



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
709EC011

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
MICHAEL AUSTIN 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
01/14/2009	NET 15 DAYS	GROUND	BUCKHANNON, WV	PREPAID
BID OPENING DATE: 02/25/2009		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	EA		065-30	\$106,050.00	\$106,050.00
PROVIDE 33,000 GVW CAB AND CHASSIS WITH WV TRACTOR BODY OPEN END CONTRACT TO PROVIDE 33,000 GVW CAB AND CHASSIS, STAINLESS STEEL DUMP BODY, AND PISTON PUMP HYDRAULIC SYSTEM FOR THE WEST VIRGINIA DIVISION OF HIGHWAYS PER THE ATTACHED SPECIFICATIONS. A MANDATORY PRE-BID CONFERENCE WILL BE HELD ON 02/05/09 10:00 AM AT THE EQUIPMENT DIVISION, BUCKHANNON, WV 26201. FAILURE TO ATTEND PRE-BID WILL RESULT IN BID DISQUALIFICATION. QUESTIONS: WRITTEN QUESTIONS WILL BE ACCEPTED THROUGH CLOSE OF BUSINESS (5:00 PM EST.) ON FRIDAY, 01/30/2009. SEND YOUR QUESTIONS TO: PURCHASING DIVISION ATTENTION MICHAEL AUSTIN 2019 WASHINGTON ST. EAST CHARLESTON, WV 25305 QUESTIONS MAY BE SENT VIA FAX, E-MAIL, OR REGULAR MAIL. E-MAIL: MICHAEL.D.AUSTIN@WV.GOV FAX: 304-558-4115 IT IS THE VENDORS RESPONSIBILITY TO VERIFY THAT THEIR QUESTIONS HAVE BEEN RECEIVED BY CALLING 304-558-2402. EXHIBIT 2						

RECEIVED
 2009 MAR 25 AM 9:06
 WV PURCHASING DIVISION

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE	TELEPHONE	DATE	
<i>M. Matheny</i>	304-485-4418 ext 601	03/23/09	
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. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
5. 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.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) 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.
15. **WEST VIRGINIA ALCOHOL & DRUG-FREE WORKPLACE ACT:** If this Contract constitutes a public improvement construction contract as set forth in Article 1D, Chapter 21 of the West Virginia Code ("The West Virginia Alcohol and Drug-Free Workplace Act"), then the following language shall hereby become part of this Contract: "The contractor and its subcontractors shall implement and maintain a written drug-free workplace policy in compliance with the West Virginia Alcohol and Drug-Free Workplace Act, as set forth in Article 1D, Chapter 21 of the West Virginia Code. The contractor and its subcontractors shall provide a sworn statement in writing, under the penalties of perjury, that they maintain a valid drug-free work place policy in compliance with the West Virginia and Drug-Free Workplace Act. It is understood and agreed that this Contract shall be cancelled by the awarding authority if the Contractor: 1) Fails to implement its drug-free workplace policy; 2) Fails to provide information regarding implementation of the contractor's drug-free workplace policy at the request of the public authority; or 3) Provides to the public authority false information regarding the contractor's drug-free workplace policy."

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** 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. Complete all sections of the quotation form.
4. Unit prices shall prevail in case of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** 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



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DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
01/14/2009				

BID OPENING DATE: **02/25/2009** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE ON 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.</p> <p>UNLESS SPECIFIC PROVISIONS ARE STIPULATED IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS, AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.</p> <p>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.</p> <p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE 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>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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BID OPENING DATE: **02/25/2009** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<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, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.</p> <p>REV. 9/98</p> <p>EXHIBIT 4</p> <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</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE _____ TELEPHONE _____ DATE _____

TITLE _____ FEIN _____ ADDRESS CHANGES TO BE NOTED ABOVE

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5

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01/14/2009				

BID OPENING DATE: 02/25/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
REQUISITION NO.: 709EC011....						
ADDENDUM ACKNOWLEDGEMENT						
I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO M PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.						
ADDENDUM NO.'S:						
	NO. 1	YES				
	NO. 2	YES				
	NO. 3	YES				
	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 COMPANY COMPANY						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE	TELEPHONE	DATE	
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE	

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PAGE
7

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MATHENY MOTOR TRUCK COMPANY
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DATE PRINTED 01/14/2009	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
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BID OPENING DATE: **02/25/2009** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
		304-485-2577				
CONTACT PERSON (PLEASE PRINT CLEARLY):						
		MIKE MATHENY				
***** THIS IS THE END OF RFQ 709EC011 ***** TOTAL:						<i>mf Matheny</i> \$106,050.00

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>mf Matheny</i>	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:

West Virginia Code §5A-3-10a provides that: 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.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the **West Virginia Code**. The vendor **must** make said affirmation with its bid submission. Further, public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the **West Virginia Code** and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the **West Virginia Code** may take place before their work on the public improvement is begun.

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 materials, 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.

LICENSING:

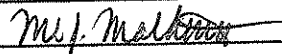
Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, 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.

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>.

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.

Vendor's Name: MATHENY MOTOR TRUCK COMPANY

Authorized Signature:  Date: March 23, 2009



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DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B	FREIGHT TERMS
02/10/2009	NET 15 DAYS	GROUND	BUCKHANNON, WV	PREPAID

BID OPENING DATE: 03/11/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
				ADDENDUM NO. 1		
				BID OPENING DATE AND TIME CHANGED		
				FROM: 02/25/09 AT 1:30 P.M.		
				TO: 03/11/09 AT 1:30 P.M.		
				NO OTHER CHANGES		
0001	1	EA		065-30		
				33,000 GVW CAB AND CHASSIS		
***** THIS IS THE END OF RFQ 709EC011 ***** TOTAL:						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
<i>M. Matheny</i>	304-485-4418 ext 601	03/23/09
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
CEO	55-032-0770	

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03/06/2009	NET 15 DAYS	GROUND	BUCKHANNON, WV	PREPAID

BID OPENING DATE: 03/25/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 2						
BID OPENING DATE AND TIME CHANGED						
FROM: 03/11/09 AT 1:30 P.M.						
TO: 03/25/09 AT 1:30 P.M.						
NO OTHER CHANGES						
0001	1	EA		065-30		
33,000 GVW CAB AND CHASSIS						
***** THIS IS THE END OF RFQ 709EC011 ***** TOTAL:						_____

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE	TELEPHONE	DATE	
<i>M. J. Matheny</i>	304-485-4418 ext 601	03/25/09	
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE	
CEO	55-032-0770		

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LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 3						
CHANGES TO THE SPECIFICATIONS ATTACHED.						
BID OPENING DATE AND TIME REMAINS 03/25/09 @ 1:30 P.M.						
NO OTHER CHANGES.						
0001	1	EA		065-30		
33,000 GVW CAB AND CHASSIS						
***** THIS IS THE END OF RFQ 709EC011 ***** TOTAL:						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	<i>M. J. Matheny</i>	TELEPHONE	304-485-4418 ext 601	DATE	03/23/09
TITLE	CEO	FEIN	55-032-0770	ADDRESS CHANGES TO BE NOTED ABOVE	

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PREBID ADDENDUM #3
 OPEN END CONTRACT
 709EC011

CHANGES TO BIDDER'S EVALUATION REPORT:

FROM:
 TITLE: 33,000 GVW CAB AND CHASSIS, STAINLESS STEEL DUMP BODY, AND
 PISTON PUMP HYDRAULIC SYSTEM

TO:
 TITLE: **MINIMUM 33,000 GVW CAB AND CHASSIS, STAINLESS STEEL DUMP
 BODY, AND PISTON PUMP HYDRAULIC SYSTEM**

NO CHANGE REQUIRED:
 1.0 PURPOSE

NO CHANGE REQUIRED:
 X4.2.2 Delivery date of balance of completed units: 222 calendar days after receipt of
 SEE "EXCEPTIONS TO SPECIFICATIONS" purchase agreement

NO CHANGE REQUIRED:
 X4.2.1 Delivery date of completed representative unit: 132 calendar days after receipt
 SEE "EXCEPTIONS TO SPECIFICATIONS" of purchase agreement

NO CHANGE REQUIRED:
 X6.1 **Manufacturer, model, series, and date of manufacture of proposed unit:**

Cab and Chassis: HINO, MODEL 338, 300 SERIES, 2010 MODEL YEAR

Dump Body: HENDERSON, MODEL MUNI II, WV09, 2009 MODEL YEAR

Piston Pump Hydraulics: COMPONENT TECHNOLOGY SG03040008 WV

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

If not, why? _____

FROM:

X8.1 GVW plate rating: _____ lbs.

TO:

X8.1 GVW plate rating: 33,000 lbs.

LEAVE AS WRITTEN:

X8.3 Wheelbase: 152.0 inches, set forward design for our snowplow applications
 YES NO

LEAVE AS WRITTEN:

X8.4.3 Is the truck chassis frame rails free of obstructions inside the frame rails and along the left outside frame rail 23 inches to 38 inches from the back of the cab for installation of the spinner chute YES NO

FROM:

X8.5 Cab: Is cab manufacturer's standard steel and/or fiberglass and/or aluminum with premium or manufacturers highest level interior trim with inside noise level rating not to exceed 80 dba in compliance with Federal regulations YES NODoes it have an ambient temperature display for outside temperature
 YES NOIs hood a tilt hood and fenders either steel and/or fiberglass YES NOIs rear air bag suspension provided YES NOInner fender panels that are adequate to keep materials from engine compartment
 YES NO

TO:

X8.5 Cab: Is cab manufacturer's standard steel and/or fiberglass and/or aluminum with premium or manufacturers highest level interior trim with inside noise level rating not to exceed 80 dba in compliance with Federal regulations YES NODoes it have an ambient temperature display for outside temperature
 YES NOIs hood a tilt hood and fenders either steel and/or fiberglass YES NOInner fender panels that are adequate to keep materials from engine compartment
 YES NO

LEAVE AS WRITTEN:

X8.5.2 Seats:
Driver – Fully adjustable high back with head rest, air rides, bucket style; seat includes air lumbar, hip bolsters, side bolsters, and back bolsters, with full cloth on entire seat x YES NO

FROM:

X8.5.7.8 Manufacturers stationary grille or grille with cutout area to allow tilt hood to clear snow plow mount YES NO
Bug screen provided behind grille YES NO

TO:

X8.5.7.8 Manufacturer shall provide for stationary grille, grille with cutout area, or a hood which tilts for easy access to the engine to allow tilt hood to clear snow plow mount x YES NO
Bug screen provided behind grille x YES NO

DELETE:

X8.5.7.11 Does unit include kit for front mounted CB radio and all power and ground wiring to include co-ax cable, antenna, speaker, etc. **DELETE**
All cable and wiring routed using grommets and wire looms **DELETE**

Radio make and model: **DELETE**

LEAVE AS WRITTEN:

X8.6 Engine:
Make: HINO Model: J08E-TW
 260 HP Torque @ 585 lb. ft.

LEAVE AS WRITTEN:

X8.6.2 Fuel heater/water separator mounted inside engine compartment YES x NO
SEE "EXCEPTIONS TO SPECIFICATIONS"
Manufacturer: DAVCO

NO CHANGE REQUIRED:

X8.7.1 Is cooling system capable of maintaining engine temperature within the manufacturers recommended range during continuous winter/summer operation YES NO

Does unit provide an automatic "on-off" fan drive with nylon fan blades YES NO

Manufacturer: HINO

FROM:

X8.7.3 Does the radiator provide adequate clearance to facilitate the installation of a crankshaft driven PTO drive shaft YES NO

The distance between the extreme tip of the radiator fan blade and the centerline of the crankshaft is _____ inches to insure adequate clearance for PTO drive shaft

Radiator and heater hoses are silicone type or approved equivalent with constant torque clamps or equivalent utilized on radiator hoses to minimize cold water leaks YES NO

TO:

X8.7.3 Does the radiator provide adequate clearance to facilitate the installation of a crankshaft _____ or transmission driven PTO drive shaft YES NO

The distance between the extreme tip of the radiator fan blade and the centerline of the crankshaft is * _____ inches to insure adequate clearance for PTO drive shaft *NOT APPLICABLE SINCE PROVIDING TRANSMISSION DRIVEN PTO

Radiator and heater hoses are silicone type or approved equivalent with constant torque clamps or equivalent utilized on radiator hoses to minimize cold water leaks YES NO

NO CHANGE REQUIRED:

X8.8.1 Capacity: 52 US gallons. Does tank comply with FMVSS YES NO

Filler cap is chain tethered YES NO

NO CHANGE REQUIRED:

X8.9.2.1 Cold Crank AMPS 1800 AMPS with sealed terminals

LEAVE AS WRITTEN:

X8.9.6.4 Will manufacturer provide body builder circuits – three (3) switches located in the dash instrument panel with one (1) weather protected body builder connection box or module located at the rear under cab YES NO

Is the power module 20 amps per channel, 8- amps maximum output
 YES NO

Do the dash switches control the power module with LED backlighting
SEE "EXCEPTIONS TO SPECIFICATIONS" YES NO

FROM:

X9.8.7 For future potential pre-wet application, will the combination body be capable of accepting frame mounted approximately 85 gallon poly liquid tanks
 YES NO

Will the body be designed to allow maximum protection to the tanks
 YES NO

TO:

X9.8.7 For future potential pre-wet application, will the combination body be capable of accepting fender mounted approximately 75 gallon poly liquid tanks
 YES NO

Will the body be designed to allow maximum protection to the tanks
 YES NO

LEAVE AS WRITTEN:

X9.12 Is the body a unibody design – no crossmember YES NO

FROM:

X9.12.1 The body has one (1) piece sides and floor which incorporates a sloping floor to side radius to adequately feed material to the conveyor chain YES NO

TO:

X9.12.1 Does the body have one (1) piece sides and floor which incorporates a sloping floor to side radius YES NO

Degree of slope to adequately feed material to the conveyor chain 35 °

LEAVE AS WRITTEN:

X9.13 The boxed top rail is sloped inward to shed debris YES NO

FROM:

X9.14 Full length 304 stainless steel integral rear fenders which incorporate prewet liquid reservoirs (85 gallon) YES NO

TO:

X9.14 Full length 304 stainless steel integral rear fenders which incorporate prewet liquid reservoirs (75 gallon) YES NO

LEAVE AS WRITTEN:

X9.15.5 Conveyor width – 25 inches or more YES NO

LEAVE AS WRITTEN:

X9.15.7 Conveyor is driven with 25:1 planetary gearbox drives or equal on both the front and rear shafts with 5.0 CIR hydraulic motors YES NO

One (1) motor has an integral conveyor speed sensor YES NO

DELETE:

X9.16.3 For rear spreading a (DELETE) gauge 304 stainless steel (DELETE) x (DELETE) inch rear feedgate in the body tailgate

FROM:

X9.16.5 The front spinner bracket and chute is mounted to the truck chassis frame and for rear spreading capability the rear spinner chute and brackets are installed by the successful vendor YES NO

TO:

X9.16.5 Is the front spinner bracket and chute mounted to the truck chassis frame and installed by successful vendor YES NO

FROM:

X9.16.6 The spinner assembly is universal and may be used at front or rear YES NO

TO:

X9.16.6 The spinner is universal and mounted at the front for delivery and may be used at front or rear YES NO

LEAVE AS WRITTEN:

X9.16.9 Is the spinner 409 or 304 stainless steel YES NO

LEAVE AS WRITTEN:

X9.17.1 Trunnion Mount YES NO

FROM:

X9.17.4 Hoist cylinder has three (3) stages with ___ inches of stroke with a four (4) inch diameter first stage YES NO
Manufacturer and part number: _____

TO:

X9.17.4 Single acting hoist cylinder has three (3) stages with 90 inches of stroke with a four (4) inch diameter first stage YES NO

Manufacturer and part number: CS90-4-3 MAILHOT

LEAVE AS WRITTEN:

X9.17.7 A five (5) degree oscillating cylinder collar protects the cylinder against side Stress YES NO

LEAVE AS WRITTEN:

X9.18.7 Does the unit have air operated tailgate with dual brake chamber air tailgate latches (one on each side) YES NO

Pivot shafts included stainless steel bushings to eliminate seizing YES NO

DELETE:

X9.18.8 1 ½ inch 304 stainless steel grip strut walk rail installed on both sides of the body
(DELETE)

FROM:

X9.25.9 Load covering system provided with a _____ oz. black vinyl tarp to fit 14 foot 6 inch body YES NO

TO:

X9.25.9 Load covering system provided with a 18 oz. black vinyl tarp to fit 10 foot body YES NO

FROM

X10.3.13 Snowplow power angle control section is 4 way three (3) position spring centered motor spool for operation of worm gear driven type reversing system YES NO

TO:

X10.3.13 Snowplow power angle control section is 4 way three (3) position spring centered cylinder spool for operation of a power angle plow YES NO

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
EQUIPMENT DIVISION

43:

BIDDER'S EVALUATION REPORT

PROCUREMENT SPECIFICATIONS FOR OPEN END CONTRACT
NO. 371-2-G

33,000 GVW CAB AND CHASSIS, STAINLESS STEEL DUMP BODY, AND
PISTON PUMP HYDRAULIC SYSTEM

NOTE TO BIDDER: Procurement Specification No. 371-2-G, 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.: 709EC011

Bidder's Name: MATHENY MOTOR TRUCK COMPANY

Address: PO BOX 1304, PARKERSBURG WV 26102-1304

Telephone Number: 304-485-4418 ext.601

Years Bidder has been registered to do business with the State of West Virginia: 87 YRS.

Years Company has been an authorized dealer for proposed unit: 1 Yr. 6 MO. YRS.

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

X4.2 DELIVERY:

X4.2.1 Delivery date of completed representative unit: 192 Calendar Days After
SEE ADDENDUM 3 & "EXCEPTIONS TO SPECIFICATIONS" Receipt of Purchase Agreement

X4.2.2 Delivery date of balance of completed units: 132 Calendar Days After Receipt of
SEE ADDENDUM 3 & "EXCEPTIONS TO SPECIFICATIONS" Purchase Agreement

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 Prices for units:	1-25	<u>\$106,050.00</u> per unit
	26-50	<u>\$106,050.00</u> per unit
	51 and over	<u>\$106,050.00</u> per unit

X6.0 SPECIFICATIONS - GENERAL

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

Cab and Chassis: HINO, MODEL 338, 300 SERIES, 2010 MODEL YEAR

Dump Body: Viking Proline CB10/11

Piston Pump Hydraulics: Component Technology Model SG03040008 West Virginia

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

TO BE COMPLETED PRIOR TO DELIVERY OF REPRESENTATIVE TRUCK

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 WVDON.

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	_____

MATHEM CHASSIS

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 _____

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:

WARRANTY PROTECTS AGAINST DEFECTS IN MATERIAL & WORKMANSHIP FOR

24 MONTHS/UNLIMITED MILEAGE. ADJUSTMENTS, EXPENDABLES SUCH AS

BULBS & FUSES ARE COVERED FOR 90 DAYS/3,000 MILES. BATTERIES ARE COVERED FOR ONE (1) YEAR. SEE ATTACHMENT

WV TRACTOR BODY

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 _____

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:

_____ Two years parts and labor bumper to bumper _____

MARHEM CHASSIS

47

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)

BASE VEHICLE & DRIVE TRAIN - 24 MO/UNLIMITED MILES 100% PARTS & LABOR;
FRAME - 60 MO 100% PARTS & LABOR

ENGINE - 36 MO/UNLIMITED MILES

CAB - 36 MO/UNLIMITED MILES - 100 % PARTS & LABOR

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 CHASSIS, BODY & PUMP WARRANTY EXCEPT INTERNAL ENGINE WORK.
WORK MUST HAVE PRIOR DEALER APPROVAL AND FOLLOW ALL CHASSIS, BODY & PUMP
POLICY & PROCEDURES.

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

CHASSIS - PARKERSBURG - AVAILABILITY LEVEL TBD

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:	<u>20</u>	% discount
B.	Terms: Net 60	Manufacturer's published list price less:	<u>15</u>	% discount
C.	Terms: Net 90	Manufacturer's published list price less:	<u>10</u>	% 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 \$ 85.00 per mechanic hour

B. Travel Time Charge \$ 105.00 per mechanic hour
(Specify if one-way) _____; port to port YES

C. Mileage Charge \$ NO CHARGE per vehicle mile
(Specify if one-way) NO CHARGE; port to port NO CHARGE

D. Field Mechanic Rate \$ 105.00 per mechanic hour

E. Specify period of time that prices are in effect: ONE (1) YEAR

F. Surcharge for miscellaneous items: 10 % OF LABOR WITH MAXIMUM OF \$50.00

X6.6 EVALUATION COMMITTEE REQUIREMENTS *102015 VAB/HAM*

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: HINO Model: 338

X8.1 GVW plate rating: 33,000 Lbs. SEE ADDENDUM 3

X8.2 Cab to axle dimension: 84.6 Inches.

X8.2.1 Cab to end of frame: 134.6 inches

X8.3 Wheelbase: 152.0 inches, set forward design for our snowplow applications YES NO
SEE ADDENDUM 3

X8.4 Frame: Will you provide a frame that meets or exceeds all Federal requirements for GVWR specified that has an integral front frame extension with no frame cutouts except to allow engine installation? YES NO

Will extension extend forward of the grille area a minimum of 12 inches YES NO

Warranty on frame: 5 years and conform to the following:

X8.4.1 Frame steel: 120,000 PSI yield strength minimum X YES NO

X8.4.2 R.B.M.: 3,866,400 Ins./Lb.

