildup can occur during the assembly process of the rear suspension and rear cab air springs, and can cause the springs to have the appearance of being crooked, misaligned, or improperly installed. This tolerance buildup is not detrimental to the operation of the vehicle and will not have an effect on either the quality of the ride or the durability of the components or vehicle. Straightening of these springs is not covered under Warranty.

Alignment of Axles/Wheels/Steering Wheel

Each DTNA vehicle manufacturing plant uses an integrated alignment system to align axles and wheels and to center the steering wheel to DTNA specifications. Realignment or readjustment of these items, including steering stops and steering poppets, is not covered under Warranty.

Any special alignment settings at the request of the Owner must be handled between the service location and Owner after delivery from factory. These special adjustments are not covered under Warranty.

Axle Breather Vents

During the manufacturing process, an oil run or drip stain may appear at the breather vent. Removing the vent, applying pipe sealant to the threaded vent fitting and re-installing the vent is unnecessary. Removing the axle breather vent and re-sealing the threaded fitting is not covered under this Warranty.

Cab Interior Components

The repair or replacement of cab interior components that are rendered unserviceable due to normal wear or abuse are not covered under this Warranty.

These components include, but are not limited to:

- Curtains
- Floor coverings (including floor mats)
- Painted trim components
- Steering wheel
- Steering wheel wrap
- Upholstery
- Window shades

Chrome Surfaces, Aluminum, and Stainless Steel Components

The following items ARE covered under this Warranty:

- Chrome peeling off in sheets
- Chrome cut at mounting bolts due to over-torque at the factory
- Bubbles in the chrome that are not caused by rock chips and/or general rust conditions
- Isolated rust along seams or welds

The following items are NOT covered under this Warranty:

- General rust (e.g., rust on the unfinished backside of a bumper)

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- Dimpling at the mounting bolts
- Staining, bluing, and/or yellowing that can be cleaned with a quality cleaning product
- Rust, pits, and/or nicks caused by road wash or road debris breaking the chrome surface
- Streaks/stains/corrosion caused by severe wash solutions or corrosive road salts/chemicals

Claims pertaining to failures of chrome surfaces, aluminum, and stainless steel components will not be processed unless a clear photo is provided that adequately shows the defect.

Clutch Adjustment

Clutch adjustments are normally required due to clutch wear and are considered normal maintenance. However, if the clutch adjustment is found to be outside of Company specifications during, or prior to, product in-service, a claim will be accepted on a one-time basis.

Claims for clutch adjustments will not be accepted unless the adjustment is found to be outside of Company specifications using the special clutch adjustment measuring tools provided by Company (e.g., adjusting the clutch to satisfy feel will not be accepted as Warranty).

Competition

Warranty will become void on any product that is used in competition including, but not limited to:

- Racing
- Tractor pulls
- Other motor sports

Consumable Parts

Parts that are subject to consumption during their normal service life and are routinely replaced during normal maintenance services are covered up to 15,000 miles (24 000 km) for all DTNA vehicles except TBB bodies and chassis. TBB consumable parts are covered up to 30 calendar days from the date of in-service. These items are:

- Antennas (exception: satellite radio antennas)
- Ashtrays
- Belts
- Brake linings
- Cigarette lighter assembly
- Clutch brake
- Clutch linings
- Data logger batteries
- Desiccant cartridges
- Fire extinguishers
- Flash tubes
- Fluorescent ballast and tubes
- Fuses
- Gladhand
- Hosetennas

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- Light bulbs*
- Lower center bumper air dam
- Mattresses
- Mud flaps
- Mud flap mounting brackets
- Caps (including, but not limited to, DEF, fuel, radiator, surge tank)
- Receiver-drier filter
- Trailer air hoses
- Trailer electrical cables
- Windshield washer nozzles
- Wiper arms and blades (TBB makes - wiper blades only)

* Sealed light and LED assemblies are not considered consumable.

The cost of consumable parts which are not reusable due to needed warrantable repairs is covered by this Warranty; examples include but are not limited to:

- Antifreeze
- Coolant
- Filters
- Fluids
- Grease/lubricants
- Oil

Corrosion

Coverage provides Warranty against corrosion to any metal or metal alloy part of the vehicle. Rust or corrosion to specific components and/or caused by certain conditions are excluded from all Company Warranty coverage and will not be paid under Basic Vehicle, Cab Structure, Cab Corrosion, Aftermarket Parts Warranty, or Extended Service Coverage.

