



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
7011EC18

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
BUYER 33 304-558-2402

VENDOR

*709035314 304-485-4410
 MATHENY MOTOR TRUCK COMPANY
 PO BOX 1304
 PARKERSBURG WV 26102-1304

SHIP TO

DIVISION OF HIGHWAYS
 EQUIPMENT DIVISION
 ROUTE 33
 BRUSHY FORK ROAD
 BUCKHANNON, WV 26201
 304-472-1750

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
03/17/2011	NET 30 DAYS	GROUND	BUCKHANNON, WV	PREPAID
BID OPENING DATE: 04/21/2011		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	EA		FREIGHTLINER WITH 287-36 MONROE EQUIP.	\$156,470.00	\$156,470.00
	64,000	GVW CAB AND CHASSIS, COMBINATION				
<p>REQUEST FOR QUOTATION (RFQ) OPEN END CONTRACT</p> <p>THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF HIGHWAYS, IS SOLICITING BIDS FOR AN OPEN END CONTRACT TO PROVIDE 64,000 GVW CAB AND CHASSIS COMBINATION DUMP/SPREADER PER THE ATTACHED SPECIFICATIONS.</p> <p>TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION WILL BE RECEIVED THROUGH THE CLOSE OF THE MANDATORY PRE-BID MEETING. TECHNICAL QUESTIONS MUST BE SUBMITTED IN WRITING TO SHERI SLONE WEST VIRGINIA STATE PURCHASING DIVISION. VENDORS MAY SUBMIT QUESTIONS PRIOR TO THE MANDATORY PRE-BID VIA MAIL AT THE ADDRESS LISTED IN THE BODY OF THIS RFQ, VIA FAX AT 305-558-4115, OR VIA EMAIL AT SHERI.D.SLONE@WV.GOV. WRITTEN QUESTIONS WILL ALSO BE ACCEPTED DURING THE MANDATORY PRE-BID. DEADLINE FOR ALL TECHNICAL QUESTIONS IS THE CLOSE OF THE PRE-BID MEETING. NO ADDITIONAL QUESTIONS WILL BE ACCEPTED AFTER THE PRE-BID MEETING. ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL ADDENDUM TO BE ISSUED BY THE PURCHASING DIVISION AFTER THE MANDATORY PRE-BID MEETING.</p>						

RECEIVED

2011 MAY -5 PM 1:11

WV PURCHASING DIVISION

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
<i>M.A. Matheny</i>	304-485-4418	05/04/2011
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
CEO	55-032-0770	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
5. Payment may only be made after the delivery and acceptance of goods or services.
6. Interest may be paid for late payment in accordance with the *West Virginia Code*.
7. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
10. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern the purchasing process.
11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.htm and is hereby made part of the agreement. Provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.
15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



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SHIP TO

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 EQUIPMENT DIVISION
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 BRUSHY FORK ROAD
 BUCKHANNON, WV
 26201 304-472-1750

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
03/17/2011				

BID OPENING DATE: 04/21/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
MANDATORY PRE-BID						
<p>A MANDATORY PRE-BID WILL BE HELD ON TUESDAY 04/05/2011 AT 10 AM, BRUSHY FORK RD IN BUCKHANNON, WV 26201. ALL INTERESTED PARTIES ARE REQUIRED TO ATTEND THIS MEETING. FAILURE TO ATTEND THE MANDATORY PRE-BID SHALL RESULT IN DISQUALIFICATION OF THE BID. NO ONE PERSON MAY REPRESENT MORE THAN ONE BIDDER.</p> <p>AN ATTENDANCE SHEET WILL BE MADE AVAILABLE FOR ALL POTENTIAL BIDDERS TO COMPLETE. THIS WILL SERVE AS THE OFFICIAL DOCUMENT VERIFYING ATTENDANCE AT THE MANDATOR PRE-BID. FAILURE TO PROVIDE YOUR COMPANY AND REPRESENTATIVE NAME ON THE ATTENDANCE SHEET WILL RESULT IN DISQUALIFICATION OF THE BID. THE STATE WILL NOT ACCEPT ANY OTHER DOCUMENTATION TO VERIFY ATTENDANCE. THE BIDDER IS RESPONSIBLE FOR ENSURING THEY HAVE COMPLETED THE INFORMATION REQUIRED ON THE ATTENDANCE SHEET. THE PURCHASING DIVISION AND THE STATE AGENCY WILL NOT ASSUME ANY RESPONSIBILITY FOR A BIDDER-S FAILURE TO COMPLETE THE PRE-BID ATTENDANCE SHEET. IN ADDITION, WE REQUEST THAT ALL POTENTIAL BIDDERS INCLUDE THEIR E-MAIL ADDRESS AND FAX NUMBER.</p> <p>ALL POTENTIAL BIDDERS ARE REQUESTED TO ARRIVE PRIOR TO THE STARTING TIME FOR THE PRE-BID. BIDDERS WHO ARRIVE LATE, BUT PRIOR TO THE DISMISSAL OF THE TECHNICAL PORTION OF THE PRE-BID WILL BE PERMITTED TO SIGN IN. BIDDERS WHO ARRIVE AFTER CONCLUSION OF THE TECHNICAL PORTION OF THE PRE-BID, BUT DURING ANY SUBSEQUENT PART OF THE PRE-BID WILL NOT BE PERMITTED TO SIGN THE ATTENDANCE SHEET.</p>						
EXHIBIT 10						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
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03/17/2011				
BID OPENING DATE: 04/21/2011		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
REQUISITION NO.:						
ADDENDUM ACKNOWLEDGEMENT						
I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.						
ADDENDUM NO.'S:						
NO. 1 .YES.....						
NO. 2 .YES.....						
NO. 3						
NO. 4						
NO. 5						
I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.						
VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.						
 SIGNATURE MATHENY MOTOR TRUCK CO. COMPANY						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
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TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
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*709035314 304-485-4410
 MATHENY MOTOR TRUCK COMPANY
 PO BOX 1304
 PARKERSBURG WV 26102-1304

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DIVISION OF HIGHWAYS
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03/17/2011				

BID OPENING DATE: 04/21/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
..... 05/04/11 DATE						
NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE BID. REV. 09/21/2009 EXHIBIT 2 LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE UPON AWARD AND EXTENDS FOR A PERIOD OF ONE (1) YEAR OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING THIRTY (30) DAYS WRITTEN NOTICE. UNLESS SPECIFIC PROVISIONS ARE STIPULATED IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS, AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT. RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, SUBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND SHALL BE LIMITED TO TWO (2) ONE (1) YEAR PERIODS. CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE						

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ADDRESS-CORRESPONDENCE TO ATTENTION OF
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COMMODITY

*709035314 304-485-4410
 MATHENY MOTOR TRUCK COMPANY
 PO BOX 1304
 PARKERSBURG WV 26102-1304

SHIP TO

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 EQUIPMENT DIVISION
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03/17/2011				

BID OPENING DATE: 04/21/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM WITH THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p> <p>OPEN MARKET CLAUSE: THE DIRECTOR OF PURCHASING MAY AUTHORIZE A SPENDING UNIT TO PURCHASE ON THE OPEN MARKET, WITHOUT THE FILING OF A REQUISITION OR COST ESTIMATE, ITEMS SPECIFIED ON THIS CONTRACT FOR IMMEDIATE DELIVERY IN EMERGENCIES DUE TO UNFORESEEN CAUSES (INCLUDING BUT NOT LIMITED TO DELAYS IN TRANSPORTATION OR AN UNANTICIPATED INCREASE IN THE VOLUME OF WORK).</p> <p>QUANTITIES: QUANTITIES LISTED IN THE REQUISITION ARE APPROXIMATIONS ONLY, BASED ON ESTIMATES SUPPLIES BY THE STATE SPENDING UNIT. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACT SHALL COVER THE QUANTITIES ACTUALLY ORDERED FOR DELIVERY DURING THE TERM OF CONTRACT, WHETHER MORE OR LESS THAN THE QUANTITIES SHOWN.</p> <p>ORDERING PROCEDURE: SPENDING UNIT(S) SHALL ISSUE A WRITTEN EQUIPMENT CONTRACT ORDER (FORM NUMBER WV-35) FOR COMMODITIES COVERED BY THIS CONTRACT. THE ORIGINAL WV-35 MUST BE SENT TO THE PURCHASING DIVISION OF THE DEPARTMENT OF ADMINISTRATION. AFTER APPROVAL AND ENCUMBRANCE, ONE COPY OF THE PURCHASE ORDER WILL BE RETURNED TO THE SPENDING UNIT AND ONE COPY FORWARDED TO THE VENDOR AS AUTHORIZATION FOR SHIPMENT. NO ORDER IS VALID UNLESS APPROVED AND ENCUMBERED BY THE PURCHASING DIVISION.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FUTHER ORDER.</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
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03/17/2011				

BID OPENING DATE: **04/21/2011** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
	REV. 5/2009					
	EXHIBIT 4					
	<p>LOCAL GOVERNMENT BODIES: UNLESS THE VENDOR INDICATES IN THE BID HIS REFUSAL TO EXTEND THE PRICES, TERMS, AND CONDITIONS OF THE BID TO COUNTY, SCHOOL, MUNICIPAL AND OTHER LOCAL GOVERNMENT BODIES, THE BID SHALL EXTEND TO POLITICAL SUBDIVISIONS OF THE STATE OF WEST VIRGINIA. IF THE VENDOR DOES NOT WISH TO EXTEND THE PRICES, TERMS, AND CONDITIONS OF THE BID TO ALL POLITICAL SUBDIVISIONS OF THE STATE, THE VENDOR MUST CLEARLY INDICATE SUCH REFUSAL IN HIS BID. SUCH REFUSAL SHALL NOT PREJUDICE THE AWARD OF THIS CONTRACT IN ANY MANNER.</p>					
	REV. 3/88					
	<p>NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p>DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p>					
	<p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p>					

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
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TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
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03/17/2011				

BID OPENING DATE: **04/21/2011** BID OPENING TIME: **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
SEALED BID						
BUYER: SHERI SLONE - FILE 33						
RFQ. NO.: 7011EC18						
BID OPENING DATE: 04/21/2011						
BID OPENING TIME: 1:30 PM						
PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:						
----- 304-485-2577 -----						
CONTACT PERSON (PLEASE PRINT CLEARLY):						
----- MIKE MATHENY -----						
***** THIS IS THE END OF RFQ 7011EC18 ***** TOTAL:						

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
EQUIPMENT DIVISION

BIDDER'S EVALUATION REPORT

PROCUREMENT SPECIFICATIONS FOR OPEN END CONTRACT
NO. 377-2-F

64,000 GVW CAB AND CHASSIS, STAINLESS STEEL
COMBINATION DUMP/SPREADER MUNI BODY, AND PISTON PUMP HYDRAULIC SYSTEM

NOTE TO BIDDER: Procurement Specification No. 377-2-F, Paragraph 2.0 recommends the completion and submittal of this Report with your bid. Purpose of this Report is to enable the West Virginia Division of Highways Evaluation Committee to make full and fair evaluation of the bid. Addendums in order, along with a summary of exception as a separate attachment, should be with Bidder's Evaluation Report. FAILURE TO SUBMIT THIS REPORT, COMPLETE IN ITS ENTIRETY, MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

Reference Requisition No.: 7011EC18

Bidder's Name: MATHENY MOTOR TRUCK COMPANY

Address: PO BOX 1304 PARKERSBURG WV 26102-1304

Telephone Number: 304-485-4418

Years Bidder has been registered to do business with the State of West Virginia: 89 YRS.

Years Company has been an authorized dealer for proposed unit: 4 YRS.

X3.2 Have you complied with all mandatory specifications? YES NO

X4.2 DELIVERY:

X4.2.1 Delivery date of completed representative unit: 120 Calendar Days After
Receipt of Purchase Agreement by successful vendor

X4.2.2 Guaranteed delivery date of balance of completed units: 240 Calendar Days After
Receipt of Purchase Agreement by successful vendor

NOTE: Vendor should type Bidder's Evaluation Report

The "Bidder's Evaluation Report" is available for download on Purchasing's Web site at www.state.wv.us/admin/purchase

X5.0 AWARD CRITERIA;

X5.1 Price per completed unit including minimum 2 year bumper to bumper parts and labor warranty :

\$156,470.00 per unit

If a 3 year bumper to bumper basic parts and labor warranty excluding normal wear items and misuse is available, please state price for completed unit:

INCLUDED ABOVE per unit
SEE ADDENDUM #2

X6.0 SPECIFICATIONS - GENERAL

X6.1 Manufacturer, model, series, and date of manufacture of proposed unit:

FREIGHTLINER, 114SD, M2, 3rd QTR. 2011 FOR PILOT

Is descriptive literature, fully describing proposed unit attached to your bid? YES NO

If not, why? _____

X6.2 Will the required number of service manuals, and complete parts list be delivered to the Equipment Division at Buckhannon upon completion of delivery of total units?

YES NO

Will the required Equipment Preventive Maintenance Form (Section X6.2 of Bidders Evaluation Report) be provided upon inspection of the pilot unit? YES NO

X6.2
2-10-00

EQUIPMENT PREVENTATIVE MAINTENANCE QUESTIONNAIRE

THIS FORM MUST BE COMPLETED IN ITS ENTIRETY BY SUCCESSFUL BIDDER OR MANUFACTURER'S TECHNICAL REPRESENTATIVE PRIOR TO DELIVERY OF PILOT MODEL TO THE WVDOH.

DESCRIPTION: _____ MAKE: _____

MODEL: _____ YEAR: _____ PURCHASE AMOUNT: _____

ENGINE: MAKE: _____ MODEL: _____ FUEL TYPE: _____

HORSEPOWER: _____ CYLINDER: _____ ENGINE SERIAL: _____

COOLING SYSTEM CAPACITY: _____

BELTS: DESCRIPTION: _____ PART NUMBERS: _____

GVW: _____ AXLE CAPACITY: FRONT: _____ REAR: _____

TIRES: FRONT MAKE & SIZE: _____

REAR MAKE & SIZE: _____

DIMENSIONS OF UNIT: LENGTH: _____ WIDTH: _____ LENGTH: _____

VENDOR CONTACT PERSON: _____ PHONE: _____

PARTS:

BATTERY MAKE: _____ MODEL: _____ CCA: _____

TOP OR SIDE POST: _____ DIMENSIONS: LENGTH _____ WIDTH _____ HEIGHT _____

SPARK PLUGS OR FUEL INJECTORS MAKE: _____ PART #: _____

FUEL PUMP OR INJECTION PUMP MAKE: _____ MODEL: _____

ALTERNATOR MAKE: _____ PART #: _____

STARTER MAKE: _____ PART #: _____

TURBO CHARGER MAKE: _____ PART #: _____

TRANS. MAKE: _____ MODEL: _____ AUTO/MANUAL: _____

HYDRAULIC PUMP MAKE: _____ MODEL: _____

FILTERS	MAKE	PART NO.	LUBRICANT	MANUFACTURER TYPE
---------	------	----------	-----------	-------------------

OIL _____	ENGINE _____
AIR INNER _____	TRANSMISSION _____
AIR OUTER _____	POWER STEERING _____
FUEL PRIMARY _____	HYDRAULIC _____
FUEL SECONDARY _____	DIFFERENTIALS _____
COOLANT _____	BRAKE FLUID _____
HYDRAULIC _____	COOLANT _____
OTHER _____	OTHER _____

X6.3 TRAINING:

Will training seminar be conducted on Preventive Maintenance, Operator and Mechanic Training
 YES NO

Will you conduct training with each purchase order against this open end contract?
 YES NO

Will training be conducted within 2 working days from the delivery of the pilot unit on the individual purchase order?
 YES NO

If NO, explain time frame _____

Will an Operator's Manual be furnished directly to Training Academy prior to the delivery of the pilot?
 YES NO

X6.4 If you are the successful vendor, will you furnish all training aids, i.e., videos, projectors, required in conducting the training?
 YES NO

X6.4.1 Will all manuals, booklets, etc. explaining preventive maintenance, operator procedures, and service schedule be delivered with each unit?
 YES NO
 If NO, explain SEE ADDENDUM #2

X6.5 WARRANTY AND SERVICE POLICY

Will the warranty and service you provide comply with all areas as stated in Section 6.5 of specifications
 YES NO

Is warranty literature attached?
 YES NO

Is a minimum two (2) year bumper to bumper basic parts and labor warranty excluding abuse and normal wear items included?
 YES NO

Describe:

SEE ATTACHMENT & ADDENDUM #2

Will the equipment have a valid and current state inspection sticker?
 YES NO

List all extended service contract coverages, published and not published, along with a cost as options. Also, provide manufacturers hours vs. miles conversion.

ONE HOUR EQUALS 39 MILES

SEE ATTACHMENT FOR EXTENDED WARRANTIES

X6.5 WARRANTY AND SERVICE POLICY QUESTIONNAIRE

THIS FORM MUST BE COMPLETED IN ITS ENTIRETY AND SUBMITTED WITH YOUR BID.

(If additional lines are needed, make copies of form.)

1. Define the terms of the standard warranty. If not offered, so state. (Attach copy)

PER 6.5: 2 YEAR BUMPER TO BUMPER ON CHASSIS & BODY

3 YEAR UNLIMITED MILES ENGINE WARRANTY

SEE ATTACHMENT

2. Define warranty service to be performed at DOH facilities and warranty service to be performed at manufacturer's representative facility. List name and location of manufacturer's representative.

DOH CAN PERFORM WARRANTY WORK AS LONG AS THEY MEET FREIGHTLINER'S

TRAINING, TOOLING & WARRANTY PROCEDURES.

MANUFACTURER'S REPRESENTATIVE: JOE MANZIONE, CRANBERRY TWN, PA

3. List locations for parts inventories that are within the State of West Virginia. Also, list availability levels, if known.

MATHENY MOTOR TRUCK CO., MINERAL WELLS, WV - \$1.8M

MCCOY FREIGHTLINER, WAYNE COUNTY, WV - NOT KNOWN

4. During the term of warranty, list the guarantee discount to manufacturer's published list price for parts that bidder will sell the parts to owner.

- A. Terms: Net 30 Manufacturer's published list price less: 25 % discount
- B. Terms: Net 60 Manufacturer's published list price less: 20 % discount
- C. Terms: Net 90 Manufacturer's published list price less: 15 % discount

5. During the term of warranty, will all manufacturers or engineering improvements be submitted to Division of Highways? X YES NO

6. During the term of warranty, list the guaranteed rates charged for repair to the unit.

A. Shop Rate \$ 90.00 per mechanic hour

B. Travel Time Charge \$ 90.00 per mechanic hour
(Specify if one-way) _____; port to port X

C. Mileage Charge \$ NONE per vehicle mile
(Specify if one-way) _____; port to port _____

D. Field Mechanic Rate \$ 90.00 per mechanic hour

E. Specify period of time that prices are in effect: 12 MONTHS

F. Surcharge for miscellaneous items: 15 %

X6.6 EVALUATION COMMITTEE REQUIREMENTS

Is all component specifications, product literature, component models provided for Evaluation Committee bid determination? YES NO

X6.7 Will all parts, equipment, accessories, material, design and performance characteristics not specified herein, but which are necessary to provide a complete unit, be furnished with the unit and conform in strength, quality of material, and quality of workmanship to those which are advertised and provided to the market in general by the unit industry?

YES NO

X6.7.1 Are all parts and accessories adequate and regularly supplied as standard to be included except those which may be duplications of specifications herein, and except these by specification are not to be furnished?

YES NO

X6.7.2 Are all standard safety features that are required by Federal and State statutes of law included?

YES NO

X7.0 SPECIFICATIONS OF THE QUOTED UNIT

The bidder should complete the following schedule in order for the Division to compare the actual bid unit to the specifications. Should the bidder except a requirement, then such exception may be only on the basis that such feature is not offered by the manufacturer. The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specifications.

X8.0 Specifications – Cab and Chassis

Manufacturer: FREIGHTLINER Model: M2114SD

Will a minimum 2 year basic bumper to bumper warranty including parts and labor be furnished? SEE ADDENDUM #2 YES NO

X8.1 GVWR Rating: 64,180 Lbs.

X8.2 Cab to Axle Dimensions: 126 Inches usable

X8.2.1 After frame length: 64 Inches

X8.3 Wheelbase: 240 Inches and is set forward design for snowplow application for various plows YES NO

X8.3.1 Have you adjusted wheelbase and CA dimension to provide the optimum legal weight distribution? YES NO

X8.3.2 BBC (Bumper to Back of Cab) 114 Inches excluding frame extension

X8.4 Frame:

Does the frame meet or exceed all Federal requirements for GVWR specified that extends forward beyond the grille a minimum of 14 inches? YES NO

X8.4.1 Frame material 120,000 PSI yield strength. Is frame extension a "parent rail" material? YES NO

X8.4.2 RBM: 3,217,200 million Ins/Lb. per rail Is an integral frame and frame extension Included YES NO

X8.4.2.1 Where engine and radiator adjustments are required, 3,217,200 million in lb. per rail (RBM).

X8.4.3 Is main frame and any required liners straight channel or offset channel, full length

X8.4.4 Is frame RBM approved by manufacturers Engineering Department? YES NO
Is it bolt on or welded extension? YES NO

X8.4.5 Does front frame accommodate the Department's standard hydraulic PTO shaft and pump, and the plow frame? YES NO

Does it provide easy service accessibility? YES NO

X8.4.5.1 Front frame mounted tow hooks YES NO

X8.4.5.2 Has the factory installed front bumper to be omitted YES NO

X8.5 Cab:

Manufacturers standard steel, aluminum and/or fiberglass with premium or manufacturers highest level interior trim with inside noise level rating not to exceed 80 dba in compliance with Federal regulations YES NO

Ambient temperature display for outside temperature YES NO

Is hood a tilt hood YES NO

Fenders steel and/or fiberglass YES NO

Is rear air bag suspension provided YES NO

Are inner fender panels adequate to keep materials from engine compartment YES NO

- X8.5.1 Cab door locks, both doors, keyed alike YES NO
- X8.5.2 Dual sun visors YES NO
- X8.5.3 Arm rests, both sides YES NO
- X8.5.4 Seats: Fully adjustable air ride high back with head rest, cloth covered both left hand and right hand sides YES NO
- Clearance between seats 20 inches**
- X8.5.5 Floor mats: Rubber floor mats throughout cab area with non-absorbent backing under mats YES NO
- X8.5.6 Turn signals: Manufacturers standard with hazard warning switch YES NO
- X8.5.7 Heater and defroster: Fresh air type, heaviest duty YES NO
- X8.5.8 Windshield wipers and washers: Manufacturer's heaviest duty "artic type" with intermittent feature with manufacturers largest reservoir filled with antifreeze type solvent YES NO
- X8.5.9 Instruments: Are all instruments dash mounted except where specified otherwise? YES NO
 Are all standard instruments supplied, including but not limited to the following: YES NO
- X8.5.9.1 Coolant, oil pressure gauges, to have both dial type readout and either an audible or visual alarm to warn operator when safe operating conditions are exceeded YES NO
- X8.5.9.2 Voltmeter or ammeter YES NO
- X8.5.9.3 Engine RPM tachometer YES NO
- X8.5.9.4 Speedometer with odometer YES NO
- X8.5.9.4.1 Are provisions for dual speedometer leads made available**
 SEE EXCEPTION REPORT YES NO
- X8.5.9.5 Primary air pressure gauge YES NO
- X8.5.9.6 Auxiliary air pressure gauge YES NO
 Is it combined with primary air pressure gauge YES NO
- X8.5.9.7 Air filter manufacturers heaviest duty dual element type that meets all requirements of extended engine warranty YES NO

- X8.5.9.8 Does unit have front air intake YES X NO
Is an air actuated or cable control valve provided to enable operator to divert air intake to engine compartment while in snow plowing application
 YES X NO
- X8.5.9.9 Is air filter restriction indicator gauge dash mounted X YES NO
- X8.5.9.10 Engine hourmeter controlled by engine operation X YES NO
- X8.5.9.11 Fuel level reading X YES NO
- X8.5.9.12 Parking brake dash controlled with indicator light X YES NO
- X8.5.9.13 Manufacturers best sound/weather insulation package for proposed cab
 X YES NO
- X8.5.9.14 Outside temperature control with in cab digital read out X YES NO
- X8.5.10 Rearview Mirrors:
- X8.5.10.1 West coast type power adjustable with convex spot mirror X YES NO
Size: 16.75"x5.1" PLUS CONVEX MIRROR SEE EXCEPTION REPORT
- X8.5.10.2 Both mirrors heated type with stainless steel composite X powder coated
 X or aluminum hardware X with corrosion resistance, heads, and fasteners
 X YES NO
- X8.5.11 Grab Handle: Right hand and left hand sides, internal or external mounting to rear of door opening
 X YES NO
- Are inside handles featured X YES NO Is one (1) outside, left, mounted grab handle with non-slip insert for bed aggregate inspection furnished X YES NO
- X8.5.12 Air horns, with snow shields if cab mounted, with adequate clearance for future installation of body dump cab protector
 X YES NO
- Does it have single air horn used without snow shield if mounted downward on frame rail under hood
 YES X NO
- X8.5.13 Unit includes lockable hand operated throttle control or electronic control for idle up and idle down for hydraulic flow rate
 X YES NO
- X8.5.14 Will manufacturer provide for stationary grille or grille with cutout area to allow tilt hood to clear snow plow mount
 X YES NO
- Is stone/gravel guard provided
 X YES NO
- X8.5.15 Air conditioning: Manufacturers fresh air type heaviest duty with APADS or equal RCD system including replaceable fresh air filter
 X YES NO