X8.4.3 Is the truck chassis frame rails free of obstructions inside the frame rails and along the left outside frame rail 23 inches to 38 inches from the back of the cab for installation of the spinner chute SEE ADDENDUM 3 X YES NO

X8.4.4 Have you omitted the factory installed bumper and complied with our building of a front bumper X YES NO

X8.5 Cab: Is cab manufacturer's standard steel and/or fiberglass and/or aluminum with premium or manufacturers highest level interior trim with inside noise level rating not to exceed 80 dba in compliance with Federal regulations X YES NO

Does it have an ambient temperature display for outside temperature X YES NO

Is hood a tilt hood and fenders either steel and/or fiberglass X YES NO

Is rear air bag suspension provided - NOT APPLICABLE * YES * NO

Inner fender panels that are adequate to keep materials from engine compartment X YES NO

X8.5.1 Is unit equipped with manufacturers tilt steering column with cruise control feature X YES NO

OR

Provide locking hand operated throttle YES X NO

X8.5.2 Seats:
Driver - Fully adjustable high back with head rest, air ride, bucket style; seat includes air lumbar, hip bolsters, side bolsters, and back bolsters, with full cloth on entire seat
SEE ADDENDUM 3 X YES NO

Material is Modura YES X NO OR approved equal: SEARS 70
SEE "EXCEPTIONS TO SPECIFICATIONS"

X8.5.2.1 Passenger seat fully adjustable high back with head rest, air ride, bucket style, cloth covered or cloth insert in vinyl X YES NO

Clearance between drivers and passenger seats 12 inches

X8.5.3 Floor mats: Rubber floor mats throughout cab area with non-absorbent backing under mats X YES NO

X8.5.4 Heater and defroster: Fresh air type, heaviest duty X YES NO

*
SEE
ADDENDUM
NUMBER
3

- X8.5.5 Windshield wipers and washers: Manufacturers heaviest duty artic type with intermittent feature
 YES NO
- Wipers equipped with snow type blades YES NO
- X8.5.6 Instruments: Are manufacturer's gauges with visual and/or audible, and/or programmable warning to inform driver when operating conditions are exceeded included:
- X8.5.6.1 Voltmeter or ammeter YES NO
- X8.5.6.2 Engine RPM tachometer YES NO
- X8.5.6.3 Speedometer with odometer YES NO
 Are provisions for dual speedometers leads available YES NO
- X8.5.6.4 Air pressure gauge(s) YES NO
- X8.5.6.5 Air filter to be manufacturers heaviest element type YES NO
- X8.5.6.6 Air filter restriction indicator dash mounted YES NO
- X8.5.6.7 Engine hourmeter (controlled by engine operation) YES NO
- X8.5.6.8 Fuel gauge(s) with low fuel warning indicator YES NO
- X8.5.6.9 Is unit equipped with front air intake YES 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 NO
- X8.5.6.10 Oil pressure gauge YES NO
- X8.5.6.11 Temperature gauge YES NO
- X8.5.6.12 Low coolant indicator YES NO
- X8.5.7 Accessories:
- X8.5.7.1 Manufacturers dash mounted extended two (2) cup drink holder
 SEE "EXCEPTIONS TO SPECIFICATIONS" YES NO
- X8.5.7.2 Air horns with snow shields YES NO
 If cab mounted, adequate clearance for future installation of dump body cab protector
 N.A. YES N.A. NO
- Single horn without snow shield YES NO
 Mounted downward on frame rail under hood YES NO
 SEE "EXCEPTIONS TO SPECIFICATIONS"

X8.5.7.3

Rearview Mirrors:

Heated dual, West Coast Type _____ YES NO Size: _____Power adjustable with convex spot mirror YES _____ NO

(OR)

dual flat mirrors (Size: 7.25" x 14.25"^{HEADED}) and power adjustable with separate dual (Size: 8" x 6") convex spot mirrors YES _____ NO

to include fore and aft breakaway feature with corrosive resistant finish equal to stainless steel, powder coat or aluminum or molded plastic housing and mounting brackets

 YES _____ NO

X8.5.7.4

Grab Handle:

Right hand and left hand sides internal or external mounting to rear of door opening

 YES _____ NO**If inside handles, one (1) outside, left, mounted grab handle with non-slip insert for bed aggregate inspection furnished** YES _____ NO

X8.5.7.5

Glass: Manufacturers tinted safety glass; front, sides, and rear YES _____ NO

X8.5.7.5.1

Dual power windows YES _____ NO

X8.5.7.6

Radio: Manufacturers standard AM/FM stereo YES _____ NOWeather band radio feature YES _____ NO

X8.5.7.7

Air Conditioning: Manufacturers fresh air type heaviest duty with APADS or equivalent RCD system to include replaceable fresh air filter YES _____ NO

X8.5.7.8

Manufacturers stationary grille or grille with cutout area to allow tilt hood to clear snow plow mount *SEE ADDENDUM 3 YES NO**Bug screen provided behind grille** YES _____ NO

X8.5.7.9

Front mudflaps manufacturers standard for unit bid YES _____ NO

X8.5.7.10

Emergency triangle warning kit, with hold down or stowed in the cab

 YES _____ NOMake/Model: KD LAMP CO./KD610-464S

X8.5.7.11

Does unit include kit for front mounted CB radio and all power and ground wiring to include co-ax cable, antenna, speaker, etc. YES NO**All cable and wiring routed using grommets and wire looms** YES NORadio make and model: CUSTOM RADIO, MODEL NO. CSS6500

X8.5.7.12

Two (2) front frame mounted tow hooks or eyes YES _____ NO

X8.5.7.13

Accessories included in manufacturers standard cab not listed above:

DUAL OVERHEAD COMPARTMENTS, POWER DOOR LOCKS, COAT HOOK,

FULL INTERIOR TRIM, CIGARETTE LIGHTER, TILT & TELESCOPIC

X8.6 Engine: STEERING WHEEL

Make: HINO Model: JO8E-TW

260 HP . Torque @ 585 Lb. Ft.

X8.6.1 Has engine manufacturer made provisions for front mounted hydraulic pump to crankshaft pulley
SEE ADDENDUM 3 YES NO

X8.6.2 Fuel heater/water separator mounted inside engine compartment YES NO
SEE "EXCEPTIONS TO SPECIFICATIONS"

Manufacturer: DAVCO

X8.6.3 Engine block heater 1000 watt/ 120 v rating includes weather proof spring loaded cap over plug YES NO

X8.6.4 Single vertical exhaust pipe with horizontal muffler that meets all Federal noise abatement requirements X YES NO

Exhaust frame mounted on the passenger side of unit with heat shield on vertical exhaust X YES NO

X8.6.5 Engine equipped with engine brake X YES NO

Compression YES NO (or) Compression/Exhaust YES NO (or)
Exhaust YES NO

Manufacturer: HINO

X8.6.6 Is engine oil pan zinc nickel plated YES NO

(OR)
Aluminum YES NO (OR) Non-Corrosive coated X YES NO

X8.6.7 Engine provides electronic speed control including throttle and cruise control features X YES NO

X8.7 Cooling System:

X8.7.1 Is cooling system capable of maintaining engine temperature within the manufacturers recommended range during continuous winter/summer operation YES NO

Does unit provide an automatic "on-off" fan drive with nylon fan blades YES NO

Manufacturer: *

*SEE
ADDENDUM
3

X8.7.2 Will the system be filled with permanent type extended life coolant Dex-Cool or equivalent rated at a -34°F minimum YES NO

X8.7.3 Does the radiator provide adequate clearance to facilitate the installation of a crankshaft driven PTO drive shaft YES NO

*SEE
ADDENDUM
3

The distance between the extreme tip of the radiator fan blade and the centerline of the crankshaft is inches to insure adequate clearance for PTO drive shaft

Radiator and heater hoses are silicone type or approved equivalent with constant torque clamps or equivalent utilized on radiator hoses to minimize cold water leaks YES NO

X8.8 Fuel Tank:

X8.8.1 Capacity: 52 US gallons. Does tank comply with FMVSS YES NO

Filler Cap is chain tethered YES NO

X8.9 Electrical System:

X8.9.1 Type: 12 volt negative ground system includes manual reset circuit breakers (main panel) SAE Type III with trip indicators to replace all fuses except for 5 amp fuses. YES NO
SEE "EXCEPTIONS TO BID"

X8.9.2 Batteries:

X8.9.2.1 Cold Crank AMPS 1800 AMPS with sealed terminals

X8.9.2.2 Jump start studs mounted on outside of battery box YES NO

X8.9.3 Alternator Capacity: 105 AMPS brushless with internal regulator

X8.9.4 Lighting: All lighting conforms to the West Virginia Motor Vehicle Code YES NO

Unit features daytime running lights YES NO

Cab marker lights are LED type with halogen headlamps. YES NO

X8.9.5 Is auxiliary snow plow lighting package included YES NO

X8.9.5.1 Will truck vendor eliminate rear taillights YES NO
Is there at least eight (8) foot of wiring bundled at end of frame for body vendor hookup of taillights provided in dump bed body YES NO

X8.9.6 Will manufacturer YES NO or successful vendor YES NO make provisions for manufacture approved wiring and weatherproof disconnect plug YES NO

Manufacturer and Part number WEATHER PAC, PART NO. 1211075

Will there be three (3) foot "pigtail" to operate front combination left and right turn/park lights/auxiliary headlights. YES NO

- X8.9.6.1 Is weatherproof disconnect plug located at lower left front grille/bumper area
 YES NO
- Are all wiring connections weatherproof with wiring encased in wire looms
 YES NO
- X8.9.6.2 Are provisions for 7-way trailer connection light socket mounted at rear of truck frame
 YES NO
 Manufacturer and Part number COLE HERSEE, PART NO. 12063
- X8.9.6.3 **Will manufacturer provide body builder circuit interface capability with connection Plug 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
- X8.9.6.4 **Will manufacturer provide body builder circuits – three (3) switches located in the dash instrument panel with one (1) weather protected body builder connection box or module located at the rear under cab.**
 YES NO
- Is this power module 20 amps per channel, 80 amp maximum output**
 YES NO
- Do the dash switches control the power module with LED backlighting**
 SEE "EXCEPTIONS TO SPECIFICATIONS" YES NO
- X8.10 Transmission
- Manufacturer: ALLISON Model: 3500 RDS2
- X8.11 Driveline: SPICER SPL 140 SEE "EXCEPTIONS TO SPECIFICATIONS"
 Does it have a greasable main shaft YES NO
- X8.12 Rear Axle:
- X8.12.1 Rated Capacity: 23,000 Lbs. **Single reduction includes driver controlled main locking differential**
 YES NO
- X8.12.2 Rear Spring Capacity: 23,000 Lbs. including 4,500 lb. capacity load stabilizer Springs
 YES NO
- Does it provide sufficient clearance between spring, brake chambers, and tires to operate with single tire chains**
 YES NO
- X8.12.3 Gear ratio: 6.14
 Are vehicles capable of a top speed of 70 MPH YES NO

- X8.12.4** Is rear axle differential, transmission, and front wheel lubrication reservoirs filled with synthetic type lubrication and provided with magnetic drain plugs where applicable
 YES NO
- X8.13** Front Axle:
- X8.13.1** Capacity: 14,000 lbs. I-beam type
- X8.13.2** Front Spring Capacity: 14,000 lbs.; 14,000 lbs. rating for use with front plow
- X8.13.3** Manufacturers heavy duty shock absorbers YES NO Make: HINO
- X8.13.4** Front wheel oil lubricated wheel seals YES NO Make: STEMCO
- X8.14** Brakes:
- X8.14.1** Type: Full air, with manufacturers ABS with traction control in compliance with the most current FMVSS requirements YES NO
- X8.14.2** Compressor: Model and Make: DENSO 10.0 CFM
- X8.14.3** Service Brake Size:
- X8.14.3.1** Front: 16.5"x5.0"
- X8.14.3.2** Rear: 16.5"x7.0"
- X8.14.4** Parking Brake: Spring set, air release actuating rear axle service brakes YES NO
 Instrument panel control YES NO YES MGM
- X8.4.4.1** Are all brake chambers sealed brake chambers with epoxy exterior coat on front and rear chambers YES NO Make: MGM
- X8.14.5** Air dryer with heater YES NO Make and Model: BENDIX AD-IP
SEE "EXCEPTIONS TO SPECIFICATIONS"
- X8.14.6** Manufacturer's standard air tanks for service brakes; auxiliary tank for parking brake
 YES NO
- X8.14.7** Low air pressure warning light and buzzer YES NO
- X8.14.8** Do brakes meet all current Federal and State FMVSS requirements YES NO
- X8.14.9** Are brake dust covers installed on all wheels YES NO
- X8.14.10** Is unit equipped with tractor protection valve and hand control valve to accommodate installation of glad hands at rear of frame rails to enable unit to pull an air-braked trailer
 YES NO

X8.14.10.1 Are glad hand recessed as not to stick out past end of frame rails YES NO

X8.15 Tires and Wheels:

X8.15.1 Wheel, Front and Rear 22.5 x 8.25 hub piloted steel disc type, to accommodate specified tire size YES NO

Make and Model: ACCURIDE - 28828 with 0.472 inches thickness YES NO

All wheels include wheel guard separators YES NO
SEE "EXCEPTIONS TO SPECIFICATIONS"

X8.15.2 Tires: (Describe)

X8.15.2.1 SEE Front: BRIDGESTONE 11R22.5/H/16PLY HIGHWAY R250
"EXCEPTION TO SPECIFICATIONS"

X8.15.2.2 Rear: BRIDGESTONE 11R22.5/G/14PLY ON/OFF HIGHWAY M725

X8.16 Manufacturers standard power steering for front axle specified YES NO

Manufacturer: TRW

X8.17 Features considered as standard equipment not specifically addressed:

3YR/24 HOUR EMERGENCY ROADSIDE ASSISTANCE

X8.18 Paint:

X8.18.1 Specify cab exterior and interior color and paint type:

BOTH INTERIOR & EXTERIOR ARE HINO WHITE & USE IMRON F3405H1

X8.18.2 Is truck grille manufacturer's standard similar to silver/aluminum in color? YES NO

X8.18.3 Are fuel tanks, steps, air tanks and battery box non-corrosive coated? YES NO

X8.18.3.1 Is wheel paint provided as specified? YES NO

X8.18.4 Detail/Decorative Stripes with Logo:

X8.18.4.1 Are stripes provided 2" type with taper at front of hood? YES NO

X8.18.4.2 Does the conspicuity striping material provided meet requirements of Section 8.18.4.3 through 8.18.4.6 of the specification section? YES NO

Will you install the striping? YES NO

X8.18.4.7 Is your proposed paint plan attached with your bid? YES NO

If not, why? _____

X8.18.4.8 Will you use manufacturer's standard plant procedures for prepping of cab for painting?
 X YES NO

X8.19 Does the proposed unit meet or exceed the "OSHA of 1970" and/or subsequent changes?
 X YES NO

X8.20 Does the unit conform to the advertising guidelines? (Describe)
 AS SPECIFIED IN SPECIFICATION 8.20

X8.21 Preventive Maintenance and Operator's Training School:

X8.21.1 Will a preventative maintenance and operator's training seminar be provided?
 X YES NO

X8.21.2 If you are the successful vendor, will you furnish all training aids, i.e., videos, projectors, required in conducting the training?
 X YES NO

X8.21.3 Will all manuals, booklets, etc. explain preventive maintenance, operator procedures, and service schedule be delivered with each unit?
 X YES NO
If NO, explain _____

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.

Reference Requisition No. on request for proposal: 709EC011

Bidder's Name: WEST VIRGINIA TRACTOR COMPANY

Address: PO BOX 473, CHARLESTON, WV 25322

Telephone Number: 304-346-5301

Years Company has been an authorized dealer for proposed unit: 5 Yrs.

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

VIKING PROLINE MODEL CB1011LW 10' STAINLESS STEEL COMBINATION

BODY MANUFACTURED IN 2009 OR LATER AS ORDERED

Is descriptive literature, fully describing proposed dump/spreader body attached to your bid?

YES NO

If NO, why _____

Refer to Section 6.1 of the specification

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

Will combination dump/spreader body have minimum 2 year basis warranty including parts and labor excluding abuse and normal wear items YES NO

X9.1 Body capacity 6 cubic yards water level

X9.2. Sideboard pockets and tailgate height provide additional capacities of 1.5 cubic yard

X9.3 Front body bulkhead 3/16 inch 304 stainless steel YES NO

X9.4 Cab shield has sufficient clearance to ensure shield will not hit exhaust when dumping on uneven terrain? YES NO

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

X9.6 Dimensions:

X9.6.1 Inside length of body 120 inches

X9.6.2 Inside width of body 96 inches wide to maximize capacity and lower the center of gravity of the unit

X9.6.3 Outside width of body 102 inches at the integral fenders

X9.6.4 Body spacing from cab 4 inches

X9.6.5 Basic minimum side height 36 inches (measure from the floor to top rail)

X9.6.6 Tailgate minimum height 46 inches (measure from the floor to top rail)

X9.6.7 Body overhang 10 inches to 18 inches (measure from center of hinge pin)

X9.6.8 Cab protector 24 inches x 96 inches with adequate clearance for cab mounted air horns

X9.7 Is cab protector sloped rearward for drainage purposes YES NO

X9.8 Construction of the body sides, front, head, and tailgate conform to the following minimum Specifications

Steel types are 304 stainless steel

YES NO

X9.8.1 Floor: 1/4 inch thickness

- X9.8.2 Sides: 3/16 inch thickness
- X9.8.3 Tailgate plate: 3/16 inch thickness
- X9.8.4 Top rail: 3/16 inch thickness
- X9.8.5 Cab protector: 10 gauge
- X9.8.6 Longitudinal: 12 inch 7 gauge 304 stainless steel formed inner/ 7 gauge 304 stainless steel formed with internal stainless steel gussets every 30 inches
- X9.8.7 For future potential pre-wet application, will the combination body be capable of accepting frame mounted approximately 75 gallon poly liquid tanks. X YES NO
- Will the body be designed to allow maximum protection to the tanks X YES NO
- X9.9 Is all welding inside the body continuous, not skip welded. X YES NO
- Are all rails and posts continuous welded X YES NO
- X9.10 Are the rear corner posts full length, one (1) piece construction X YES NO
- X9.10.1 Is a rear bolt on spreader apron provided X YES NO
Is it integrated into the rear of the bed YES X NO
- X9.11 Cab protector sides, formed with gussets, extend forward 24 inches. Clearance above highest point of cab is 3 inches
- X9.12 Is the body a unibody design – no crossmembers X YES NO
- X9.12.1 Does the body have one (1) piece sides and floor which incorporates a sloping floor to side radius X YES NO
- Degree of slope to adequately feed material to the conveyor chain. 35
- X9.12.2 Do the sides of the body slope to the conveyor to facilitate self cleaning of body without raising X YES NO
- X9.13 The boxed top rail is sloped inward to shed debris X YES NO
- X9.14 Full length 304 stainless steel integral rear fenders which incorporate prewet liquid reservoirs (75 gallon) X YES NO
- X9.15 An integrated center conveyor provides the ability of the body to convey granular materials with the body down X YES NO

The following features are provided:

- X9.15.1 Does the conveyor have no more than 12 inch truck frame to body floor height for lower center of gravity and lower mounting height YES NO
- X9.15.1.1 Have you used wood YES NO Type of material: Poly
- X9.15.2 1/4 inch 304 stainless steel conveyor floor YES NO or 1/4 inch abrasion resistant steel (AR400) 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 – 25 inches or more YES NO
- X9.15.6 Conveyor is reversible** YES NO
- X9.15.7 Conveyor is driven with 25:1 planetary gearbox drives or equal on both the front and rear shafts with 5.0 CIR hydraulic motors YES NO
- One (1) motor has an integral conveyor speed sensor YES NO
- X9.15.8 Conveyor chain is D667K pintle type (24,500 lb. tensile/strand) with **minimum 3/8 inch x 1 1/2 inch conveyor crossbars welded to every link** YES NO
- X9.15.9 A 10 gauge 304 stainless steel bolt in pan under the conveyor to keep material off chassis frame YES NO
- X9.16 The body has the capability to convey to the front or the rear with a material spinner for distributing material:** YES
- X9.16.1 For front spreading, a front feedgate integrated into the head sheet of the body 8 inches x 24 inches
- X9.16.2 A 304 stainless steel front spinner chute is mounted between chassis frame rails and with the body down be completely enclosed to prevent material from dropping on chassis drive shaft** YES NO
- X9.16.4 Is the rear feed gate lever operated YES NO or screw adjustable YES NO
- Is the feedgate capable of being positively locked into position YES NO
- X9.16.5 Is the front spinner bracket and chute mounted to the truck chassis frame and installed by successful vendor** YES NO
- X9.16.6 The spinner is universal and mounted at the front for delivery and may be used at front or rear** YES NO
- X9.16.7 Spinner assembly 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

X9.16.8 10 gauge 20 inch diameter spinner disc has replaceable machined hub YES NO

X9.16.9 Is the spinner 409 or 304 stainless steel YES NO

X9.16.10 If spinner hydraulic motor is mounted on top of spinner disc, is the motor enclosed in a removable material shedding protective cover YES NO

X9.17 Hydraulic Hoist:

X9.17.1 Trunnion Mount YES NO

X9.17.2 Telescopic hoist is no less than N.T.E.A. Class 40 YES NO

X9.17.3 Single hoist cylinder is trunnion mount YES NO

X9.17.4 Single acting hoist cylinder has three (3) stages with 90 inches of stroke with a four (4) inch diameter first Stage YES NO
 Manufacturer and part number: MAILHOT CS-90-4-3

X9.17.5 The cylinder has wear and corrosion resistant nitrided cylinder tubes YES NO

X9.17.6 Cylinder warranty: 2 years

X9.17.7 A five (5) degree oscillating cylinder collar protects the cylinder against side stress YES NO

X9.17.8 The body has 6 inch x 8 inch x 1/2 inch structural angle rear hinge assembly installed in the truck chassis frame YES NO

X9.17.9 The rear hinge assembly has cold roll steel hinge pins connecting to 2 1/2 inch hinge blocks with grease zerks YES NO

X9.18 The following features are included:

X9.18.1 Warning light (bed raised) control console mounted YES NO

X9.18.2 Hydraulic oil level reading YES NO

X9.18.3 Safety decals as required YES NO

X9.18.4 304 stainless steel mud guards, 10 gauge x 24 inches x 30 inches permanently attached in front of rear wheels YES NO

Will exhaust stack be aligned for body clearance YES NO

- X9.18.5 304 stainless steel shovel bracket YES NO
- X9.18.6 304 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
- X9.18.7 Does the unit have air operated tailgate with dual brake chamber air tailgate latches (one on each side) YES NO
- Pivot shafts included stainless steel bushings to eliminate seizing YES NO
- X9.18.9 OSHA approved backup alarm, electronic ambient, adjusts to background noise, 112 dba shock mounted at the rear YES NO
- X9.18.10 OSHA approved body support, both sides YES NO
- X9.18.11 Unit equipped with 49,000 lb. capacity pintle hook centered between rear frame rails YES NO
- Manufacturer and Model: WALLACE FORGE B30
- Height from ground level to center line of pintle "eye": 32 inches
- X9.18.12 Air deflector-hood mounted, blue or smoke YES NO
- Deflector manufacturer's standard width for truck mode YES NO
- Width: approximate 60" determined by truck hood width
- Access to front end hood tilt handle YES NO
- Extra handle YES NO
- X9.18.13 Is screen over hopper provided with 3/8 inch rod across 3/8 inch rod for 2 3/4 inch grid opening (to prevent oversize material from entering hopper during filling) YES NO
- X9.18.14 Is screen frame 1/4 inch by 1 1/2 inch angle iron welded to rods and hinged to 5 inch I-beams YES NO
- X9.19 Lighting: Weather/shock resistant lights LED type with average amp draw between .045 - .72 YES NO
- Manufacturer and Model: TRUCKLITE
- All connections have sure snap plug assemblies and epoxy sealed electronics to protect against shock and vibration YES NO