Exclusions to corrosion Warranty include, but are not limited to, the following:

- Corrosion caused by general rust (e.g., rust on the unfinished backside of a bumper)
- Surface rust caused by chips or scratches in the paint or chrome surfaces
- Corrosion caused by high-pressure washing, severe wash solutions, cleaning solvents, detergents, compounds
- Corrosion caused by salinity in the environment or corrosive salts and/or chemicals used on the road surface
- Corrosion caused by acid rain or other industrial fallout
- Corrosion due to improper prevention measures during storage or use
- Corrosion or rust on tone rings, rotors, or drums
- Corrosion due to environmental damage (including ocean spray); airborne fallout (includes chemicals, tree sap, etc.), or other atmospheric conditions or other acts of nature
- Corrosion due to improper use, misuse, or abuse, negligence, including improper or insufficient maintenance

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Damage

The following are not covered under Warranty:

- Damage caused by use of the vehicle in any application that is not approved or is inconsistent with build specifications
- Damage resulting from improper use or misuse or abuse, negligence, improper operation, improper or insufficient maintenance (including, but not limited to, failure to maintain vehicle as outlined in the Driver's/Operator's and Maintenance Manuals), overloading, unauthorized modifications, accidents, or operation at excessive speeds
- Environmental damage, including airborne fallout (including chemicals, tree sap, etc.), or other atmospheric conditions, hailstones, or other acts of nature
- Damage caused by road salts/chemicals or cleaning solvents, detergents, or compounds
- Storage deterioration including damage caused by improper or insufficient storage or maintenance
- Damage caused by road hazards or road conditions
- Damage caused during shipping/transport after initial delivery of vehicle
- Damages (including peeling or flaking) caused by high-pressure washing or steam cleaning
- Damages occurring after in-service (e.g., from rock chips)
- Damages caused by customer-installed sealer in air conditioning systems
- Damages caused by non-factory approved engine horsepower/torque upgrades
- Damage due to vibration associated with misapplication or improper operation of drivetrain components
- Damage due to terrorist activities
- Damage due to acts of war

Engine

Any DTNA engine in a vehicle on which odometer mileage has been changed so the mileage cannot be readily determined is excluded from Warranty.

Non-DTNA engines, including all of its components as supplied by the non-Company engine manufacturer, are excluded from Warranty but are warranted separately by the manufacturer of the engine. For non-DTNA engine warranty or service, contact the engine manufacturer's authorized sales and service facility.

Engine Brakes, Air Compressors, and Other Proprietary Engine Components

The engine manufacturer installs most air compressors and engine brakes. Any failure of a proprietary engine component or Jake Brake® component must be filed directly to the engine manufacturer.

Failures on Company engines and non-proprietary engine components can be filed through DTNA.

Exhaust System Clamps

During the early life of the vehicle or when the engine is cold, many exhaust clamps exhibit a soot trace. This condition is self-correcting and does not require adjustment, tightening, or replacement of the clamp. Claims for adjusting or tightening will not be paid under Warranty.

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Fifth Wheels

Adjustment of the locking mechanism, bushings, slide locking plungers, and the repair or replacement of lock guards are considered routine maintenance and are not covered under this Warranty.

Glass, Mirrors, Lens

Conditions excluded from Warranty include but are not limited to:

- Breakage
- Chips
- Scratches
- Cracks

Initial Operating Period

During a vehicle’s Initial Operating Period (IOP), repair on components found loose and included on a scheduled maintenance table may be reimbursed by Company. The IOP for DTNA vehicles is as follows:

Make	IOP ¹
Freightliner, Western Star	Up to 15,000 miles/24 000 km ²
FCCC	Up to 25,000 miles/40 000 km ²
TBB Bodies and TBB Chassis ³	Up to 6 months from in-service date

¹ IOP does not apply to powertrain components.

² The IOP begins at zero (0) distance; the in-service distance does not affect the IOP distance limits.

³ TBB applications utilizing FCCC chassis retain the FCCC IOP separate from the TBB body.

Routine maintenance, servicing, and adjustment, as defined in the applicable Vehicle Maintenance Manual and Driver’s Manual, are excluded from Warranty.

Periodic adjustment or re-torque of wheel bearings, wheel lug nuts, and suspension U-bolts are considered maintenance adjustments and are not covered under Warranty.

Vibrations, squeaks, rattles, loose fittings/clamps, hose fitting leaks, loose nuts/bolts/screws, and loose electrical connections may develop during the initial trip(s) of the vehicle; associated repairs/adjustments are covered under Basic Warranty unless the distance at which the condition occurs exceeds the published maintenance interval for the component.

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- Components included on a scheduled maintenance table that have loosened at a time or distance exceeding the first scheduled maintenance or outside the IOP, whichever is greater, are not covered under Warranty and are the responsibility of the customer.