- X8.5.16 Radio: AM/FM stereo with weatherband radio feature YES NO
- X8.5.17 Glass: Manufacturers tinted safety glass (all locations) YES NO
- X8.5.17.1 Dual power windows YES NO
- X8.5.18 Manufacturers engine cover or dash mounted extended two (2) cup drink holder YES NO
- X8.5.19 Front mudflaps manufacturers standard for unit bid YES NO
- X8.5.20 Emergency triangle warning kit, with hold down stowed (fastened) in the cab
 Manufacturer & Model: GROTE 71422 YES NO
STIMPSONITE 130 SEE EXCEPTION REPORT
KING JAMES CO 1005
- X8.5.21 Manufacturers tilt steering column with cruise control feature YES NO
 OR
 Locking hand operated throttle steering wheel YES NO
 Diameter: 18 inches
- X8.5.22 Fire extinguisher – rechargeable with vehicle mount. Mounted in the cab for easy and quick access YES NO
 Manufacturer & Model: KIDDE 466225-01
- X8.5.23 **List any accessories not indicated above but are included in the manufacturer's standard cab**
SEE ATTACHED LITERATURE
-
- X8.5.24 **If you are the successful vendor, will you provide WVDOH with complete list of all filters required for normal maintenance on proposed unit.** YES NO
- X8.6 **Engine:**
 Is engine diesel YES NO 12.8 liter SEE EXCEPTION REPORT
 Peak HP 410 at 1800 RPM Torque 1450 lb ft. at 1240 RPM
 Is engine compliant and certified to meet US EPA 210 Emission Standards without using Federal EPA credits YES NO
 Manufacturer: DETROIT DIESEL Model: DD1.3
- X8.6.1 Will engine manufacturer make provisions for front mounted hydraulic pump to crankshaft pulley YES NO
 Manufacturer & Model: SPICER 1350

- X8.6.1.1 In block engine heater 1500 watt YES NO
- X8.6.1.1.1 Is electrical cable from the heater to plug one piece and waterproof, located left side under driver door YES NO
- X8.6.1.2 Fuel heater/water separator provided inside of engine compartment YES NO
 Manufacturer: ARTIC FOX SEE EXCEPTION REPORT
- X8.6.1.2.1 Engine fuel system equipped with primer pump YES NO
- X8.6.1.3 Exhaust:
 X8.6.1.3.1 Single vertical exhaust pipe with underbody muffler that will meet all Federal noise abatement requirements YES NO
 Exhaust to the passenger (right) side of unit YES NO
- X8.6.1.3.2 **Is tail pipe shielded or insulated to protect personnel from burns when entering or exiting the cab** YES NO
The shield is 180 degrees to 360 degrees and of non-rustable material such as stainless steel or aluminum YES NO
 SEE EXCEPTION REPORT
 Manufacturer: BURGAFLEX
- X8.6.1.3.3 Exhaust pipe with rain cap or exhaust turn out YES NO
- X8.6.2 **Jacob's Engine Brake** **Cummins C-Brake** **Mack Power Leash**
compression and exhaust **or equal** _____
- X8.6.3 Are engine components facing wheel areas, on both sides, and the areas to the rear of wheels shielded by means of rubber skirts supported by easily removable steel rods YES NO
- X8.6.4 Engine oil pan is zinc nickel plated aluminum or non-corrosive coated
- X8.7 Clutch: THIS SECTION WAS ELIMINATED BY ADDENDUM #2
- X8.7.1 Externally lubricated and manually adjusted with torque limiting clutch brake YES NO
- X8.7.2 Clutch adjustment set to specifications prior to delivery to the Department YES NO
- X8.7.3 **Is clutch dual plate ceramic clutch** YES NO
 Size: _____ inch **Kwik adjust (manual feature)** YES NO
 Manufacturer and model: _____ with 7 spring damper YES NO

- X8.7.4 Does clutch meet or exceed peak engine torque YES NO
- X8.8 Cooling System: Is it capable of maintaining engine temperature within the manufacturer's recommended range during continuous operation** YES NO
- X8.8.1 Does the system incorporate a thermostat and bypass for warm up YES NO
- Is it filled with permanent type Dex Cool extended life or equal antifreeze rated to a -30° F or lower** YES NO
- Is it a low silicate type antifreeze for diesel engines only YES NO
- X8.8.2 Is it the largest factory available engine cooling capacity compatible with engines and transmission referenced and for continuous high engine output under extreme temperatures and/or operating conditions due to prolonged snow plowing operations in low gears YES NO
- X8.8.3 Is unit fitted with provisions for visually monitoring coolant without necessitating removal of the cap from the radiator or expansion tank YES NO
- X8.8.4 Does the radiator mounting provide adequate clearance to facilitate the installation of a crankshaft driven PTO drive shaft** YES NO
- X8.8.5 Distance between the extreme tip of the radiator fan blade and the centerline of the crankshaft to insure adequate clearance for PTO drive shaft: 3"-5" inches**
- X8.8.6 Radiator and heater silicone hose manufacturer and model: GATES BLUE STRIPE**
- X8.9 Fuel Tanks:
- X8.9.1 Safety type aluminum fuel tanks as required by FMVSS YES NO
- X8.9.2 Single aluminum usable: 110 U.S. gallon; frame mounted YES NO**
- X8.9.3 Driver and passenger entrance steps-grated self cleaning safety step YES NO
- X8.9.3.1 Are all edges banded (skirting) on the outer perimeter YES NO
- X8.9.3.2 Top of first step above ground: 15.7 inches
- X8.9.4 Is a fuel draw system provided that meets all Federal 2010 emission standards** YES NO
- X8.10 Electrical System:
- X8.10.1 Type: Manufacturer's 12 volt negative ground system with manufacturers radio interference Suppression YES NO
- X8.10.1.1 Circuit breaker equipped, in easily accessible location, weatherproof YES NO

- X8.10.2 Three (3) ___ or four (4) heavy duty – 12 volt batteries, maintenance free with sealed terminals YES ___ NO
- X8.10.2.1 Reserve capacity: 780 minutes @ 80 degrees F
- X8.10.2.2 Cold crank AMPS: 4,500 total @ 0 degrees F
- X8.10.3 Alternator capacity: 160 AMPS with internal regulator YES ___ NO
- X8.10.4 Wiring: Heavy duty hypalon type or equal in heavy duty sheathing, bundled with lacing cords or non-metallic tie straps YES ___ NO
- X8.10.5 Lighting: Are provision made available for all required lighting on completed unit (number, location, and color) to conform to the West Virginia Motor Vehicle Code YES ___ NO
- X8.10.6 Auxiliary snow plow/salt spreader lighting package YES ___ NO
- X8.10.6.1 Will truck vendor provide rear tail lights ___ YES NO
- Truck vendor will provide 4 feet of wiring bundled at the end of the frame for body vendor hook up of tail lights and etc. in the dump bed body YES ___ NO
- X8.10.7 Will manufacturer or successful vendor ___ make provisions for manufacture approved wiring and weatherproof disconnect plug YES ___ NO
SEE EXCEPTION REPORT
- Manufacturer and Model: WEATHER PAC 1530027
- seven (7) pin connector YES ___ NO with ___ foot "pigtail" to operate combination left and right turn/park lights/auxiliary headlights YES ___ NO
- X8.10.7.1 Are provisions for weatherproof disconnect plug located at lower left front grille-bumper area YES ___ NO
- All wiring connections weatherproof with wiring encased in wire looms YES ___ NO
- X8.10.7.2 Is a 7 way trailer connection light socket mounted at rear of truck frame YES ___ NO
Manufacturer and Model: PHILLIPS (J560) 15720 SEE EXCEPTION REPORT
- X8.10.7.3 Has manufacturer provided body builder circuit interface capability with connection plug to be located at rear of frame for body builder connection to stop, tail, and marker light circuits, ignition controlled auxiliary feed to ground to provide splice free chassis wiring integrity YES ___ NO

X8.10.7.4 Has manufacturer provided body builder circuits – three (3) switches X YES NO
 located in the dash instrument panel with one (1) weather protected body builder
 connection box or module located at the rear under cab X YES NO
 * amps per channel, amp maximum output
 *SEE EXCEPTION REPORT X YES NO
 Do dash switches control the power module with LED backlighting X YES NO

X8.11 Power Train Overview:
 Do lubricants for front axle hubs and differentials, automatic transmission, transfer cases, and all
 rear differentials meet or exceed all appropriate MIL and SAE specifications for synthetic
 lubricants X YES NO
 all plugs identified as synthetic or painted red X YES NO

X8.11.1 Transmission: ALLISON 4500 RDS 6-SPEED
 transmission oil cooler X YES NO

X8.11.1.1 Does transmission torque capacity meet or exceed specified engine torque
 X YES NO

X8.12 Driveline:
X8.12.1 Manufacturer and Model: MERITOR 18N MAIN; 17T INTERAXLE

X8.13 Rear Axle:
X8.13.1 Manufacturer and Model: MERITOR RT-46-160P

X8.13.2 Is each unit equipped with driver controlled main locking differential in forward and rear axle
 that is manually cab controlled X YES NO

X8.13.3 Ratio: Does gear ratio determined give the vehicles the capability of a top speed of
 approximately 70 MPH YES X NO
 If not 70 MPH, please specify 69.7 MPH

X8.13.4 Is housing aluminum or other lightweight material YES X NO

X8.13.5 Rear wheel seals: SKF SCOTSEAL PLUS XL SEE EXCEPTION REPORT

X8.13.6 Drain plug, magnetic X YES NO

X8.14 Front suspension:
X8.14.1 Capacity at ground each front spring 10,000 lb.
 Total spring capacity 20,000 lb.

- X8.14.2 Are the front spring pins or bearings/bushing furnished with 360 degree grease grooves to insure adequate lubricant penetration YES NO
- X8.14.3 Are spring hangers heavy castings with sufficient pin and bearing surface to render trouble free service YES NO
- X8.15 Rear suspension: HENDRICKSON
- X8.16 Front Axle:
- X8.16.1 Capacity: 20,000 lbs.
- X8.16.1.1 Does the front axle, drag links, and tie rods have grease zerks installed YES NO
- X8.16.2 Heavy duty shock absorbers YES NO
- X8.16.3 Oil lubricated front wheel seals YES NO Manufacturer: SKF SCOTSEAL PLUS XL
SEE EXCEPTION REPORT
- X8.16.4 Does unit provide adequate tire clearance at maximum turning angles YES NO
- X8.17 Brakes
- X8.17.1.1 Type: Full air, with manufacturers ABS in compliance with the most current FMVSS requirements YES NO
- X8.17.2 Compressor: Manufacturer and Model: BENDIX BA-921 19.0 cu. ft.
- X8.17.3 Service Brake Size:
- X8.17.3.1 Front: 16.5" x 6.0" "S" cam OR power front disc brake system providing equal performance
- X8.17.3.2 Quick change type single OR double anchor pin if drum type brakes
- X8.17.3.3 Rear: 16.5" x 7.0" "S" cam with quick change type single
OR double pin
- X8.17.3.4 Are all brake chambers sealed brake chambers with epoxy exterior coat on front and rear Chambers YES NO
Manufacturer: HALDEX
- X8.17.4 Do drum brakes have automatic slack adjusters and are clearance sensing type only, with adjustment on application of the brake YES NO
- X8.17.5 Parking Brake: Rear wheel spring type -- severe service spring brakes YES NO
Manufacturer and Model: HALDEX GOLDSEAL
- X8.17.5.1 Does parking brake provide modulated emergency braking via the foot valve in the event of a rear service system failure YES NO

X8.17.6 Air dryer with heater 21+ inches above road service

Manufacturer and Model: BENDIX AD-9

with spin on desiccant cartridge or equal YES NO

Is the installation made in concurrence with the air compressor manufacturer's recommendations YES NO

- X8.17.6.1 Are all electrical connectors for drain valve and air dryer covered with heat shrink material or have sealed connections YES NO
- X8.17.7 Manufacturer's standard air tanks for service brakes YES NO
- Auxiliary tank for parking brake YES NO
- X8.17.8 Low air pressure warning light and buzzer YES NO
- X8.17.9 Rear service brake chambers and spring brake chambers mounted to provide adequate clearance for tire chains and backing into bituminous paving machines YES NO
- Factory installed YES NO
- X8.17.10 Brake dust covers installed on all wheels YES NO
- X8.17.11 Unit equipped with hand control valve, tractor protection valve, with provisions for installation of glad hands at rear of truck to enable unit to pull air brake operated equipment trailer YES NO
- X8.17.11.1 Are glad hands recessed as not to stick out past the end of frame rails**
 YES NO
- X8.18 Tires and Wheels:
- X8.18.1 Truck equipped with hub piloted steel disc wheels for tubeless tires YES NO**
- X8.18.2 Wheel end equipped with outboard cast brake drums YES NO
- 15 degree tubeless steel wheels, hub piloted, 10 hole – 285.75mm bolt circle with 220mm two-piece flange nuts YES NO
- X8.18.3 Front:
- X8.18.3.1 Wheels: Size: 22.5" x 9.0"
10 hole 285.75 mm bolt circle with 220 mm bore, tubeless steel disc YES NO
- Rated at 10,000 lbs. at a **maximum inflation pressure of 130 PSIG.**
- Manufacturer and Model: ACCURIDE 29039
- With 0.500 inch thick disc, non standard off set with steel hubs YES NO

Powder coated YES NO Gray top coat YES NO

X8.18.3.2 Tires: 315/80R22.5 Ply 20

X8.18.4 Rear:

X8.18.4.1 Wheels: Size: 22.5" x 8.25"
10 hole – 285.75 mm bolt circle with 220mm bore, tubeless steel disc
 YES NO

Rated at 7500 lbs. at a maximum inflation pressure of 120 PSIG

Manufacturer and Model: ACCURIDE 28828

With 0.472 inch thick disc YES NO

Powder coated YES NO Gray top coat YES NO

X8.18.4.2 Tires: 11R22.5

X8.18.4.3 Does the dual rear wheel/tire assembly have clearance between the tires, which permits the use of dual tire chains YES NO

X8.18.5 All wheels have wheel separators YES NO

X8.18.6 Radial Tires:

Front Radial Tire: Manufacturer and Model: GOODYEAR G291

Rear Radial Tire: Manufacturer and Model: GOODYEAR G282

X8.19 Steering:

X8.19.1 Power steering: Dual integral OR single integral type hydraulic power steering with right wheel power-assist cylinder YES NO

X8.19.2 Steering system: (flow, pressure, relief valve etc): VAN TYPE

Manufacturer: TRW

X8.19.3 Hydraulic supply pump: Vane type OR roller type with sufficient oil flow to permit one (1) steering wheel revolution per second with front axle loaded to rated capacity, with plow on, in a "park" condition YES NO

Manufacturer and Model: TRW

X8.19.4 Is the pump the integral filter type unit YES NO

- X8.19.5 **Power steering reservoir:**
"Remote mounted" YES NO
- Capacity: 4 qt. Filter is easy to remove and replace** YES NO
- X8.19.6 Is the remote filter factory mounted, certified, and engineering approved in conjunction with the appropriate pump YES NO

X8.20 Features considered as standard equipment but not addressed:

SEE LITERATURE

X8.21 Paint: Describe proposed method of painting:

PER BID REQUEST

X8.21.3 Wheel Paint: POWDER PAINTED PER BID REQUEST

X8.22 Detail/Decorative Stripes with Logo:

- X8.22.1 Width: 2 inches
- X8.22.2 Will WVDOH logo area comply with 8.22.2 of specification YES NO
- X8.22.3 Does conspicuity striping material provided meet requirements of Section 8.22.3 through 8.22.8 of specification** YES NO
- X8.22.4 Does sheeting meet specification as stated in 8.22.4 YES NO
- Does it come with aggressive high tack pressure sensitive adhesive** YES NO
Manufacturer: REFLEXITE

X8.23 Does unit offered meet or exceed "Occupational Safety and Health Act of 1970"

YES NO

X8.24 Does unit conform to the advertising guidelines

YES NO

X8.25 Preventive Maintenance and Operator's Training School SEE ADDENDUM #2

- X8.25.1 Will a preventive maintenance and operator's training seminar be provided YES NO

Manuals (OR) CD

- X8.25.2 Will booklets and pamphlets be furnished to be used by the operators YES NO

Describe agenda IT WILL BE PER BID REQUEST & IN ADDITION WE WILL CONDUCT A HANDS ON VEHICLE WALK AROUND.

- X8.25.3 Will you furnish all training aids; i.e. videos, projectors, etc. required in conducting the training** YES NO

X9.0 SPECIFICATIONS – 304 STAINLESS STEEL COMBINATION DUMP/SPREADER BODY

The bidder should complete the following schedule in order for the Division to compare the actual bid unit to the specifications. Should the bidder except a requirement, then such exception may be only on the basis that such feature is not offered by the manufacturer. The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specifications.

Bidder: MONROE TRUCK EQUIPMENT

Address: 1051 WEST 7th STREET MONROE, WI 53566

Telephone Number: 608-328-8127

Years company has been an authorized dealer for proposed unit: 20 years

Manufacturer, model, series, and date of manufacture of proposed combination dump/spreader body:

MONROE TRUCK EQUIPMENT

MODEL: FFDS-WV

Is descriptive literature full describing proposed combination dump/spreader body attached to your bid proposal? X YES NO

If NO, refer to specification statement Section 6.6

When will required number of operating manuals, service manuals, and complete parts list be delivered to the Equipment Division at Buckhannon? prior to deliver of unit or UPON COMPLETION OF UNITS

Does the combination dump/spreader body have a minimum two (2) year basic bumper to bumper Warranty including parts and labor? X YES NO

X9.1 Body capacity: 14 cubic yards water level

X9.2 Sideboard pockets and tailgate height provides additional capacities of 2 to 5 cubic yards

X9.3 Front body bulkhead 7 gauge Size: 3/16 inch 201 stainless steel

X9.3.1 Is head sheet vertical X YES NO

X9.4 Does cab shield have sufficient clearance to ensure shield will not hit exhaust when dumping on uneven Terrain X YES NO

X9.5 Two (2) front truck frame mounted tow hooks or eyes accessible through bumper YES NO DELETED PER ADDENDUM #2

X9.6 Dimensions:

X9.6.1 Inside length of body: 174 inches

- X9.6.2 Inside width of body: 86 - inches wide to maximize capacity and lower the center of gravity
- X9.6.3 Outside width of body: 96 inches at the integral fenders
- X9.6.4 **Body spacing from cab 4 - 6 inch**
- X9.6.5 Basic side height: 44 inches (measure from the floor to top rail)
Two (2) dirt shedding horizontal 10 gauge 201 stainless steel side braces on each side of body
X YES NO
- X9.6.6 Tailgate height: 52 inches (measure from the floor to top rail)
- X9.6.7 Body overhang: 12 inches (measure from center of hinge pin)
- X9.6.8 Cab protector: 24 inches x 94 inches with adequate clearance for cab mounted air horns
- X9.7 Cab protector sloped rearward for drainage purposes X YES NO

X9.8 Construction of the body sides, front, head, and tailgate:

Steel types: 201 STAINLESS STEEL UNLESS OTHERWISE NOTED

- X9.8.1 ~~DELETED PER ADDENDUM #2~~
Floor: inch thickness 304 stainless
OR
abrasion resistant AR400 X 3/16 inches thick
- X9.8.2 Sides: 7 Gauge 3/16 inch thickness 201 stainless steel
- X9.8.3 Tailgate plate: 7 gauge 201 stainless steel
- X9.8.4 Top rail: 7 gauge 201 stainless steel
- X9.8.5 Cab protector: 10 gauge 201 stainless steel
- X9.8.6 **Is inside formed longitudinal constructed of 1/4 inch 201 stainless steel**
 X YES NO
- Outside formed long sill of 7 gauge 201 stainless steel** X YES NO
- with overall combined height of 12 inches including internal stainless gussets**
 X YES NO
- A 1/4 inch thick 201 stainless steel fish plate is welded to outside surface outside long sill above the rear hinge**
 X YES NO

- X9.9 Is all the welding inside the body continuous and not skip welded YES NO
 Are all rails and posts continuous welded YES NO
- X9.10 Are the rear corner posts full length, one (1) piece construction YES NO
- X9.11 Cab protector sides, formed with gussets, extending forward ^{DELETED PER ADDENDUM #2} _____ inches
 Clearance above highest point of cab is ^{DELETED PER ADDENDUM #2} _____ inches
- X9.12 Is body a unibody design – no crossmembers YES NO
- X9.12.1 Does the body have one (1) piece sides constructed of 7 gauge 201 stainless steel
 W/AR400 FLOOR PER ADDENDUM #2 YES NO
- X9.13 Floor constructed of 3/16 inch AR400 (steel) with 5 inch round floor to side radius
 YES NO
- X9.15 Is there an integrated center conveyor providing the ability of the body to convey granular materials with the body down YES NO
- X9.15.1 12.5 inches truck frame to body floor height for lower center of gravity and lower mounting height YES NO
- X9.15.1.1 Will wood products be used between truck frame and bed YES NO
- X9.15.2 Abrasion resistant steel 3/16 inch AR400 conveyor floor YES NO
- X9.15.3 2 inch diameter front and rear shafts with eight (8) tooth sprockets YES NO
- X9.15.4 Drive sprockets are double keyed to shaft YES NO
- X9.15.5 Conveyor width: 28 inches
- X9.15.6 ¼ inch 201 stainless steel formed inner sill which also forms the conveyor chain guard YES NO
- X9.15.7 7 gauge 201 stainless steel formed over long sills YES NO
- X9.15.8 3/16 inch AR400 conveyor bed floor ^{DELETED PER ADDENDUM #2} YES NO
- X9.15.9 Formed 3/8 inch thick tie plate fully extend between the left and right side of body, located at rear of unit YES NO
- Will tie plate provide additional structural support at the rear of the body to prevent sagging at the rear corner posts YES NO

- X9.15.10 Are there two (2) inch diameter drive shafts with eight (8) tooth sprockets YES NO
 Will sprockets be heat treated to 50 Rockwell C hardness YES NO
- X9.15.11 Will conveyor be driven with 25:1 planetary gearbox drive on the rear shaft with approximately 8 CIR hydraulic motor YES NO
 Will motor have an integral conveyor speed sensor YES NO
- X9.15.12 Conveyor chain D667K pintle type (4.50 ϕ . tensile/strand) with 1/2 inch x 1 1/2 inch conveyor crossbars spaced on every other link. YES NO
- X9.15.13 A 10 gauge 201 stainless steel bolt in pan under the conveyor to keep material off chassis frame YES NO
- X9.15.14 Does the rear apron have a bolt on cover plate which allows for easy access to gear case YES NO
- X9.16 Is tailgate have 7 gauge 201 stainless steel full perimeter dirt shredding boxed 7 panel with a 7 gauge 201 stainless steel 9 inch x 24 inch fully adjustable rear feed gate YES NO
- X9.16.1 Is rear feedgate lever operated or screw adjustable The feedgate capable of being positively locked into position YES NO
- X9.16.2 Is tail gate hinged at top, flame cut hardware, pork chop type off-set hardware to achieve maximum opening of tail gate YES NO
 Does it have provision for pivoting at bottom YES NO
- X9.16.3 Flush mount, 1/2 inch flame cut 304 stainless steel tail gate pivots YES NO
- X9.16.4 Heavy duty offset hinge plates, one (1) inch flame cut 304 stainless steel YES NO
- X9.16.5 1/4 inch 304 stainless steel latch hooks with 3/8 inch 304 stainless steel latch plates YES NO
- X9.16.6 Full perimeter 201 stainless steel boxing with all horizontal edges sloped outward YES NO
- X9.16.7 Are there three (3) 10 gauge 201 stainless steel sloped horizontal braces that are flush with perimeter boxing YES NO
- X9.16.8 Stainless steel upper pins with grease zerks YES NO
- X9.16.9 Latching action at the bottom of gate is operable by the truck driver without leaving the truck cab YES NO