- X9.19.1 All marker lights 2 1/2 inch diameter flush mount sealed beam lights with integral reflector mounted in rubber base YES NO
- X9.19.2 All ground wires attached with plated steel fasteners YES NO
- X9.19.3 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
- Make and Model: TRUCKLITE #60360Y
- X9.19.4 Center rear I.D. lights three (3) located in truck chassis YES NO
- X9.19.5 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
- Make and Model: TRUCKLITE #60360Y
- Strobe lights marked and switched at dash board location YES NO
- X9.19.6 Auxiliary headlights for snowplowing application shock mounted on fender of unit YES NO
- Make and Model: TRUCKLITE _80888
- X9.19.7 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: TRUCKLITE #60360Y
- X9.19.8 Two (2) rear frame mounted tow hooks** YES NO
- X9.19.9 Lighted license plate bracket YES NO
- X9.20 Are the following at the front or rear both sides of the body:
- X9.20.1 304 stainless steel fold down ladder that locks into position when either in the down or up position YES NO
- X9.20.2 Two (2) 304 stainless grab handles YES NO
- X9.21 Tailgate (304 stainless steel): YES NO
- X9.21.1 Tailgate hinged at top, flame cut hardware, pork chop type off-set hardware to achieve maximum opening of tailgate, but has **provision for pivoting at the bottom** YES NO
- X9.21.2 Flush mount, 1/2 inch flame cut 304 stainless steel tailgate pivots YES NO
- X9.21.3 Heavy duty offset hinge plates, one (1) inch flame cut 304 stainless steel YES NO

- X9.21.4 3/4 inch 304 stainless steel latch hooks with 3/8 inch 304 stainless steel latch plates YES NO
- X9.21.5 Full perimeter 304 stainless steel boxing with all horizontal edges sloped outward YES NO
- X9.21.6 Two (2) 10 gauge 304 stainless steel sloped horizontal braces that are flush with perimeter Boxing** YES NO
- X9.21.7 7 gauge 304 stainless steel 10-12 inch x 24-26 inch rear feedgate YES NO
- X9.21.8 Cold roll steel upper pins with grease zerks YES NO
- X9.21.9 Top hinge channel has removable, chain tethered keeper pins YES NO
- X9.21.10 Latching action at the bottom of gate operable by the truck driver without leaving the truck cab YES NO
- X9.21.11 Gate is self aligning YES NO
- X9.21.12 Tailgate lower latch pins 304 stainless steel 1 1/4 inch diameter YES NO
- X9.21.13 Body integrated or bolt on 304 stainless steel 15 inch spreader apron YES NO
- X9.22 Design and strength characteristic of the entire body such that the unit structural members and the hoisting system will not suffer any deformation, damage, or structural failure resulting from raising a distributed full payload YES NO
- X9.23 Bumper:
- X9.23.1 Bumper formed out of 1/4 inch roll steel YES NO
Weighs 10.2 lbs. per square foot
- X9.23.2 Bumper face covers all of truck frame (12 inches) with two (2) flanges of 2 1/4 inches top and bottom YES NO
- X9.23.3 Overall width of bumper: 94 inches
- X9.23.4 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.
- X9.23.4.1 Does bumper have two (2) access holes for utilization of tow hooks YES NO

65

- X9.23.5 Upper and lower flanges cut and welded solid at point where bumper is bent and ground off smooth YES NO
- X9.23.6 Bumper mounted by two (2) mounting angles bolted to front of truck frame with two (2) 5/8 inch bolts each side YES NO
- X9.23.7 Mount angle 1/4 inch x 3 inches x 10 long with four (4) 5/8 inch holes YES NO
- X9.23.8 Paint on front bumper: DARK BLUE
- X9.24 Underbody Tool Box:
- X9.24.1 One (1) tool box mounted under body on right side frame rail YES NO
- X9.24.2 Tool box 18 inches high, 24 inches wide, 18 inches deep cradled by a heavy steel angle frame attached to the truck frame YES NO
- X9.24.3 **Construction** 14 gauge, galvaneal steel with all seams welded YES NO
- X9.24.4 Tool box has horizontal hinged fold down door YES NO
- X9.24.5 Tool box door has cable or chain to hold the door in a horizontal position YES NO
- X9.25 Load covering system electrically or air controlled YES NO
- X9.25.1 Electric motor assembly includes 12 volt direct drive motor with forward and reverse action, cab mounted control switch, resettable circuit breaker YES NO
- X9.25.2 Pivot arm assembly constructed in a two (2) piece bent arm configuration of 1 5/8 inch 1/8 inch gauge steel tubing YES NO
- X9.25.3 **Bent arm extensions constructed of** 1 3/8 inch 1/4 inch gauge steel tubing
- X9.25.4 Rear cross constructed of 1 5/8 inch 1/8 inch gauge steel tubing
- X9.25.5 Pivot arm rests included YES NO
- X9.25.6 Underbody spring extension spring DNA inches in length attached to base of pivot arm and of body with articulating spring mounting bracket YES NO
Torsion Spring not extension spring design
- X9.25.7 All steel components finished with manufacturer's recommended rust preventative system with **adequate primer and paint** YES NO
- X9.25.8 Steel cab protector mounted triple bend wind deflector provided YES NO

X9.25.9 Load covering system provided with a 18 oz. black vinyl tarp to fit 10 foot body
 YES NO

X9.25.10 Load covering system supplied with all necessary hardware and delivered to the West Virginia Division of Highways as a complete and operational unit. YES NO

X9.26 Paint: Describe proposed method of painting

X9.26.1 – X9.26.4

 All non stainless steel surfaces will be shot blasted the one coat of primer and one top coat will be
 applied. _____

X9.27 Detail/Decorative Stripes with Logo:

Will striping and detailing you provide comply with requirements of Section 9.27.1 through 9.27.7
 YES NO

X9.28 All body features considered as standard, but not specifically addressed:

 All included _____

X9.29 Does the proposed unit meet or exceed the "OSHA OF 1970" and/or subsequent changes
 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, and an auxiliary equipment drive circuit
 YES NO

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

Bidder: _____ West Virginia Tractor Company _____

Address: _____ P.O. Box 473 Charleston, WV 25322 _____

Telephone Number: 346-5301 _____

Years company has been an authorized dealer for proposed unit: 5 years

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

Component Technology Model SG03040008 West Virginia System Manufactured as required
for contract _____

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 At time of delivery

Pre-Wet system:

Does 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 operator, presented in gallons per to Ton YES NO

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

Have to stop truck to view operator screen

Will central hydraulic system have minimum 2 year basis warranty including parts and labor excluding abuse and normal wear items 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 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 type or ORB 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
- 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 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 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

YES NO

X10.1.10 Pump Output: Is it capable of providing hoist cylinder extension required for a 50 degree Body dump angle in 13 seconds at 1500 engine RPM at a 1000 PSI system load

YES NO

X10.1.11 Is the make and model bid in compliance with overall quality of construction, design, and performance of the pump supplied

YES NO

X10.1.12 Pump:

Manufacturer and Model: REXROTH A10VO71 SERIES 31

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 SERIES

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

Normally open, energize to close

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 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

Installed inline not at manifold

- X10.2.5 Is 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: Certified Power Inc**
- 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 section 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 Pressure compensation of the spinner and auger sections and also a priority section installed to allow for operation of the plow hoist in any circumstance** YES NO
No priority section
- 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 port 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 3-way three (3) position spring centered cylinder spool for operation of a single 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 Flow limiting system preset at required flow rates provides performance as stated in Section 10.1.10 as maximum for dump body up and down to reduce system over demand operation YES NO
- X10.3.12 Snowplow lift control section is 3-way three (3) position spring centered cylinder spool with float detent for operation of a single acting lift cylinder with pilot controlled load lock valve YES NO
- Does the valve design require a load holding check valve to properly carry the plow weight YES NO
- X10.3.12.1 Full flow workport relief valve preset at maximum required unlock pressure installed in power down workport YES NO
- Workport relief valve installed in power up workport if maximum system pressure output setting exceeds normal operating pressure limit of plow lift cylinder YES NO
- Is a three (3) way valve provided for plow hoist circuit YES NO
- X10.3.12.2 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

X10.3.13 Snowplow power angle control section is 4 way three (3) position spring centered cylinder spool for operation of worm gear driven type reversing system 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

X10.3.14 Auxiliary equipment drive circuit control section 3-way three (3) position spring centered solenoid operated motor spool YES NO

Is the circuit separate and distinct from the spreader control system YES NO

X10.3.14.1 **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 1173 RPM
 YES NO

X10.3.14.2 Is an inline mounted control valve supplied for this operation in place of directional control valve section YES NO

If supplied, is proper interconnections and venting of load sense network system provided YES NO

X10.3.14.3 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 YES NO

Is mating nipple SH6-63 with protective cap supplied YES NO

X10.3.14.4 **Manufacturer and model of directional and auxiliary circuit valves:**

Rexroth MP-18 SERIES

X10.3.15 **Is directional control valve assembly with tank in an enclosure to protect it from the elements** YES NO

X10.3.16 Pre-Wet Circuit:

X10.3.16.1 **Is a separate circuit provided to control an add-on pre-wet system**
 YES NO

X01.3.16.2 Is the hydraulic valve of the sectional type YES OR of the cartridge style contained in a manifold YES

X10.3.16.3 **Is a manifold type valve supplied** YES NO **Is it attached to the main**

valve assembly YES NO

X10.3.16.4 Is all wiring to the pre-wet hydraulic circuit provided as part of the system YES NO

X10.3.16.5 Is the wiring to 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 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 YES NO

Are overrides manually adjustable over operating flow range in the event of electrical system failure YES NO

X10.4.2 Flow control circuits are pressure compensated YES NO

Provides spinner flow rate of 7 GPM and a conveyor flow rate of 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 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 YES NO

X10.4.4 Is PWM solenoid control supplied by microprocessor spreader control system YES NO
Are solenoids capable of 100% PWM signal without failure 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:** Rexroth MP-18 Series

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 99,999 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
Screen is Solid State VFD (Vacuum Fluorescent Display)
- X10.5.11 Is material spread width selectable by no less than a 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 :**

Component Technology SG51/SG53 with GL400 Control

X10.6 Central Control Console:

X10.6.1 Mounted between seats within easy access of the driver YES NO

X10.6.1.1 Is 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 **Is hoist control lever OSHA compliant (hoist interlock)** YES NO

X10.6.4 Are central control 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 mounted within the cab YES NO

X10.6.4.4 Is an access plate to internal wiring provided YES NO

X10.7 Hydraulic Reservoir and Valve Enclosure Assembly:

X10.7.1 Hydraulic reservoir 40 gallon operated capacity flex mounted to the chassis frame rail and valve enclosure assembly YES NO

X10.7.2 **Tank constructed of 7 gauge 304 stainless 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 filler/breather cap with removable 500 micron strainer YES NO
- X10.7.5 Is an internal 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 mounted within tank/valve enclosure to protect it from elements YES NO
- X10.7.8 Pump 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 is not installed in the 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 Snap tite quick disconnects (manifold mounted) supplied for the forward and rear spinner 1/2 Inch pressure and return lines**
 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:

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 (based on a purchase 1-25 units) covering the operation, maintenance, trouble shooting and calibration/programming of the hydraulic system and spreader controls and where will they be held:

Three (3) One (1) Day Training Sessions per PO

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: March 23, 2009

Title: CEO

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

**EXCEPTIONS TO SPECIFICATIONS - MATHENY MOTOR TRUCK COMPANY
10' DUMP TRUCKS ON 33,000 lb. GVW TRUCKS FOR RFQ NUMBER 709EC011**

1. X4.2.1 I based the delivery of the Pilot model on receipt of the purchase order by April 25th. If purchase order is received prior to April 25th, you will need to add that number of days to the 132 days in my bid. Conversely, if purchase order is received after April 25th, you can deduct that number of days from the 132 days I put in my bid.
2. X4.2.1 The balance of the order will be filled at the rate of three (3) per week starting no more than sixty (60) days from acceptance of Pilot model. Therefore, based on the number of vehicles you order divided by three (3) deliveries per week will tell you how long it will take me to deliver completed trucks (following the the sixty (60) days).
3. X8.5.2 Seats
My Sears 70 seats are an approved equal.
4. X8.5.7.1 Drink Holder
There is one (1) pull out dash drink holder and two (2) drink holders at right side of driver's seat. We have a total of three (3) drink holders.
5. X8.5.7.2 Air Horn
Providing single (1) air horn with dual trumpets that is mounted on right outside frame rail under cab behind right fender. Horn does not have a shield and is pointed downward. Picture attached.
6. X8.5.7.3 Rearview Mirrors
Am providing dual heated & power flat mirrors that are 7.25"x 14.25" with separate 8"x 6" convex mirrors that are not power nor heated.
6. X8.6 Engine is 260 hp. Engine Torque is 585.
7. X8.6.2 Heated Fuel/Water Separator
This is mounted on left outside frame rail under cab & at rear of cab. A picture of this is in my 8 1/2" x 11" fold out literature titled "Conventional Truck Product Line" as Item #7.

EXCEPTIONS TO SPECIFICATIONS CONTINUED - MATHENY MOTOR TRUCK COMPANY

8. X8.6.3 BW Air Dryer
Model AD-IP. Information is attached.
9. X8.11 Driveline
Hino says the Spicer SPL 140 is Spicer's replacement for the 1710 series.
10. X8.15.2 Tires
Front Tires are Bridgestone R250.
Rear Tires are Bridgestone M725.
The tread on the front & rear tires are the same as provided on the Hino Crew Cab Bridge Trucks.
11. X8.9.1 Manual Reset Circuit Breakers
Hino truck does not have manual reset circuit breakers. Hino uses replaceable fuses and breakers.
12. X8.9.6.4 The three (3) dash switches for the snow plow lights, strobe lights & spot lights are backlighted with light bulb in the switch.
13. X8.15.1 Wheel Guard Separators
Hino does not offer or recommend wheel guard separators.

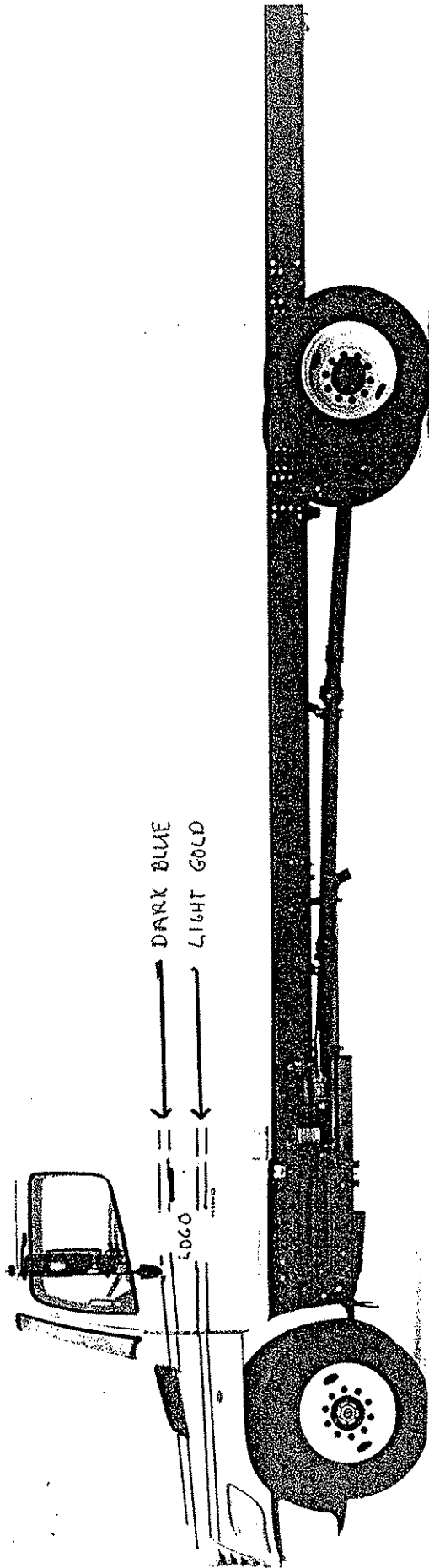
MATHENY MOTOR TRUCK CO.
P.O. BOX 1304
PARKERSBURG, WV 26102-1304

WEST VIRGINIA TRACTOR COMPANY

709EC011 Exceptions to Specifications

9.25.6 The load covering system has a torsion spring design
in lieu of an extension spring design.

8.18.4.7

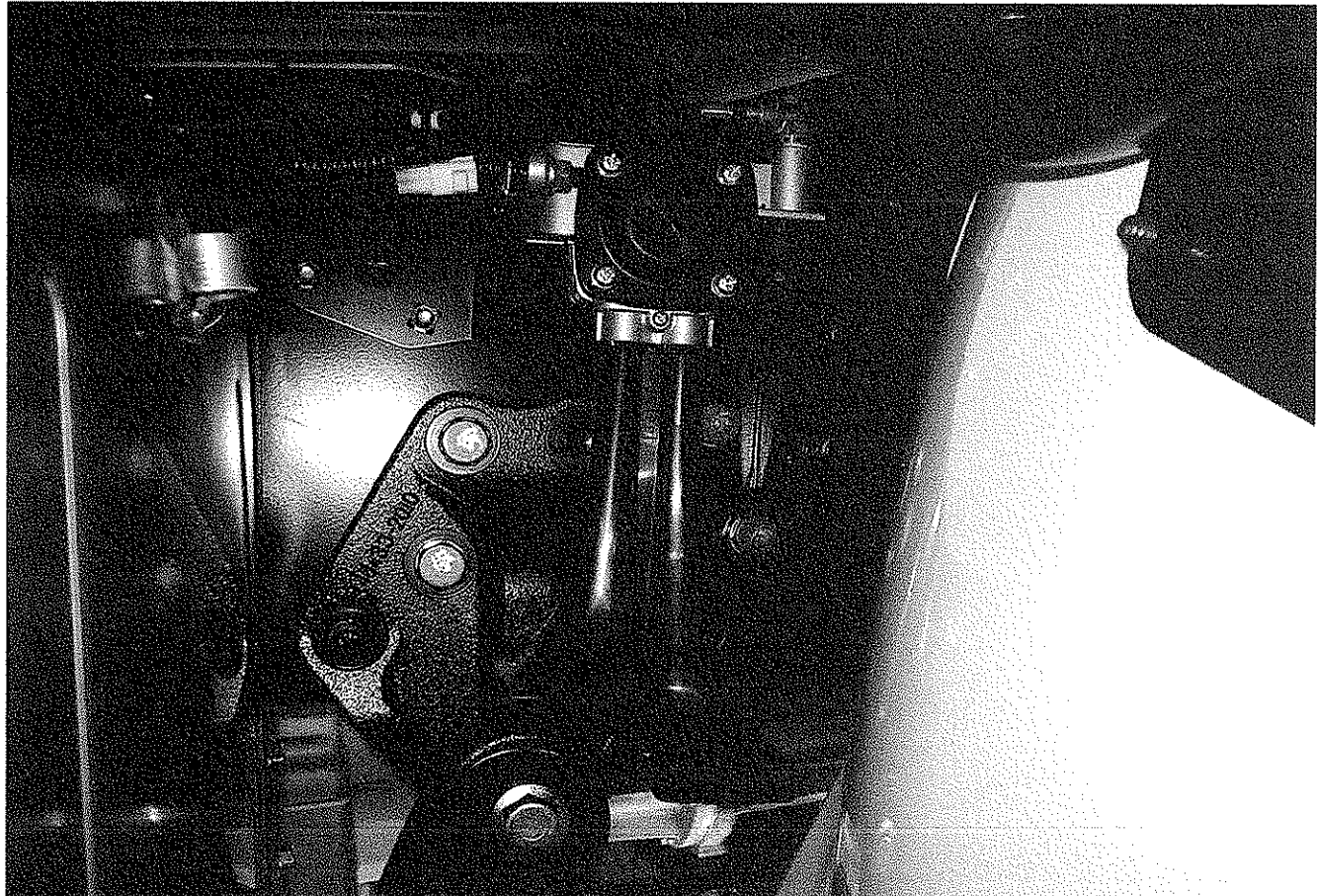


APPROXIMATE LOCATION OF WUDDH STRIPES. ACTUAL LOCATION TO BE DETERMINED WITH WUDDH APPROVAL.

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

Air Horn Placement NV Model 338

X8.5.7.2 AIR HORN



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

X8.6.2 HEATED FUEL/WATER SEPARATOR

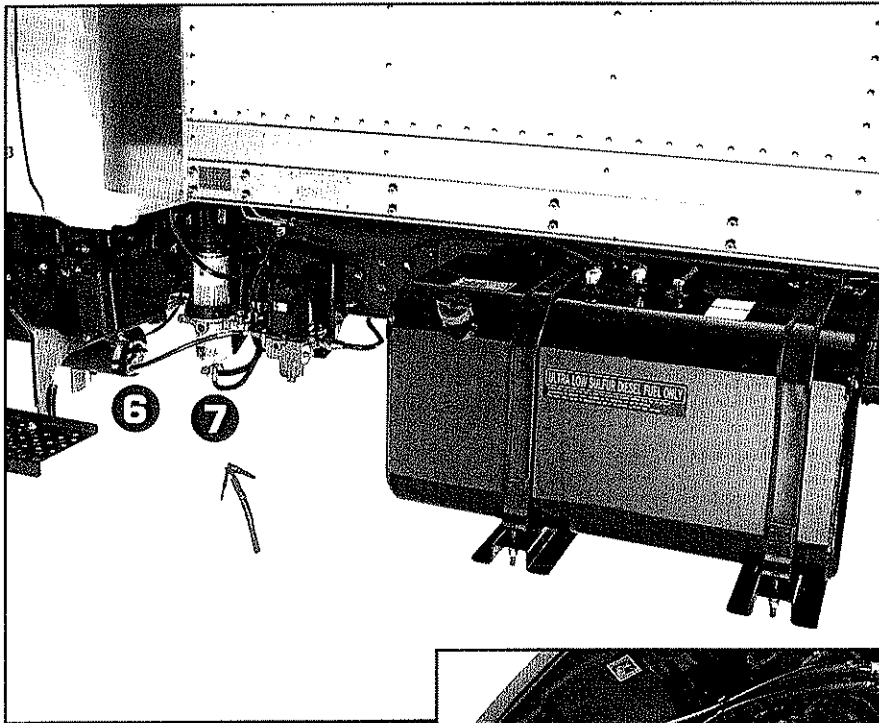
On the Outside

The beauty of Hino Trucks is more than skin deep.

⑥ Our well placed under-step battery box, air-tank and ⑦ standard Davco heated fuel filter provide protection for these important components.