Components Found Loose and Included on a Scheduled Maintenance Table	Prior to First Scheduled Maintenance	After First Scheduled Maintenance
Within IOP	File Claim	File Claim
Outside IOP	File Claim	Customer Responsibility

- Components that do not appear on scheduled maintenance tables are not subject to IOP limitations and are covered per the applicable coverage and exclusions.

Consumable items are addressed separately from IOP; see [Consumable Parts](#) elsewhere in this section for details.

Exclusions from Warranty during the IOP are:

- Cab, hood, and fender-mounted mirrors are adjusted at the factory but may be retracted by the transporter to prevent damage during transport. Subsequent adjustments and tightening of mirror mounting hardware are considered part of the routine preparation of the vehicle before Customer delivery. Claims for adjusting the mirrors or tightening of the attaching hardware will not be paid under Warranty during or after the IOP.
- Claims for re-routing of electrical wiring, hoses, or lines which meet DTNA’s routing standards will not be paid under Warranty during or after the IOP. However, if during the IOP, evidence of a potential failure (e.g., rubbing or chaffing that would lead to a short in a wire or a hole in a hose/line) is found where a line, hose, or electrical wiring is mis-installed and is making contact with one of the following, a one-time claim for correcting the routing will be accepted:
 - Hot surface
 - Moving part
 - Sharp edge

Such claims should be filed with *28 - Part Improperly Installed* as the Cause code. Keep photos that clearly show evidence of rubbing or chaffing due to mis-installation on file.

Note: Preventative re-routing for other conditions not listed above is not considered warrantable. However, if a line, hose, or electrical wiring actually fails (i.e., leaks or shorts) due to rubbing or chaffing on any surface, such failures are covered per the applicable coverage and exclusions.

- Final preparation of the vehicle for Customer delivery to include cleaning/vacuuming interior of cab, washing windows, washing the exterior of the vehicle, and polishing exterior chromed or painted surfaces are considered as ordering location responsibilities. Claims for these activities will not be paid under Warranty during or after the IOP.

Loose Components

During the manufacturing process, certain components are placed in the cab of the vehicle or strapped down to the chassis. It is the service location’s responsibility to mount these shipped loose items in the correct location on the vehicle. Mounting the shipped loose items below will not be covered under Warranty.

These items include, but may not be limited to:

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- Aerodynamic wheel covers
 - Exception: Mounting covers on Freightliner Cascadia trucks may be reimbursed; varies by model/specifications
- Antennas
- Chrome lug nut covers
- Decals & paperwork
- Driver's pouch
- Fire extinguishers
- Jacks
- License plate brackets
- Mattress
- Reflectors with flares
- Reflectors without flares
- Spare wheels/tires
- Tire inflation hoses
- Trailer cables (air/electrical)
- Winter fronts

Misapplication of Product

The Warranty on any product used inconsistent with its specified vocation/application will be downgraded to the Warranty that is consistent with product use. Any and all claims associated with the misapplication of the product will be subject to chargeback.

Miscellaneous Expenses

Premium charges and work not directly related to the repair or replacement of a warranted part are not reimbursed, unless specifically stated elsewhere in the applicable Warranty coverage. Examples include, but are not limited to:

- Federal, state, provincial, and local taxes
- Travel expenses
- Loss of revenue
- Customer labor, including overtime labor
- Downtime
- Driver's expenses
- Cost of rental equipment
- Loss of cargo, including perishable cargo
- General housekeeping and bulk shop supplies (e.g., shop rags, solvents, sweeping compounds, coveralls, etc.)
- Communication charges
- Towing/road call assistance
- For non-powertrain component repairs, the removal, repair, or replacement of:

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- Components/parts and optional items that are not sold or installed by Company
- Equipment installed by a body builder, customer, or service location
- Dynamometer testing on non-Company engines after repairs have been performed
- Shop hardware supplies that are not itemized on the claim as "parts used" (e.g., common bolts, washers, nuts, tie straps, cotter pins, etc.)
- Time spent waiting at a counter to obtain a part, etc.
- Environmental fees, cleanup, or other charges
- Cost of emergency services

Modifications to Original Equipment

Company does not warrant product modifications or equipment installations unless performed at a Company Custom Truck Services (CTS) Center. In addition, the extra time necessary to remove body builder-installed items and/or equipment to work on a warrantable repair is not covered under this Warranty unless Company sells the complete chassis/body/equipment as a package.

If service locations or Customers perform any product modifications or equipment installations, to the extent these modifications or equipment installations adversely affect other vehicle components or vehicle performance, Company shall not accept any product liability or claims under the terms of the product Warranty. These claims become the sole responsibility of the person performing the modifications or equipment installations.