- X9.16.10 Is gate self aligning YES NO
- X9.16.11 Are tailgate lower latch pins 304 stainless steel 1 ¼ inch diameter YES NO
- X9.17 Does the body have the capability to convey to the rear with a stainless steel material spinner for distributing material** YES NO
- X9.17.1 Does it have a rear chassis mounted stainless steel spinner assembly that is adjustable left to right, and up and down to assure accurate placement of material on spinner disc to facilitate control of spread pattern. YES NO
- X9.17.2 10 gauge stainless steel 20 inch diameter spinner disc to have replaceable fins YES NO
- X9.17.3 Are spinner disc vanes 304 stainless steel YES NO
- X9.17.4 Is spinner motor mounted on top of spinner disc YES NO
- Is it enclosed in removable material shedding protective cover YES NO
- X9.17.5 Is spinner disc driven by a 4-bolt 2.8 CIR hydraulic motor YES NO
- X9.17.6 Does spinner motor have an integral sensor capable of providing spinner disc feedback to the in-cab console YES NO
- X9.18 Hydraulic Hoist:
- X9.18.1 Is it trunnion mounted to bottom of dump body YES NO
- X9.18.2 Is telescopic hoist no less than N.T.E.A. Class 90 – Double Acting with 26 ton capacity YES NO
- X9.18.3 Is single hoist cylinder trunnion mount YES NO
- X9.18.4 Does hoist cylinder have three (3) stages with 140 inches of stroke YES NO
- Manufacturer and model: MAILHOT CS-140-5.5-3DA
- X9.18.5 Does the cylinder have wear and corrosion resistant nitrided cylinder tubes YES NO
- X9.18.6 Cylinder warranty: 2 years
- X9.18.7 Does a five (5) degree oscillating cylinder collar protect the cylinder against side stress, if trunnion mount cylinder provided YES NO
- X9.18.8 Does the body have 6 inch x 8 inch x 1/2 inch formed angle rear hinge assembly installed in the truck chassis frame YES NO
- X9.18.9 Does the rear hinge assembly have cold roll steel hinge pins connecting to 2 1/2 inch hinge blocks with grease zerks YES NO

X9.19 Are the following features included:

- X9.19.1 Warning light (bed raised) console mounted YES NO
- X9.19.2 Hydraulic oil level reading YES NO
- X9.19.3 Safety decals as required YES NO
- X9.19.4 201 stainless steel mud guards, 10 gauge x 24 inches x 30 inches permanently attached in front of rear wheels YES NO
- Will body vendor align exhaust stack for body clearance YES NO
NOT REQUIRED
- X9.19.5 201 stainless steel shovel bracket YES NO
- X9.19.6 201 stainless steel gussets (board pockets) for 4 inch x 6 inch lumber (rough) located at front and rear and mid-rail YES NO
- 4 inch x 6 inch (rough) oak sideboards supplied and bolted through the gussets YES NO
- Painted aluminum to match the body YES NO DELETED PER ADDENDUM #2
- X9.19.7 Does the unit have air operated tailgate spring applied air release mechanism YES NO
- Pivot shafts included stainless steel bushings to eliminate seizing YES NO
- X9.19.8 1 1/2 inch 304 stainless steel grip strut walk rail installed on both sides of the body YES NO
- X9.19.9 OSHA approved backup alarm, electronic ambient, adjusts to background noise, 112 dba shock mounted at the rear YES NO
- X9.19.10 OSHA approved body support, both sides YES NO
- X9.19.11 Unit equipped with 49,000 lb. capacity pintle hook centered between rear frame rails YES NO
- Manufacturer and Model: BUYERS BP-760
- Height from ground level to center line of pintle "eye": 32 inches
- X9.19.12 Air deflector-hood mounted, blue or smoke YES NO
- Deflector manufacturer's standard width for truck mode YES NO
Width: TBD-SEE EXCEPTION PAGE
- Access to front end hood tilt handle YES NO
- Extra handle YES NO

X9.20 Lighting: Weather/shock resistant lights LED type with average amp draw between .045 - .72
 YES NO

Manufacturer and Model: TRUCK-LITE LED

All connections have sure snap plug assemblies and epoxy sealed electronics to protect against shock and vibration
 YES NO

X9.20.1 All marker lights 2 1/2 inch diameter flush mount sealed beam lights with integral reflector mounted in rubber base
 YES NO

X9.20.2 Are all lights connected to chassis through a weatherproof junction box located at the rear of truck
 YES NO

X9.20.3 Rear lights shock mounted, recessed oval stop, tail, turn, and recessed oval back up lights mounted in back post
 YES NO

Strobe lights marked and switched from dash board location
 YES NO

Manufacturer and Part #: TRUCK-LITE 60050R S/T/T

X9.20.4 Center rear I.D. lights three (3) located in truck chassis
 YES NO

X9.20.5 Two (2) amber oval LED strobe lights mounted at the front corners of the cab protector, and two (2) amber oval LED strobe lights mounted at each outside corner of the cab protector
 YES NO

Manufacturer and Part # of Both Locations: TRUCK-LITE 60360Y

Strobe lights marked and switched at dash board location
 YES NO

X9.20.6 Auxiliary headlights for snowplowing application shock mounted on fender of unit
 YES NO

Manufacturer and Part #: TRUCK-LITE 80888

X9.20.7 Two (2) oval amber LED strobe lights mounted at top of rear corner posts right and left sides and switched in combination with cab protector strobe
 YES NO

Manufacturer and Model: TRUCK-LITE 60360Y

X9.20.8 Lighted license plate bracket
 YES NO

X9.21 Are the following at the front or rear both sides of the body:

X9.21.1 304 stainless steel fold down ladder that locks into position when either in the down or up position
 YES NO

X9.21.2 Two (2) 304 stainless grab handles
 YES NO

- X9.21.3 Is the design and strength characteristics of entire body such that the unit structural members and hoisting system will not suffer any deformation, damage, or structural failure resulting from raising a distributed full payload X YES NO
- X9.22 Bumper:
- X9.22.1 Bumper formed out of 1/4 inch roll steel X YES NO
Weighs 10.2 lbs. per square foot
- X9.22.2 Bumper face covers all of truck frame (12.0 inches) with two (2) flanges of 2.25 inches top and bottom X YES NO
- X9.22.3 Overall width of bumper: 94.0 inches
- X9.22.4 Bumper straight across front from centerline of truck chassis 21 inches each side of Centerline, making bumper straight 42 inches long in center with ends swept back 30 degrees and 27 inches each side.
- X9.22.5 Bumper has two (2) access holes for utilization of tow hooks X YES NO
- X9.22.6 Upper and lower flanges cut and welded solid at point where bumper is bent and ground off smooth X YES NO
- X9.22.7 Bumper mounted by two (2) mounting angles bolted to front of truck frame with two (2) 5/8 inch bolts each side X YES NO
- X9.22.8 Mount angle .25 inch x 3 inches x 8 long with four (4) 5/8 inch holes X YES NO
- X9.22.9 Paint on front bumper: PPG URETHANE OR POWDER COAT TO MATCH BLUE
MARTIN SENOUR 82-580Z
- X9.23 Underbody Tool Box:
- X9.23.1 One (1) tool box mounted under body on right side frame rail X YES NO
- X9.23.2 Tool box 18 inches high, 24 inches wide, 18 inches deep cradled by a heavy steel angle frame attached to the truck frame X YES NO
- X9.23.3 Construction 14 gauge, 60 galvaneal steel with all seams welded X YES NO
- X9.23.4 Tool box has horizontal hinged fold down door X YES NO
- X9.23.5 Tool box door has cable or chain to hold the door in a horizontal position X YES NO
- X9.24 Load covering system electrically or air controlled X YES NO
- X9.24.1 Electric motor assembly includes 12 volt direct drive motor with forward and reverse action, cab mounted control switch, resettable circuit breaker X YES NO

- X9.24.2 Pivot arm assembly constructed in a two (2) piece bent arm configuration of 1 1/4 inch
14 gauge steel tubing X YES NO
- X9.24.3 **Bent arm extensions constructed of 1 inch 14 gauge steel tubing**
- X9.24.4 Rear cross constructed of 1 1/4 inch 14 gauge steel tubing
- X9.24.5 Pivot arm rests included X YES NO
- X9.24.6 Underbody spring extension spring 12 inches in length attached to base of pivot arm and of
body with articulating spring mounting bracket X YES NO
- X9.24.7 All steel components finished with **manufacturer's recommended rust preventative system
with adequate primer and paint** X YES NO
- X9.24.8 Steel cab protector mounted triple bend wind deflector provided X YES NO
- X9.24.9 Load covering system provided with a 18 oz. black vinyl tarp to fit 14 foot 6 inch body
 X YES NO
- X9.24.10 Load covering system supplied with all necessary hardware and delivered to the West
Virginia Division of Highways as a complete and operational unit. X YES NO
- X9.25 Paint: Describe proposed method of painting
- X9.25.1 Will the 304 stainless steel surfaces of the body be "paint free" X YES NO
- X9.25.2 - X9.25.4 PER ADDENDUM #2

ALL 201 STAINLESS STEEL SURFACES TO BE UNPAINTED AND CLEANED WITH AN ACID

WASH SOLUTION TO REMOVE CARBON BURNING FROM STAINLESS STEEL WELDS.

- X9.26 Detail/Decorative Stripes with Logo:
Will striping and detailing you provide comply with requirements of Section 9.26.1 through 9.26.7
COMPLIES PER ADDENDUM #2 X YES NO

- X9.27 All body features considered as standard, but not specifically addressed:

SEE ATTACHED LITERATURE

- X9.28 Does the proposed unit meet or exceed the "OSHA OF 1970" and/or subsequent changes
 X YES NO

X10.0 SPECIFICATIONS - CENTRAL HYDRAULIC SYSTEM

Is the central hydraulic system designed to operate the following:

A front mounted telescopic dump body hoist cylinder, a hydraulically driven integrated salt and abrasive spreader system requiring the simultaneous operation of two (2) hydraulic motors in two (2) different modes with conveyor reverse, a single acting snowplow lifting cylinder, a snowplow power angle system, plow balance system and an auxiliary equipment drive circuit YES NO

Are provisions made for future add on pre-wet system YES NO

Bidder: MONROE TRUCK EQUIPMENT/FORCE AMERICA INC.

Address: 1051 W 7th ST MONROE, WI 53566/COLUMBUS, OH

Telephone Number: 608-329-8126/614-351-4884

Years company has been an authorized dealer for proposed unit: 12 years

Manufacturer, model, series, and date of manufacture of proposed central hydraulic system:

FORCE AMERICA ADD-A-STACK AND SSC5100 SPREADER CONTROL

Is descriptive literature full describing proposed central hydraulic system attached to your bid proposal? YES NO

If NO, refer to specification statement Section 6.6

When will required number of operating manuals, service manuals, and complete parts list be delivered to the Equipment Division at Buckhannon? _____ prior to deliver of unit or UPON COMPLETION OF UNITS

Describe: PROPOSED MANUAL AVAILABLE AT PILOT INSPECTION. FINAL APPROVED MANUAL AVAILABLE UPON COMPLETION OF PRODUCTION UNIT.

Are provisions made for a future add-on hydraulic driven pre-wet system YES NO

Pre-Wet System:

Does supplied spreader control contain the ability to control a closed loop pre-wet system YES NO

Does system operate using a flow meter feedback circuit YES NO

Does controller software allow for adjustability of pre wet output by the operator, represented in gallons per ton YES NO

Is information related to pre wet application rate and total flow in gallons displayed on the screen while the pre wet system is active YES NO

Does central hydraulic system have a minimum two (2) year basis bumper to bumper warranty including parts and labor? YES NO

X10.1 Pump System:

X10.1.1 Pump: Variable volume pressure compensated load sensing axial piston type YES NO

X10.1.2 Front mounting flange and main housing/case of cast iron construction YES NO

Inlet and outlet port section of high strength ductile iron with SAE split flange porting or orb type porting YES NO

X10.1.3 **Is suction port and associated plumbing sized to allow for minimum inlet restriction between the pump and the suction port on the reservoir?** YES NO

Does installation comply with pump manufacturers allowable inlet condition specifications YES NO

Is suction plumbing equal to or greater than pump inlet or suction size YES NO

X10.1.4 Is pressure port of the SAE split flange or ORB type side mounted for direct bolt mounting of solenoid shut down valve assembly YES NO

X10.1.5 Case drain and load sense signal ports of the SAE O-ring type YES NO

Case drain line taken directly to tank without passing through the return line filter YES NO

X10.1.6 **Input shaft has a minimum continuous torque rating equal to 200 % of the imposed load when pump is operated at maximum engine rpm, maximum displacement and system pressure** YES NO

Is it minimum SAE "C" keyed YES NO

X10.1.7 Front input shaft bearing heavy duty ball or roller type designed for high axial and radial loading YES NO

Rear shaft bearing of the high speed and load sleeve type design YES NO

Bearings fully lubricated by flooded case oil YES NO

X10.1.8 Ramp/swashplate supported by pressure lubricated bearings of the rocker cam or saddle type for high piston load support YES NO

Ramp angle positioning by means of dual servo control cylinders for rapid pump response and precise pump output control YES NO

X10.1.9 Adjustable load sense and high pressure compensator control valve assembly of the full cartridge or of bolt on housing design for ease of replacement and repair X YES NO

X10.1.9.1 System design and components provide flow, pressure and performance requirements with a maximum operating load sense differential pressure of 300 PSI and a maximum standby pressure of 350 PSI for maximum efficiency.

If pilot control shifted valving is used, is it designed to be fully functional within this pressure range NOT REQUIRED/USED YES NO

X10.1.9.2 High pressure compensator valve preset to limit the maximum pump output pressure to maximum required operating pressure plus load sense differential and margin pressure to prevent premature de-stroking of ramp resulting in reduced or insufficient pump output X YES NO

X10.1.10 Pump Output: Is it capable of providing hoist cylinder extension required X YES NO

Part number MAILHOT CS-140-5.5-3DA - 11.0 gallons to fully extend but after filling gallons is required to raise the cylinder:

- 10 GPM flow rate 66 seconds to raise
- 15 GPM flow rate 44 seconds to raise
- 20 GPM flow rate 33 seconds to raise
- 25 GPM flow rate 26 seconds to raise
- 30 GPM flow rate 22 seconds to raise
- 35 GPM flow rate 19 seconds to raise
- 40 GPM flow rate 16 seconds to raise

ONLY CYLINDER REQUIRED

Part number - gallons to fully extend gallons to fill and gallons to extend

- 5 GPM flow rate seconds to raise
- 10 GPM flow rate seconds to raise
- 15 GPM flow rate seconds to raise
- 20 GPM flow rate seconds to raise
- 25 GPM flow rate seconds to raise
- 30 GPM flow rate seconds to raise
- 40 GPM flow rate seconds to raise

X10.1.11 Is the make and model bid in compliance with overall quality of construction, design, and performance of the pump supplied X YES NO

- X10.1.12 Pump:**
Manufacturer and Model: FORCE AMERICA FASD45
- X10.1.13 Is pump manufacturers standard product release and design** YES NO
- X10.1.14 Is pump driveline assembly of the keyed shaft design utilizing a 4 bolt driveshaft flange and matching drive yoke on the pump** YES NO
- X10.1.14.1 Does driveline have a minimum continuous torque rating equal to 200% of the imposed load when pump is operating at maximum system requirements** YES NO
- Manufacturer and Model:** SPICER 1310
- X10.1.14.2 Are dual journals and yokes incorporated to connect the pump shaft and engine drive flange with an angular misalignment no greater than six (6) degrees and not less than two (2) degrees** YES NO
- X10.2 Pump Shutdown System:**
- X10.2.1 Normally closed, energize to open, solenoid operated control valve of the cartridge and manifold design to be directly bolted to pump pressure port** YES NO
- Is solenoid electrical connection of the Packard "Weatherpack" type with "SO" cable wiring** YES NO
- X10.2.2 Is valve controlled by a console mounted "Master On" switch with pilot lamp for normal system operation and by a float switch located in hydraulic reservoir to automatically shut off pump pressure port flow to all down stream functions in the event of low hydraulic oil level** YES NO
- X10.2.3 Pressure drop across valve** 40 PSI at 40 GPM flow when in the switched open position
 Nominal valve rating 50 GPM at 3500 PSI
- X10.2.4 SAE #6 gauge port equipped with Parker Hannifin Model PD361 diagnostic coupling nipple and protective cap provided for pump output pressure testing to be installed in valve manifold and within an easily accessible mounting position** YES NO
- X10.2.5 Valve designed to protect the pump from damage when the system is shut down at high pressure and flow operation** YES NO
- X10.2.6 Valve manufacturer and model:** FORCE AMERICA 9172A001
- X10.2.7 Central control console mounted audio alarm and warning lamp indicating pump pressure/flow shutdown** YES NO
- X10.2.8 Warning lamp press-to-test light and incorporate a switching system into the automatic shutdown assembly to simulate low oil level, shut off pump output flow and test float switch wiring and connection** YES NO

- X10.2.9 A console mounted electrical override function switch provided to allow momentary operation of hydraulic functions in emergency situations YES NO
- X10.3 Directional Control Valve Assembly:
- X10.3.1 Valve stacked section type and of closed center circuit design YES NO
- X10.3.2 Each work section pressure and flow compensated with fully integrated load sense network YES NO
- Flow output is relative to spool travel with preset maximum flow rate obtained at maximum spool stroke providing feathering control of operated function YES NO
- X10.3.3 Dump body, snowplow lift, and snowplow power angle sections of the manual cable shift type YES NO
- Auxiliary circuit section of the electric solenoid shift type YES NO
- Both ends of each section valve spool sealed with weather resistant caps or cable entry bonnets YES NO
- X10.3.4 **Valve assembly flow capacity rating and pressure drop characteristics sufficient to provide for the required pump output and circuit flow rates at the specified maximum load sense differential pressure settings** YES NO
- X10.3.5 All valve ports of the SAE o-ring seal type and of sufficient size to handle required section flow rates at stated load sense differential pressure YES NO
- X10.3.6 **Is valve a pre-compensated design** YES NO
A priority section installed to allow plow to raise in a system over demand situation YES NO
- X10.3.7 Main pressure inlet relief valve provided to reduce system pressure shock loads YES NO
- Is it preset at pressure so as not to interfere with pump pressure compensator and to prevent premature relief opening at system high demand operation YES NO
- X10.3.8 **If pilot pressure reducing valve is required for solenoid section control, design meets operating requirements as set forth in Section 10.1.9.1** YES NO
- Pilot supply and tank venting internal within the valve assembly section** YES NO
- X10.3.9 Load sense network high pressure relief provided and preset to limit system maximum operating pressure YES NO
- Set point provides proper pressure margin to pump pressure compensator and high pressure relief valve as to prevent premature loss of required flow rates and pressure capability YES NO

- X10.3.10 SAE #6 gauge 0port equipped with Parker Hannifin PD361 diagnostic coupling nipple with protective cap for load sense testing to be installed in an easily accessible location
 YES NO
- X10.3.11 Dump body control section 4-way three (3) position spring centered cylinder spool for operation of a double acting hoist cylinder
 YES NO
- X10.3.11.1 Full flow workport relief valve installed in power up port YES NO
- Set point to prevent operating pressure from exceeding hoist cylinder normal operating pressure rating
 YES NO
- X10.3.11.2 Is full flow work port relief valve installed in power down port set at 500 PSI to prevent full system pressure on down stroke
 YES NO
- X10.3.12 Snowplow lift control section is 4-way three (3) position spring centered cylinder spool for operation of a double acting lift cylinder
 YES NO
- X10.3.12.1 Adjustable flow control installed to limit downward speed of snowplow
 YES NO
- Flow limiting control system preset for proper plow lift speed to be supplied to reduce over demand operation and to increase system efficiency YES NO
- Will flow limit be determined at time of pilot model review YES NO
- X10.3.13 Snowplow power angle control section is 4 way three (3) position spring centered cylinder spool for operation of cylinder type reversible plow
 YES NO
- X10.3.13.1 Flow limiting control system preset for proper plow reversing speed to be supplied to reduce over demand operation and to increase system efficiency YES NO
- Will flow limit be determined at time of pilot model review YES NO
- X10.3.14 Plow Balance Valve:
- X10.3.14.1 Is hydraulic system supplied with a plow balance valve YES NO
- X10.3.14.2 Is valve designed to offset a specific (adjustable) plow weight when activated
 YES NO

- X10.3.14.3** Does plow balance system not alter the operation of any other hydraulic function or have an adverse effect on the performance of other hydraulically operated equipment including:
- | | | | | | |
|---------------------|-------|-----|----------|----|-------|
| Wing Plow | _____ | YES | <u>X</u> | NO | _____ |
| Body Hoist | _____ | YES | <u>X</u> | NO | _____ |
| Plow Hoist or Angle | _____ | YES | <u>X</u> | NO | _____ |
| Spreader functions | _____ | YES | <u>X</u> | NO | _____ |
- Are all normal operations of the plow lift/lower functions maintained without additional tasks X YES _____ NO
- X10.3.14.4** Will plow lift be immediate to guarantee safe operation of the vehicle X YES _____ NO
- X10.3.14.5** Are solenoid valve coils used X YES _____ NO
- Will they have manual override capabilities if needed for continued use when coils fail X YES _____ NO
- X10.3.14.6** Does manifold valve include a pressure test point for use when checking balance pressures X YES _____ NO
- X10.3.14.7** Is pressure test point capable of tapping into system at pressures of 5,000 PSI X YES _____ NO
- X10.3.15** Auxiliary equipment drive circuit control section 3-way three (3) position spring centered solenoid operated motor spool X YES _____ NO
- Is the circuit separate and distinct from the spreader control system X YES _____ NO
- X10.3.15.1** Flow limiting control system preset to provide 22 GPM at a system load pressure of 2200 PSI. Pump is capable of supplying this flow rate with engine speed of 1400 RPM
- X10.3.15.2** Is an inline mounted control valve supplied for this operation in place of directional control valve section NOT REQUIRED. USING _____ YES X NO
DIRECTIONAL CONTROL VALVE
- If supplied, is proper interconnections and venting of load sense network system provided NOT NEEDED BECAUSE USING A _____ YES X NO
DIRECTIONAL CONTROL VALVE.
- X10.3.15.3** Is pressure line 3/4" SAE 100R2 hose and manifold mounted at rear of chassis and equipped with Parker Hannifin SH6-62 quick disconnect coupler and protective metal plug X YES _____ NO
- Is mating nipple SH6-63 with protective cap supplied X YES _____ NO
- Will mounting location be determined at time of pilot model review X YES _____ NO

X10.3.15.4

Manufacturer and model of directional and auxiliary circuit valves:FORCE AMERICA 4020 ADD-A-STACK

X10.3.16

Is directional control valve assembly located in a combination tank/valve stainless enclosure assembly to protect the hydraulic tank/valve from the elements X YES NO**Capacity of reservoir (tank) 40 gallon**

X10.3.17

Pre-Wet Circuit:

X10.3.17.1

Is a separate circuit provided to control an add-on pre-wet system X YES NO

X10.3.17.2

Is hydraulic valve of the sectional type YES X NO OR of the cartridge style contained in a manifold X YES NO

X10.3.17.3

If manifold type valve is supplied, is it attached to the main valve assembly X YES NO

X10.3.17.4

Is all wiring to pre-wet hydraulic circuit provided as part of the system contained in the bid X YES NO

X10.3.17.5

Is wiring to the control console related to the rest of the pre-wet system (low level float, flow meter connection, etc.) provided as part of the pre-wet package at the time of pre-wet system install X YES NO

X10.4 Spreader Control Valve Assembly:

X10.4.1

Are spinner and conveyor solenoid flow controls of the PWM proportional solenoid type and equipped with manual overrides X YES NO**Are overrides manually adjustable over operating flow range in the event of electrical system failure** X YES NO

X10.4.2

Flow control circuits are pressure compensated X YES NO**Provides spinner and pre-wet flow rate of 0-7 GPM and a conveyor flow rate of 0-15 GPM****Pressure relief valve system limit circuits to 2200 PSI**

X10.4.3

Load sense circuits connected to directional control valve network for proper pump control X YES NO**Does design prevent improper high pressure load sense signal and pressure line loading when spreader valve is not in use and when spreader quick disconnects are uncoupled** X YES NO

- X10.4.4 Is PWM solenoid control supplied by microprocessor spreader control system
 Are solenoids capable of 100% PWM signal without failure YES NO
 YES NO
- X10.4.5 Solenoid operated directional control valve and in-cab mounted electrical switch operates spreader conveyor reverse required for front or rear material discharge selection provided
 YES NO
- X10.4.6 Is electrical switching and indicator light for spreader clogged indication provided
 YES NO
- X10.4.7 **Manufacturer and model of valve:** FORCE AMERICA SPIN-A-VEYOR
- X10.5 Spreader Control System:
- X10.5.1 Dual flow, ground speed oriented spreader control system of the closed loop microprocessor based type with nonvolatile control memory
 YES NO
- X10.5.2 Automatic calibration and flexibility of programming
 YES NO
- X10.5.3 **System is capable of operation in ground speed oriented closed loop conveyor feed back, open loop, manual set, blast and unload modes and fully functional in both front and rear material discharge selection**
 YES NO
- X10.5.4 Automatic switchover with display indication from closed loop to open loop operation in the event of loss of feed rate sensor signal is provided
 YES NO
- X10.5.5 Control console digital readouts capable of displaying actual application rate, vehicle ground speed, distance of spread route driven and total quantity of material spread
 YES NO
- X10.5.6 Programming and output cable connection for material and trip information printer and program uploading is provided
 YES NO
- X10.5.7 Control unit capable of accumulating display information up to 999,999 miles and 999,999 tons of discharged material
 YES NO
- X10.5.8 Console programming capable of selection, calibration and display of four (4) separate spread materials with independent application rates of each material capable of being set to fixed rates or to rate increments of a preset maximum application rate
 YES NO
- X10.5.9 A variable digital access code lockout for application rate selection and for system operating parameters is provided
 YES NO
- Is it a key switch
 YES NO
- X10.5.10 **Backlighted switches and LCD screen utilized for on-board programming and for display readout and application rate selection**
 YES NO