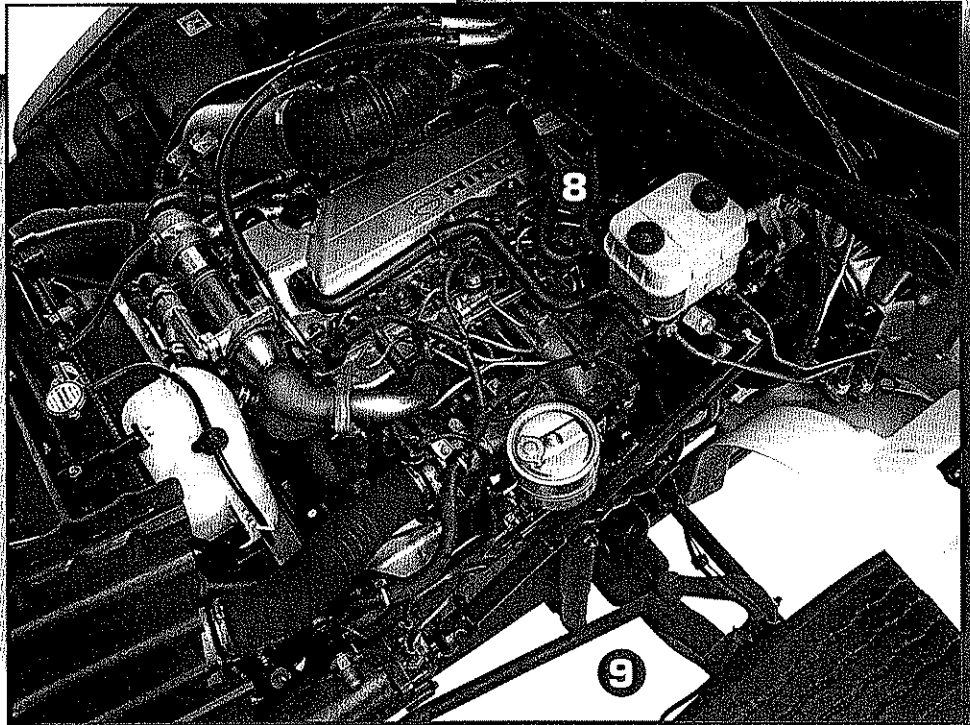
Additionally, our color-coded, easily accessible frame power drop connections make Hino Trucks the chassis of choice for body builders and upfitters.

All of the maintenance points were engineered with the mechanic in mind, making Hino Trucks the most serviceable medium duty truck.



Under the Hood

The engine—already known for its fuel economy, durability and low-maintenance—has been enhanced with ⑧ a closed crankcase ventilation system and a larger EGR cooler to meet the stringent 2007 emissions regulations. Glow plugs have also been made standard, to provide added benefit in cold weather climates. ⑨ Maintenance-friendly “stand-inside” wheel well makes routine service and fluid checks simple—one reason why Hino Trucks are the technician’s choice.



HINO  **TRUCKS**

A Toyota Group Company

The purpose of the AD-IP DI is to permit ease of installation of the AD-IP air dryer in a charging system that utilizes a Holset Type "E" or "QE" compressor. With the AD-IP DI in use the makeup line and single check valve, required in the Holset installation are incorporated into the AD-IP DI. The AD-IP DI air dryer is meant specifically for the Holset system. Utilize the standard AD-IP when other charging systems are in use.

Weight 27.5 lbs.
 VMRS 13-010-033
 Device Code 2415

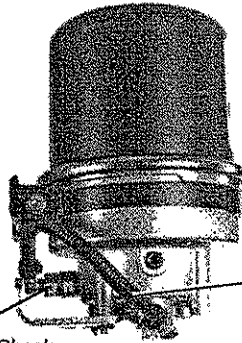
AD-IP O.E. PART NUMBER TO SERVICE NEW & REMAN.

Service Pc. No.	Reman Pc. No.	O.E.M. Pc. No.
800067	5000709	5000708, 5000830, 5001239, 5001626, 5001736, 5006630, 5003975
800168	5001751	800248, 5001113, 5001744, 5002659, 5002662



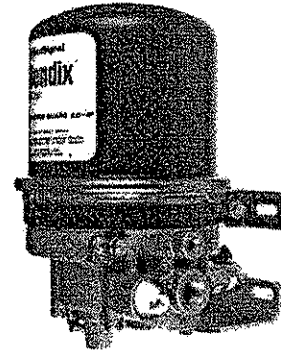
MATHENY MOTOR TRUCK CO.
 P.O. BOX 1304
 PARKERSBURG, WV 26102-1304

Delivery Port Adapter Assy. (Kit 5000702)



1 Single Check Valve

2 Make-Up Air Line



ECON CHECK VALVE KIT 109499 consists of the following:

Item	Qty	Description
1	1	Single Check Valve
2	1	1/4" Tubing Assembly

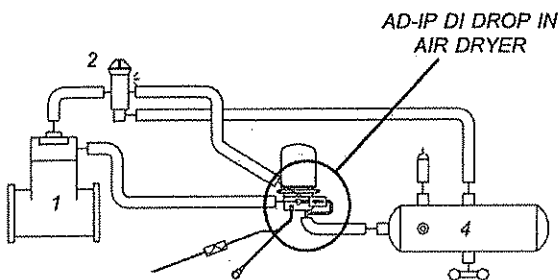
Service Pc. No.	Reman. Pc. No.	Supply Port	Delivery Port	Heater & Thermo. Volts-Watt	Comments
800067	5000709	" PT	" PT	12v - 90w	Notes 1, 2
800168	5001751	" PT	" PT	12v - 90w	Notes 2, 3

Note 1 - All replacement air dryers include 109871 (wire harness and splice kit) and 5001247 (mounting bracket kit).
 Note 2 - 12 & 24 volt air dryers are identified by connector color - White = 12v, Gray = 24v
 Note 3 - Includes Econ Check Valve Kit and NO mounting kit

AD-IP DROP IN SYSTEM APPLICATION & INSTALLATION INFORMATION

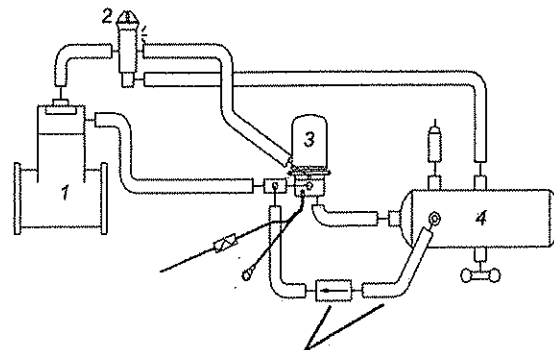
The AD-IP DI (Drop In) Air Dryer is meant for use in charging systems that use the Holset Type E or QE compressor.

Holset Charging System w/AD-IP DI (Drop In) Air Dryer



Key	Description
1	Compressor
2	Governor
3	AD-IP Drop In Air Dryer
4	Supply Res.

Holset Charging System w/Standard AD-IP Air Dryer



This Make Up line and single check valve INCORPORATED IN AD-IP DI

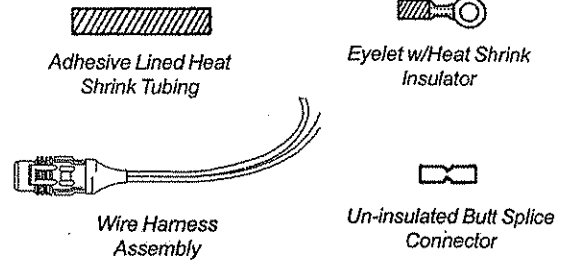
MAINTENANCE KITS

AD-IP

CATALOG
08-A-17

WIRE HARNESS AND SPLICE KIT 109871

Qty.	Description
1	Wire Harness Assembly
2	Un-insulated Butt Splice Connector
1	1/4" Eyelet w/Heat Shrink Insulator
1	3/8" Eyelet w/Heat Shrink Insulator
2	2" Length Adhesive Lined Heat Shrink Tubing

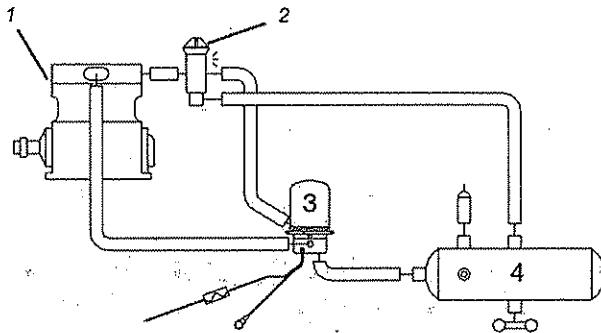


SYSTEM APPLICATION & INSTALLATION INFORMATION

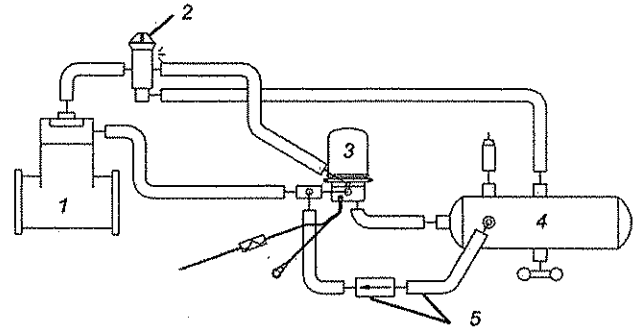
The AD-IP Air Dryer can be used in all the charging systems displayed below with the exception of the European style, Discharge Line Unloader system. Use the AD-9 Air Dryer shown on catalog page 08-A-31 for the discharge line unloader systems. Refer to Product bulletin Pro-08-12 for additional information on this subject.

Use the following component key for the charging system schematics below;

**Typical AD-IP Air Dryer Installation
Single & Two Cylinder Compressor (Except Holset E & QE)**

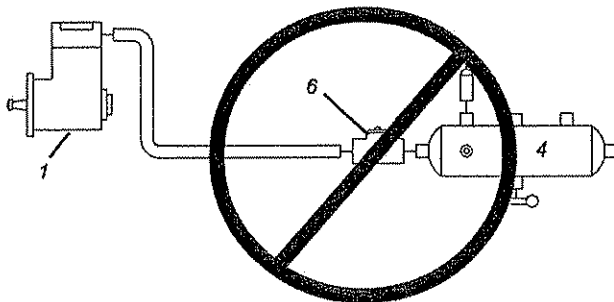


**Typical standard AD-IP Air Dryer Installation
Holset E & QE Single Cylinder Compressor**

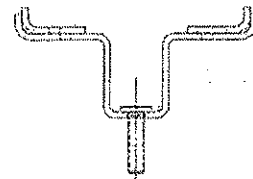
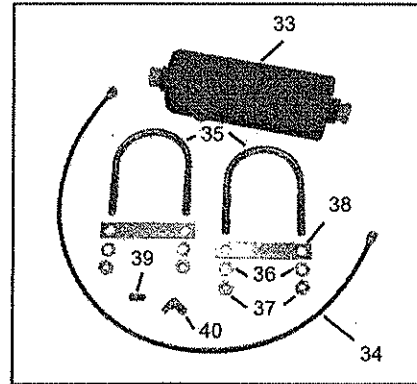
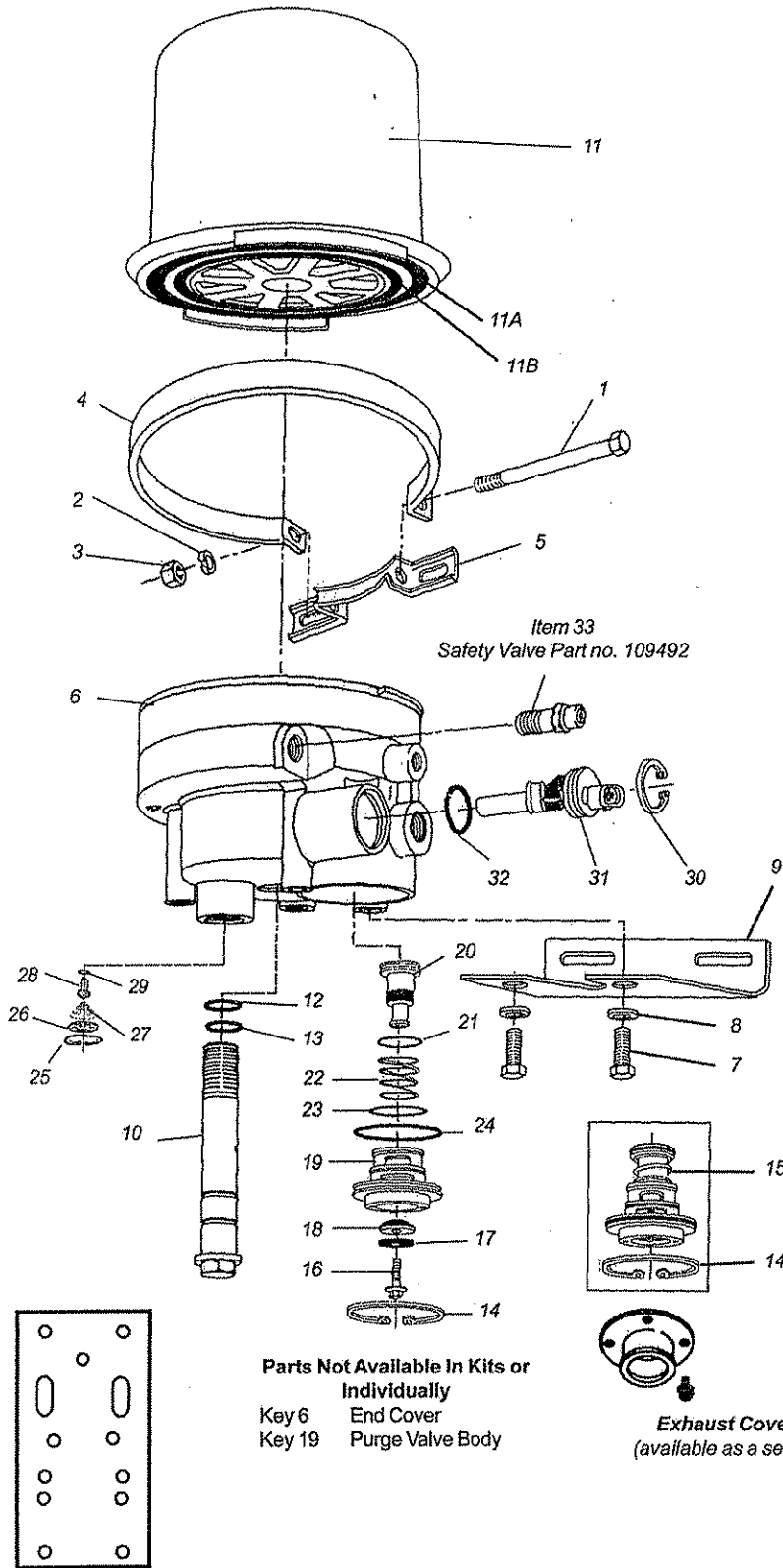


For Systems Using the Holset Type E & QE compressor, Use the AD-IP DI Drop In Air Dryer.

**Typical Discharge Line Unloader Charging System
USE AD-9 INSTEAD OF AD-IP
(See Catalog Page 08-A-31)**



Key	Description
1	Compressor
2	Governor
3	AD-IP Air Dryer
4	Supply Res.
5	Single Check & Feed Back Line (Holset only)
6	Discharge Line Unloader Valve

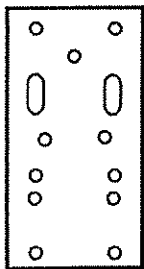


Bracket Pc. No. 109983 used on AD-IP Pc. Nos. 109500, 5001743 and 5001744

Parts Not Available in Kits or Individually
 Key 6 End Cover
 Key 19 Purge Valve Body

Exhaust Cover 112609
 (available as a separate item)

UNIVERSAL MOUNTING PLATE
 Pc. No. 113209
 (Can be used to mount any air dryer to vehicle)



AD-IP Piece Number Changeover

AD-IP Pc. No.	AD-IP Service Pc.No.	AD-IP Pc. No.	AD-IP Service Pc.No.	AD-IP Pc. No.	AD-IP Service Pc.No.	AD-IP Pc. No.	AD-IP Service Pc.No.
65612	65612	109479	NA	800857	800857	5003294	65613
65613	65613	109480	NA	801124	801124	5003976	65612
65614	NA	109500	65693	5000154	65612	5005268	800551
65615	NA	109503	65693	5000155	65612	5005270	65612
65693	65693	131030	NA	5000156	65612	5005387	65613
65709	NA	131038	65612	5000213	65612	5005697	65612
109465	65612	131066	65612	5000214	65612	5005702	65613
109466	65613	131080	65612	5000351	800089	5006591	65612
109467	NA	800020	NA	5000794	65612	5006634	65612
109468	NA	800021	65612	5000985	800089	5006848	65612
109469	65612	800089	800089	5001509	800089	5006879	65612
109470	65613	800249	800249	5001740	65612	5007252	65613
109471	NA	800551	65612	5001743	65693	5007270	65612
109472	NA	800576	800576	5002660	800249	5009413	65613
109477	65612	800577	800577	5002663	800249	5009817	65612
109478	65613	800618	800618	5002900	65612		

MAINTENANCE KITS

**MOUNTING BRACKET KIT
5001247**

Item	Description	Qty.
1	5/16" Clamp Ring Bolt	1
2	Washer	1
3	5/16" Nut	1
4	Clamp Ring	1
5	Saddle Bracket	1
7	3/8" Cap Screw	2
8	3/8" Washer	2
9	Lower Mounting Bracket	1

**CARTRIDGE BOLT KIT
109498**

Item	Description	Qty.
10	Cartridge Bolt	1
12	O-Ring	1
13	O-Ring	1

**DESICCANT CARTRIDGE KIT
65624 (Service New Cartridge)
109493 (Remanufactured Cartridge)**

Item	Description	Qty.
11	Desiccant Cartridge	1
11A	O-Ring	1
11B	O-Ring	1
12	O-Ring	1
13	O-Ring	1

**PURGE VALVE MAINT. KIT
5003547**

Item	Description	Qty.
14	Retaining Ring	1
16	Shoulder Bolt	1
17,18	Purge Valve Complete	1
20	Purge Valve Piston	1
21	Quad-Ring	1
22	Piston Return Spring	1
23	O-Ring	1
24	O-Ring	1
19	Piston Guide	1
	Purge Valve Assembly Tool	1

**EXTENDED PURGE KIT*
5005309**

Item	Description	Qty.
33	Reservoir 3.5" x 10"	1
34	Makeup Line	1
35	Mounting Clamps	2
36	1/2" Lock Washers	4
37	1/2" Nuts	4
38	Plate	2
39	Straight Fitting	1
40	90° Fitting	1
	3/4" Pipe Plug	2

*For extended purge air dryers only.

**HEATER & THERMO. KIT
109495 (12 V.)
109496 (24 V.)**

Item	Description	Qty.
30	Retaining Ring	1
31	Heater & Thermo Assly	1
32	O-Ring	1

**SERVICE PURGE VALVE KIT
800404**

Item	Description	Qty.
14	Retaining Ring	1
15	Purge Valve Assembly	1
21	Quad-Ring	1
23	O-Ring	1
24	O-Ring	1

**DELIVERY CHECK VLV. KIT
109494**

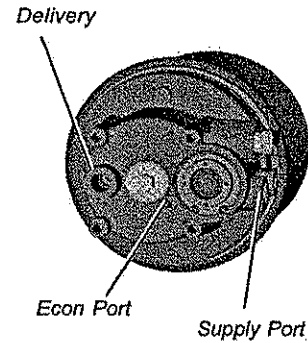
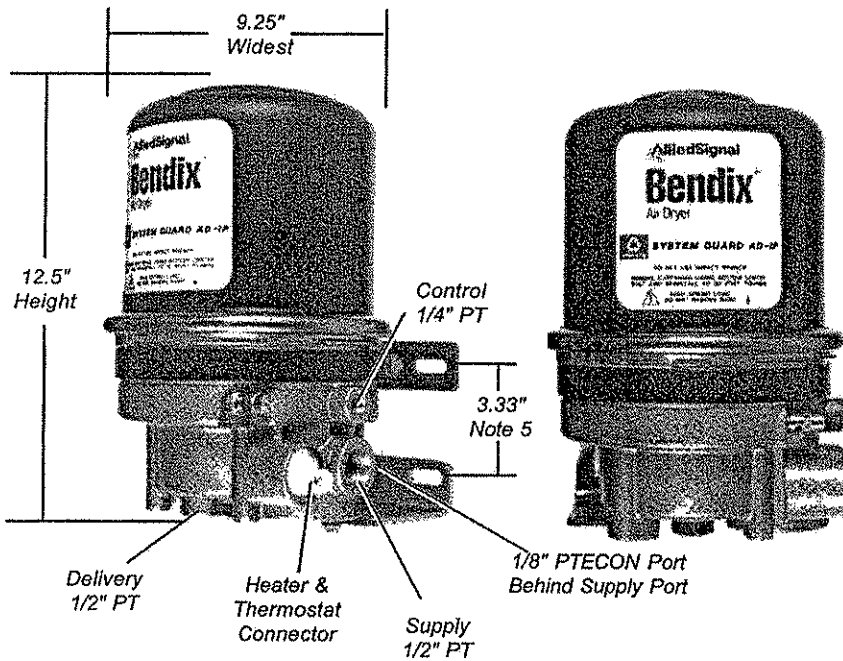
Item	Description	Qty.
25	Retaining Ring	1
26	Perforated Plate	1
27	Check Valve Spring	1
28	Check Valve	1
29	O-Ring	1

The function of the AD-IP Integral Purge Air Dryer is to collect and remove air system contaminants in solid, liquid and vapor form before they enter the brake system. It provides clean, dry air to the components of the brake system which increases the life of the system and reduces maintenance costs. Daily manual draining of the reservoirs is eliminated.

In addition to the standard AD-IP, the AD-IP DI (Drop In) is also offered. It is a specialized version designed especially for air systems that use either the Holset (Cummins) Type E or QE air compressor. These Holset compressors utilize a unique unloading system that requires

that air pressure remain in the discharge line during the entire unloaded cycle of the compressor. To accomplish this, Holset compressors rely on air "feedback" or back pressure from the supply reservoir. When an air dryer is installed the direct "feedback" from the supply reservoir is interrupted and an alternate source for "feedback" pressure must be provided. A standard AD-IP air dryer can be installed however a separate "feedback" line with a single check must be installed. The AD-IP Drop In model incorporates the feedback line and single check as an integral part of the dryer and eliminates the need for these components.

