SDT-MH 16 Ton Truck Tender

SERIAL # _____ WORK ORDER # _____

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Chandler Equipment Company Personnel

Bill Chandler Chief Executive Officer

Advertising & Marketing

Dealer / Distributor Arrangements

Brannon Chandler General Manager

Production & Scheduling

Warranty, Sales and Service

Andrea Thompson Administrative Assistant

Lisa Johnson Accounts Receivable

Collections

Michael Sosebee Sales Manager

Gene Dye Outside Sales

Mid-South Regional Sales Manager

Dan McCorvey Outside Sales

Southeast Regional Sales Manager

Richard Wray Outside Sales

Western Regional Sales Manager

Matt Farmer Inside Sales

Michael Anderson Precision Ag Products

Equipment Service

Wes Hobgood Parts & Service

Kimbro Grizzle Parts & Service

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Warranty Policy

A) Standard Warranty:

Chandler Equipment Company warrants that equipment manufactured by Chandler Equipment Company, under normal conditions of use and service, shall be free from material defects due to faulty manufacturing for the period listed below.

- a. Poultry Litter Spreaders and Conveyors Six (6) Months
- b. Fertilizer and Lime Pull Type Spreader Six (6) Months
- c. Fertilizer Tenders (Trailer or Truck Mounted) Six (6) Months
- d. Fertilizer and Lime Chassis Mounted Spreaders One (1) Year

This warranty period is from the date of delivery to the original owner.

(Warranty period is on equipment built after July 1, 2012)

B) Warranty Approval:

- a. Any and All warranty claims must be approved in writing by Chandler Equipment Company prior to any work being done.
- b. ANY WORK DONE WITHOUT PRIOR WRITTEN APPROVAL WILL NOT BE COVERED UNDER WARRANTY AND THE CUSTOMER / DEALER WILL BE RESPONSIBLE FOR ALL COST.

C) Warranty Claim Forms: (Dealer Only)

- a. Warranty claim form / forms will be supplied to Dealer upon request.
- b. Warranty claim forms are available in 2 part paper form or in an electronic format.
- c. All warranty claims must include serial number, date of purchase, customer name and date of sale to original owner. (See attached warranty claim instructions for guidelines on filling out warranty claim form)
- d. Improperly filed or misleading information on warranty claims shall result in warranty claim being denied.
- e. <u>ALL WARRANTY CALIMS MUST BE FAXED TO (770) 535-1265.</u>

D) Labor and Repair Cost: (Dealers Only)

- a. Labor for any repairs must be approved prior to any work being done.
- b. Labor rate (per hour) will be determined by Chandler Equipment Company, See Chandler Labor Rate List.
- c. Also Chandler Equipment Company retains the right to adjust any and all warranty claims.

E) Dealer Responsibility:

- a. Dealer shall be first line in all communications with the customer.
- b. Dealer shall also maintain good and open communications between the customer and Chandler Equipment in order to resolve warranty issues.
- c. Dealer shall be responsible for informing the customer of operating procedures, safety precautions and normal maintenance to help avoid any warranty issues.
- d. Promptly inform Chandler Equipment of any possible warranty issues.
- e. Dealer is responsible for making every effort to resolve warranty issues in a timely manner.
- f. Notify Chandler Equipment on any possible non-warranty issues, such as any modification made to equipment.

F) Original Chandler Genuine Parts:

a. Chandler Equipment Company will only warranty equipment that uses Chandler Genuine Parts. Any equipment that is sold by a dealer with parts other than Original Chandler Genuine parts shall Void Any and All warranties

G) Replacement Parts Shipping:

- a. Chandler Equipment Company shall send Chandler Genuine Parts for warranty replacement. Chandler Equipment shall NOT warranty any part or parts replaced by the Customer/Dealer that are not Chandler Genuine Parts.
- b. Cost of any part or parts that are replaced by the Customer / Dealer that are not Chandler Genuine Parts shall be the sole responsibility of the Customer / Dealer.
 - All replacement parts covered under warranty will be shipped via regular UPS. The cost of any parts shipped <u>UPS-Next Day Air</u> will be the sole responsibility of the Customer/Dealer.