- X10.5.11** Is material spread width selectable by no less than 10 position switch with minimum and maximum spinner speed totally programmable through entire flow range YES NO
- Is spinner speed capable of linking to ground speed for on-off control YES NO
- X10.5.12** Does display enunciate error message and sound audio alarm when microprocessor system detects any loss of control or accuracy YES NO
- X10.5.13** Will system be fully functional at time of delivery YES NO
- X10.5.14** Is truck speed sensor compatible with type of speedometer drive system supplied on chassis YES NO
- X10.5.15** Is a built-in ground speed simulator provided either internal to the control or located in the control console YES NO
- X10.5.16** Are all components required for proper installation and operation of control system onto truck and spreader units supplied YES NO
- X10.5.17** **Manufacturer and model of proposed control system :**
FORCE AMERICA 5100
-
- X10.6** Central Control Console:
- X10.6.1** Mounted between seats within easy access of the driver YES NO
- X10.6.1.1** Warning light (bed raised) control console mounted YES NO
- X10.6.2** Will all wiring, valve control cables and electrical harness entry into cab and console sealed with grommets YES NO
- X10.6.3** Are remote control valve levers console mounted YES NO
- Are all levers clearly marked as to function and operation YES NO
- X10.6.3.1** Remote control levers to operate push-pull type cables with .250" diameter stainless steel rod ends YES NO
- X10.6.3.2** Is inner cable member 18-8 stainless steel armor wrapped construction with a low resistance nylon liner and polyethylene covered tempered steel wire conduit YES NO
- X10.6.3.3** Is cable to valve connection of the weather resistant bonneted type YES NO
- X10.6.3.4** Hoist control lever OSHA compliant (hoist interlock) YES NO
- X10.6.4** Are central console or dash mounted rocker switches with indicator lamps provided for strobe lights, spreader light and plow lights isolated from all hydraulic system control circuits YES NO

- X10.6.4.1 Are interconnections and cables installed and ready for operation YES NO
- X10.6.4.2 Is hydraulic system automatic shutdown system and control switching relay controlled YES NO
- X10.6.4.3 Relay(s) mounted within the cab YES NO
- X10.6.4.4 An access plate to internal wiring is provided YES NO
- X10.7 Hydraulic Reservoir:
- X10.7.1 Tank/valve enclosure flex mounted to the chassis frame rail YES NO
- X10.7.2 Tank constructed of 7 gauge ³⁰⁴stainless steel YES NO**
- X10.7.3 Tank equipped with a combination oil level sight glass and thermometer YES NO
- X10.7.4 Tank equipped with a pressurized ten (10) micron filter/breather cap with removable 500 micron Strainer YES NO
- X10.7.5 Is an internal stainless steel baffle provided within the tank YES NO
- X10.7.6 Tank stenciled with **minimum of 1 1/2" high "Hydraulic Oil"** YES NO
- X10.7.7 Tank level switch connection "SO" type wiring and flange mounted within the tank/valve enclosure to protect it from the elements YES NO
- X10.7.8 Reservoir supply suction port 2 inches NPT and system report port 1 1/4 inches NPT**
- X10.8 Filtration:
- X10.8.1 Manufacturers standard filtration to adequately protect the hydraulic system from damage YES NO
- X10.8.2 Return line filter isolated from reservoir by a full flow non-restrictive type quarter turn brass ball valve if filter not installed in reservoir YES NO
- X10.8.3 Each filter equipped with a differential pressure switch to indicate filter clogged condition by means of a console mounted indicator lamp YES NO
- X10.8.4 One (1) extra replacement filter for each assembly is provided for each truck YES NO**
- X10.8.5 Filter assemblies positioned as close to reservoir as possible and in an easily accessible service location YES NO

X10.9 Hoses and Fittings:

- X10.9.1 Each hose-assembly (hose with hose ends) except for suction hose is fitted with JIC swivel connections on ends where connection to system component is made YES NO
- X10.9.2 All pressure line hoses meet or exceed SAE Specification 100R2 and are equal to Gates high pressure hose, type C2AT for sizes up to and including 1 inch ID YES NO
- X10.9.3 Suction hose 2 inch nominal ID and meet SAE Specification 100R4, braided fiber, spiral wire reinforced, rubber covered hose with replaceable bolt-on type fittings YES NO
- X10.9.4 All hydraulic hoses fully cleaned on interior, installed, and ready for operation YES NO
- X10.9.5 Are grommets used when routing hoses through steel bracketing or frame members YES NO
- X10.9.6 **Are Snap-Tite quick disconnects (manifold mounted) supplied for spinner 1/2 inch pressure and return lines (VH Series Auger/Conveyor)** YES NO
- Is iron or galvanized iron pipe for fittings and connectors used YES NO
- X10.9.7 Are all fittings and connectors steel type designed for high pressure hydraulic system use YES NO
- X10.9.8 Pipe thread ported components and connectors are only used when the specific component is not available with SAE or JIC porting YES NO
- X10.9.9 Are all pipe thread connectors used coated with liquid Teflon pipe sealer prior to assembly YES NO
- X10.9.10 Hoses that run to the front of truck chassis for snowplow functions are manifold mounted behind the front bumper with sufficient access for pump service and snowplow hitch installation YES NO
- X10.9.11 Are snowplow lines equipped with complete 1/2 inch "VH" series Snap-tite quick disconnects (coupler and nipple supplied) and metal caps and plugs YES NO

X10.10 Items not specifically stated but are necessary for proper system installation and operation are supplied and comply with recommended hydraulic industry standards:

SEE ATTACHED LITERATURE & SPECIFICATION SHEET

X10.11 Will initial servicing and pre-testing of hydraulic system be included for:

- X10.11.1 Initial fill of reservoir with a high grade 32 AW hydraulic fluid to approximately 40 gallon level, marked on sight glass : YES NO

- X10.11.2 Start-up and initial run of hydraulic system, checking for leaks, excessive heat, system efficiency** YES NO
- Will you replace any defective component** YES NO
- Will you cover any defects discovered at time of plow installation if equipment is not available at time of initial test of plow circuits** YES NO
- X10.11.3 Refill reservoir to the 40 gallon operating level** YES NO
- X10.12 If any hydraulic lines are located within 10 inches of exhaust system are they metal lines and insulated** YES NO
- X10.13 Are detailed component specifications, product literature, system component layout drawing with bill of materials and full functional hydraulic system schematics in accordance with JIC and ANSI-Y32 format attached with your bid** YES NO
- X10.14 If successful vendor, will you provide WVDOH with a complete list of all filters required for normal maintenance on proposed unit** YES NO
- X10.15 Explain your training sessions with each purchase order covering the operation, maintenance, trouble shooting and calibration/programming of the hydraulic system and spreader controls and where will they be held:**
- (3) ONE DAY SESSIONS COVERING ALL ASPECTS OF UNIT. LOCATION TO BE
- AT EQUIPMENT DIVISIONS FACILITY.

State of West Virginia **VENDOR PREFERENCE CERTIFICATE**

Certification and application* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. Application is made for 2.5% resident vendor preference for the reason checked:

- Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
- Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
- Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or,**

2. Application is made for 2.5% resident vendor preference for the reason checked:

- Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

3. Application is made for 2.5% resident vendor preference for the reason checked:

- Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

4. Application is made for 5% resident vendor preference for the reason checked:

- Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or,**

5. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:

- Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or,**

6. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:

- Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: MATHENY MOTOR TRUCK CO

Signed: 

Date: 05/04/2011

Title: CEO

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: MATHENY MOTOR TRUCK COMPANY

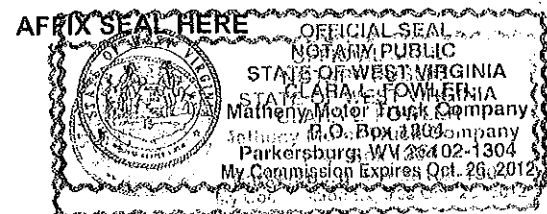
Authorized Signature: *M. Matheny* Date: 05/04/2011

State of WV

County of Wood, to-wit:

Taken, subscribed, and sworn to before me this 4 day of MAY, 2011.

My Commission expires 10/26/12, 20 .



NOTARY PUBLIC

Clara O. Fowler
Clara O. Fowler



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
7011EC18

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
BUYER 33
304-558-2402

VENDOR

*709035314 304-485-4410
 MATHENY MOTOR TRUCK COMPANY
 PO BOX 1304
 PARKERSBURG WV 26102-1304

SHIP TO

DIVISION OF HIGHWAYS
 EQUIPMENT DIVISION
 ROUTE 33
 BRUSHY FORK ROAD
 BUCKHANNON, WV
 26201 304-472-1750

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
04/11/2011	NET 30 DAYS	GROUND	BUCKHANNON, WV	PREPAID

BID OPENING DATE: 04/28/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				FREIGHTLINER WITH ADDENDUM NO. 1 MONROE EQUIP.		
				THIS ADDENDUM IS ISSUED TO:		
				1.) EXTEND THE BID OPENING DATE FROM 04/21/2011 AT 1:30 PM TO 04/28/2011 AT 1:30 PM.		
				2.) PROVIDE A COPY OF THE MANDATORY PRE-BID SIGN IN SHEET.		
				*****END ADDENDUM NO. 1*****		
0001	1	EA		287-36		
	64,000			G.V.W. CAB AND CHASSIS, COMBINATION		
				***** THIS IS THE END OF RFQ 7011EC18 ***** TOTAL:		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	<i>M. J. Matheny</i>	TELEPHONE	304-485-4418	DATE	05/04/2011
TITLE	CEO	FEIN	55-032-0770	ADDRESS CHANGES TO BE NOTED ABOVE	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
7011EC18

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
BUYER 33
304-558-2402

*709035314 304-485-4410
 MATHENY MOTOR TRUCK COMPANY
 PO BOX 1304
 PARKERSBURG WV 26102-1304

VENDOR

SHIP TO

DIVISION OF HIGHWAYS
 EQUIPMENT DIVISION
 ROUTE 33
 BRUSHY FORK ROAD
 BUCKHANNON, WV
 26201 304-472-1750

DATE PRINTED 04/22/2011	TERMS OF SALE NET 30 DAYS	SHIP VIA GROUND	F.O.B. BUCKHANNON, WV	FREIGHT TERMS PREPAID
BID OPENING DATE: 05/05/2011		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				FREIGHTLINER WITH ADDENDUM NO. 2 MONROE EQUIP.		
				THIS ADDENDUM IS ISSUED TO:		
				1.) ADDRESS TECHNICAL QUESTIONS PER THE ATTACHED.		
				2.) ADDRESS SPECIFICATION CHANGES PER THE ATTACHED.		
				3.) EXTEND THE BID OPENING DATE FROM 04/28/11 @1:30 PM 05/05/11 @1:30 PM.		
				*****END ADDENDUM NO. 2*****		
0001	1	EA		287-36		
				64,000 GVW CAB AND CHASSIS, COMBINATION		
				***** THIS IS THE END OF RFQ 7011EC18 ***** TOTAL:		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>M. J. Matheny</i>	TELEPHONE 304-485-4418	DATE 05/04/2011
TITLE CEO	FEIN 55-032-0770	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

PREBID ADDENDUM #2
.7011EC18

64,000 GVW CAB AND CHASSIS, STAINLESS STEEL COMBINATION
DUMP/SPREADER MUNI BODY, AND PISTON PUMP HYDRAULIC SYSTEM

CHANGES TO BIDDER'S EVALUATION REPORT:

X6.5 VENDOR WRITTEN QUESTION – No Change Required

FROM:

X8.4.5.1 Front frame mounted tow hooks _YES_ _NO

TO:

X8.4.5.1 Does unit have front frame mounted tow hooks X YES NO

X8.5.4 VENDOR WRITTEN QUESTION – No Change Required

X8.5.24 VENDOR WRITTEN QUESTION – No Change Required

VENDOR WRITTEN QUESTION

FROM:

X8.6 – Line 1 and 2

Engine:

Is engine diesel _YES_ _NO_ LITER

Peak HP _at_ RPM Torque lb. ft. at RPM

TO:

X8.6 – Line 1 and 2

Engine:

Is engine diesel X YES NO 12.7 LITER

Peak HP 410 at 1800 RPM Torque 1450 lb. ft. at 1240 RPM

1240 [↑] _{W/M}

VENDOR WRITTEN QUESTION

X8.6 – Line 3 and 4 – LEAVE AS WRITTEN

Is engine compliant and certified to meet US EPA 2010 Emission Standards without using Federal EPA credits X YES NO

Manufacturer: DETROIT DIESEL Model: DD13

X8.6.3 VENDOR WRITTEN QUESTION – No Change Required

DELETE:

X8.7 Clutch:

X8.7.1 Externally lubricated and manually adjusted with torque limiting clutch brake YES NO

X8.7.2 Clutch adjustment set to specifications prior to delivery to the Department YES NO

X8.7.3 Is clutch dual plate ceramic clutch YES NO

Size: inch Kwik adjust(manual feature) YES NO

Manufacturer and model: with 7 spring damper YES NO

X8.7.4 Does clutch meet or exceed peak engine torque YES NO

X8.9.2 No Change Required

Single aluminum usable: 110 U.S. gallon; frame mounted X YES NO

X8.16.1 No Change Required – Capacity: 20,000 lbs.

X8.16.3 VENDOR WRITTEN QUESTION – No Change Required

X8.18.6 VENDOR WRITTEN QUESTION – No Change Required

Radial Tires:

Front Radial Tire: Manufacturer and Model: GOODYEAR G291

Rear Radial Tire: Manufacturer and Model: GOODYEAR G282

DELETE:

X8.25 Preventive Maintenance and Operator's Training School:

- X8.25.1 Will a preventive maintenance and operator's training seminar be provided YES_NO
Manuals _ or CD _
- X8.25.2 Will booklets and pamphlets be furnished to be used by the operators YES_NO
Describe agenda _
- X8.25.3 **Will you furnish all training aids; i.e. videos, projectors, etc. required in
conducting the training YES_NO**

X9.0 **VENDOR WRITTEN QUESTION (SPECIFICATIONS DESCRIPTION-No Change
Required**

FROM:

X9.3 Front body bulkhead _ gauge Size: _ inch _ stainless steel

TO:

X9.3 **Front body bulkhead 7 gauge Size: 3/16inch 201 stainless steel**

DELETE:

X9.5 Two (2) front truck frame mounted tow hooks or eyes accessible through
bumper YES_NO

X9.6.8 **VENDOR WRITTEN QUESTION – No Change Required**

FROM:

X9.8.1 Floor: _ inch thickness 304 stainless _
OR abrasion resistant AR400 _ _ inches thick

TO:

X9.8.1 Floor: 3/16 inch thickness abrasion resistant AR400 steel 3/16 inches thick

VENDOR WRITTEN QUESTION:

DELETE:

X9.11 Cab protector sides, formed with gussets, extending forward _ inches
Clearance above highest point of cab is _ inches

FROM:

X9.12.1 Does the body have one (1) piece sides constructed of 7 gauge 201 stainless steel YES NO

TO:

X9.12.1 Does the body have one (1) piece sides constructed of 7 gauge 201 stainless steel with AR400 flat floor X YES NO

X9.13 VENDOR WRITTEN QUESTION -- No Change Required

X9.15.6 VENDOR WRITTEN QUESTION -- No Change Required

DELETE:

X9.15.8 3/16 inch AR400 conveyor bed floor YES NO

DELETE (Last Sentence Only)

X9.19.6 Painted aluminum to match the body YES NO

FROM:

X9.19.11 Unit equipped with 49,000 lb. capacity pintle hook centered between rear frame Rails YES NO
 Manufacturer and Model: Height from ground level to center line of pintle "eye" inches

TO:

X9.19.11 Unit equipped with 49,000 lb. capacity pintle hook centered between rear frame rails X YES NO

Manufacturer and Model: BUYERS PRODUCT BP-760

Height from ground level to center line of pintle "eye" 32 inches

FROM:

X9.24.7 All steel components finished with manufacturer's recommended rust preventative system with adequate primer and paint YES NO

TO:

X9.24.7 All steel components finished with manufacturers recommended rust preventive system includes primer and paint X YES NO

FROM:

X9.25.1 Will the 304 stainless steel surfaces of the body be "paint free" YES NO

TO:

X9.25.1 Will the 201 stainless steel surfaces of the body be "paint free"
 X YES NO

FROM:

X9.25.2 Describe proposed method of painting

TO:

X9.25.2 Will all 201 stainless steel surfaces be unpainted and cleaned with an acid wash solution to remove carbon burning from the stainless steel welds
 X YES NO

FROM:

X9.25.3 Describe proposed method of painting

TO:

X9.25.3 Will all non 201 stainless steel components on the body be painted aluminum
 X YES NO

FROM:

X9.26.4 Will striping and detailing you provide comply with requirements of Section 9.26.1 through 9.26.7 YES NO

TO:

X9.26.4 Will striping material meet the requirement of ASTM D4956-91 Type V sheeting, a super high-intensity retroreflective sheeting consisting of microprismatic retroreflective elements. Does the sheeting meet the requirements of NHSTA, DOT, 49CFR, PART 571 Federal Motor Vehicle safety standards for conspicuity sheeting.
 X YES NO

X10.0 VENDORS WRITTEN QUESTION – No Change Required

X10.1.10 VENDORS WRITTEN QUESTION – Change in Manufacturer and part number only in specification; blank line in Bidder's Evaluation Report to be filled in – No Change Required to Bidder's Evaluation Report

"EXCEPTIONS TO SPECIFICATIONS"

RFQ NUMBER 7011EC10
West Virginia Division of Highways

Bidder: MATHENY MOTOR TRUCK COMPANY

- X8.1 GVWR rating is 64,180 lbs. not the 64,000 lbs. requested.
- X8.5.20 Emergency triangle warning kit requests KD610-464S, KD Lamp or equal. I am providing Grote 71422 or Stimpsonite 130 or King James Co. 1005. These other three manufacturer's are "or equal". The reason for the three suppliers is that these kits are not readily available so we are forced to use three suppliers.
- X8.5.9.4.1 Provision for dual speedometer leads for body company are located in the chassis supplied body company component interface junction block.
- X8.5.10.1 Bid specs call for a mirror size of 7" X 16" with convex mirror. I am supplying a 5.1" X 16.75" mirror with convex mirror.
- X8.5.15 The Freightliner air conditioning diagnostic system is part of the complete chassis diagnostic system. This system is newer and more accurate than "APADS".
- X8.6.1 Bid spec requests a 395 hp @ 1700 rpm.
I am supplying a 410 hp @ 1800 rpm.
MANDATORY SPEC: Bid requests 1450 lb.ft. minimum torque at 1200 RPM. My bid has 1450 lb.ft. torque at 1240 RPM.

- X8.6.1.3 Included in my bid is a Artic Fox Model AFXC 406 in tank fuel heater. Bid request's a Zero Start Model 820-8751 & thermostat Model 820-8786 inline fuel heater. My fuel heater is in the fuel tank not in the engine compartment.
- X8.6.1.4.2 Our tailpipe shield is supplied by Burgaflex which is an "or equal" to Riker.
- X8.10.7 Bid request is for Weather Pac 12110751 and I am supplying the Weather Pac 1530027 which is an "or equal" and is designed for our chassis.
- X8.6.2 **MANDATORY SPEC: Our Jacob's Engine Brake is a compression brake. Bid requests a compression and exhaust brake. Some truck suppliers supply a compression and turbo brake but not a compression and "exhaust" brake.**
I have attached literature about our brake. I believe it compares favorable to the Mack engine.
- X8.10.7.2 Bid request is for a Cole Hersee No. 12081 and I am providing an "or equal" Phillips No. 15720 which is identical to the Cole Hersee No. 12081.
- X8.10.7.4 The numbers for this item will be sent under separate cover.
- X8.13.5 Bid request is for Stemco or equal and SKF Scotseal Plus XL is an "or equal".
- X8.16.3 Bid request is for Stemco or equal and SKF Scotseal is an "or equal".
- X8.17.3.4 Bid request is for MGM TR-TS parking brakes and the Haldex Goldseal is an "or equal".

May 2, 2011

Non – mandatory specification clarification

X 10.1.8 Ramp angle positioning by means of load sense pressure pushing pistons with spring pushing back (not dual servo style). Many thousands of this type of pump design by numerous manufactures have been used and are currently being sold and used for rapid pump response and precise pump output control.

X 10.3.2 Work sections are compensated with full integrated load sense network. Spreader and spinner flow compensated with plow priority and speed control.

X6.1



WORK SMART

FREIGHTLINER 114SD

VOCATIONAL SEVERE DUTY PLOW



FREIGHTLINER 114SD SEVERE DUTY PLOW

114SD

FREIGHTLINER'S NEW 114SD: THE BEST SOLUTION TO YOUR TOUGHEST CHALLENGES.

Through wind, through sleet, through rain, through snow - especially snow - Freightliner Trucks' new 114SD Severe Duty Plow is ready to tackle whatever Mother Nature throws its way.

Built on our severe duty platform, the 114SD plow features best-in-class visibility, enhanced maneuverability for tight situations, a lightweight aluminum cab for corrosion resistance, and larger door openings for easy entry and egress. And, with its factory chassis layout and inclusive warranty, the 114SD is an easy upfit for truck equipment manufacturers.

Legendary Freightliner quality, and insightful, industry-specific innovations make the 114SD the perfect vehicle to meet all of your most severe duty plow needs.

STANDARD FEATURES

- 114" BBC aluminum day cab
- Set-forward front axle position @ 31"
- Strong, durable cab and hood
- Radiator-mounted mold-in color front grille with signature styling
- Front grille, headlight bezels, engine air intake grille, bumper and primary mirrors trimmed in black
- Halogen composite headlights
- Air rear cab mounts
- Ergonomic wing dash
- 63" x 14" rear window
- Up to 50 degree wheel cut depending on wheel equipment
- DD13® engine with 350 HP, 1350 lb-ft torque
- Eaton® Fuller® 10-speed manual transmission
- Front axle rated at 12,000 lbs
- Rear axle rated at 40,000 lbs
- 60-gallon cylindrical fuel tank

OPTIONAL FEATURES

- Bright accented front grille with chromed grille surround, headlight bezels and engine air intake grille
- Engine air intake pre-cleaner
- Integral front frame extensions in 12" and 24" lengths
- Large selection of wheelbases with frames and frame reinforcements to meet severe duty needs
- Front engine, rear engine and transmission power take-offs
- Three batteries mounted under cab with clear back of cab packaging
- Range of cylindrical and rectangular aluminum fuel tanks
- Steer axles from 12,000 to 22,000 lbs (23,000 lbs available Oct. 2011)
- Single drive axles from 21,000 to 38,000 lbs rating
- Tandem drive axles from 40,000 to 58,000 lbs rating
- Inside/outside engine air intake with snow door
- Grab handles with rubber inserts
- Raised fuel tank and under-step aftertreatment system (available Oct. 2011)
- A wide range of Eaton and Allison® transmissions
- Freightliner AirLiner® and TufTrac® rear suspensions
- Hendrickson and Chalmers rear suspensions
- Expanded dash instrumentation, switches and controls to meet almost any vocational application
- DD13 engine with up to 450 HP, 1650 lb-ft torque
- Cummins® ISC engine with up to 350 HP, 1000 lb-ft torque (available Oct. 2011)
- Cummins ISL engine with up to 380 HP, 1300 lb-ft torque (available Oct. 2011)
- Frame-mounted front tow hooks
- Switch/harness pre-wire for snow plow lights (four configurations)
- Fresh air intake snow shield
- Snow plow crossmember for wing plow support
- Extreme climate thermal cab insulation
- 3.2 million RBM single frame rail (available Oct. 2011)

**FIND A TRUCK FOR YOUR BUSINESS AT
FREIGHTLINERTRUCKS.COM**

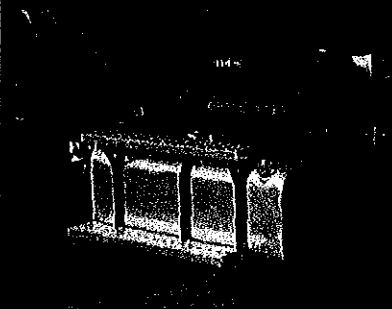
Visit your local Freightliner dealer for complete specifications and options.



Ergonomically designed driver's area features an automotive style dash, easy-to-read LED-backlit gauges and controls within easy reach.



Tilt hood with radiator-mounted stationary grille and front frame extensions.



Under cab storage for up to three batteries allows for clear back of cab packaging.



Engine air intake with snow door.



WORK SMART

Competitive financing available through Daimler Truck Financial. For the Freightliner Trucks Dealer nearest you, call 1-800-FTL-HELP, www.freightlinertrucks.com, 530, 2/11. FTL/MC-B-1038. Specifications are subject to change without notice. Freightliner Trucks is registered to ISO 9001:2000 and ISO 14001:2004. Copyright © 2011, Daimler Trucks North America LLC. All rights reserved. Freightliner Trucks is a division of Daimler Trucks North America LLC, a Daimler company.