Weight 28.75 lbs.
 VMRS 13-010-033
 Device Code 2414



AD-IP Bottom View

Service Pc. No.	Reman. Pc. No.	Mounting Bracket Kit	Econ Port	Heater & Thermo. Volts-Watt	Notes
65612	109477	5001247	---	12v - 90w	
65613	109478	5001247	---	24v - 90w	
65693	109503	---	---	12v - 90w	
800089	5000985	5001247	1/8" PT	12v - 90w	
800249	5002660	---	---	12v - 90w	
800576	5005556	5001247	---	12v - 90w	Ext. Purge
800577	5005567	---	1/8" PT	12v - 90w	Ext. Purge
800618	5006284	5001247	---	24v - 90w	Ext. Purge
800857	109478	5001247	---	24v - 90w	Includes Silencer

Note - 12 & 24 volt air dryers are identified by connector color - White = 12v, Gray = 24v

Note - Center to center of slots in both brackets 3.33 inches

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

Directional Control Valve Load Sense Pressure Compensated MP18

RA 64 965/01.05 1/20

Replaces: 10.96

Series 30

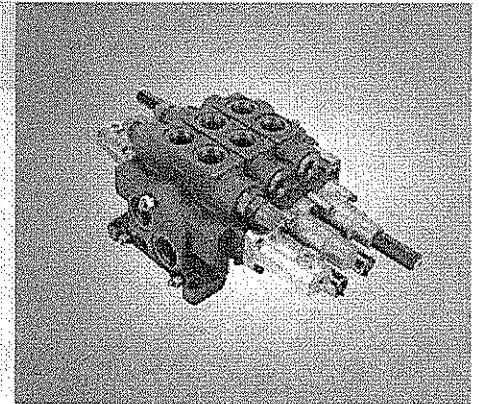
Nominal pressure 3625 psi (250 bar) pump side
Nominal pressure 4200 psi (290 bar) actuator side
Max. flow

— pump side:

- 40 GPM (150 l/min) unloading and priority inlet element
- 50 GPM (189 l/min) standard closed center inlet element

— actuator side:

- 35 GPM (133 l/min) consult factory for higher flow rates



Functional Description

MP18, series 30 mobile stack type valves are load sensing pressure compensated valves. They control the volume, direction of oil flow and maintain a constant flow regardless of changing load pressures.

An advantage of the MP18 is that the starting point for movement of the function always remains the same, i.e., a specified control spool position always has the same metering characteristics. This is accomplished by a compensating spool in each section.

While the main spool is in neutral, the primary shuttle and secondary shuttle are vented to tank. When the main spool is operated, the load pressure is directed via the primary shuttle to the spring end of the pressure compensator spool. The section compensator now moves to the open position. Dependent on the pressure drop between the section compensator and the control spool opening, a specific volume now flows to the function. The load signal also simultaneously communicates to the secondary shuttle and on to the system compensating device. The system compensating device can be either an inlet compensator (open center unloading inlet) in the case of a fixed pump system or a pump compensator control in the case of a variable pump system.

Features

- Parallel and series parallel type valve with wide range of section circuitry including 3-way, 4-way, float, motor control, 3 position and priority. Available with both flow and pressure control spools.
- May be combined with MP18 series 10 sections to provide series parallel circuitry.
- Section compensator allows each section to operate at a predetermined flow rate independent of pump discharge flow and pressure.
- Low spool operating forces possible by elimination of series by-pass circuits through the valve. This lends itself to remote operation of valve spools.
- Variety of main spool operators including manual, hydraulic, electro-hydraulic (proportional or on-off control), and mechanical detents. Electro-hydraulic and hydraulic remote also available with manual handle override.
- Section with pressure regulator or remote regulator port allows each section to operate at a predetermined maximum pressure level independent of pump discharge pressure.
- Low neutral pressure drop with open center inlet section, pressure drop remains constant regardless of number of sections. Pump discharge flow is directed back to the reservoir at low pressure through the unloading valve located within inlet section.
- Primary relief in open center unloading inlet section and priority port relief in priority inlet section which provides accurate pressure control over a wide flow range

Ordering Code

Fluid

Petroleum oil (For operation with other fluids, consult a Rexroth Application Engineer)

MP 18-30 / /

Number of Sections

Directional control sections (8 sections maximum)

Directional Control Valve

Mobile stack valve, pressure compensated, Series 20 **MP 18**

Inlet () Indicate required pressure in bar.

Standard closed center inlet	C	Closed center priority ①	P()
Closed center top port	CT	Open center ①	O()
Closed center top ported with spike relief ①	CG()	Open center with back pressure check ①	OB()
Closed center top ported with plug ①	CQ	Open center with power beyond ①	OP()

Directional Control Section

High Boy Section	HB	High Boy Regenerative	HBR
High Boy Priority	HBP		

Schematic Designation () Indicate limited flow in liters/minute after spool schematic designation.

1		5		9		13	
2		6		10		14	
3		7		11			
4		8		12		16	

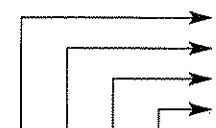
All spool designations, except number 6, 10, and 16, are available with flow limited main spools for improved metering characteristics. If flow limited spool is required, add in () the flow in liters/min. after the spool designation. Available flow limited main spools are; 7 gpm (34 lpm), 11 gpm (42 lpm), 15 gpm (57 lpm) and 24 gpm (91 lpm). Consult factory for special customer requirements in main spool design if quantities are justified.

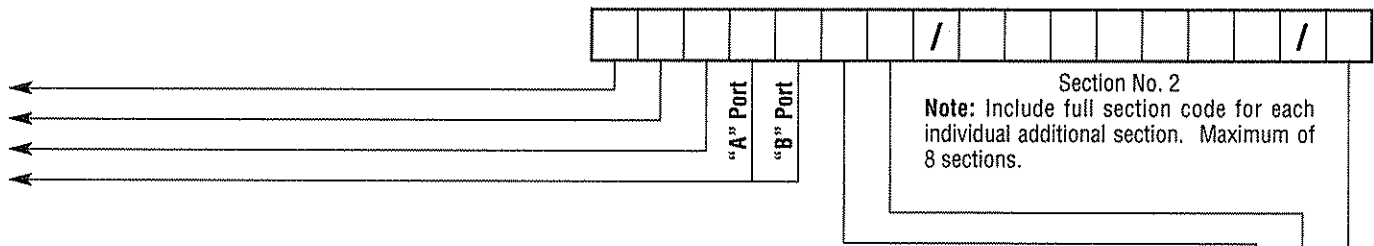
Spool Operation () Indicate required DC voltage (12v or 24v) or pressure release detent setting in bar.

Spring centered	A	Hydraulic pilot operated	H
Spring centered with stroke limiter on A & B	A1	Hydraulic pilot operated with stroke limiters ②	H1()
Spring centered with stroke limiter on A	A2	Hydraulic pilot operated with manual handle override	H2
Mechanical detent A and B	B	Electrical proportional control	L()
Spring centered from A mechanical detent B	B1	Electrical proportional control with stroke limiters ③	L1()
Spring centered from B mechanical detent A	B2	Electrical prop. control with manual handle override ④	L2()
Spring centered from A & B mechanical detent float	B3	Electrical on/off control	M()
Multi-position detent	B4	Electrical on/off control with stroke limiters ⑤	M1()
Mechanical detent A, B, and float	B5	Electrical on/off control with manual handle override ⑥	M2()
Mechanical detent A and float spring centered from B	B6		

Port Options () Indicate the required secondary relief setting in bar.

Pilot operated relief & anti-cavitation check valve	G()
Proportional combination pilot operated relief & anti-cavitation check valve	P()
Anti-cavitation check valve	E
Machined for port option, with plug	Q





Compensator Option

Standard Compensator	0
Adjustable flow control	1
Fixed-flow hollow compensator. Specify flow in liters/min.: 5 gpm (19 lpm), 10 gpm (38 lpm), 15 gpm (57 lpm), 20 gpm (76 lpm) ⑤	2
Load check	3

Section Compensator Pressure Control Option () Indicate required settings in bar.

No compensator pressure control (standard)	A
Compensator pressure regulator	B()
Port for remote compensator pressure regulation ④	C

End Cover

Standard end cover	L
End cover with pressure reducing valve integral for electro-hydraulic controlled sections.	Q
End cover with external supply pressure port for electro-hydraulic controlled sections.	R
End cover with pressure regulator for pilot supply port.	S
To add P, T or LS ports to end cover, add P, T or L in () after end cover codes L, Q, R or S. Example: L(PTL) would indicate a pressure, tank and load sense carry over ports in the end cover.	()

- ① Please consult factory when ordering.
- ② H1() designate which ports are to be stroke limited (A, B, or A & B).
- ③ All electrical main spool operation codes (L, L1, L2, M, M1, M2) must be sold as complete valve assemblies.
Codes L1 or M1 designate stroke limiter. Specify which ports are to be stroke limited (A, B, or A & B).
All electrical sections must be assembled in line from end cover Q or R.
- ④ Compensator pressure options (B, or C) not available in all section assemblies.
Not available when spool operation codes B-B6 or when used in conjunction with secondary work port options.
Port for remote compensator pressure regulation not available in electrical solenoid operated sections.
- ⑤ Not available in HBP sections.

Technical Data

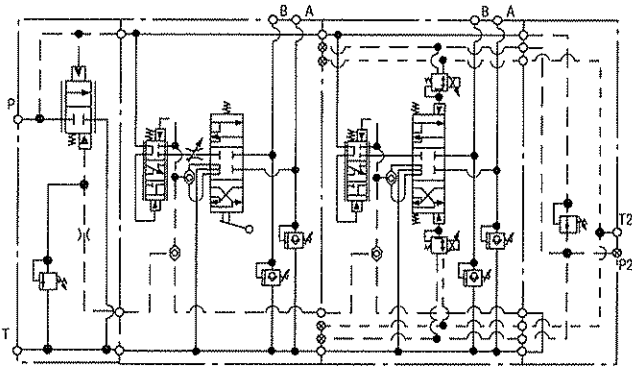
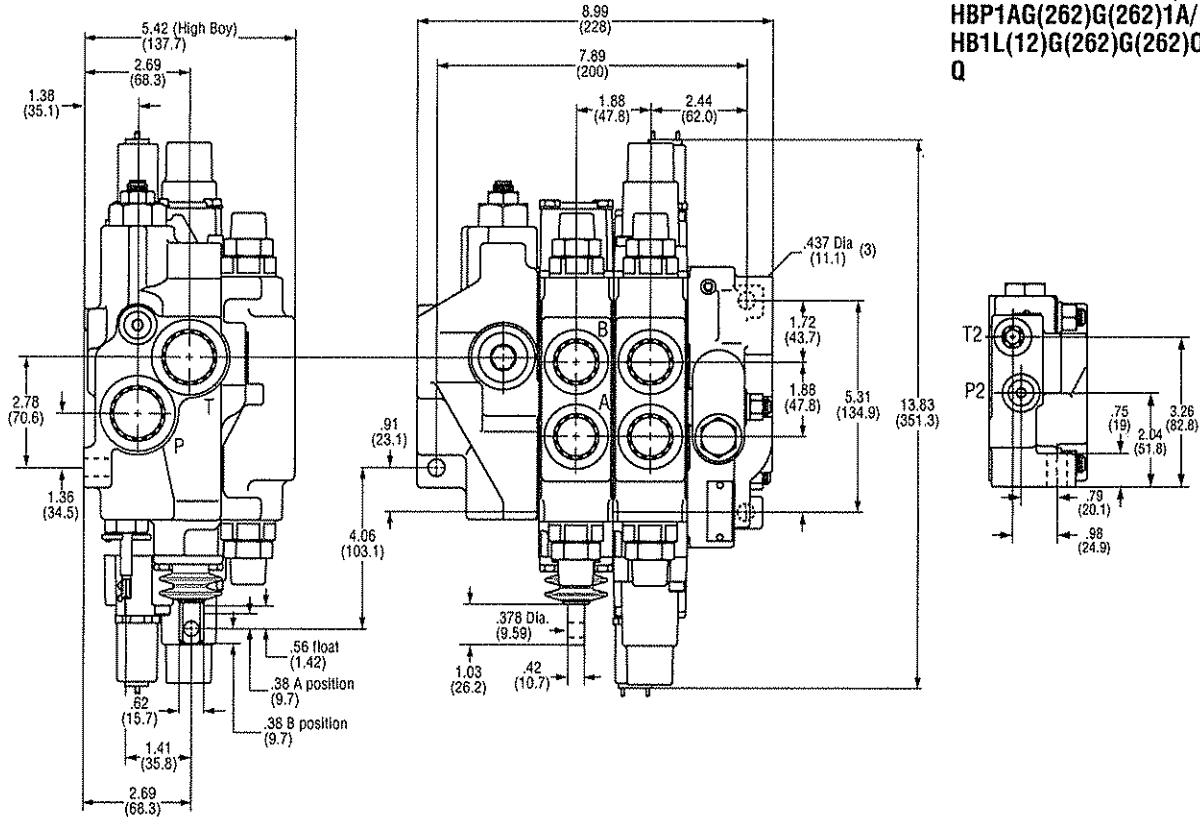
MP18 Specifications

Flow range	GPM (L/min)	35 (133)	<i>Note... Consult factory for higher flow rates</i>
Primary operating pressure	Port T	PSI (bar)	290 (20)*
	Port P	PSI (bar)	3625 (250)*
Secondary relief valve setting	Port A, B	PSI (bar)	4200 (290)*
Hydraulic fluid	Petroleum oils (HM, HL, HLP)		
Fluid temperature range	° F (° C)	t _{min} = -4° F (-20)	t _{max} = 158° F (70)
Viscosity range	SSU (mm ² /s)	35-1760 (10-380) (dependent upon fluid)	
Cleanliness level	18/15 according to ISO 4406		

*For applications outside these parameters, please consult Rexroth

Installation Dimensions

Model...2MP18-30/O(250)/
HBP1AG(262)G(262)1A/
HB1L(12)G(262)G(262)0A/
Q



Regen and Top Ported Closed Center Inlets with Standard End Cover

Number of Directional Control Spools	Overall Length		Bolt Hole Centers	
	Inches	millimeters	Inches	millimeters
1	6.60	167.6	5.79	147.0
2	8.48	215.3	7.67	194.7
3	10.36	263.0	9.55	242.5
4	12.24	310.77	11.43	290.2
5	14.11	358.5	13.30	337.9
6	15.99	406.2	15.18	385.7
7	17.87	454.0	17.06	433.4
8	19.75	501.7	18.94	481.1

Closed Center Inlet with Standard End Cover

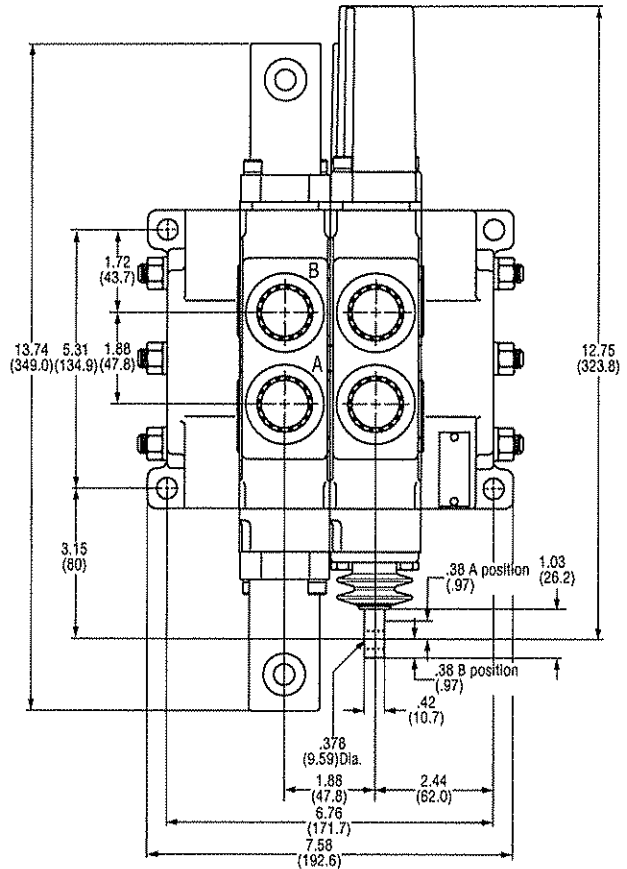
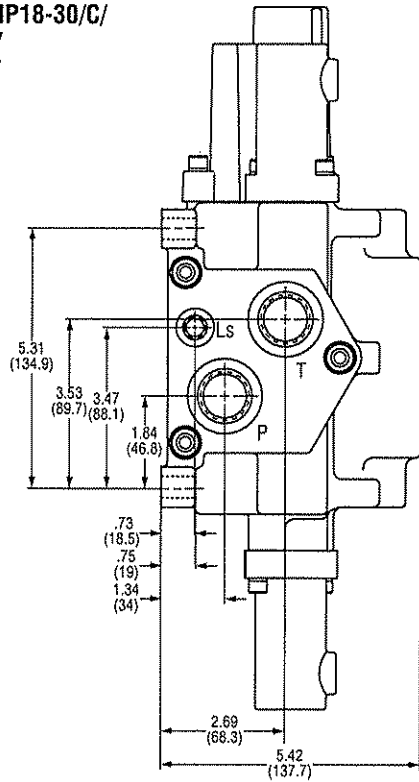
Number of Directional Control Spools	Overall Length		Bolt Hole Centers	
	inches	millimeters	inches	millimeters
1	5.70	144.8	4.88	124.0
2	7.58	192.6	6.76	171.7
3	9.46	240.3	8.64	219.5
4	11.34	288.0	10.52	267.2
5	13.22	335.7	12.40	314.9
6	15.10	383.5	14.28	362.6
7	16.98	431.2	16.16	410.4
8	18.86	478.9	18.04	458.0

Priority and all Open Center Inlets with Standard End Cover

Number of Directional Control Spools	Overall Length		Bolt Hole Centers	
	Inches	millimeters	inches	millimeters
1	6.86	174.3	6.01	152.6
2	8.74	222.0	7.89	200.3
3	10.62	269.8	9.77	248.0
4	12.50	317.5	11.64	295.8
5	14.38	365.7	13.52	343.5
6	16.26	412.9	15.40	391.2
7	18.14	460.7	17.28	438.9
8	20.02	508.4	19.16	486.7

Installation Dimensions

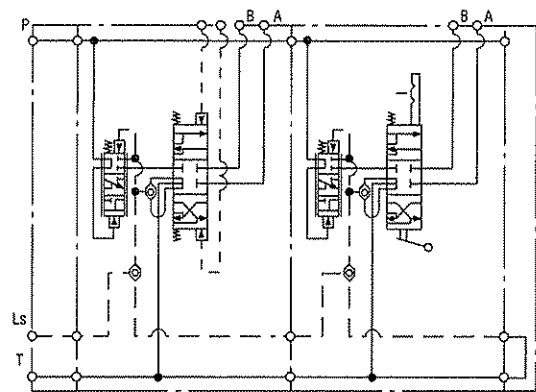
Model...2MP18-30/C/
HB1HZZOA/
HB1BZZOA/
L



Standard Port Sizes (SAE)

Inlet	P...Inlet	T...Tank	PB	PR	LS	PRLS
C	#12	#12			#6	
G	#16	#16			#6	
CG	#16	#16			#6	
CQ	#16	#16			#6	
P	#16	#16		#12, 8, 6	#6	#6
O	#16	#16				
OB	#16		#12			
OP	#16	#16	#12			
Work Section	A Work Port	B Work Port				
HB	#12	#12				
HBP	#12	#12				
HBR	#12	#12				
End Covers	P...Inlet	T...Tank	LS...Load Sense	P2...Pilot Supply	T2...Pilot Drain	
L(PTL)	#12	#12	#4			
L(PTL)	#16	#16	#6			
Q(PTL)	#16	#16	#6		#4	
R(PTL)	#16	#16	#6	#4	#4	
S(PTL)	#16	#16	#6	#4	#4	

Hydraulic Housing #4 or #6

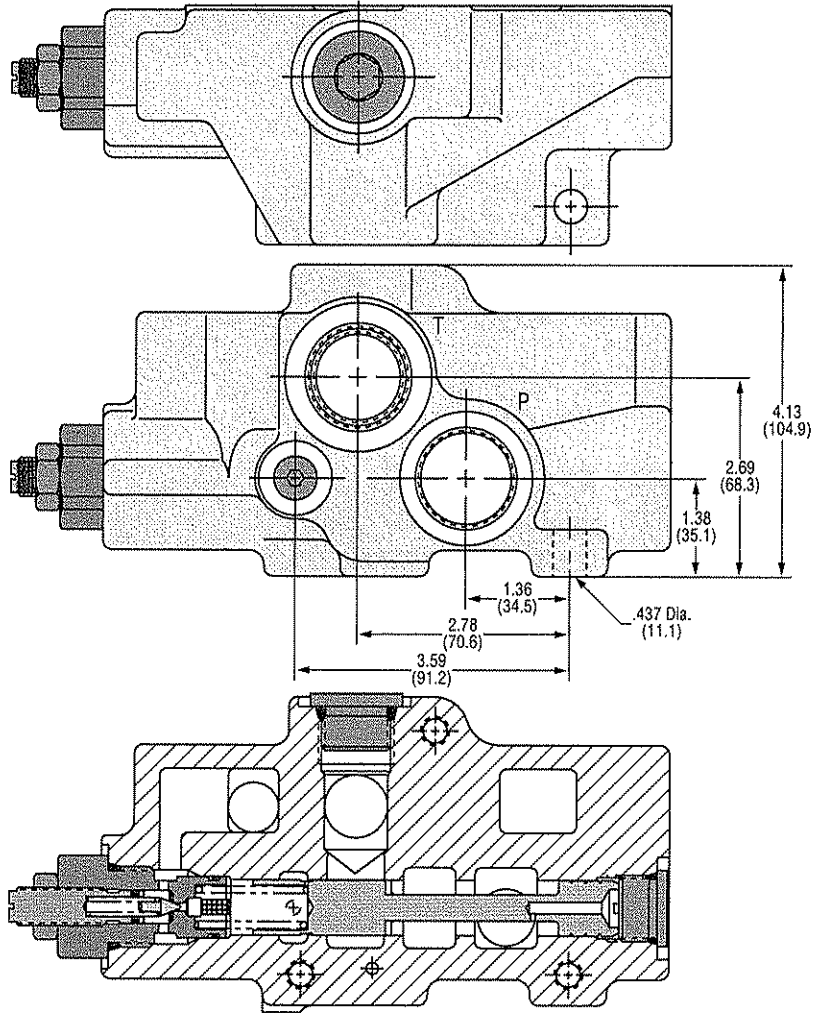


Note: If stack valve assembly has one of the optional end covers (Q, R, or S) the overall length is .250 inches (6.35 mm) longer than the matching valve assembly with standard end cover. Bolt hole mounting dimensions do not change.