Paint

The following exclusions to paint warranty include, but are not limited to:

- Complete chassis re-painting to repair paint damages
- Damages occurring after in-service (e.g., from rock chips)
- Peeling/flaking caused by high-pressure washing or steam cleaning
- Rusting of painted bumpers
- Removal and/or replacement of decals, striping, and/or lettering not applied by Company

Specific areas of the vehicle are deliberately not painted or are not painted to any standard; paint repairs are not warrantable to such areas. These areas include:

- Underside of the hood, including the inside of the wheel wells
- Underside of the roof-mounted air fairings
- Underside of the exterior sun visor
- Inside of the side-mounted air fairings
- Inside of the bumper
- Aftertreatment devices

Gloss

Gloss claims pertaining to gloss issues on vehicles painted with low-gloss colors (as identified in the Truck/Bus Sales Order) will not be covered under Warranty.

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Routine Maintenance

Routine or preventative maintenance, servicing, and adjustment, as defined in the applicable Vehicle Maintenance Manual and Driver's Manual, are excluded from Warranty.

Periodic adjustment or re-torque of wheel bearings, wheel lug nuts, and suspension U-bolts are considered maintenance adjustments and are not covered under Warranty.

Vibrations, squeaks, rattles, loose fittings/clamps, hose fitting leaks, loose nuts/bolts/screws, and loose electrical connections may develop during the initial trip(s) of the vehicle and these types of repairs/adjustments are covered under Warranty one (1) time during the applicable IOP unless excluded above.

Reminder: After the IOP, these developments are the result of use and their repair/adjustment activities are considered routine maintenance and thus excluded from Warranty.

Tampering/Misuse

Conditions resulting from tampering, misuse, improper adjustments, alteration, accident, failure to use recommended fuel or non-performance of required maintenance services are not covered.

It is a violation of U.S. federal law to alter the engine, exhaust plumbing, aftertreatment system, diesel exhaust fluid system, or other vehicle components in any way that would bring the engine/vehicle out of compliance with certification requirements [Ref: 42 U.S.C. §7522(a)(3)]. It is the Owner's responsibility to maintain the vehicle so that it conforms to EPA regulations.

Test Products

Any product(s) used in testing must be identified to the Warranty Department and accommodations must be made for claims that relate to the test item(s).

Any product used in endurance testing, such as the Altoona Test, are void of all Warranty, including but not limited to New Product Warranty, Aftermarket Parts Warranty, Extended Service Coverage, or any Company additional or used truck coverage.

Tires and Tire Balancing

The tires are not covered under this Warranty, but are warranted separately by the tire manufacturer. Tire balancing is not covered under Warranty.

Transmissions (Non-Company)

Allison transmissions and components are not covered under this Warranty, but are warranted separately by Allison. Information regarding Allison's warranty is provided for informational purposes only and is subject to change. For warranty or service information, contact Allison's authorized sales and service facility.

Eaton Hybrid transmissions are not covered under this Warranty.

3.8 Transfer of Warranty

This Warranty is transferable to a subsequent Owner if it has not expired. To ensure the Owner receives proper Warranty recognition, the ownership information should be updated in OWL.

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3.9 Change of Owner Address Information

To ensure Company's ability to reach the current Owner with Recall and Field Service campaign information, the Owner's information must be updated whenever there is a change to the Owner's name or address.

3.10 Product Improvement

Company reserves the right to make improvements or changes to the product at any time without incurring any obligation to make such changes or improvements to any other vehicle.

3.11 Owner's Responsibilities

DTNA provides Owner's Warranty Information booklets for Company products. When the Owner first receives a Company product, the service location should review the Owner's Warranty Information booklet(s) with the Owner. It is important that the new Owner becomes familiar with the contents about Warranty, parts replacement that affects emission controls, and maintenance service. It is the Owner's responsibility to ensure the product is maintained as outlined in the Driver's/Operator's and Maintenance Manuals and to maintain the vehicle so that it conforms to EPA regulations.

To initiate Warranty, the customer must complete and sign the Warranty Start Form (WAR275); service locations keep the signed form on file and register the vehicle with DTNA for Warranty.

As soon as a problem exists, the Owner is responsible for presenting the product to an Authorized Service Location. The Warranty repairs should be completed in a reasonable amount of time. The Owner should also be aware that DTNA may deny Warranty coverage if the product has failed due to abuse, neglect, improper maintenance, or unapproved modifications. DTNA recommends that Owners retain all receipts regarding product maintenance but Company cannot deny Warranty solely for the lack of receipts.

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