X6.5

Freightliner (FTL)



Run Smart

Freightliner Medium-Duty/Business Class

Description	Coverage	
	Time ¹	Distance ¹
Basic Vehicle	3 2 Years	Unlimited
Battery	3 1 Year	100,000 mi/161 000 km
Brightwork	6 Months	Unlimited
Cab Corrosion/Perforation	5 Years	Unlimited
Cab Structure	3 2 Years	Unlimited
Chassis Paint	6 Months	Unlimited
Corrosion	6 Months	Unlimited
Crossmembers	5 Years	Unlimited
Drivetrain	2 Years	Unlimited
Frame Rails	5 Years	Unlimited
Paint	1 Year	100,000 mi/161 000 km
Steer Axle ²	2 Years	Unlimited

¹Time or distance, whichever comes first

²Steer axle coverage-group applies to glider only.

MATHENY MOTOR TRUCK CO.
P.O. BOX 1304
PARKERSBURG, WV 26102-1304

Warranty Statement & Warranty Coverage Descriptions follow on page two of this document.

The information provided in this document is for general information only and is not offered as customer's warranty.

This coverage may be superseded without notification.

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Warranty Statement

1.00 NEW VEHICLE COVERAGE

The following section outlines Company standard warranty coverages for all Company vehicles, apparatus or chassis or cabs sold and domiciled in the USA (50 states and Washington, D.C.), Puerto Rico, and Canada. This information is also included in the Operator's Maintenance and Owner's Warranty Information Booklet.

1.01 NEW VEHICLE LIMITED WARRANTY

Under this New Vehicle Limited Warranty ("Warranty"), Company 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 Warranty covers all components and parts unless specifically covered by other warranties or otherwise excluded by this document.

1.02 LIMITATIONS

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

This Warranty does not apply to engines, Allison or Twin Disc transmissions, tires, or other components or parts that are not manufactured by Company and that are warranted directly by their respective manufacturers. 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.

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 vehicle to comply with this Warranty and Purchaser must, at Purchaser's expense, promptly return the vehicle to an authorized Dealer for inspection and repair or replacement of any defect in material or workmanship occurring within the applicable warranty period.

The vehicle 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 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.

1.03 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 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.

1.04 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 VEHICLE 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 VEHICLE USE.

Coverage Descriptions

Axles

Coverage includes all factory-installed steer axles; drive axles; tag axles; and pusher axles. Excludes any axle installed by a dealer or body builder.

Drive Axle(s)

Coverage 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, and attaching hardware.

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 includes all components included in the individual build specification of each individual application.

Steer Axle

Coverage 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, kingpin bushings, and king pin seals.

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 includes all components included in the individual build specification of each individual application.

Battery

Only Freightliner LLC's private brand-label (Alliance Brand Parts), Mopar (Storling Bullet only), and Furukawa (STL360 Model only) batteries will be warranted. Any other brand of battery is excluded from Company coverage. Claims for all other brands must be submitted directly to the supplier. Warranty coverage includes the battery assembly only.

Basic Body

Coverage includes body emergency lighting and controls; hinged and rollup compartment doors; body trim; body lighting and controls; body electrical systems.

Basic Chassis

Coverage includes all factory-installed components of the vehicle/chassis that are not excluded elsewhere in the warranty, or by special agreement or described as having a different time, or distance or hours, or listed separately on each new vehicle warranty coverage chart.

Basic Vehicle

Coverage includes all factory-installed components of the vehicle/chassis that are not excluded elsewhere in the warranty, or by special agreement or described as having a different time or distance, or listed separately on each new vehicle warranty coverage chart.

Body Electrical

Coverage includes body wiring harness(es) only.

Body Structure

Coverage includes compartments and body panels; hinged compartment doors; fire pump closure; body frame and sub-frame, if applicable. Excludes surface corrosion caused by chips or scratches.

Body Structure and Corrosion

Coverage includes compartments and body panels; hinged compartment doors; fire pump closure; body frame and sub-frame, if applicable. Excludes surface corrosion caused by chips or scratches.

Brightwork

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

Cab Corrosion/Perforation

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

Cab Structure

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

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, or Aftermarket Parts Warranty.

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

- Corrosion caused by general rust (for example, 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 (rotor exclusion does not apply to hydraulic discs with Magna-Coat Rotors)

- 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

Cowl Corrosion/Perforation

Coverage is limited to rust-through or perforation of the cowl 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. Excludes any damage to the paint such as chips or scratches.

Cowl Structure

Coverage includes cowl structural components, sheet metal panels, and hood. Excludes all bolt-on components including hood hinges, latches, guides, or other mounting hardware.

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.

Driveline

Coverage includes driveline shaft tubing, U-joints, yokes, support bearings, and splines.

Drivetrain

Coverage includes transmission, (except Allison transmissions) steer axle(s), drive axle(s), and transfer case. Excludes tag axle(s), pusher axle(s), driveline, and U-joints.

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 regardless if attached with conventional or huck bolts.

Glider

An incomplete vehicle which may be ordered with or without engine and/or major drive train components; warranty coverage includes all components as specified in the specific build specification.

Off Road On-Site Assistance

Coverage is exclusively available for off road vehicles that are prohibited from use on public streets. If this coverage is provided, it will be specifically included in the coverage table as a separate category. Coverage includes on-site assistance and/or equipment transportation to the nearest authorized repair location for a Daimler Trucks North America LLC warrantable repair.

Paint (Body, Cab, & Cowl)

Paint coverage excludes lack-of gloss issues on vehicles painted with low gloss colors; the underside of hoods and roof and side mounted air fairings; and any damages to the paint or painted surface such as chips and scratches.

Body Paint

Coverage includes all factory-painted exterior body surfaces. Warranted against orange peel; peeling/delaminating; cracking or checking; or loss of gloss due to cracking, checking or hazing.

Cab Paint

Coverage includes all factory-painted exterior surfaces (except those included in chassis paint coverage). Warranted against orange peel; peeling or delaminating; cracking or checking; or loss of gloss due to cracking, checking or hazing.

Cowl Paint

Coverage includes all factory-painted exterior surfaces of cowl structure (except those included in chassis paint). Warranted against orange peel; peeling or delaminating; cracking or checking; or loss of gloss due to cracking, checking or hazing.

Paint, Chassis (Chassis Paint)

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

Towing/Roadside Assistance

Coverage includes roadside assistance or towing (to the nearest authorized repair location) for a Daimler Trucks North America LLC warrantable repair in a vehicle-down situation that prevents the safe and lawful operation of the vehicle. If this coverage is provided, it will be specifically included in the coverage table as a separate category.

Transfer Case Assembly

Coverage includes housing and all internally lubricated parts.

Transmission

Coverage includes housing and all internally lubricated parts, electric/air shift/control units, valves, gaskets, and seals. Excludes broken synchronizer pins, PTOs, transfer case(s), airlines, gauge senders, yoke(s), clutch and clutch control components including clutch brake. Excludes Allison automatic transmissions and Twin Disc Automatic Transmissions.

Wheel End Equipment

Coverage includes brake components, wheels, hubs, drums, rotors, wheel seals/ bearings, slack adjusters, and attaching hardware.

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FREIGHTLINER LLC
CUSTOMER PROTECTION PLANS

Class 8 Vehicles (Linehaul/Longhaul applications, prices vary for other vocations)
Level II Warranty

Suggested Retail Price Sheet (USA)

Prices in effect April 1, 2010

Component	Miles	Coverage Options: Time and Mileage															
		Two Years				Three Years				Four Years				Five Years			
		50K	100K	150K	200K	50K	100K	150K	200K	50K	100K	150K	200K	50K	100K	150K	200K
	Codes																
Selected Components Coverage																	
Climate Control System	WAM	\$ 160	\$ 185	\$ 210	\$ 260	\$ 365	\$ 415	\$ 465	\$ 515	\$ 470	\$ 520	\$ 570	\$ 645	\$ 625	\$ 675	\$ 760	\$ 800
Starter / Alternator	WAB	87	88	113	128	175	200	230	261	228	281	298	337	312	356	411	466
Steering	WAC	88	110	120	129	153	174	200	228	218	249	287	325	290	331	382	432
Cooling	WAD	91	111	128	172	170	195	224	291	238	272	314	450	312	356	411	499
Suspension Front & Rear	WAE	74	103	115	127	146	169	234	278	216	242	289	343	288	331	384	412
All selected options	V	500	607	686	816	1,009	1,153	1,353	1,571	1,388	1,544	1,758	2,100	1,827	2,049	2,338	2,609
* Basic Vehicle - 3 YRS. INCLUDED	WAH	998	1237	1478	1653	2504	2868	3317	3766	3270	3753	4294	4919	4141	4498	5215	5931
* Alliance Batteries - " "	WAS	39	45	52	58	64	63	75	87	92	100	130	141	148	183	238	266
* Cab & Hood - " "	WAO	60	60	60	60	141	141	141	141	246	246	246	246	387	387	387	387
Towing**	WAG	1 Year/Unlimited Miles				2 Years/Unlimited Miles				3 Years/Unlimited Miles				4 Years/Unlimited Miles			
Cab Guard Removal***	WAV	1 Year/Unlimited Miles				2 Years/Unlimited Miles				3 Years/Unlimited Miles				4 Years/Unlimited Miles			
Transmission ^A																	
Allison 4000 RDS ^A	WAK-1CW	5 Years/Unlimited Miles															
Allison 4000 RDSR ^A						5 Years/Unlimited Miles											
Allison 4600 RDS ^A * SEE NUJON	WAK-1CX	5 Years/Unlimited Miles				ATTACHMENT											
CPP Level II Supplemental****	K																
Frame Rails/ Crossmembers Upgrade	WA1-001	8 Years/750,000 miles															
Transmission Upgrade Eaton/Fuller	WAK-1BF	3 Years/300,000 miles															
Axles Upgrade	WAL-039	3 Years/300,000 miles															

** Towing includes up to \$550 US (or Canadian equivalent) maximum charge, per occurrence, for a vehicle defect that prevents its safe and lawful operation.
 ***Warrantable failure must be covered by Basic or Extended Basic Vehicle coverage in effect at time of failure; removal must be necessary to perform repairs.
 ****Available only on vehicles with maximum GVWR of 39,000 on 2 axles, 60,000 lbs on 3 axles, or 70,000 lbs on 4 axles.
 *****Allison requires use of Allison Approved TES 295 transmission fluid and Genuine Allison Filters.

Customer protection plans must be registered within 80 days of in-service date.
 A late fee of 1.5 % per month will be charged after the 80-day period.
 A flat late fee of \$0% will be charged after 1 year from the in-service date.
 Fees paid for extended coverage are not refundable.
^A Engine and Transmission coverage must be registered within 180 days of in-service date.

* THESE ITEMS ARE INCLUDED IN BASE BID.

M. J. Matthews

EC-04E (April 2010)

MATHENY MOTOR TRUCK CO.
P.O. BOX 1304
PARKERSBURG, WV 26102-1304



X65

MATHENY MOTOR TRUCK CO.

Established 1922

3rd & Ann Streets • P.O. Box 1304

Parkersburg, WV 26102-1304

(304) 485-4418 • (800) 284-4418

(304) 485-2577 fax

www.mathenymotors.com

May 4, 2011

STATE OF WEST VIRGINIA
DIVISION OF HIGHWAYS

ALLISON EXTENDED WARRANTY:

The only extended available is to extend the warranty from the standard 3 year warranty to a 5 year warranty.

The additional charge for this warranty is \$325.00 each truck.

To qualify for the extended warranty WVDOH must use TES-295 Transmission Fluid or approved equal.

BUICK

GMC

SUZUKI



HINO TRUCKS
A Toyota Group Company

ISUZU
TRUCK

Thomas
MULTI-PURPOSE

milner
INDUSTRIES

X6.5

DAIMLER

Published Fair Market Value - DD13

Year / Mileage	EW1 = (Basic)		EW2 = (Gold/Minus)		EW3 (Gold Plus)		EW4 (Platinum)	
	\$ 0 Per event	Code	\$ 0 Per event	Code	\$ 0 Per event	Code	\$ 0 Per event	Code
Vocational Warranties								
5/200,000	\$1,600	WAI-561	\$2,650	WAI-562	\$3,150	WAI-563	\$4,500	WAI-564
7/250,000	\$2,150	WAI-569	\$3,850	WAI-570	\$4,200	WAI-571	\$6,000	WAI-572
On-Highway Warranties								
3/300,000	\$615	WAI-657	\$1,000	WAI-658	\$1,500	WAI-659	\$1,950	WAI-660
3/400,000	\$1,100	WAI-665	\$1,800	WAI-666	\$2,800	WAI-667	\$3,600	WAI-668
3/500,000	\$1,700	WAI-673	\$2,600	WAI-674	\$4,050	WAI-675	\$5,200	WAI-676
4/400,000	\$1,300	WAI-681	\$2,100	WAI-682	\$3,200	WAI-683	\$4,100	WAI-684
4/500,000	\$1,900	WAI-689	\$3,050	WAI-690	\$4,450	WAI-691	\$5,750	WAI-692
5/500,000	\$2,100	WAI-697	\$3,500	WAI-698	\$4,900	WAI-699	\$6,300	WAI-700

MATHENY MOTOR TRUCK CO.
 P.O. BOX 1304
 PARKERSBURG, WV 26102-1304

Pricing valid through June 30, 2011

X 8.6

MATHENY MOTOR TRUCK CO.
P.O. BOX 1304
PARKERSBURG, WV 26102-1304

DETROIT DIESEL

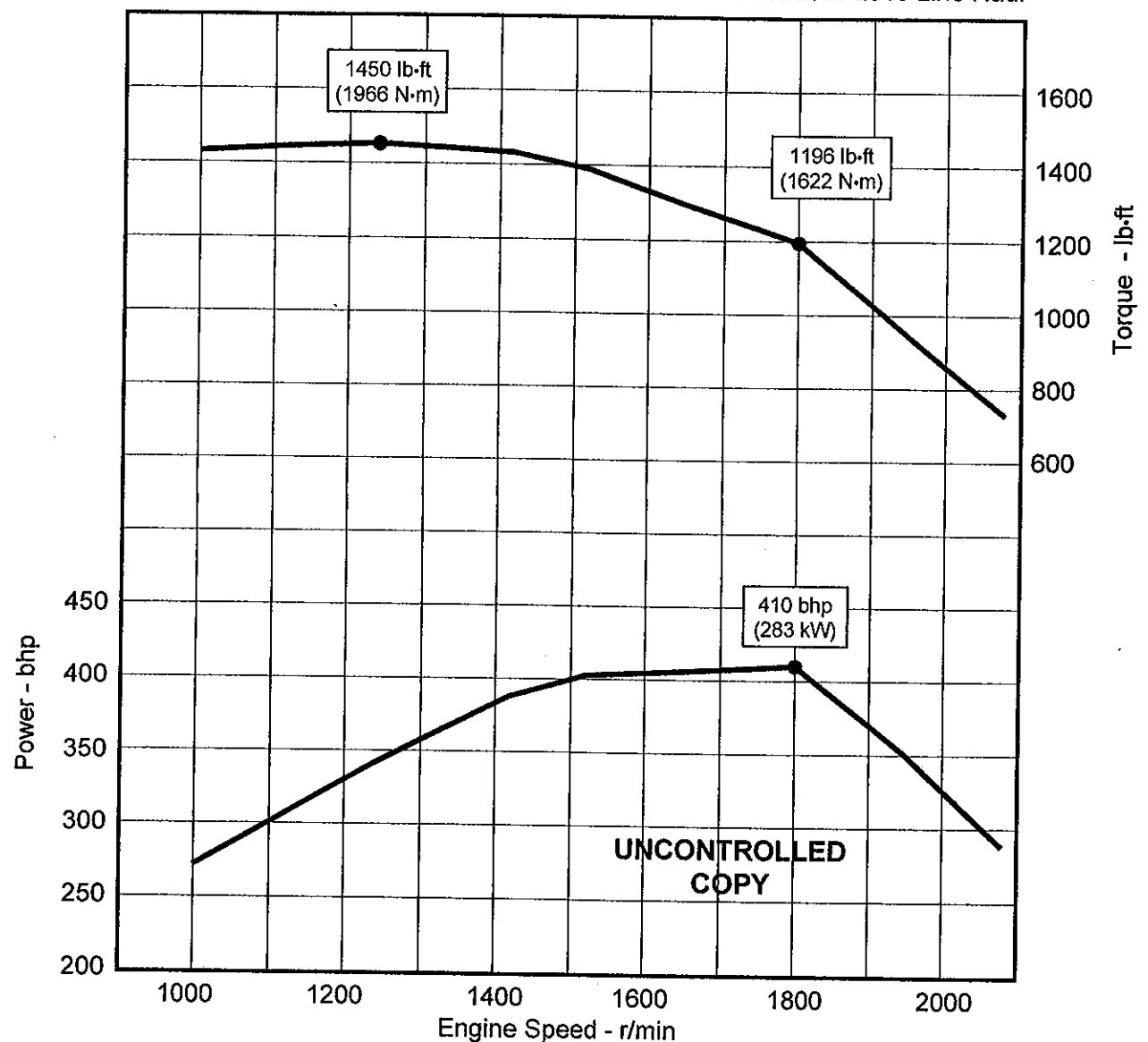


On-Highway Power

Model: DD13 HDE 471903

Rating: 410 bhp @ 1800 r/min - 1450 lb-ft

Certification: 2010 Line Haul



<p>Power output guaranteed within 5% at SAE J1995 conditions: 77°F (25°C) air inlet temperature; 29.31 in. Hg (99kPa) dry barometer; 100°F (38°C) fuel inlet temperature; .853 specific gravity at 60°F Charge air cooler system pressure drop: 40 in. H₂O (10 kPa) Charge air cooler system temperature out: 109°F (43°C) Air intake restriction: 10 in. H₂O (2.5 kPa) Exhaust Back Pressure: 60 in. H₂O (15 kPa)</p>	<p>Conversion Factors: Power: KW = bhp x 0.746 Torque: N · m = lb · ft x 1.356</p>	<p>Aftertreatment Required</p>
---	--	--------------------------------

Certified by: _____

Verified by: _____

Curve No. E4-471X-35-05
Rev. / Date: New / 01-22-10
Sheet No. 1 of 2

Performance Curve

All information subject to change without notice.
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On-Highway Specification Sheet

General Data	
Model.....	D471.903
Number of Cylinders.....	6
Bore and Stroke – in. x in. (mm x mm).....	5.20 x 6.14 (132 x 156)
Displacement – in. ³ (L).....	781.1 (12.8)
Compression Ratio.....	17.3
Configuration	
Turbocharger.....	Asymmetrical, fixed geometry + wsgate
Camshaft.....	Twin
Charge Air Cooling.....	Air to Air
Physical Data	
Size: Model and Variant Dependent (D471.903):	
Length – in. (mm).....	58.4 (1484)
Width – in. (mm).....	51.3 (1304)
Height – in. (mm).....	53.0 (1346)
Weight, Dry – lb (kg).....	2540 (1152)
Weight, Wet – lb (kg).....	2628 (1192)
Center of Gravity Distance:	
From R.F.O. Fly. Hsg. (x axis) – in. (mm).....	26.4 (670)
Above Crankshaft (y axis) – in. (mm).....	17.4 (441)
Right of Crankshaft (z axis) – in. (mm).....	-0.8 (-20)
Mechanical Data	
Thrust Bearing Load Limit, Continuous – lb (N).....	N/A
Thrust Bearing Load Limit, Intermittent – lb (N).....	N/A
Fuel System	
Fuel Injector.....	ACRS
Max. HP Pump Fuel Inlet Temp. – °F (°C).....	194 (80)
Fuel Temperature Rise @ Rated – °F (°C).....	54 (30)
Max. fuel inlet restriction at engine inlet, in.Hg (mbar).....	10.3 (350)
Max. positive fuel restriction at engine outlet, in.Hg (mbar).....	17.7 (600)
Fuel Filter Size, Primary – microns.....	100
Fuel Filter Size, Secondary – microns (Requirement).....	5 (98%)
Gear Pump Fuel Flow:	
Full Load (1800 r/min) gal/hr (L/hr).....	237 (900)
Zero Load (1800 r/min) gal/hr (L/hr).....	221 (840)
Idle Speed (600 r/min) gal/hr (L/hr).....	92 (350)
Truck Fuel Supply Line Flow:	
Full Load (1800 r/min) gal/hr (L/hr).....	124 (470)
Zero Load (1800 r/min) gal/hr (L/hr).....	127 (480)
Full Load (1200 r/min) gal/hr (L/hr).....	106 (400)
Idle Speed (600 r/min).....	90 (340)
Lubrication System	
Oil Pressure at (2000 r/min) – lb/in. ² (kPa).....	67 (460)
Oil Pressure at Low Idle – lb/in. ² (kPa) 600 RPM.....	18 (121)
Max. In Block Oil Temperature – °F (°C).....	257 (125)
Oil Flow (@ Pump) – gal/min (L/min) @ 1800 RPM.....	44 (165)
Oil Pan Capacity, High Limit – qt (L).....	37 (35)
Oil Pan Capacity, Low Limit – qt (L).....	32 (30)
Total Engine Oil Capacity with Filters – qt (L).....	43 (41)
Single Oil Filter – microns @ 50% efficiency.....	15
Electrical System (Engine only w/o Parasitic Load)	
Recommended Battery Capacity (CCA @ 0°F):	
12 Volt System Above 32°F.....	2100
12 Volt System Below 32°F.....	2800
Maximum Resistance of Starting Circuit, mohm.....	0.8
Certification Information	
Certification Approval – Line Haul.....	EPA 2010
Cooling System	
Engine Heat Rejection to Coolant:	
(1800 r/min) – Btu/min (kW).....	10871 (191)
(1520 r/min) – Btu/min (kW).....	9818 (172)
(1240 r/min) – Btu/min (kW).....	7863 (138)
Charge Air Cooler Heat Rejection:	
(1800 r/min) – Btu/min (kW).....	3206 (56.3)
(1520 r/min) – Btu/min (kW).....	2868 (50.4)
(1240 r/min) – Btu/min (kW).....	2273 (39.9)
Coolant Flow (Minimum 90% of Published Flow):	
(1800 r/min) – gal/min (L/min).....	139 (527)
(1520 r/min) – gal/min (L/min).....	123 (464)
(1240 r/min) – gal/min (L/min).....	100 (378)
Engine Radiated Heat Btu/min (kW).....	626 (11)
Thermostat:	
Start to Open – °F (°C).....	189 (87)
Fully Open – °F (°C).....	207 (97)
Minimum Water Pump Inlet Pressure	
(open circuit) – lb/in. ² (kPa).....	0 (0)
Engine Coolant Capacity – qt (L).....	24.2 (22.9)
Minimum Pressure Cap – lb/in. ² (kPa).....	15.2 (105)
Maximum Pressure:	
(Radiator Inlet, closed circuit) – lb/in. ² (kPa).....	30 (207)
Max. Allowable Eng. Temp – °F (°C) (DDEC Reported).....	230 (110)
Check Engine Light – °F (°C).....	234 (112)
Stop Engine Light – °F (°C).....	237 (114)

Cooling System (continued)	
Cooling Index:	
< 8 bhp/ton @ 10 mph wind speed – °F (°K).....	117 (65)
> 8 bhp/ton @ 20 mph wind speed – °F (°K).....	126 (70)
> 16 bhp/ton @ 30 mph wind speed – °F (°K).....	126 (70)
Minimum Fill Rate – gal/min (L/min).....	2.1 (8)
Deaeration time – Minutes.....	30
Minimum Drawdown Requirement – % of total system.....	10
Air System	
Maximum Ambient to Turbo Compressor Inlet:	
Temperature Rise – °F (°C).....	15 (8)
Max. Temperature at Turbo Compressor Inlet – °F (°C).....	131 (55)
Maximum Engine Air Intake Restriction:	
Dirty Air Cleaner – in. H ₂ O (kPa).....	22 (5.5)
Clean Air Cleaner – in. H ₂ O (kPa).....	10 (2.5)
Max. Air Compressor Inlet Restriction:	
Dirty Air Cleaner – in. H ₂ O (kPa) – single cylinder.....	25 (6.2)
Engine Air Flow:	
(1800 r/min) – ft ³ /min (m ³ /min).....	711 (20.1)
(1520 r/min) – ft ³ /min (m ³ /min).....	624 (17.7)
(1240 r/min) – ft ³ /min (m ³ /min).....	508 (14.4)
Air Mass Flow (lb/min) = Volumetric Air Flow (ft ³ /min) x 0.072	
Air Mass Flow (kg/min) = Volumetric Air Flow (m ³ /min) x 1.157	
Max. Turbocharger Compressor Out Temperature:	
Sea Level – °F (°C).....	428 (220)
@ 9482 ft (3000m) – °F (°C).....	446 (230)
Turbocharger Compressor Out Temp. (ATI=25°C):	
(1800 r/min) – °F (°C).....	360 (182)
(1520 r/min) – °F (°C).....	360 (182)
(1240 r/min) – °F (°C).....	344 (173)
Turbocharger Compressor Out Pressure (ATI=25°C, API=4kPa):	
(1800 r/min) in.Hg (kPa-gage).....	61.5 (208)
(1520 r/min) in.Hg (kPa-gage).....	60.4 (204)
(1240 r/min) in.Hg (kPa-gage).....	52.7 (179)
Max. Manifold Pressure – in.Hg (kPa).....	69 (234)
Minimum Intake Pipe Diameter – in. (mm).....	5 (127)
Maximum Charge Air Cooler System Total:	
Pressure Drop – in.Hg. (kPa).....	3 (10)
Max Ambient to CAC Outlet Temp. Diff (A/C, 40°C Tamb) – °F (°K).....	32 (18)
Maximum Crankcase Pressure – in. H ₂ O (kPa).....	2.4 (0.6)
Exhaust System	
Exhaust Flow – before Aftertreatment (sea level):	
(1800 r/min) – ft ³ /min (m ³ /min).....	1519 (43.0)
(1520 r/min) – ft ³ /min (m ³ /min).....	1414 (40.1)
(1240 r/min) – ft ³ /min (m ³ /min).....	1184 (33.5)
Exhaust Temperature – before Aftertreatment (sea level):	
(1800 r/min) – °F (°C).....	746 (397)
(1520 r/min) – °F (°C).....	792 (422)
(1240 r/min) – °F (°C).....	841 (450)
Maximum Back Pressure – in.Hg (kPa):	
With 1-Box Aftertreatment System – New.....	5.7 (19.4)
With 2-Box Aftertreatment System – New.....	7.2 (24.2)
Max Turbine Temperature (all altitudes) – °F (°C).....	1328 (720)
Recommended Exhaust Pipe Diameter:	
Single-in.(mm).....	5 (127)
Max. Temp. Loss between engine and ATS Inlet, During Parked Regen at 20-30°C ambient temp. – °F (°C).....	54 (30)