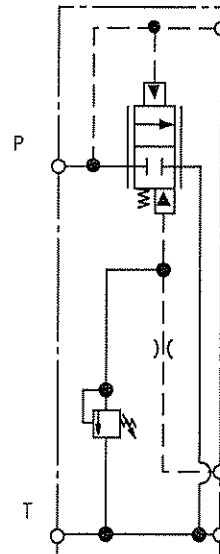
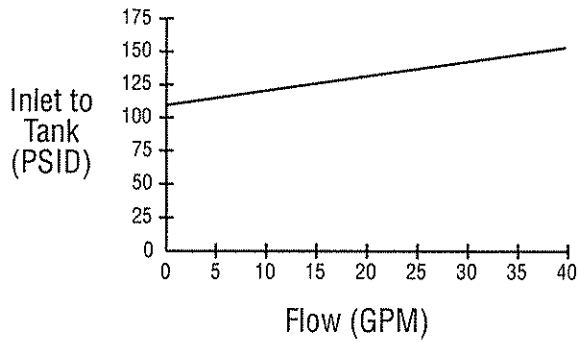
Inlets

Open Center Unloading Inlet

Code...0



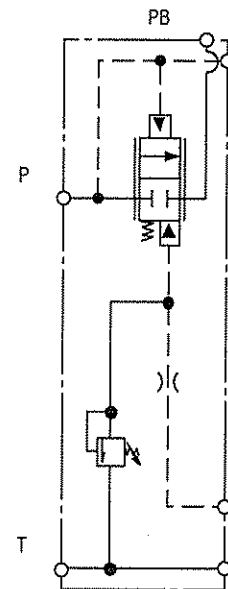
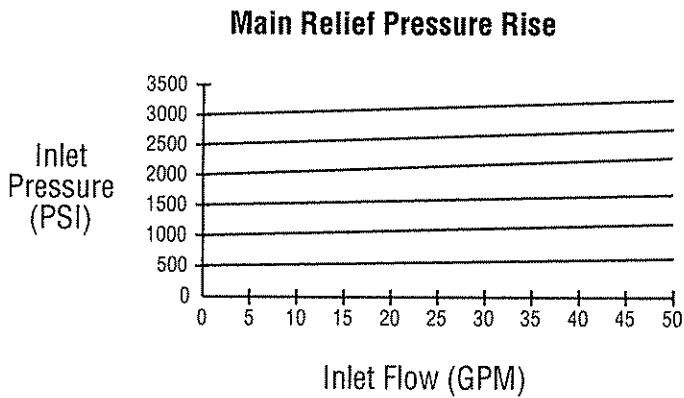
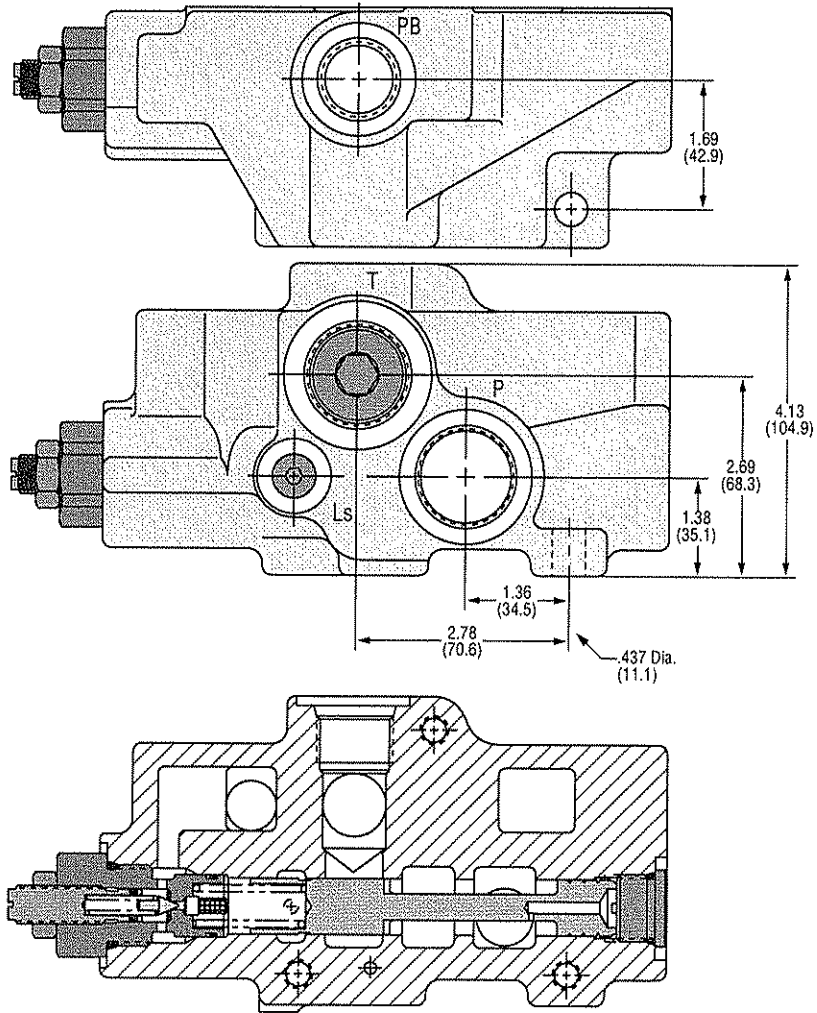
**Neutral Pressure Drop
(Open Center Inlet)**



Inlets

**Open Center Unloading Inlet
with Power Beyond**

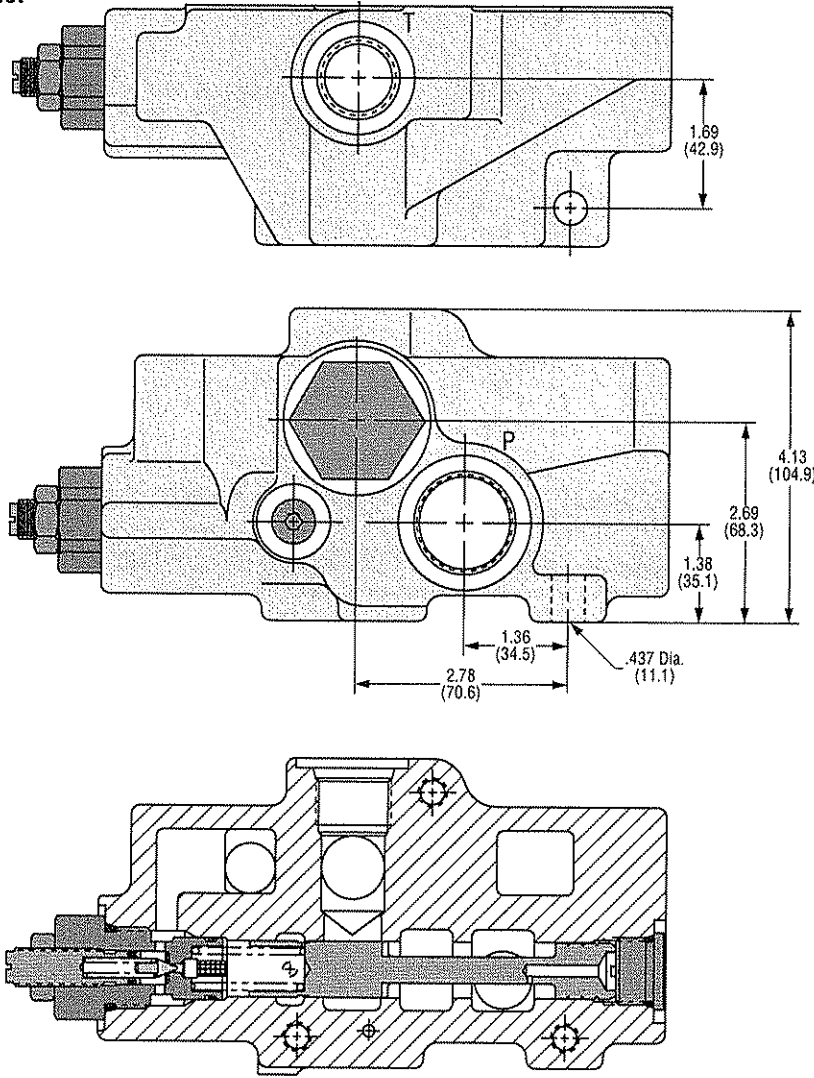
Code...OP



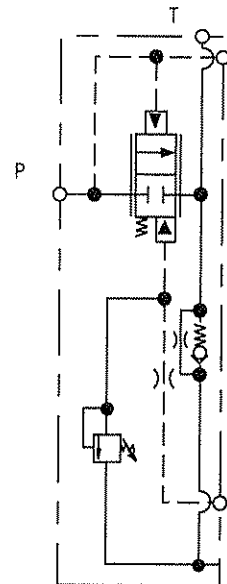
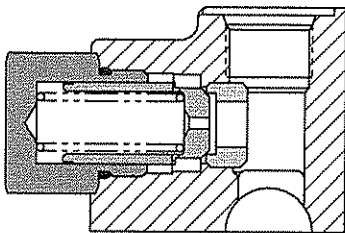
Inlets

Open Center Unloading Inlet
with Back Pressure Check

Code...OB



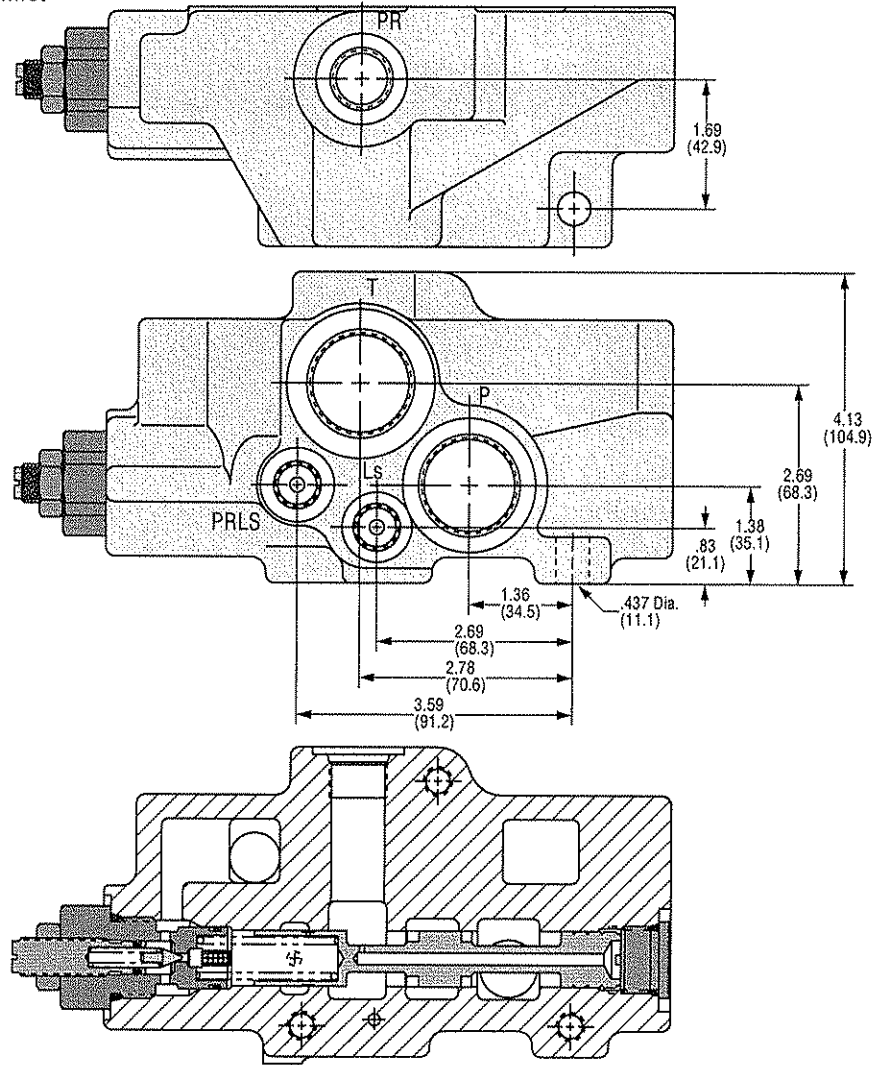
Back Pressure Check



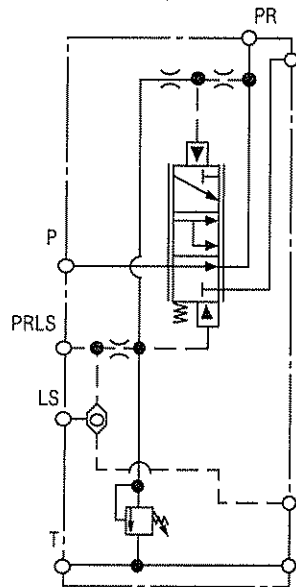
Inlet

Closed Center Priority Inlet

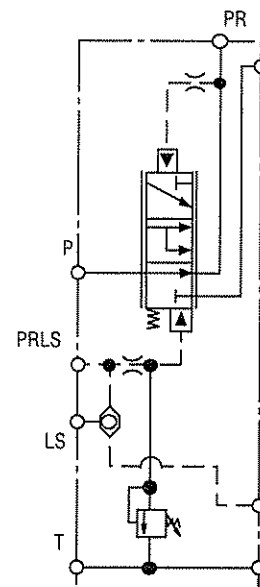
Code...P



Dynamic Bleed



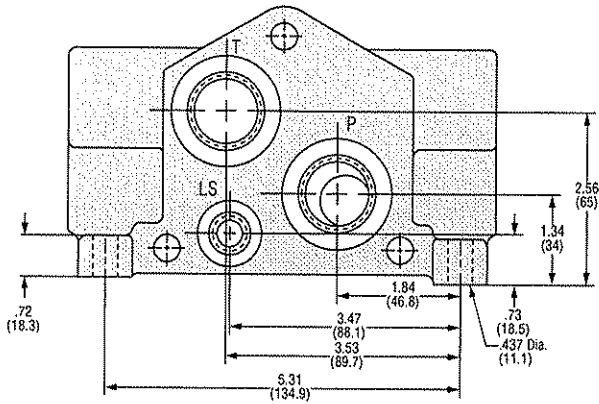
Standard Priority



Inlet Options

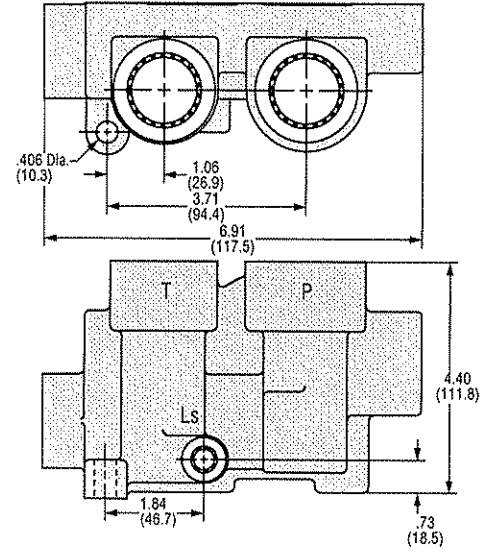
Standard Closed Center Inlet

Code...C



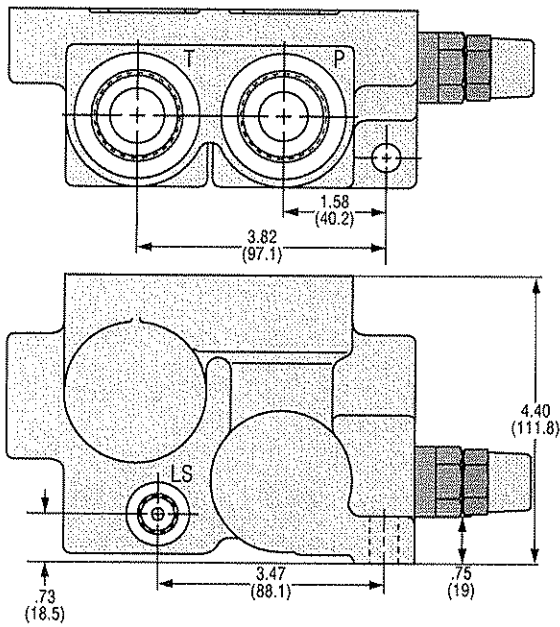
Closed Center Top Ported Inlet

Code...CT



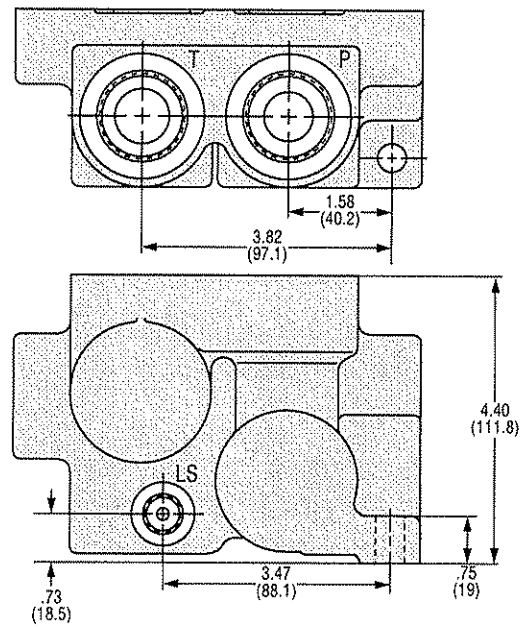
Closed Center Inlet with Spike Relief

Code...CG()



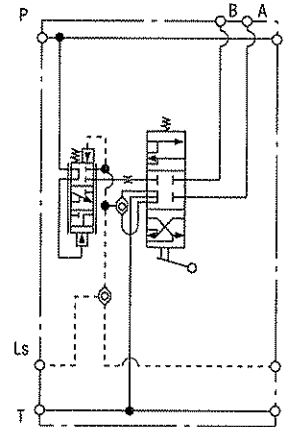
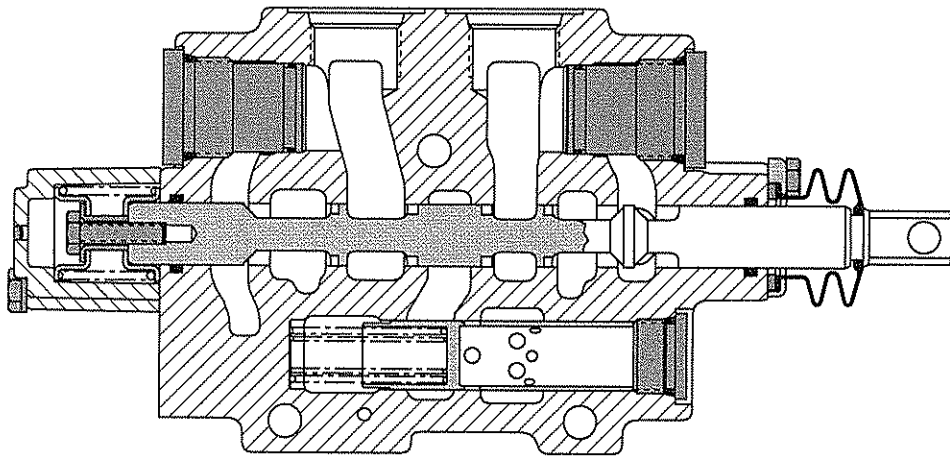
Closed Center Top Ported Inlet

Code...CQ

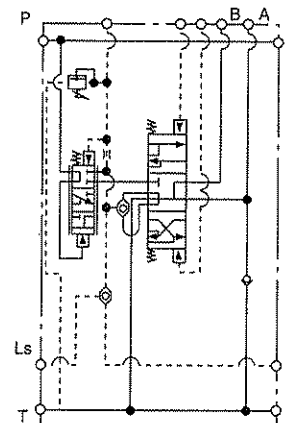
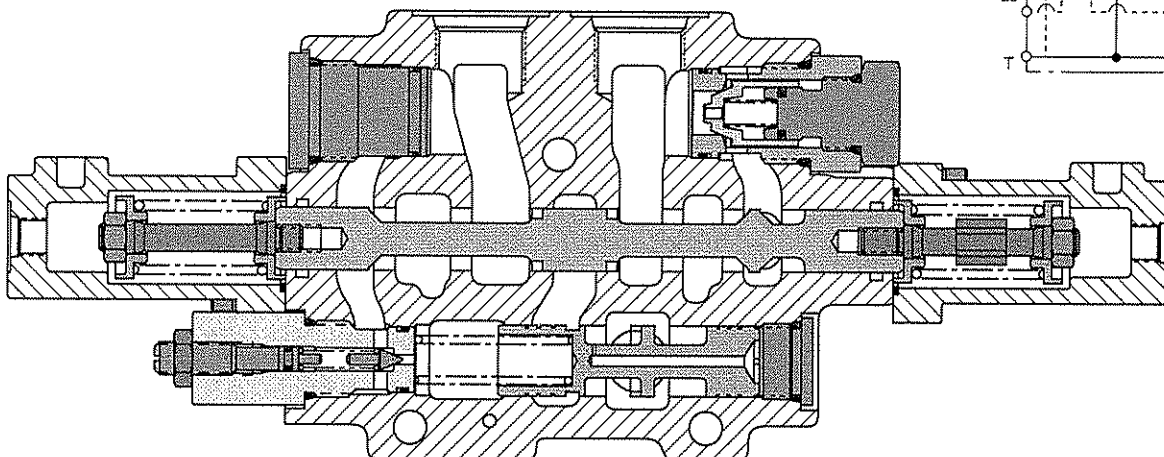


Sectional View

Model...MP18-30/HB1AQQ2(57)A

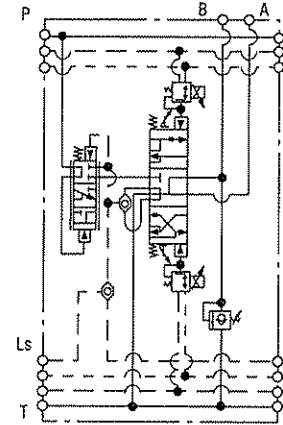
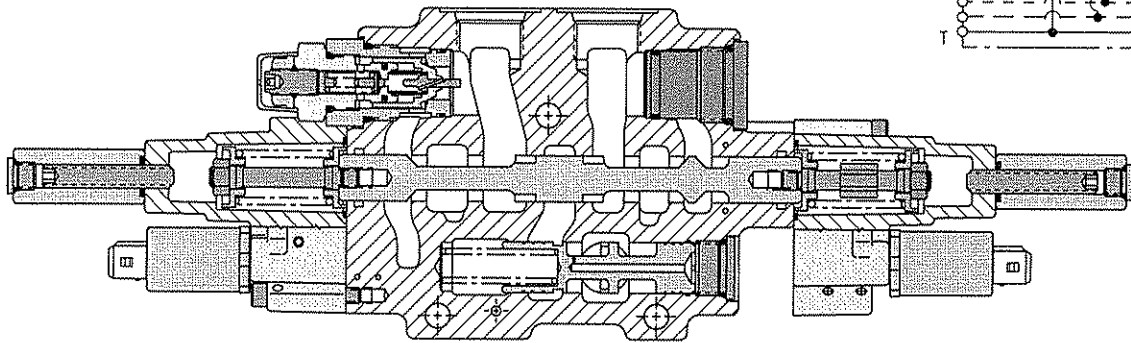


Model...MP18-30/HB3HEQ0B(103)