Performance Data	
Friction Power:	
(2000 r/min) – hp (kW).....	88 (66)
(1500 r/min) – hp (kW).....	50 (37)
Altitude Capability – ft. (m).....	12000 (3660)
Torque availability at 800 r/min – lb-ft (Nm).....	1115 (1512)
Idle Speed – r/min.....	600-800
Engine Crankcase Vent System.....	Open w/ spinner

Engine Speed r/min	Rated Power bhp (kW)	Rated Torque Lb-ft (Nm)
2080	287 (214)	725 (983)
1950	350 (261)	944 (1279)
1800	410 (306)	1196 (1622)
1650	406 (303)	1294 (1754)
1520	402 (299)	1387 (1881)
1420	388 (289)	1433 (1943)
1330	366 (273)	1444 (1958)
1240	342 (255)	1450 (1966)
1130	310 (231)	1442 (1954)
1000	271 (202)	1425 (1932)

Curve No: E4-471X-35-05
Rev. / Date: New / 01-22-10
Sheet No. 2 of 2

N/A – Not Available

All values are at rated speed and power at SAE J1995 with standard engine hardware, and without accessories, unless otherwise noted

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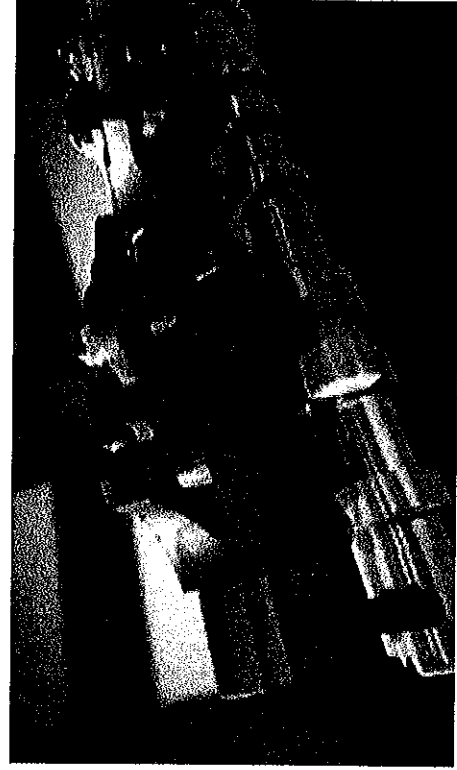
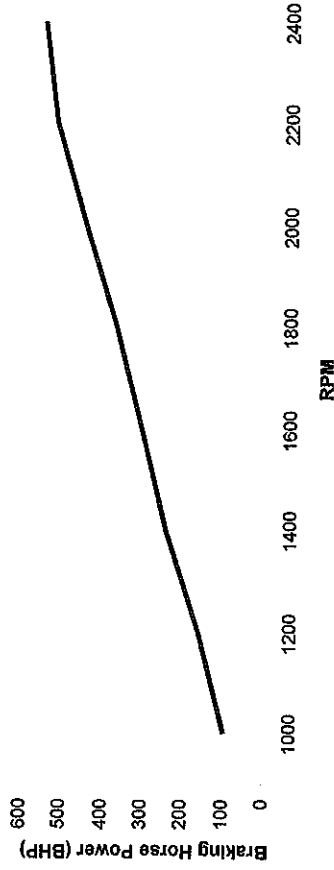
Demand Performance

The standard integrated Jacobs® Engine Brake delivers outstanding braking horsepower and extremely quiet operation.

- Up to 546 Braking Horsepower
- NEW integrated Jake® Brake designed for extremely quiet operation
- Three levels of braking retarding power:
 - Low (2-cylinder)
 - Medium (4-cylinder)
 - High (6-cylinder)

MATHENY MOTOR TRUCK CO.
P.O. BOX 1304
PARKERSBURG, WV 26102-1304

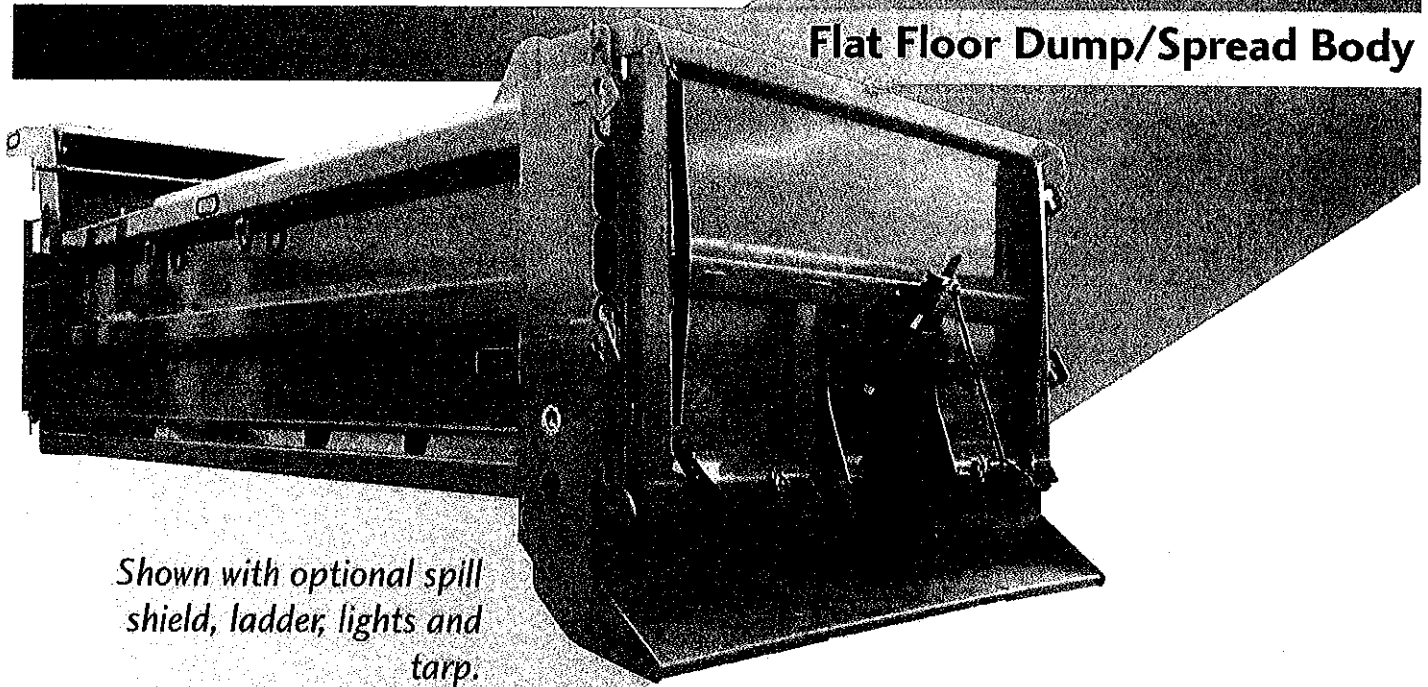
DD13 Braking Horsepower



FFDS

MATHENY MOTOR TRUCK CO.
P.O. BOX 1304
PARKERSBURG, WV 26102-1304

Flat Floor Dump/Spread Body



Shown with optional spill shield, ladder, lights and tarp.

Distributed by:

Manufactured by:



Snow & Ice Control

A Division of Monroe Truck Equipment, Inc.
1051 W. 7th Street, Monroe, WI 53566
800-880-0109 • Fax: 608-328-8390
www.monroetruck.com

Standard Features:

- Available in 9' to 16' Lengths
- $\frac{3}{16}$ " Mild Steel Sides & Ends
- $\frac{3}{16}$ " Formed Dirt Shedding Top Rail
- $\frac{1}{4}$ " Long Sills, 14" in Height with Formed Cross Sills
- $\frac{1}{4}$ " Replaceable Floor, Supported on 12" Center
- Dual 6:1 Gear Box Drives
- 2" Drive & Idler Shafts with 2" Heavy Duty Bearings
- $1\frac{1}{4}$ " Heavy Duty Chain Adjusters
- Case Hardened Sprockets to 40-48 Rockwell
- 34" Wide Conveyor with $\frac{1}{2}$ " x $1\frac{1}{2}$ " Bar Flights on $4\frac{1}{2}$ " Centers
- Heavy Duty Pintle Chain with a 26,000 Minimum Tensile Strength
- Telescopic Double Acting Nitrided Hoist Cylinder
- Full Opening Double Acting Tailgate

Options:

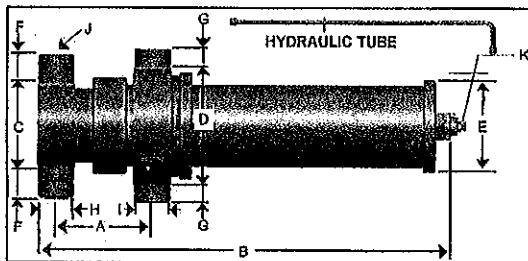
- Corrosion-Resistant Stainless Steel Construction
- High Temp Belt-Over-Chain Main Conveyor
- Bar Every Link, 2.25" Pitch
- Ladder in Mild or Stainless Steel
- Side Boards of Mild or Stainless Steel
- Optional Spinner Chutes
- Variety of Light Packages
- Variety of Cab Protectors
- Asphalt chute or Patch Pan
- Top Screens
- Grease Line Extension



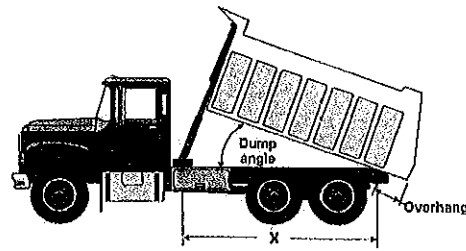
Telescopic cylinder

CS 140-5.5-3 DA

Part N°: PSD0551403VM0177

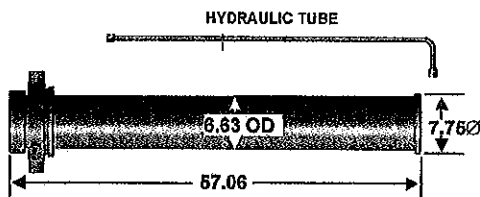


- A- 6-1/2 E- 7-3/4 I- 1-7/8
- B- 62-1/8 F- 2 J- SAE12
- C- 7 G- 1-1/4 K- 1-3/16
- D- 9 H- 1-7/8 Stroke: 140-3/16
- Contains US gals. 11 Weight: 375 lbs

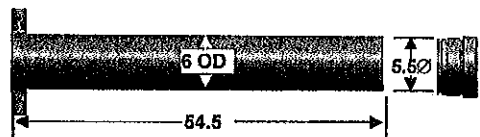


DUMP ANGLE			
Overall Body Length	Overhang	If "X" is equal to	Angle is
16'	12"	16'	46°
18'	12"	14'	60°

Installation components			
Blocks:	B-1875 (2)	Tank:	R-2000W
Frame:	AC-4030	Pump:	18-20 gal./min
Hinge:	P-200		

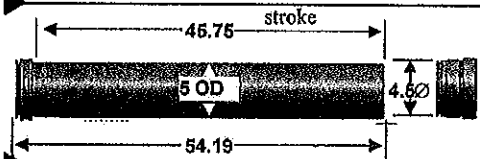


COVER
RKCD066007
HYDRAULIC TUBE
PD5360066



BASE TUBE
ROCD060032
GLAND NUT 5-1/2"
RTC055005

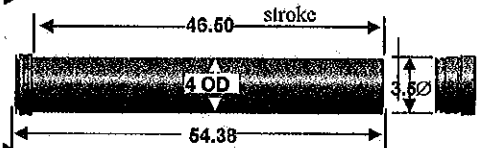
SEAL KIT
UI47SO553D
Components listed below



FIRST STAGE
RMCD050089
GLAND NUT 4-1/2"
RTC045004

U-CUP
UI07500037
O-RING
XE01252
BACKUP
XA03262

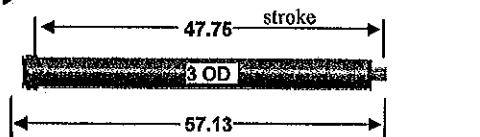
DOWEL PIN
ZE0201870250
WIPER
WA175000
PISTON RING
XD095500



SECOND STAGE
RMCD040088
GLAND NUT 3-1/2"
RTC035015

U-CUP
UI07400037
O-RING
XE01244
BACKUP
XA03244

DOWEL PIN
ZE0201870250
WIPER
WA174000
PISTON RING
XD014500



LAST STAGE
RNCD030062

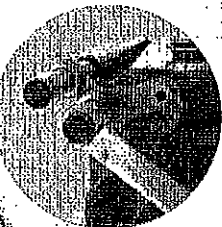
U-CUP
UI07300037
O-RING
XE01236
BACKUP
XA09236

DOWEL PIN
ZE0201870250
WIPER
WA173000
PISTON RING
XD013500

Aero

NEW! THE CLAW

- Holds arm down—no more bouncing
- Automatic operation—no electrical components or cables
- Available exclusively from Aero, patent pending



Aluminum Or Steel Arms

- Shape of aluminum arm extension makes our arms the strongest.
- Yet lightest-weight aluminum arms in the industry
- Polished aluminum arms and steel arms available
- Industry's strongest aluminum arms—unbreakable with normal use
- Both aluminum and steel arms are easy to install and adjustable to fit nearly any size dump body

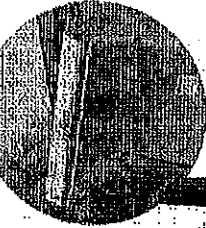
Tarp Types & Colors

- Available in split-pleat grade or mesh material
- Two standard tarp widths: 7 feet or 9 feet with an expandable bungee
- Custom tarps and colors are available at an additional cost



Adjustable Wind Deflector

- No cutting or drilling required
- One-piece adjustable deflector
- Available with or without end plates
- Reduces drag
- Extends tarp life



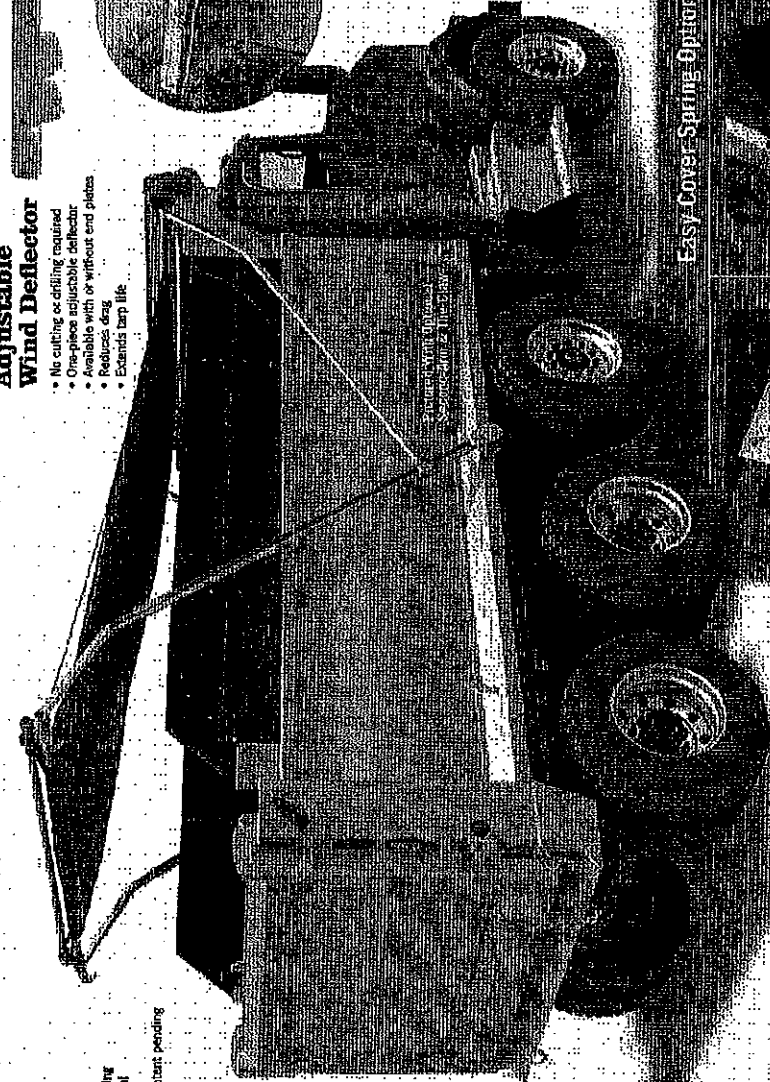
Tarp Housing

- Pre-assembled tarp housing fits on trailers with radius or diagonal front corners
- Aerodynamic design
- No welding
- Reduces drag
- Extends tarp life



Integrated Cab Shield

- For cab shields with built-in wind deflectors
- Includes roll-up tube and flange bearing



Easy-Cover Spring Options



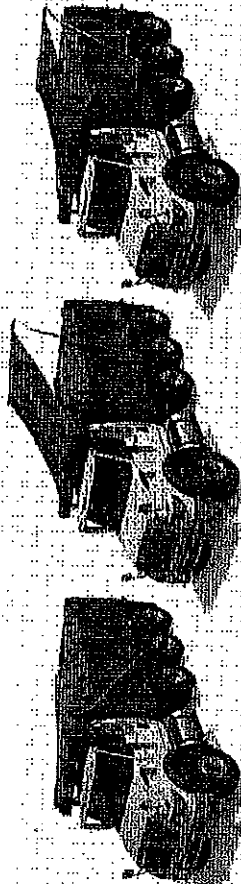
PowerPack Springmount Springs



NEW! Flange Mount Springs

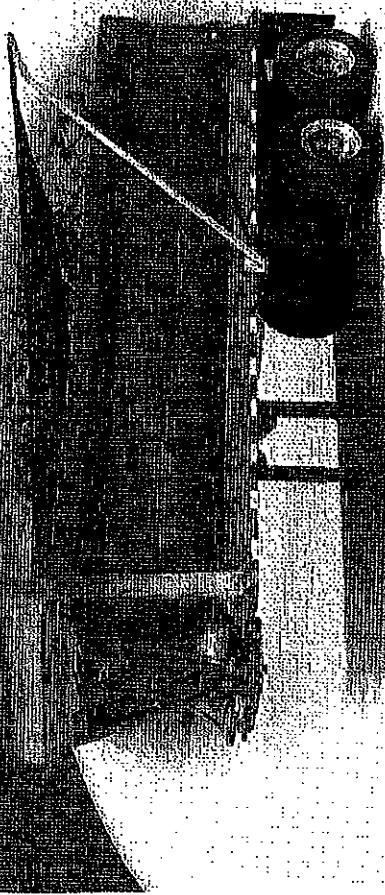


Undermount Underbody Springs



Easy Cover® is Aero Industries' best-selling, most versatile front-to-back dump truck tarp system. It features the strongest springs and arms in the industry for consistent quality performance and unsurpassed durability. Engineered and manufactured to Aero's industry-leading standards, Easy Cover is available in a variety of electric or manual models.

Aero
Tarp System Innovation
Since 1944



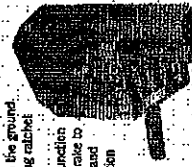
Industry's Most Reliable Electric Motor

- Proven motor design
- Motors backed by 3-year warranty
- Crank cover



Industry's Best Manual Crank

- Smooth, one-handed operation
- Operates from the ground
- Positive locking ratchet and pawl
- Works in conjunction with friction brake to ensure safety and ease of operation

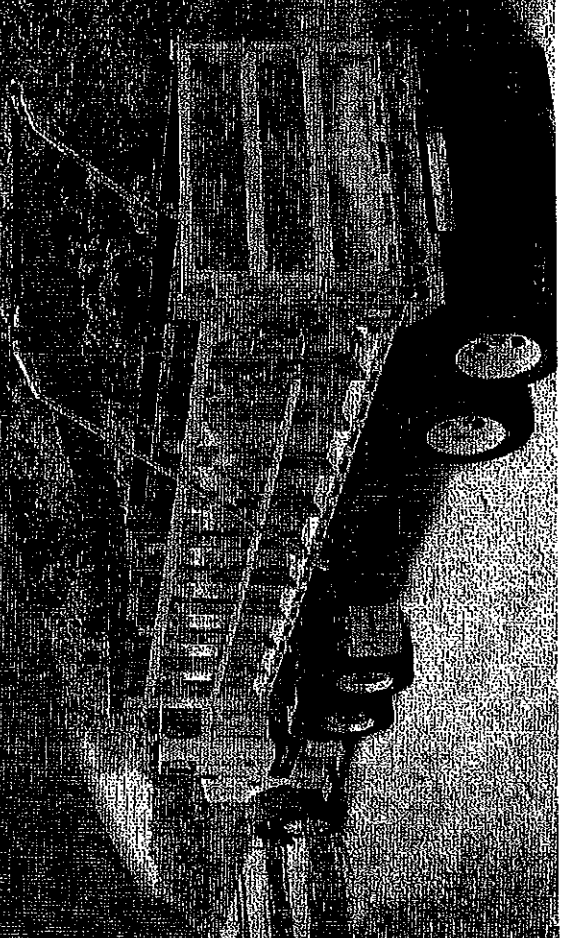


Easy Installation

- Pre-assembled components reduce installation time by hours
- Detailed schematics, with each part clearly numbered, eliminates guesswork in installation and ordering
- No welding required



EASYCOVER Tarp System



EASYCOVER.
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www.aeroindustries.com

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Incorporated IN 46241
800-535-9545
FAX: 317-244-1311

OMAHA, NE
Omaha, NE 68137
800-535-9545
FAX: 402-698-6128

STREETSBOUR, OH
Streetsboro, OH 44241
888-237-2262
FAX: 330-626-8277

AERO UK LTD
Elvington, York
North Yorkshire
YO43 4AU
TEL: 01904 607411
FAX: 01904 607412



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WV DOH RFQ# 7011EC018

FORCE America – Detailed specifications of hydraulics being proposed

HYDRAULIC PUMP: (FASD45)

The hydraulic pump is a U.S. manufactured axial piston pressure and flow compensated load-sensing type. The pump is cast iron construction and rated to 6.00 cubic inches per revolution at maximum stroke which will deliver 24.7 gpm @ 1000 engine rpm. The pump shall have a 2" inch suction line and ¾" case drain line plumbed directly back to the reservoir. The pump is rated for 3000 PSI maximum and 2500 PSI continuous. The pump has a severe duty, high pressure outboard Teflon shaft seal that protects the pump shaft bearing and seal from external contamination and salt spray. The pump has a 1¼" keyed drive shaft and SAE type C mounting flange.

SHUT DOWN SYSTEM: (9172A001)

Valve is a single normally open, two position, two way, poppet style solenoid valve capable of stopping oil flow to the hydraulic system when actuated. It will be installed at the discharge port of the pump. The valve assembly will also incorporate a high pressure relief valve to protect the system from over pressurizing during system shut down. This solenoid valve will be wired to a float type level sensor that is mounted through the top of the reservoir. The system is designed so that when the float contacts close, the solenoid valve stops the flow of oil to the system. At the same time, a signal will be sent to an indicator light on the control panel that alerts the operator of system shutdown. The control panel will also incorporate a momentary override switch wired to de-energize the shut down system to facilitate diagnostics and equipment storage.

CONTROL VALVE: (4020 ADD-A-STACK)

Control valve will be U.S. manufactured. Valve will be a load sensing type with o-ring ports. Mid-inlet section porting will be #16 inlet, #20 outlet, #16 hoist section, #4 load sense port, and #10 or #12 for all other sections. The hoist section will be stacked to one side of the mid-inlet and all other sections will be stacked on the other side. All ports shall be level with each other so as to lay flat on its base.