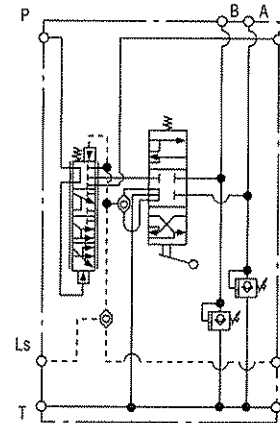
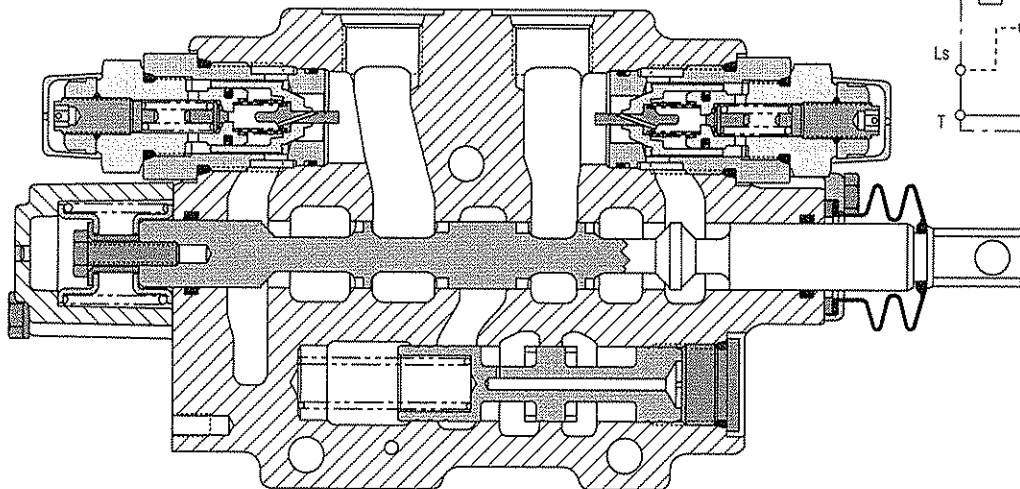


Sectional View

Model...MP18-30/HB3(42)L1QG(203)OA

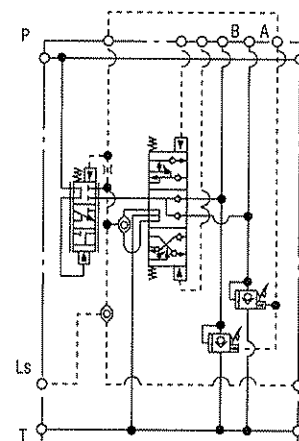
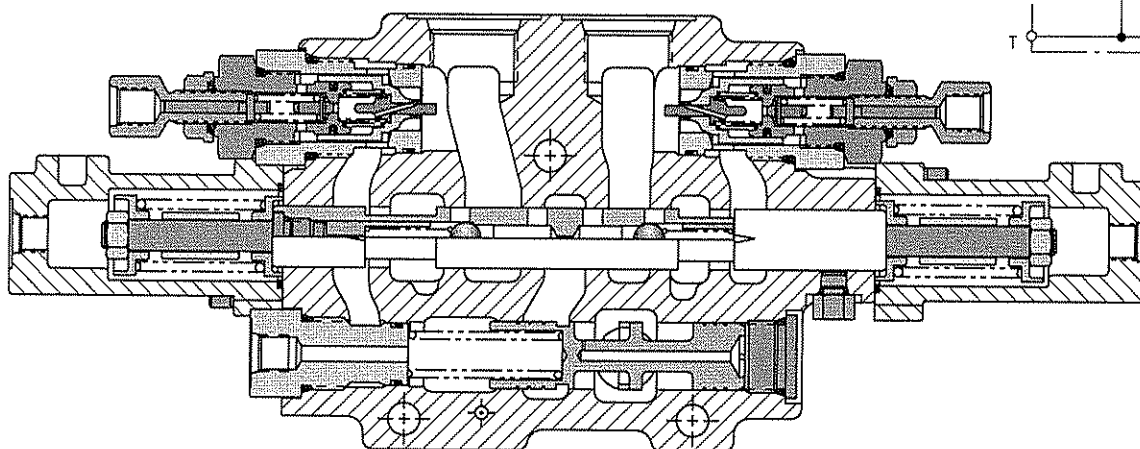


Model...MP18-30/HBP1AG(250)G(250)OA

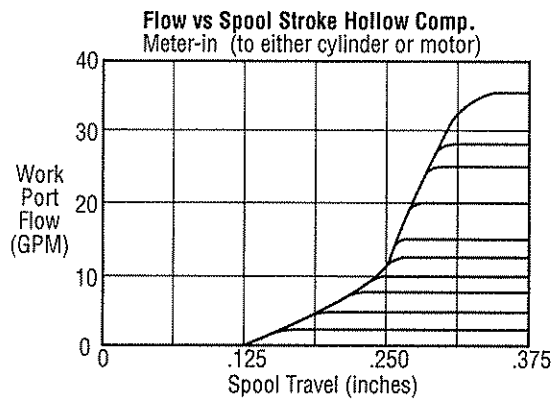
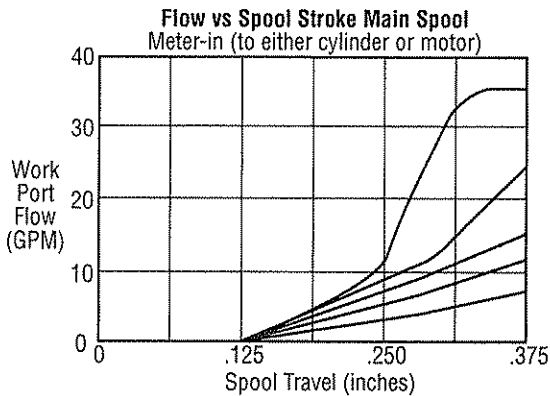
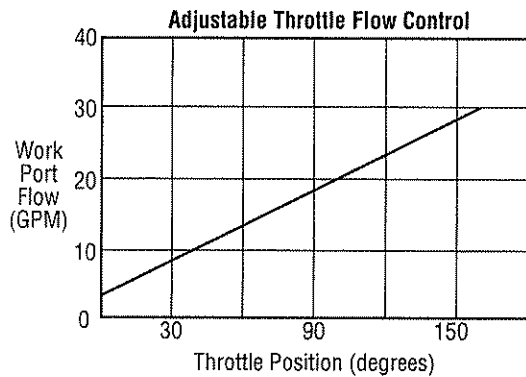
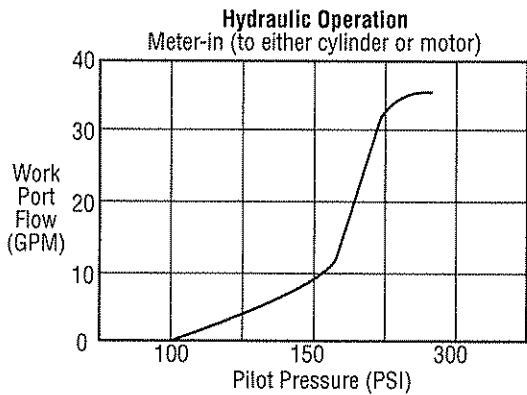
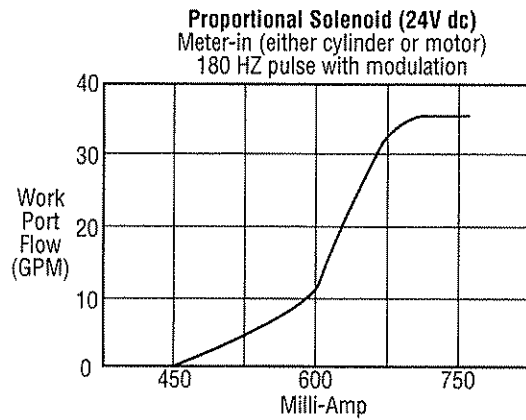
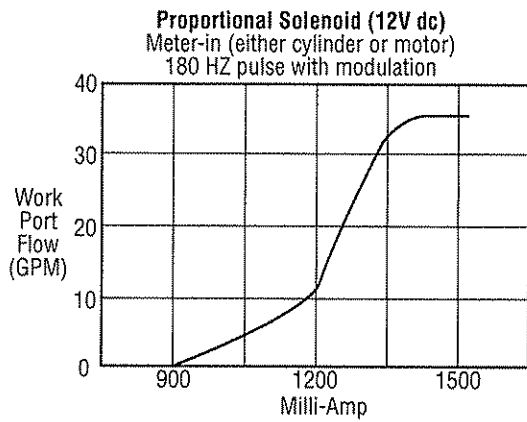
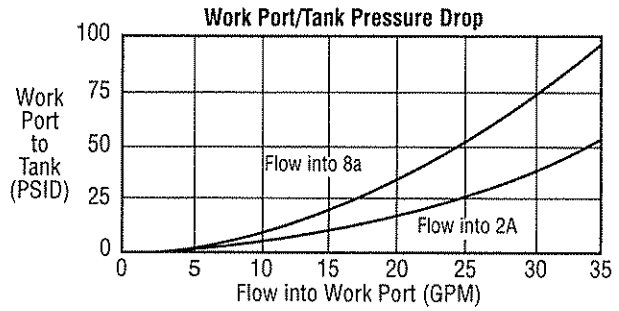
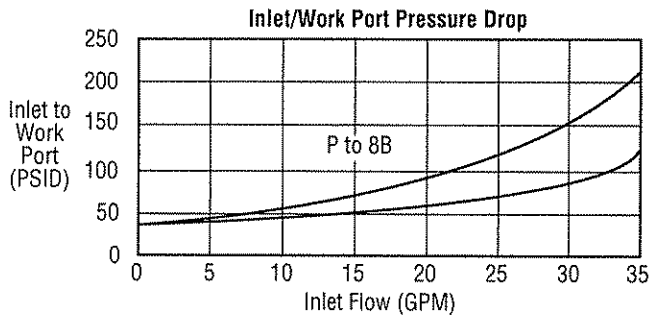


Sectional View

Model...MP18-30/HB16HP(150)P(150)0C



Operating Curves



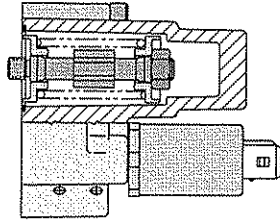
Spool Operation

Electrical Proportional and On/Off Control

Main Spool Operator Codes...L(12), L(24), M(12), M(24).

3 Position Assembly

Internal assembly typical. Housings are not interchangeable. They must be assembled to their proper ends of the sections. Assembly for "A" port end of section

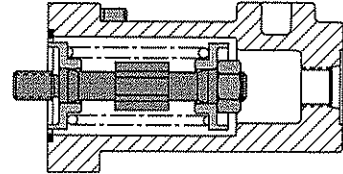


Hydraulic Operated Proportional Control

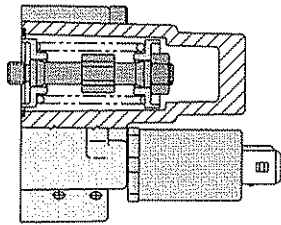
Main Spool Operator Code...H

3 Position Assembly

Housings are interchangeable from "A" to "B" end of section. Assembly for "A" port end of section.

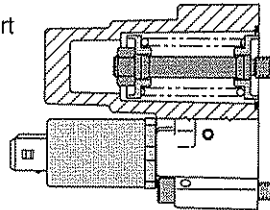


4 Position Assembly

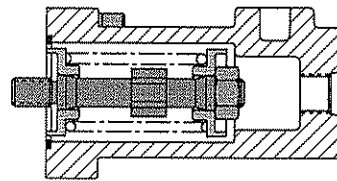


Assembly for "A" port end of section

Assembly for "B" port end of section

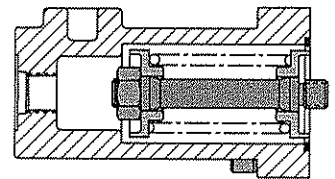


4 Position Assembly



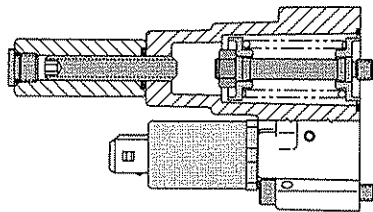
Assembly for "A" port end of section

Assembly for "B" port end of section



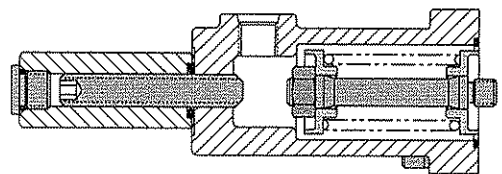
Electrical Proportional and On/Off Control with Stroke Limiter

Main Spool Operator Codes...L1(12), L1(24), M1(12), M1(24).



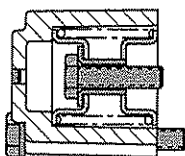
Hydraulic Proportional with Stroke Limiter

Main Spool Operator Code...H1



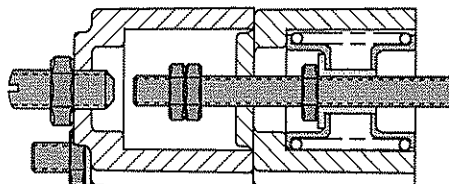
Manual Spring Centered

Main Spool Operator Code...A



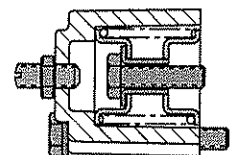
Manual Spring Centered with Stroke Limiter

Main Spool Operator Code...A1



Manual Spring Centered with Stroke Limiter

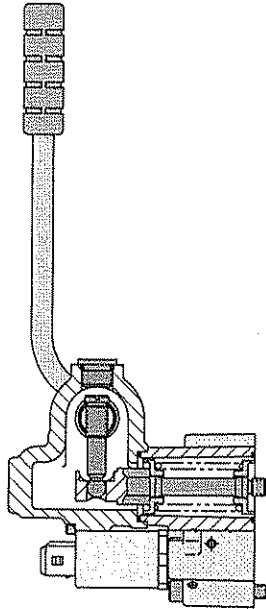
Main Spool Operator Code...A2



Spool Operation

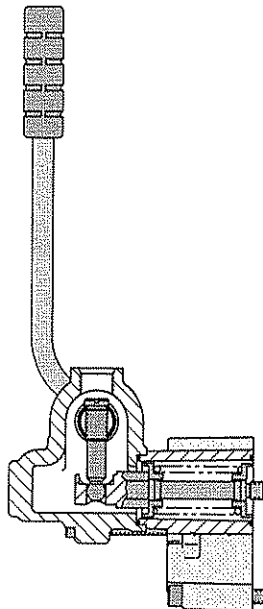
Electrical Proportional and On/Off Control with Manual Override

Main Spool Operator
 Codes...L2(12), L2(24), M2(12), M2(24)
 "B" port assembly
 Kit P/N 1602-635-096



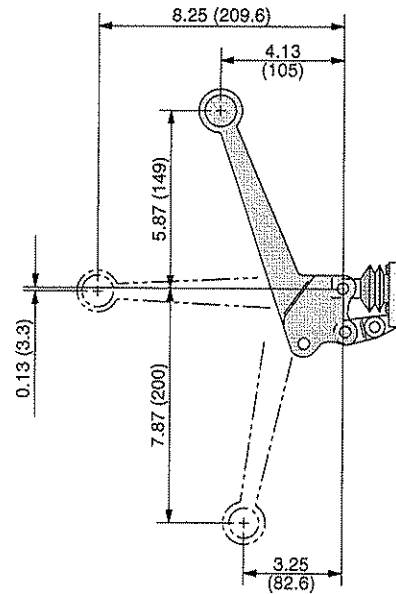
Hydraulic Control with Manual Override

Main Spool Operator Code...H2
 "B" port assembly
 Kit P/N 1602-635-097



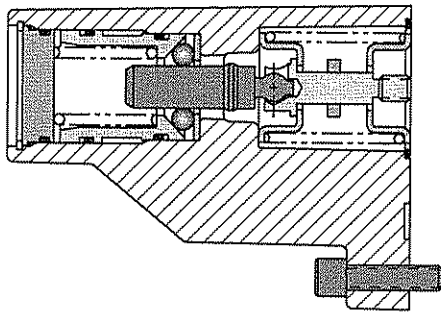
Lever and Dust Boot Assembly

Kit P/N 1601-635-040



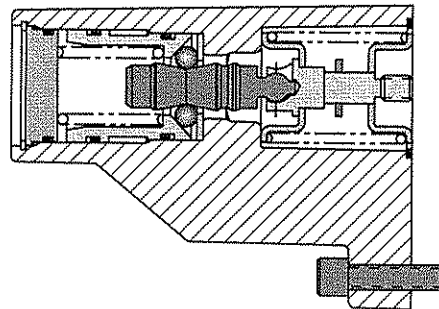
3 Position Detent Assembly

Code...B3



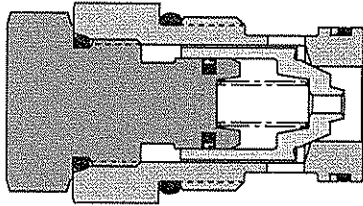
4 Position Detent Assembly

Code...B5

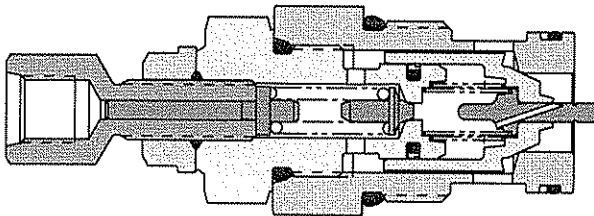


Port Options

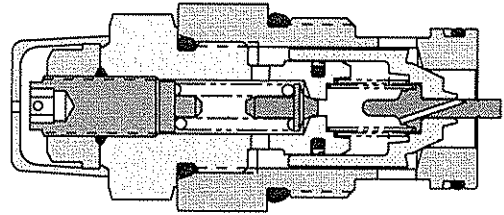
Code...E
1601-566-021



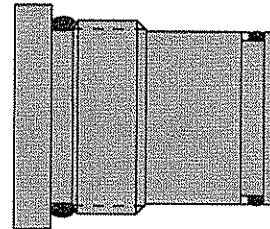
Code...P()
1695-430-001



Code...G()
1697-430-002 (300...1400 psi)
1697-430-001 (1450...4500 psi)

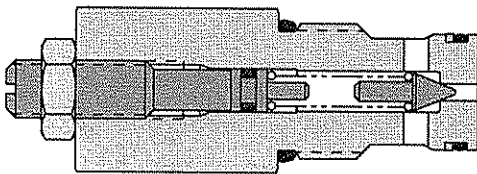


Code...Q
19-76202-019

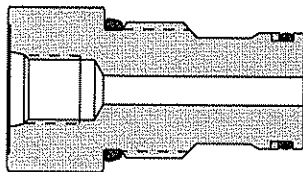


Pressure Compensator Control Options

Code...B()
1602-566-026



Code...C
1602-566-045

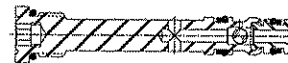


Shuttles

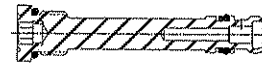
Double Acting Primary Shuttle
1604-566-002



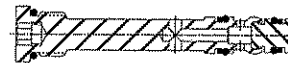
Orificed Primary Shuttle
1604-566-004



Single Acting "A" Only Shuttle
1604-566-009



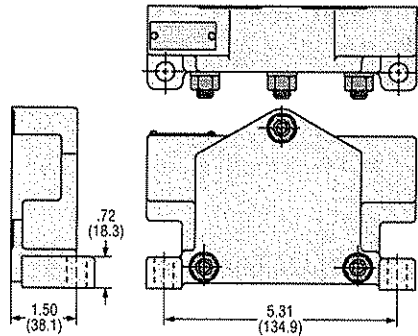
Single Acting "B" Only Shuttle
1604-566-006



End Covers

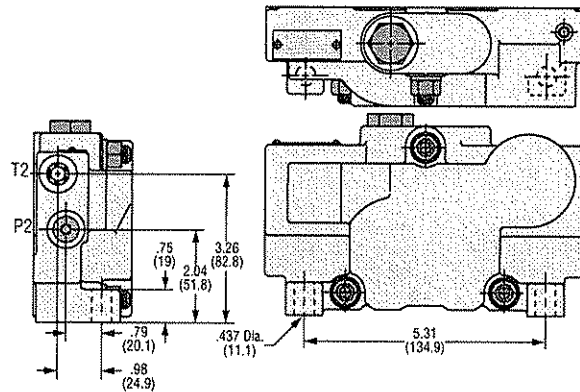
Code...L

Standard End Cover



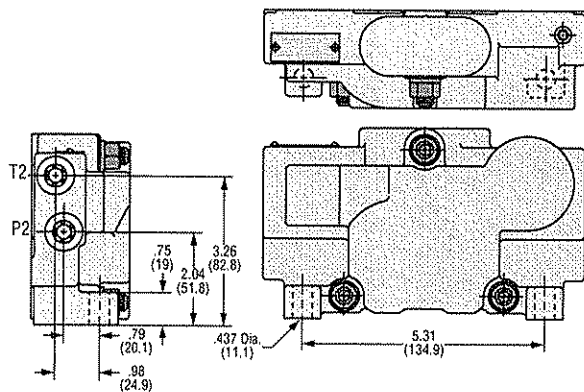
Code... Q

End cover with pressure reducing valve integral for Electro-Hydraulic controlled sections. (Includes drain port T2)



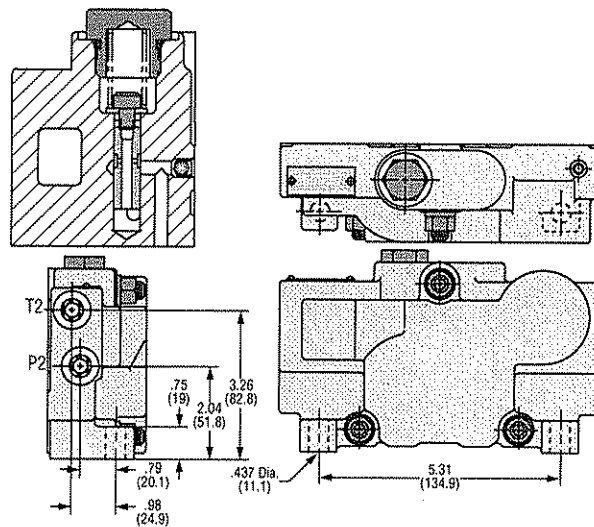
Code...R

End cover w/ external supply pressure port for Electro-Hydraulic controlled sections. (Includes pressure port P2 and drain port T2)

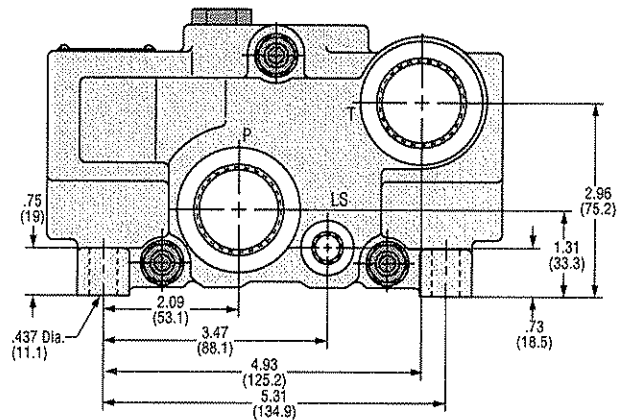
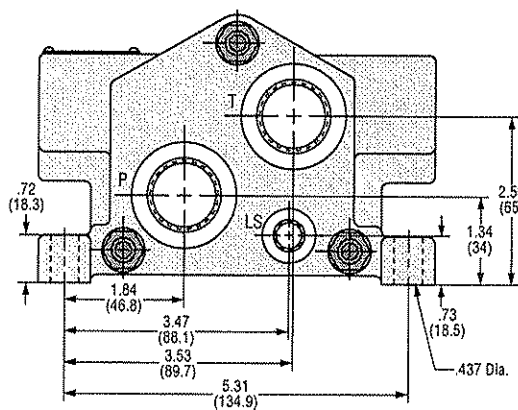


Code...S

End cover w/ pressure reducing valve integral for pilot controller supply. Not to be used with Electro-Hydraulic sections. (Includes pressure port P2 and drain port T2)



To Add Ports P, T, or LS to End Covers, Add Catalog Code (PTL) to End Cover Codes...L, Q, R, or S.