POWER FLOAT CONTROL VALVE:

The valve will be used with a load sense piston pump to prevent overheating. The hydraulic directional control valve for the plow lift will have closed cylinder ports in the neutral position in order to hold the plow up. This control valve must be automatically turned off when the plow is raised. The valve is to be activated by two solenoids.

The Power Float Control valve will not alter the operation of any other hydraulic function on the vehicle or have an adverse effect on the performance of other hydraulically operated equipment including, if applicable, wing plow, body hoist, plow angle, or spreader functions.

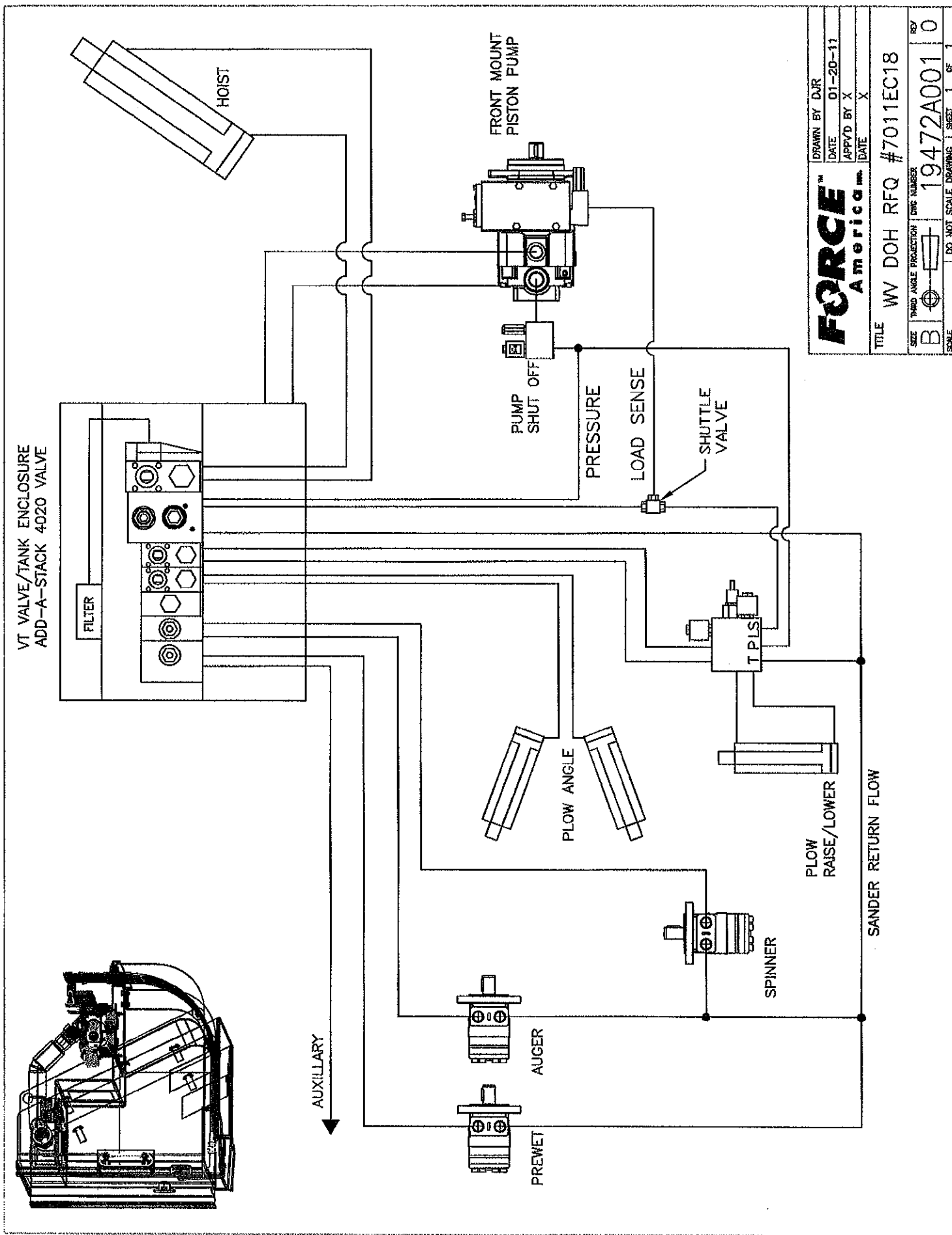
The Power Float Control valve manifold is constructed of aluminum and the valving is cartridge style. Manifold will include a pressure gage for checking the float lift pressure.

SPREADER CONTROL CONSOLE: (SSC5100)

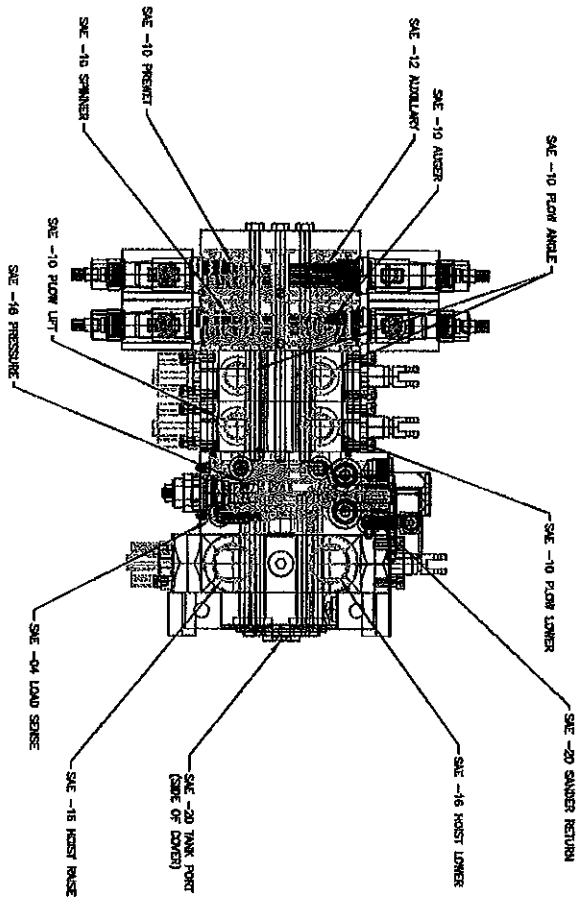
The electronic spreader control is designed for precise, closed-loop control of granular and pre-wet liquid application as a standard and has the ability to control direct liquid application separately or simultaneously when optional equipment is selected. The electronic spreader control has a **field replaceable** battery back up that protects memory functions. Data memory shall be 512K RAM. For data logging unit retains a minimum of four thousand (4000) events. The electronic spreader firmware is upgradeable by downloading files from the supplier's web site at no charge to the municipality for the life of the unit. The unit is protected from reverse polarity, as well as over-voltage protected by using a five-amp reset circuit breaker. All circuit boards are conformal coated. The spreader control is capable of self-diagnostics for system errors and correction procedures. Error log is in plain text. The log will include the last 125 errors associated with the spreader control including the date and time of each error.

As standard, the control unit shall have password protection to prevent unauthorized access to the calibration parameters. The password is programmable. The unit can also utilize iButton technology that is capable of using a Supervisor key to provide access to the parameters without the access code. As an option, iButton technology shall be available for saving and loading of calibration parameters through the use of a Calibration key. The control unit is capable of self-calibration of auger/conveyor feed rates and requires no additional timepieces to calibrate. Programming allows for blast function to be set one of three ways: momentary, timed or by distance traveled. The unit is capable of spreading up to four different granular materials and ten programmable spread rates. Controller has programmable nomenclatures for granular and pre-wet materials. Programming is provided for automatic default to open loop in the event of a feedback failure. The unit provides three operational modes: manual, open loop (ground speed only) and closed loop (ground speed with auger/conveyor feedback). Programming is also provided for two-speed axle input as required.

Text display consists of a two line alphanumeric fluorescent display that shall inform the operator of spread rate information (US or metric) and calibration parameters. The unit is capable of downloading data to a serial printer or PC computer through the use of a bi-directional RS232 port when complete data is required. The unit has the ability to control four compensated valve outputs. Unit has a standby (pass) and blast feature as standard. Unit provides stationary unload functions on granular, pre-wet and direct functions. The unit is upgradeable for event logging and temperature compensation. The control has a programmable jump-start speed feature to provide immediate material flow at one MPH. The unit is programmable to interface with road temperature sensors, direct liquid application systems, and AVL/data management equipment. For other seasonal use, the control has the ability of measuring distance driven in feet or meters, using a start, stop, and reset method. It is also be upgradeable for dust control application.



FORCE America Inc.		DRAWN BY DJR
		DATE 01-20-11
		APP'D BY X
		DATE X
TITLE WV DOH RFQ #7011EC18		
SIZE B	THIRD ANGLE PROJECTION	DWG NUMBER 19472A001 0
SCALE	DO NOT SCALE DRAWING	SHEET 1 OF 1



- HOSE SIZES:
- 1" INLET
 - 1" SANDER RETURN
 - 3/8" LOAD SENSE
 - 3/4" HOIST
 - 1/2" FLOW UP/DOWN
 - 1/2" FLOW ANGLE
 - 1/2" SPINNER
 - 3/4" AUGER
 - 1/2" PREMETS
 - 3/4" AUXILIARY

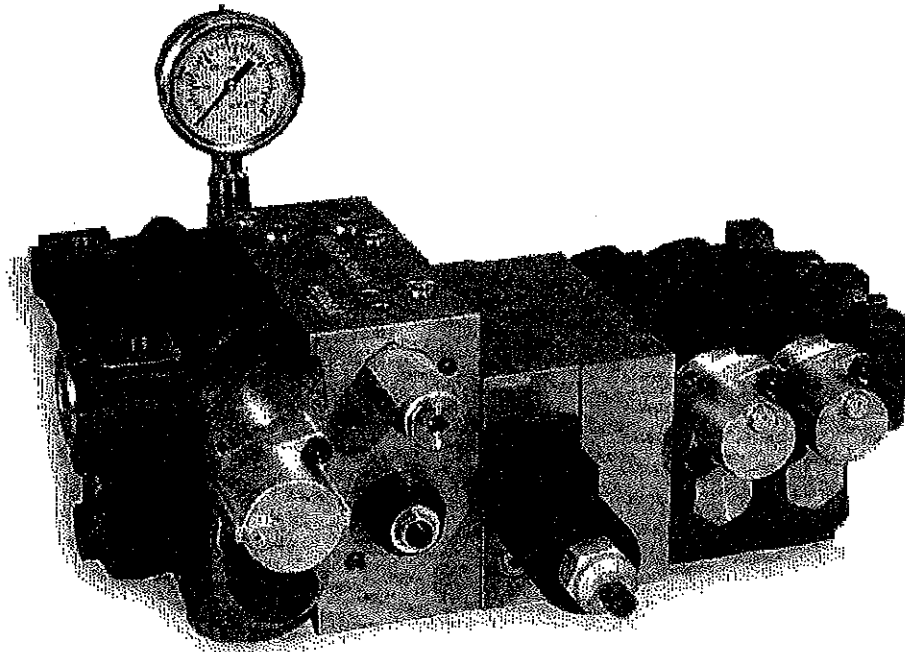


FORCE America's	
MODEL NO. WV DOH RPO #7011EC18	DATE 07-20-11
PART NO. 19473A0011	REV. 1
DRAWN BY 1	CHECKED BY 1
DESIGNED BY 1	APPROVED BY 1

F E A T U R E S

The Add-A-Stack® 4020 valve is a multifunction valve originally designed to control cylinders and motors on truck applications. The enclosure is a cost effective solution to protect the valve from typical corrosion problems of exposed valves. A simple rubber latched cover employs a gasketless weather resistant seal design that stops harmful salt spray.

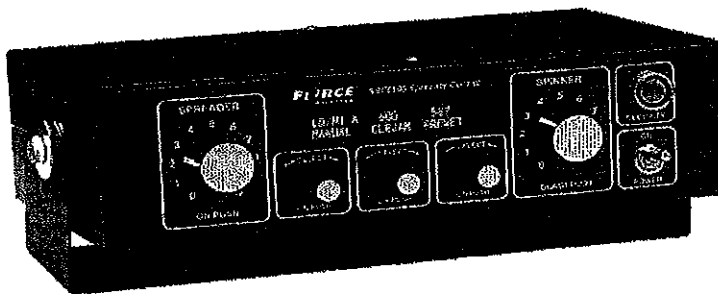
- **Stackable high and low flow sections**
- **Five different valve operators available**
 - Valve can be controlled by cable, electric on/off, electro-proportional, and pneumatic or hydraulic piloted remote
- **Gear pump or load-sensing versions available**
 - Adaptable to open center or closed center systems
- **Work port options standard**
 - Reliefs, anti-cavitations checks, and combinations are available for each workport
- **Stackable Spin-A-Veyer™ valve section**
 - Provides unequalled control for spreader functions on snowplows
- **Hard chrome plated spools**
 - A must to prevent spool and spool seal damage caused by corrosion
- **Optional individual section flow regulators**
 - Each section can be field adjusted to a desired maximum flow
- **Enclosure accommodates bulkhead style sealed cables**
- **Prewired valve harnesses**
- **Level ports all exit on bottom side to accommodate enclosures**



The SSC5100 is a microprocessor based spreader control used for accurately applying up to four identifiable materials, pre-wetting and anti-icing liquids. The SSC5100 can be used in closed-loop, open-loop or manual spreading operations.

F E A T U R E S

- **Menu driven operation and calibration**
- On-screen menus for simple ease of operation and calibration
- **Protected spreader calibration access**
- User selectable passwords or supervisor access keys provide protection from unauthorized access to calibration information
- **Driver identification with material logging**
- Categorizes individual driver activities along with material used, distance traveled, and time for each driver key
- **User definable menus and functions**
- **On-screen text readouts and audible diagnostics**
- Visual readout with distinct audible fault codes offer quick simplified troubleshooting
- **Serial data communication**
- **Three-lane direct liquid application capability**
- Control Material application to multiple lanes with high/low boom applications
- **Road temperature compensation**
- **Dual spinner capabilities**
- Integrated control of dual spinner outputs and auger reversing allow greater flexibility of spreader operations
- **Spinner lane compensation**



Electrical Specifications

- Operating temperature range.....-40° to +185°F
- Operating voltage.....10.0-18.0 VDC
- Operating current.....0.75A max with all outputs driven
.....10A max with all outputs driven
- Protection..... Over-voltage, under-voltage, over-current
- Valve drive frequency.....50, 60, 100,150,200, 250
- Proportional valve drive outputs.....5
- Auxiliary valve drive outputs.....1
- Maximum valve drive current.....2.0A
- Frequency inputs.....4
- Remote inputs.....5

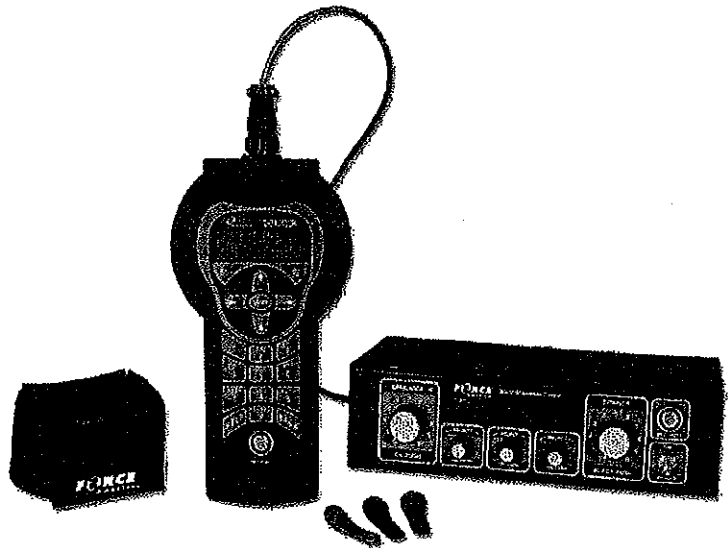
SSC5100 Ground-Based Closed-Loop Spreader Controls

Additional Features

- **Closed-loop spinner**
Accurately control closed-loop spinner of precision placement spreading systems
- **Closed-loop pre-wetting**
Precisely applies pre-wet liquid to granular and accurately logs liquid use
- **Integrated spinner/blast dials**
A FORCE America innovation that provides simultaneous spinner adjustment while blast is activated
- **Fluorescent dot matrix display**
High visibility in both day and night conditions
- **High-speed Can Bus communication**
Easily add advanced spreader features or spreader system expansion
- **Large 512k memory with an Intel 386 processor**
Ample storage space and processor power for logging events and accommodating future enhancements
- **Field replaceable lithium battery**
Provides up to 5 years of memory and time of day clock operation
- **Ground speed jumpstart on value**
Programmable startup assures proper material application at low speeds

Optional Information Management

FORCE America's SSC5100 optional data collection systems are a complete event logging and storage system used for recording all spreader actions based on temperature, date, time, and location information. The information is stored and transferred to a database system either through active wireless or passive memory storage allowing for automated report generation.



FORCE
America, Inc.

501 East Cliff Road
Burnsville, Minnesota 55337

1-888-99FORCE
www.forceamerica.com

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Part Number: FAP3A

Service Centers and Sales

Bismarck, ND	800-624-7568	Fort Dodge, IA	800-362-2994
Charlotte, NC	800-788-0598	Kansas City, MO	800-383-4724
Chicago, IL	800-433-5765	Milwaukee, WI	800-722-5844
Columbus, OH	888-449-0356	Minneapolis, MN	800-328-2732
Dallas, TX	800-893-7225	Philadelphia, PA	800-492-6621
Denver, CO	888-833-7711	Salt Lake City, UT	877-230-0505



5100 LCD

Color LCD Display

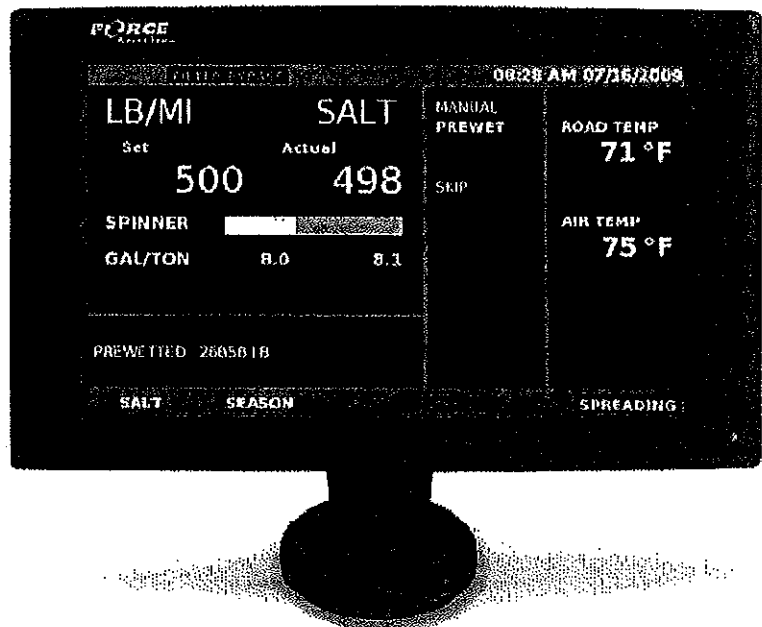
F E A T U R E S

The New 5100 LCD Color Spreader Display offers plow drivers a large, easy to read display with adjustable brightness and large fonts. All spreader control information is available at a quick glance.

- **Color LCD display**
 - 7" diagonal with 3.5" x 6" viewing area, TFT type, 800 x 480, wide VGA format screen resolution, scratch resistant screen with anti-glare coating
- **Upgradeable and retrofits to any 5100 spreader control**
 - Integrates with existing 5100 units and is upgradeable for future enhancements
- **On-Screen warning with audible alarm**
 - Bold, bright indicators of chassis-mounted hydraulic system sensors
 - Body up • Filter bypass • Oil level • Oil Temperature
- **CANBUS communication**
 - Robust communication standard for automotive/truck electronics
- **View granular, Pre-wet, and Direct application liquid rates simultaneously**
 - All critical snow fighting information on one screen



The 5100 offers a low profile display screen.



1-888-99FORCE

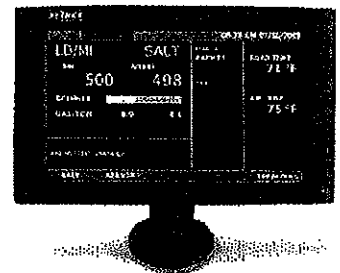
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5100 LCD

Color LCD Display

5100 LCD Display Specifications

- "Heads up" Spreader display, mounted withIn easy view of the operator
- Color LCD Display, 7" diagonal viewing area; 3.5" x 6", TFT type, with 800 x 480 screen resolution
- Wide viewing angle; +/- 45 degrees horizontal and +/- 30 degrees vertical. No color image distortion
- Display contrast ratio: 400:1
- Hardened, anti-glare scratch-resistant screen
- Upgradeable display firmware-Compact Flash socket for quick "plug and play" programming
- Operating temperature range: -40°C to 85°C
- Adjustable LCD Brightness:
 - Set brightness via 5100
 - Control brightness through dash light inputs
- CANBUS communication with spreader control
- The screen displays the following spreader information:
 - Granular application spread rate
 - Pre-wet application spread rate
 - Anti-ice application spread rate
- Application rates available in standard and metric units
- Graphical representation of spinner rate
- Mode of spreader application
 - Road Temperature (°F or °C) with optional sensors
 - Ambient temperature (°F or °C) with optional sensors
 - Spreader status differentiates between spreading, standby, and blast
- Plain text error messaging
- Current date and time
- Data menu:
 - Current output reading to valve coil for the auger, spinner, pre-wet, and anti-ice functions
 - Season cumulative spreader information including material weight and volume, distance and time for each material and operation mode
 - Error log in plain text to include the last 125 errors associated with the spreader control including the time and date of each error
 - Truck battery voltage
 - Truck Speed-miles per hour or kilometers per hour
- The display screen also includes for warning options: for body-up, low oil, oil temp, and filter bypass with an optional audible alarm. Plain English text red in color
 - Dimensions 7.75" H x 4.75" W x 3" D



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America, Inc.

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Part Number: FA1000

Service Centers and Sales

Bismarck, ND	800-624-7568	Fort Dodge, IA	800-362-2994
Charlotte, NC	800-788-8598	Kansas City, MO	800-383-4724
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Denver, CO	888-833-7711	Salt Lake City, UT	877-230-0505

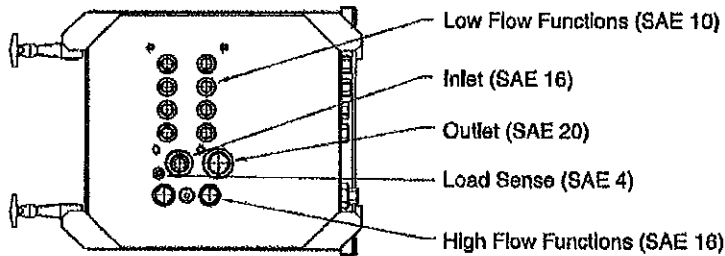
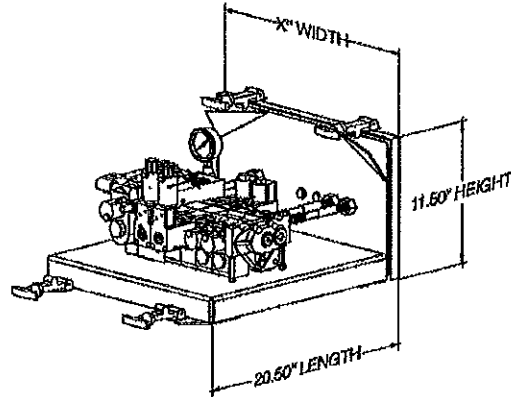
Hydraulic Valve

Add-A-Stack® 4020 Valve and Enclosure

Installation Information

Dim.	Valve Sections				
	4-5	6-7	8-9	10-11	12-13
X	19.00	22.50	26.00	29.50	33.00

All dimensions are approximate.



Specifications

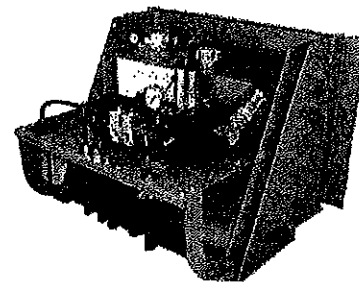
Valve Specifications

Nominal inlet flow rating.....	40 gpm*
Operating pressure (maximum).....	3500 psi
Tank pressure (maximum).....	300 psi
Minimum pressure requires (electric).....	.200psi
Temperature range.....	-40°F to +180° F
Fluid requirements.....	Petroleum based 50-4000 ssu
Filtration requirements.....	ISO 4406 18/14
Seals.....	BUNA-N
Mounting sensitivity.....	None

Electrical Specifications

Rated voltage.....	12 VDC
Coil resistance (at 68°).....	7.5 ohms
Maximum current rating.....	2 amps
Watts.....	.20 watts
Duty cycle.....	100%
Frequency.....	50 Hz pwm
Electric connector.....	24\"/>

Add-A-Stack® 4020 valves are also available in the VT-35 Valve/tank



The VT-35 valve tank assembly combines the valve enclosure and tank into one easy to install assembly. All components; tank, valve, filter, filter/breather, sensors, cables, valve fittings and hose ends are under one rubber latched cover.

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Load Sense Piston Pump

FASD - Severe Duty

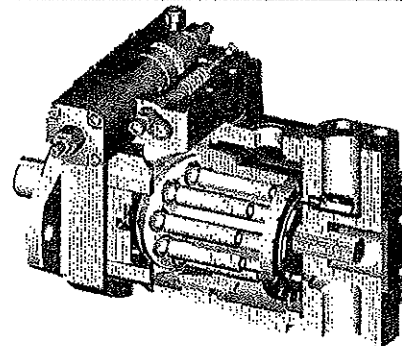
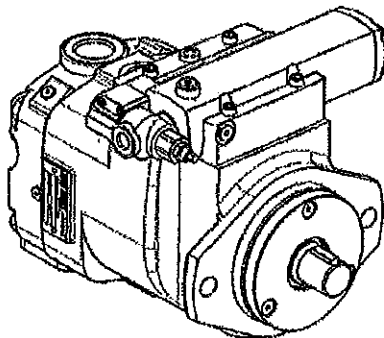
Features

FORCE America model FASD variable volume load sense piston pumps are specifically designed for severe duty mobile truck application

- High flow rates: 34 or 45 GPM (at 1800 RPM) 2400 RPM maximum speed.
- High pressure: Intermittent pressure to 4000 PSI
- Severe duty high pressure (2000 PSI) outboard Teflon shaft seal protects pump shaft bearing and seal from external contamination and salt spray
- Special hardening process on all wear surfaces
- Steel piston shoes for proven rotating group design
- O-ring housing seals, no gaskets!

Available Models

FASD34-R	-	4.67 cu/in, right hand rotation, 1-1/4" round keyed shaft, SAE C 2-bolt mount
FASD34-L	-	4.67 cu/in, left hand rotation, 1-1/4" round keyed shaft, SAE C 2-bolt mount
FASD45-R	-	6.00 cu/in, right hand rotation, 1-1/4" round keyed shaft, SAE C 2-bolt mount
FASD45-L	-	6.00 cu/in, left hand rotation, 1-1/4" round keyed shaft, SAE C 2-bolt mount



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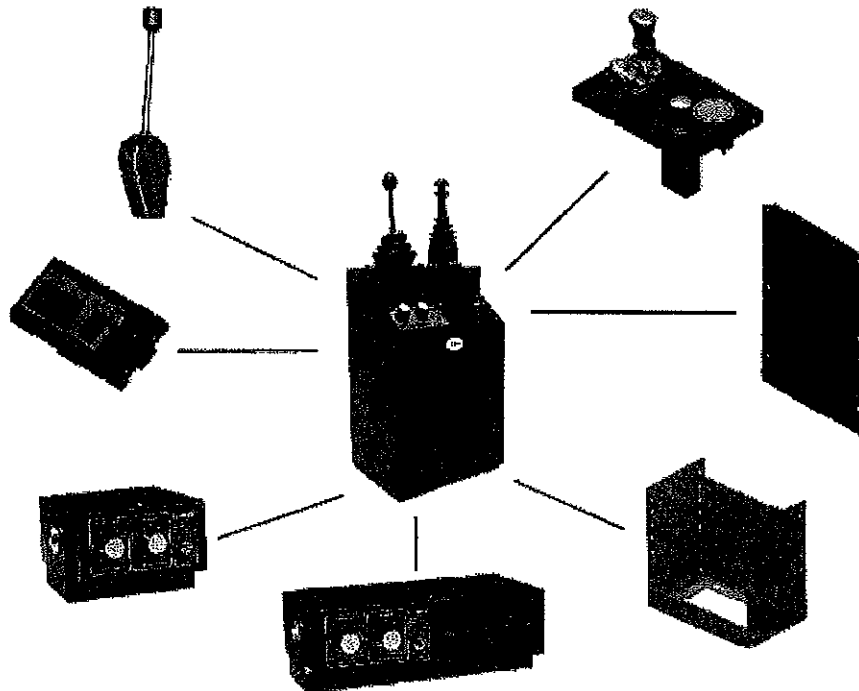
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F E A T U R E S

InControl is a modular in cab, heavy duty, truck system that is perfect for a wide variety of truck and machine control applications.

- Modular design allows you to easily create a "custom" control package that meets your needs.
- Large variety of tower sizes ensure a good fit in most applications.
- Includes push-pull cable controls, pneumatic air controls, hydraulic remote controls and electric accessory controls.
- Choose from a large selection of cover plates or we can make a custom cover to accept your current control type
- Adjustable base height option for operator safety and comfort.



Control Towers:

- 3, 5 & 7 Cable Sticks Wide - A size for most applications
- Fixed & Adjustable Bases - 14" to 20" tall for operator comfort
- Top Stick Bay & Front Stick Bays - Variety of configurations
- Top & Front Bay Component Mounting Plates -- Unlimited range of control types and combinations
- Removable Rear Cover -- Allows inside access for ease of installation and service



Control Options:

- Hoist/PTO Controls: Cable, air and electric operation
- Hydraulic Valves: Cable, air, hydraulic pilot and electric operation
- Truck Tag Axle: Manual or electric operated pneumatic operation
- Hoist Tailgate: Cable, air and electric control
- Spreader: Manual or electric control of hydraulic valves
- Tarp: Electric, hydraulic or air
- Proportional electric controls
- Wireless control
- Accessory electric high power distribution



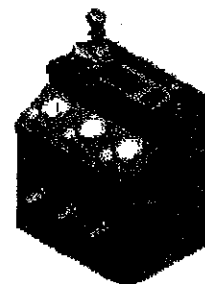
Applications:

- | | |
|-------------------------|--------------------------|
| Dump Trucks | Side Dump Systems |
| Hook Lift Trucks | Belly Dump Systems |
| Spreader-Plow Trucks | OEM Control Applications |
| Waste Collection Trucks | Machine Controls |
| Sewer Router Trucks | Remote Controls |



Preconfigured controls available for listed applications.

Bring us your needs and we'll create a configuration that puts you InControl



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POWER FLOAT CONTROL

Hydraulic Valves

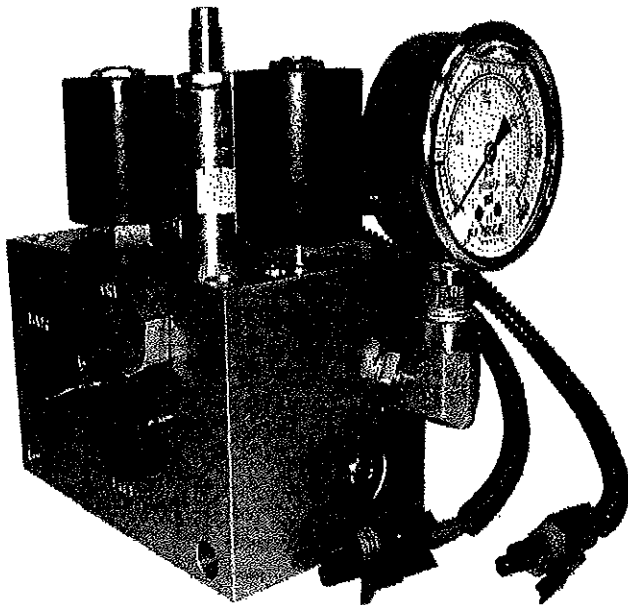
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POWER FLOAT CONTROL

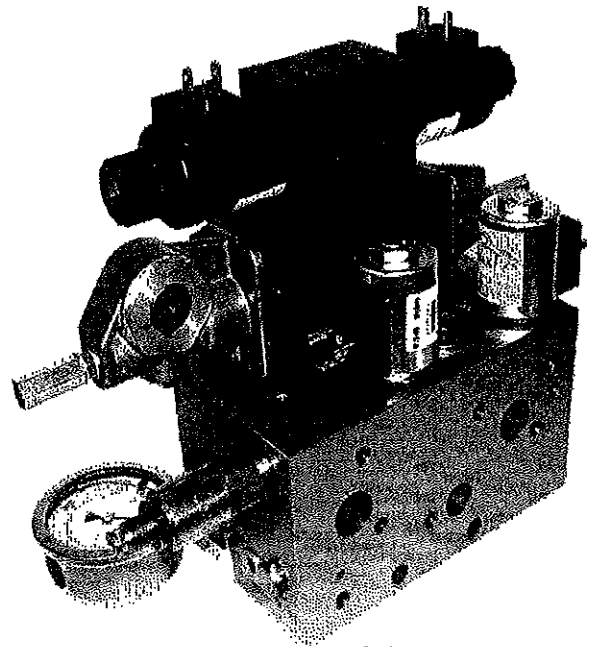
VALVES from FORCE

America, reduce the heavy weight of today's snow plows by providing continuous, controlled hydraulic pressure to the raise side of the lift cylinder.

- Hydraulic float reduces blade wear
- Reduced horsepower need - reduces fuel consumption
- Integrates into the main control valve assembly
 - No extra plumbing needed
- Single acting or double acting application
- For use in "load sense" systems only
- External and integrated valve options available



External Valve



Integrated Valve

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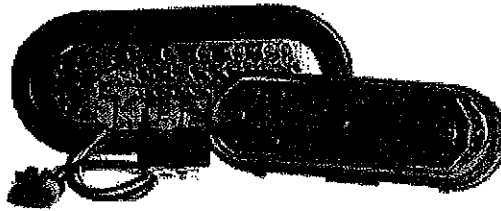
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 - [LED Strobe Lamps](#)
 - [Super 60 Strobe LED Intergral Strobe 36-Diode Pattern](#)
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- External power pack not required
- Metalized reflector version offers more intense focused light
- Non-metalized version offers wider viewing angle
- Dual or quad flashing patterns
- Meets recommended SAE J1318 & j845 photometric specifications
- Mounts horizontally or vertically
- Lamp life rated at 100,000 hours
- Resistance to shock & vibration
- Integral flange option features built-in lens
- Fit'N Forget adapter plug provides corrosion & moisture resistance
- Integral flange option features built-in lens

Super 60 Strobe LED Intergral Strobe 36-Diode Pattern

Material:

Polycarbonate lens, housing & flange
PVC grommet
16 gauge wire

Light Source:

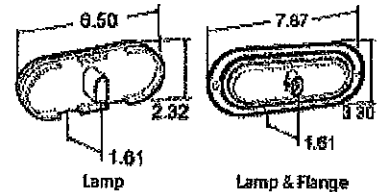
Light Emitting Diodes (LEDs)
Designed at 13.5v

Recommended Accessories:

60721 decorative grommet cover
60719 stainless steel flange cover
60734 assembly box

Kit Components:

- 60120R/Y grommet kits:
- 1 - 60362R/Y metalized reflector
- 1 - 60700 grommet
- 1 - 95220 connector
- 60122R/Y grommet kits:
- 1 - 60380R/Y non metalized reflector
- 1 - 60700 grommet
- 1 - 95220 connector
- 60124R/Y flange kits:
- 1 - 60364R/Y metalized reflector
- 1 - 95220 connector
- 60126R/Y flange kits:
- 1 - 60366R/Y non-metalized reflector
- 1 - 95220 connector



Product	Part #	U/M	Std Ctn Qty
Red	60360R	EA	1
Yellow	60360Y	EA	1
Yellow	60362Y	EA	1
Red	60362R	EA	1
Red	60364R	EA	1
Yellow	60364Y	EA	1
Yellow	60366Y	EA	1
Red	60366R	EA	1
Red	60122R	EA	1
Yellow	60122Y	EA	1
Yellow	60126Y	EA	1
Red	60126R	EA	1
Red	60124R	EA	1
Yellow	60124Y	EA	1
Yellow	60120Y	EA	1
Red	60120R	EA	1

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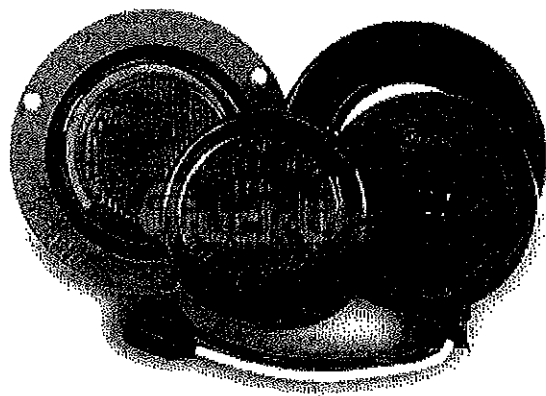
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 - ▶ Marker & Clearance
 - Marker & Clearance
 - Model 10 Marker Clearance LED 2-1/2" Sealed 2-3 Diode Pattern
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 - License, Back-up & Interior ▶
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Model 10 Marker Clearance LED 2-1/2" Sealed 2-3 Diode Pattern

Material:
 Polycarbonate lens, housing & flange
 PVC grommet
 16 gauge wire

Light Source:
 Light Emitting Diodes (LEDs)
 Designed at 14v, .03 amp (red) & .08 (yellow)

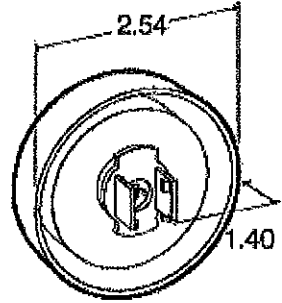
Kit Components:
 10050R/Y grommet kits:
 1 - 10250R/Y lamp
 1 - 10700 grommet
 1 - 93745 plug
 10051R/Y flange kits:
 1 - 10251R/Y lamp & flange
 1 - 93745 plug
 10051R/Y gray flange kits:
 1 - 10251R/Y lamp & flange
 1 - 93745 plug

Recommended Accessories:
 97079 flange gasket

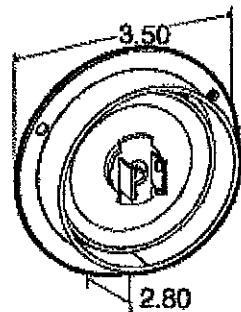
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- Highest quality LED lighting products on the market from a brand you can trust
- Standard lamp has 2 diodes
- Omni-Volt lamp has 3 diodes
- Less current draw, resulting in increased battery & alternator life while allowing more power for other vehicle requirements
- Electronics completely sealed in epoxy to resist corrosion & moisture



Lamp



Lamp and Flange

Product	Part #	U/M	Std Ctn Qty
Red, 10 Series Marker & Clearance Grommet Kit	10050R	EA	1
Red, 10 Series Marker & Clearance Grommet Kit	◆ 10050R3	EA	50
Yellow, 10 Series Marker & Clearance Grommet Kit	10050Y	EA	1
Yellow, 10 Series Marker & Clearance Grommet Kit	◆ 10050Y3	EA	50
Red, 10 Series Marker & Clearance Gray Flange Kit	10051R	EA	1
Red, 10 Series Marker & Clearance Gray Flange Kit	◆ 10051R3	EA	50
Yellow, 10 Series Marker & Clearance Gray Flange Kit	◆ 10051Y	EA	1
Yellow, 10 Series Marker & Clearance Gray Flange Kit	◆ 10051Y3	EA	50
Red, 10 Series Marker & Clearance Lamp	10250R	EA	1

Red, 10 Series Marker & Clearance Lamp	◆	10250R3	EA	50
Yellow, 10 Series Marker & Clearance Lamp		10250Y	EA	1
Yellow, 10 Series Marker & Clearance Lamp	◆	10250Y3	EA	50
Red, 10 Series Marker & Clearance Lamp w/Gray Flange		10251R	EA	1
Red, 10 Series Marker & Clearance Lamp w/Gray Flange	◆	10251R3	EA	50
Yellow, 10 Series Marker & Clearance Lamp w/Gray Flange		10251Y	EA	1
Yellow, 10 Series Marker & Clearance Lamp w/Gray Flange	◆	10251Y3	EA	50
Red, 10 Series Marker & Clearance Lamp 10-30v.	⌘	10256R	EA	1
Yellow, 10 Series Marker & Clearance Lamp 10-30v.	⌘	10256Y	EA	1

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LED Model 60 Stop, Turn and Tail or Front, Park and Turn

Material:
 Polycarbonate lens & housing
 ABS flange
 PVC grommet
 18 gauge wire

Light Source:
 Light Emitting Diodes (LEDs)
 Designed at 14v, .3 amp (stop), .1 amp (turn), .5 amp (turn)

Kit Components:
 60050R/60094Y grommet kits:
 1 - 60250R or 60280Y lamp
 1 - 60700 grommet
 1 - 94706 adapter plug
 60085R grommet kit:
 1 - 60885R lamp
 1 - 60700 grommet
 1 - 94706 adapter plug
 60058R/60097Y black flange kits:
 1 - 60256R or 60292Y lamp & flange
 1 - 94706 adapter plug
 60052R/60096Y gray flange kits:
 1 - 60292R or 60291Y lamp & flange
 1 - 94706 adapter plug

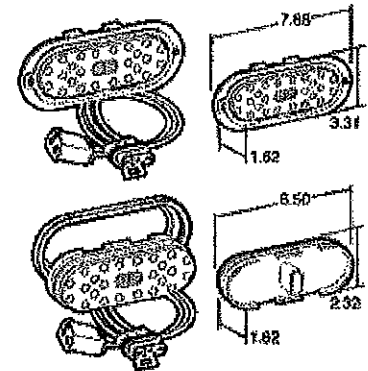
- Description or Truck-Lite #
- Advanced Search (competitor, etc.)
- > Universal Lighting
 - S/T/T & F/P/T Lamps
 - LED Model 60 Stop, Turn and Tail or Front, Park and Turn
 - Multi-Function Lamps
 - Trailer Lighting Kits
 - Modules
 - Signal Lighting
 - Marker & Clearance
 - License, Back-up & Interior
 - Forward, Warning & Speciality
 - Warning & Emergency
 - Accessories
 - Harness Systems
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 - Merchandising
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- LEDs have no filament, therefore are not susceptible to shock & vibration, a major cause of failure for lamps with incandescent bulbs
- Less current draw, resulting in increased battery & alternator life while allowing more power for other vehicle requirements
- Faster illumination offers significant safety benefit for following drivers to react quicker, resulting in an average of 3' reaction time advantage for every 10 m.p.h.
- Meets stringent Front, Park and Turn requirements



Product	Part #	U/M	Std Ctn Qty
Model 60 LED Stop, Turn & Tail 26 Diode Grommet Kit, Red, Bulk	◆ 60050R3	EA	25
Model 60 LED Front, Park & Turn 44 Diode Lamp, Yellow, DS	◆ 60892Y	EA	1
Model 60 LED Stop, Turn & Tail 26 Diode Grommet Kit, Red	60050R	EA	1
Model 60 LED Stop, Turn & Tail 26 Lamp & Gray Flange Kit, Red	60052R	EA	1
Model 60 LED Stop, Turn & Tail 26 Diode Black Flange Kit, Red	60056R	EA	1
Model 60 LED Stop, Turn & Tail 26 Diode Grommet Kit, Red, DS	◆ 60085R	EA	1
Model 60 LED Front, Park & Turn 44 Diode Grommet Kit, Yellow	60094Y	EA	1
Model 60 LED Front, Park & Turn 44 Diode Gray Flange Kit, Yellow	60096Y	EA	1
Model 60 LED Front, Park & Turn 44 Diode Lamp & Black Flange, Yellow	60097Y	EA	1

Model 60 LED Stop, Turn & Tail 26 Diode Lamp, Red		60250R	EA	1
Model 60 LED Stop, Turn & Tail 26 Diode Lamp, Red, Bulk	◆	60250R3	EA	25
Model 60 LED Stop, Turn & Tail 26 Diode Lamp & Gray Flange, Red		60252R	EA	1
Model 60 LED Stop, Turn & Tail 26 Diode Lamp & Gray Flange, Red, Bulk	◆	60252R3	EA	25
Model 60 LED Stop, Turn & Tail 26 Diode Lamp & Black Flange, Red		60256R	EA	1
Model 60 LED Front, Park & Turn 44 Diode Lamp, Yellow		60290Y	EA	1
Model 60 LED Front, Park & Turn 44 Diode Lamp, & Gray Flange, Yellow		60291Y	EA	1
Model 60 LED Front, Park & Turn 44 Diode Lamp & Black Flange, Yellow		60292Y	EA	1
Model 60 LED Stop, Turn & Tail 26 Diode Lamp, Red, DS	◆	60885R	EA	1
Model 60 LED Front, Park & Turn 44 Diode 24V Lamp & Integral Flange, Yellow, DS	◆	60298Y	EA	1
Model 60 LED Stop, Turn & Tail 26 Diode Lamp, 24V, Red		60253R	EA	1
Model 60 LED Stop, Turn & Tail 26 Diode Lamp, 24V, Red, DS	◆	60264R	EA	1

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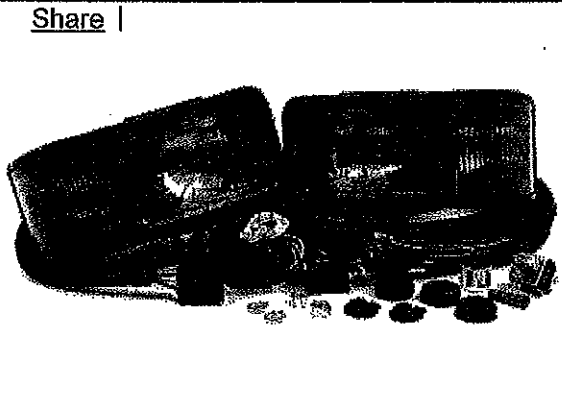


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 - ▶ Forward, Warning & Speciality
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 - DRL Snow Plow/ATL Lights
 - Headlamps
 - Fog & Driving
 - Work Lamps
 - Bus Lamps
 - European Approved Lamps
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- High impact polycarbonate & steel construction
- Features high/low beam halogen headlamps & integrated park/turn lamps
- Adapts easily to vehicle equipped with Daytime Running Light (DRL) systems
- Unique plug-in adapter design allows installation without cutting or splicing existing wiring
- Mounts on one 1/2" - 13 stud
- Normal DRL function transferred to snow plow lights
- Use matrix to determine appropriate adapter plug kit, sold separately
- Wiring system features weatherproof Packard connectors to prevent corrosion problems
- DRL kit includes a switch and a heavy-duty flasher

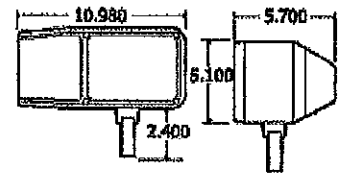
DRL Snow Plow/ATL Lights

Material:
 Polycarbonate park/turn lenses & housings
 Steel bracket
 16 gauge wire

Light Source:
 Bulb: #08004, glass sealed beam
 Designed at 12.8v, 3.52 amp (low) & 5.08 amp (high)
 Bulb: #1167, S-8 DC bayonet
 Designed at 12.8/14v, 2.10/5.9 amp

Kit Components:
 80900 DRL kit:
 1 - 80910 LH lamp
 1 - 80920 RH lamp
 1 - 80930 main harness
 1 - 80940 hardware set
 80970 HB5 adapter kit:
 1 - 80950 LH adapter
 1 - 80951 RH adapter
 80971 HB1 adapter kit:
 1 - 80952 LH adapter
 1 - 80953 RH adapter
 80972 2E adapter kit:
 1 - 80954 LH adapter
 1 - 80955 RH adapter
 80973 2D/2B adapter kit:
 1 - 80956 LH adapter
 1 - 80957 RH adapter
 80974 1A/2A adapter kit:
 1 - 80958 LH adapter
 1 - 80959 RH adapter
 80975 LF/UF adapter kit:
 1 - 80960 LH adapter
 1 - 80961 RH adapter
 80976 HB3/HB4 adapter kit:
 1 - 80962 LH adapter
 1 - 80963 RH adapter

Replacement Parts:
 80910 LH, lamp assembly
 80920 RH, lamp assembly
 80930 harness
 80940 hardware
 97224 switch



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Kit Part #	Kit Components	
	Headlamp Type	Headlamp Bulb No.
80970	HB5	H8007
80971	HB1	H8004
80972	2E	H6545/H6545/4156
80973	2D/2B	6014/H6024/H6014/H6037/H6034/H6054
80974	1A/2A	4651/4652/H4651/H4656/H4652
80975	LF/UF	H4701/H4703
80976	HB3/HB4	H8005/H8006

NOTE: If your vehicle's lighting system is not listed above, you must use the 80900 Universal Snow Plow Light/ATL Kit. If you need assistance determining which kit is correct for your vehicle, call Truck-Lite Technical Support at 888-562-6012.

Product	Part #	U/M	Std Ctn Qty
DRL ,Kit	◆ 80900	EA	1
DRL Snow Plow ATL Lamp, LH	80910	EA	1
DRL Snow Plow ATL Lamp, RH	80920	EA	1
Harness	80930	EA	1
Hardware Kit	80940	EA	1
HB5 Adapter Kit	80970	EA	1
HB1 Adapter Kit	80971	EA	1
2E Adapter Kit	80972	EA	1
2D/2B Adapter Kit	80973	EA	1
1A/2A Adapter Kit	80974	EA	1
LF/UF Adapter Kit	80975	EA	1
HB3/HB4 Adapter Kit	80976	EA	1

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