Kit Numbers

Closed Center Tie Bolt Kits

Including shims, o-rings, tie-bolts, nuts, and flat washers.	
1602-635-023	1 section
1602-635-020	2 section
1602-635-021	3 section
1602-635-022	4 section
1602-635-033	5 section
1602-635-034	6 section
1602-635-035	7 section
1602-635-036	8 section

Open Center Tie Bolt Kits

Including shims, o-rings, tie-bolts, nuts, and flat washers.	
1602-635-037	1 section
1602-635-038	2 section
1602-635-039	3 section
1602-635-040	4 section
1602-635-041	5 section
1602-635-042	6 section
1602-635-043	7 section
1602-635-044	8 section

Service Kits

1602-635-031	Face seal kit (seal between sections including shims)
1602-635-061	Seal kit electrical section pilot face seals
1602-635-086	Seal kit electrical section pilot face seals
1602-635-078	Priority inlet seal kit
1602-635-001	Dust boot kit
1601-635-040	MP18 & 22 handle & dust boot kit
1604-566-002	Standard primary shuttle double acting
1604-566-004	Orificed primary shuttle double acting
1604-566-006	Single acting shuttle "B"
1604-566-008	Single acting orificed shuttle "B"
1604-566-009	Single acting shuttle "A"
1604-566-011	Single acting orificed shuttle "A"
1602-566-022	Relief cartridge unloading and priority inlet
1604-635-001	Secondary shuttle kit, with ball
1697-430-002	Combination pilot relief/anti-cavitation port option (300-1400 psi)
1697-430-001	Combination pilot relief/anti-cavitation port option (1450-3625 psi)
1601-566-021	Anti-cavitation check valve
19-76202-019	Port option plug
1697-635-001	Seal kit port option
1602-635-094	Open center inlet back pressure check kit
1602-635-116	Mating Solenoid connector Kit - Cannon Connector "C2"
1602-635-117	Mating Solenoid connector Kit - Junior Rimer (AMP) "C4"

Operation Mechanical Detent Kits

1602-635-071	"B" detent kit
1602-635-072	"B1" detent kit
1602-635-073	"B2" detent kit
1602-635-074	"B3" detent kit
1602-635-075	"B4" detent kit
1602-635-068	"A" standard spring centered kit
1602-635-096	Manual override kit-option "L2" & "M2" without solenoid
1602-635-097	Manual override kit-option "H2"

Bosch Rexroth Corporation
Mobile Hydraulics
Mobile Controls, Electronics,
and External Gear Units
1700 Old Mansfield Road
Wooster, OH 44691-0394
Telephone (330) 263-3300
Facsimile (330) 263-3330
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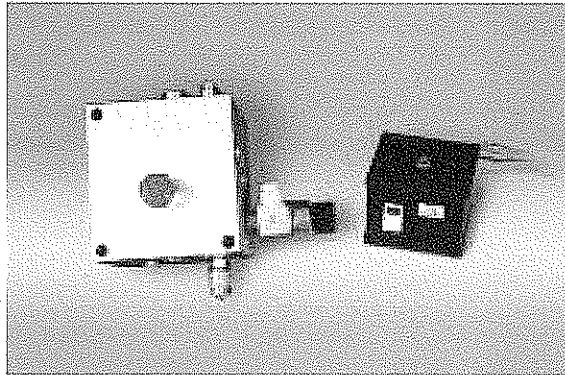
Subject to change.

Component Technology is a pioneer in snow and ice removal. We definitely have the experience to do the job. From the operator to the fleet manager we understand what you need. That's why the entire StormGuard product line, top to bottom, is the best available when you compare safety, reliability, durability, and ease of maintenance. Our engineering staff consistently proves that it is the most innovative in the industry. This makes us the best at bringing your ideas to reality. We can help you design systems and controls that will do your job right and do it well. We are here to serve you and believe that our total commitment to your success is the key to our mutual success.

Additional Features of PlowGuard:

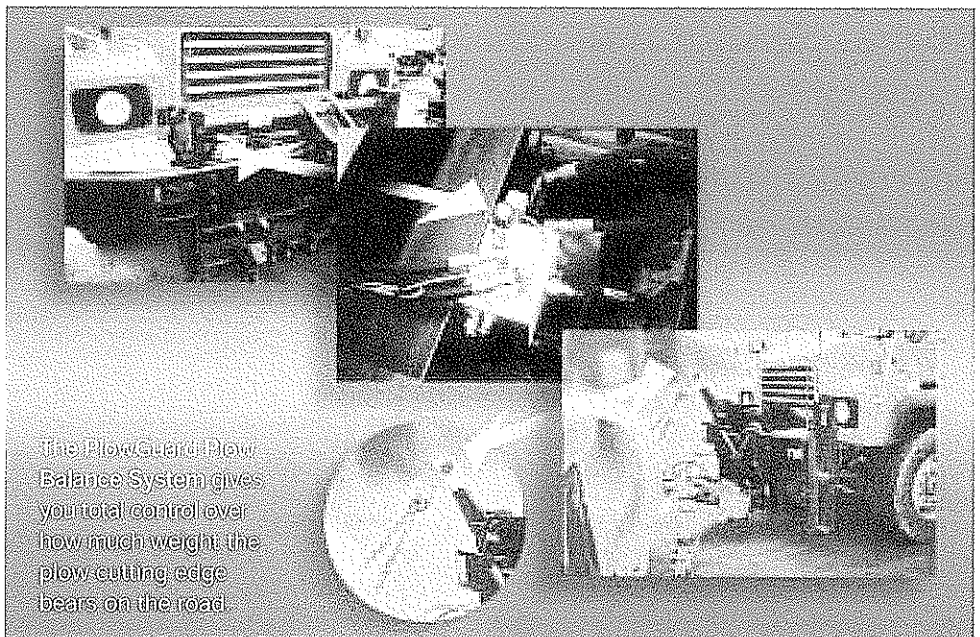
- Reduced damage to asphalt shoulders
- Consumes less than 1/100 HP when in operation

PlowGuard Plow Balance Valve System



The **PlowGuard Plow Balance System** works with gear pump and load sense pump hydraulic systems, to control the amount of weight the plow cutting edge bears on the road surface.

Retrofit installation - approximately 2.5 hrs.



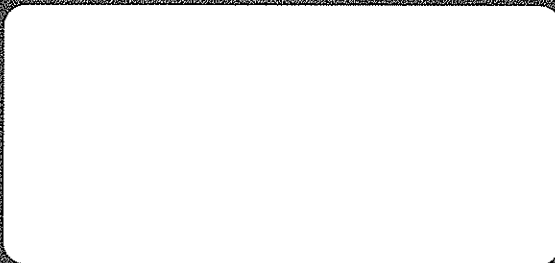
The PlowGuard Plow Balance System gives you total control over how much weight the plow cutting edge bears on the road.

Give us a call and find out where you can get into a demo truck, stop by our booth at one of the many trade shows or contact your local dealer and see first hand the StormGuard advantages of the PlowGuard Plow Balance System.

Starting A Revolution!

NBC 7/03 25K

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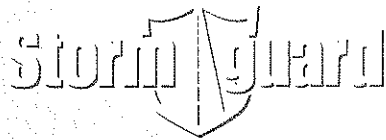
or call our corporate headquarters for a location near you

Component Technology

A DIVISION OF
 Certified Power Inc

phone: 847-573-3818
 fax: 847-573-3836

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

Component Technology



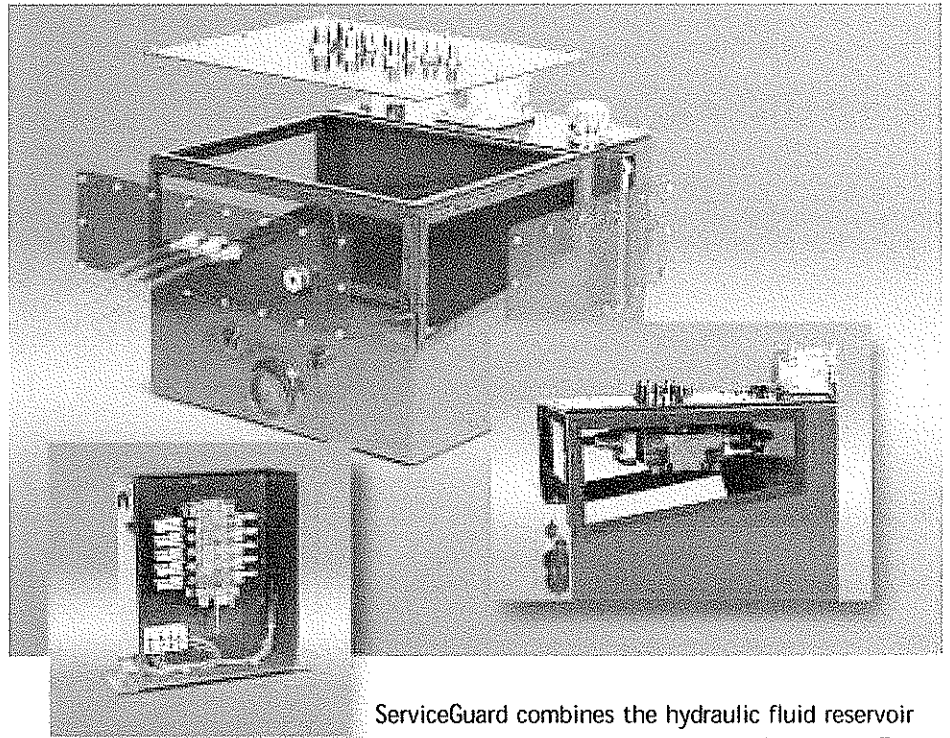
ServiceGuard/ValveGuard Reservoirs and Enclosures

SERVICEGUARD: DESIGNED FOR MAXIMUM DEPENDABILITY WITH THE FOLLOWING FEATURES:

- FORM FITTED GASKETS FOR ALL PANELS
- SLOPED BOTTOM WITH LARGE DRAIN GREATLY REDUCES RUST DAMAGE
- TOP PLATE MOUNTING ELIMINATES UNNECESSARY PLUMBING AND POSSIBLE FAILURE POINTS
- TANK MOUNTED FILTER WITH CARTRIDGE IS EASIER AND LESS EXPENSIVE TO REPLACE THAN CAN-TYPE FILTER
- 3" PORT ALLOWS FOR EASY USE OF SUCTION DRAINER
- MAGNETIZED PLUG TO ATTRACT METAL PARTICLES FLOATING IN FLUID

VALVEGUARD GIVE YOU THE FOLLOWING FEATURES:

- FORM FITTED GASKET AND 6 STAINLESS STEEL LATCHES WELDED IN PLACE
- MOUNTS DIRECTLY THROUGH STEEL PLATE PANEL TO ELIMINATE INTERNAL PLUMBING

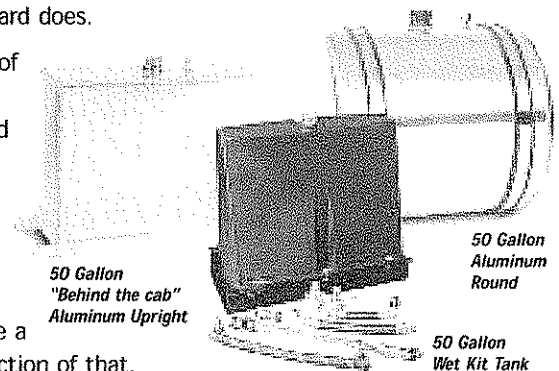


ServiceGuard combines the hydraulic fluid reservoir and valve enclosure into one convenient unit. The new bulkhead design does not require internal tubing and hoses, thereby eliminating several potential leak and service points.

It can be used with practically any valve: manual, electric, hydraulic, or air-controlled. Frame mounted units are subjected to incredible abuse from the truck's rear wheels constantly throwing off corrosive materials: ice, snow, dirt, and road salt. It is essential that the hydraulic fluid and valve assembly be protected from these hazards and that is precisely what ServiceGuard does.

The ServiceGuard unit is constructed of heavy seven gauge steel plating. In addition, ValveGuard and ServiceGuard are also available in stainless steel construction. The valve enclosure is kept weather tight by steel plates bolted over form fitted gaskets.

Its design greatly reduces downtime and labor costs during service -- once a four-hour job is now reduced to a fraction of that.



50 Gallon
"Behind the cab"
Aluminum Upright

50 Gallon
Aluminum
Round

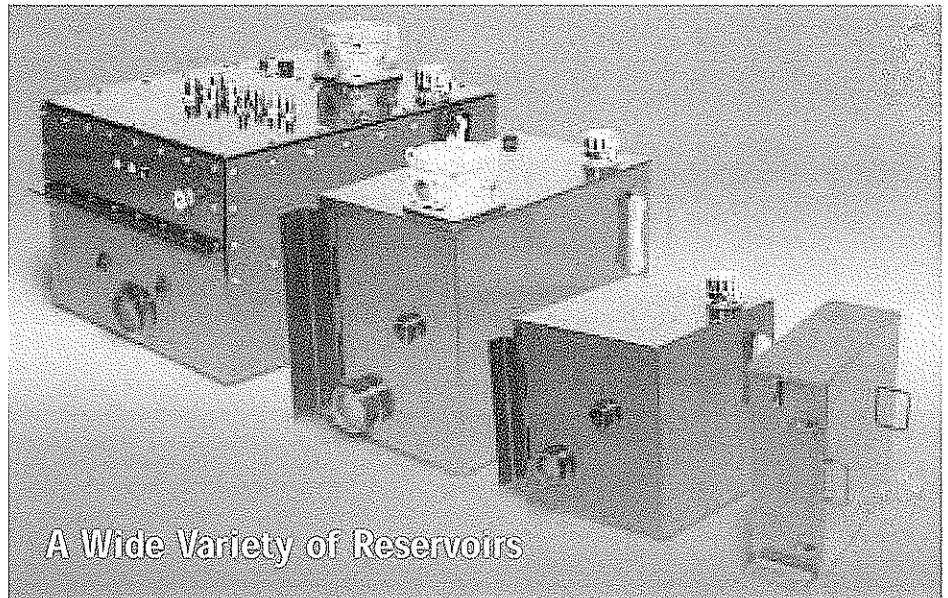
50 Gallon
Wet Kit Tank

"We Know Snow"

Component Technology is a pioneer in snow and ice removal. We definitely have the experience to do the job. From the operator to the fleet manager we understand what you need. That's why the entire StormGuard product line, top to bottom, is the best available when you compare safety, reliability, durability, and ease of maintenance. Our engineering staff consistently proves that it is the most innovative in the industry. This makes us the best at bringing your ideas to reality. We can help you design systems and controls that will do your job right and do it well. We are here to serve you and believe that our total commitment to your success is the key to our mutual success.

Additional Features of ServiceGuard and ValveGuard:

- Works with any type of valve
- Fewer potential failure points for less down time
- Easier accessibility and servicing for lower labor costs
- Designed for a longer trouble-free life
- A superior weather tight seal
- ServiceGuard comes ported to save time, money, and problems



A Wide Variety of Reservoirs

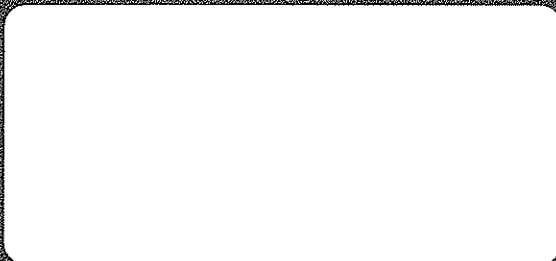
We have designed and built a wide variety of shapes and sizes of reservoirs to fit all the standard applications. However, if you have a unique need, custom reservoirs are not a problem. Steel, stainless, and poly reservoirs are available, all designed for easy mounting and built for a long life. All are pressure tested and delivered in primer allowing the installer to paint with the color of his choice. In addition our reservoirs are available with a powder coated finish, eliminating the need for finish coat painting if desired. We offer a large selection of accessories, which are available individually or as part of a complete system package.

PART NUMBER	DESCRIPTION	L	W	H
CP-RES7S	7 Gal. Side Frame Steel	12"	12"	12"
CP-RES10S	10 Gal. Side Frame Steel	12"	15"	15"
CP-RES15S	15 Gal. Side Frame Steel	16"	15"	16"
CP-RES20S	20 Gal. Side Frame Steel	18"	15"	18"
CP-RES20S-LS	20 Gal. Side Frame Load Sense Steel	18"	15"	18"
CP-RES25S	25 Gal. Side Frame Steel	20"	15"	20"
CP-RES30S	30 Gal. Side Frame Steel	24"	15"	20"
CP-RES30S-LS	30 Gal. Side Frame Load Sense Steel	24"	15"	20"
CP-RES40S	40 Gal. Side Frame Steel	24"	20"	20"
CP-RES40S-LS	40 Gal. Side Frame Load Sense Steel	24"	20"	20"
CP-RES50S	50 Gal. Side Frame	24"	20"	24"
CP-RES50S-FS-LS	50 Gal. Side Frame Load Sense Steel	24"	20"	24"
CP-RES50P-U	50 Gal. Upright Poly	Call for print		
CP-RES50S-U	50 Gal. Upright Steel	36"	14"	34"
CP-RES30S-VMSG	30 Gal. ServiceGuard Steel	24"	30"	18"
CP-RES50S-VMSG	50 Gal. ServiceGuard Steel	24"	30"	23"

Give us a call and find out where you can get into a demo truck, stop by our booth at one of the many trade shows or contact your local dealer and see first hand the StormGuard advantages of ServiceGuard and ValveGuard.

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phone: 847-573-3818
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Viking Proline Series Combination Spreaders



FEATURES:

1. All operations controlled from in-cab.
2. Radius design allows for free flow of material to conveyor.
3. Automatic chain tensioning system
4. No hinges, lock pins or moving body parts in sanding mode. Body down during spread operations.
5. Telescopic hoist for dump mode eliminated sub-frame for lower center of gravity.
6. Body available in 10', 11', 13', and 14' lengths.
7. Light weight of body increases payload.
8. Square tailgate is double acting.
9. Main conveyor chain covered except for cross slats. This allows discharge of sand, gravel or cold patch.
10. Fast accurate discharge gate setting with screw adjustment outside body.
11. Positive close and release of tailgate by means of two airbrake maxi chambers with in-cab control.
12. 25:1 planetary gear box gives up to 50,000 in/lbs of torque to start spreading any load.
13. 50 degrees of dump angle assures complete discharge of load while round shape eliminates corners which make material stick. Depending on over hang.

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

Proline Series Combination Spreaders

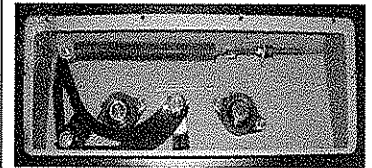


AVAILABLE OPTIONS:

- Front Discharge with Cross Conveyor
- Rear Discharge
- Bi-Directional Discharge
- 304 Stainless Steel Construction
- AR400 Construction
- Side Boards
- Bar Flites Every Link
- Poly Liquid Tanks
- Ground Speed Control
- Top Screens
- Twin Spinner Available
- Poly Liner
- Cab Shield 24"
- Air Tarp
- Hi-Temp Rubber Belt over Conveyor Chain

NOTE: Changes in design may occur thru product development.

MODEL	1011LW	1112LW	1314LW	1415LW
Inside Length	10'	11'	13'	14'
CA / CT required with 3" between cab & body	84"	96"	112"	120"
Water Level Capacity	6.0 cu. Yd.	6.6 cu. Yd.	9.9 cu. Yd.	10.7 cu. Yd.
10" Boards	8.1 cu. Yd.	9 cu. Yd.	12.7 cu. Yd.	13.8 cu. Yd.
Side Thickness	3/16	3/16	3/16	3/16
Side Material	Corten	Corten	Corten	Corten
Side Height	38"	38"	45"	45"
Tailgate 3/16. Corten	46"	46"	53"	53"
Front Panel Height	53"	53"	60"	60"
Double Acting Tailgate	Yes	Yes	Yes	Yes
Hoist	Top Lift - 20T Telescopic 3 Stage NTEA 40	Top Lift - 20T Telescopic 3 Stage NTEA 40	Top Lift - 30T Telescopic 3 Stage NTEA 60	Top Lift - 30T Telescopic 3 Stage NTEA 70
Conveyor Width	23"	23"	23"	23"
Conveyor Floor / A R Steel	1/4"	1/4"	1/4"	1/4"
Drive and Idler Shaft	2"	2"	2"	2"
Chain 667X	STD	STD	STD	STD
Cross Flites Every Other Link	STD	STD	STD	STD
Planetary Gear Reduction	25:1	25:1	25:1	25:1
Air Tailgate	STD	STD	STD	STD
Poly Spinner	STD	STD	STD	STD
Poly Return Cover	STD	STD	STD	STD
Conveyor Cover	STD	STD	STD	STD
Fenders	Integral	Integral	Integral	Integral
Ladder - Right Rear	STD	STD	STD	STD
Automatic Chain Tensioning System	STD	STD	STD	STD
Body Weight Installed	4,250	4,450	5,600	5,800



Chain Tensioning Unit



DEALER:

Viking-Cives (USA)
14331 Mill Street
Harrisville, NY 13648
(315) 543-2321
Fax (315) 543-2366

Viking-Cives, Ltd.
P.O. Box 1120, RR#4
Mt. Forest, ONT N0G2L0
(519) 323-4433
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Viking-Cives, (USA)
212 North Evans Road
Evansdale, IA 50707
(319) 236-7977
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