H) Parts Returns:

- a. All parts replaced under warranty will be returned to Chandler Equipment Company within 20 days of replacement for warranty evaluation. All parts returned for warranty evaluation must be in its original state free of modifications. Any modifications will result in the warranty claim being denied and the part or parts returned back to the customer/dealer.
- b. Any hydraulic components returned must be assembled (in original state) and with the ports plugged to prevent any contamination. Any hydraulic component that has been disassembled will VOID the warranty claim and the part or parts returned back to the customer/dealer.
- c. All Returned Parts for warranty evaluation must be clearly tagged with the following information.
 - I. RMA number
 - II. Customer or Dealer Name, address, phone number and contact person
 - III. Equipment serial number
 - IV. Complete description of problem

I) Misuse or Improper Installation:

- a. Any equipment, parts, or components that have been damaged by improper installation or misuse will **NOT** be covered under this warranty.
- b. Chandler Equipment accepts no responsibility or liability of any kind due to improper installation of equipment or parts on any product manufactured by Chandler Equipment Company. This includes, but is not limited to, any damages to personal property, crops, or any other equipment.

J) Incomplete Equipment and Dealer Add-Ons:

- a. Chandler Equipment does not warrant any equipment sold **INCOMPLETE**. This includes (but is not limited to) axles, tires, any hydraulic components or paint.
- b. Any Non Genuine Chandler Parts that are installed as aftermarket add-ons by anyone not approved in writing by Chandler Equipment Company shall **VOID ALL WARRANTIES.**
- c. Chandler Equipment Company accepts no responsibility, nor shall warrant any equipment or any component that is damaged due to any type Control System not sold and installed by Chandler Equipment Company.

K) Items Not Covered Under this Warranty:

- a. Any equipment that has been modified from its original state.
- b. Any equipment used for any other purpose that what it was originally designed for.
- c. Any travel time, cleaning of equipment, unloading of material, or towing.
- d. Any cost of materials that have been applied improperly due to the lack of customer / dealer not following proper operating instructions.

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Section 1

Basic Information & Installation

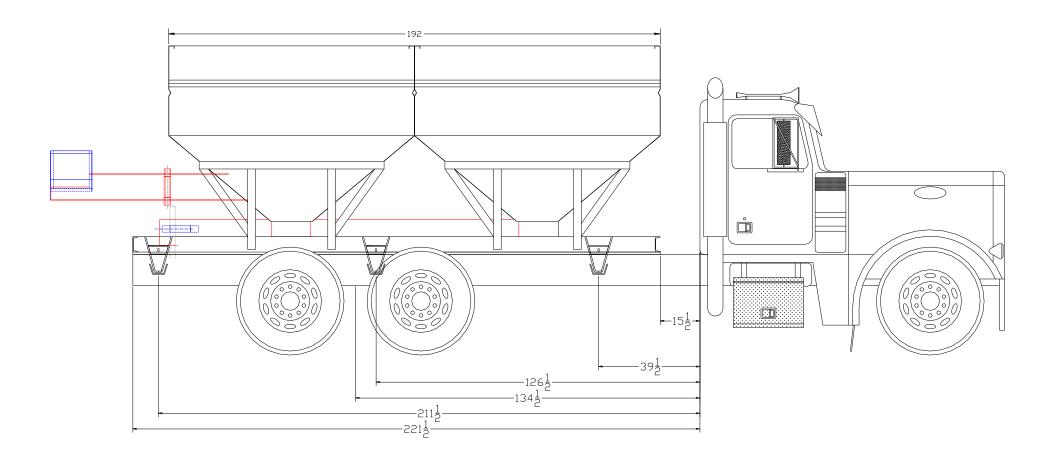
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Caution:

When installing a Chandler Equipment Co. side discharge truck mount tender (SDT-MH) on truck chassis, make sure that the auger has sufficient clearance when auger is fully raised and tender loaded.

1) Chassis Length and Tie-Down Location – SDT-MH 16



Note: These measurements are only recommendations from Chandler Equipment Company, and can vary depending on your truck. For example truck GVW, state and federal weight regulations, location of exhaust, etc. will affect your measurements.

2) Axle Loading

Example: W = 36000 #

WB = 201 in. C = 28.5 in.

Weight on Front Axle

<u>36000 # x 28.5 in.</u> = **5104** #

201 in.

Weight on Rear Axle

36000 # x (201 in. -28.5 in.) = **30896** # 201 in.

Note: This only an example, not a recommendation.

Also, these formulas can be used to determine

The center of body to center of axle (C) Based on the GVW of your front or rear Axle and the truck's wheel base (WB).

Tender Weight of Body and Load

12' – 10 Ton 28000 # 16' – 16 Ton 36000 # **Axle Loading:**

W = Weight of Body and Load (pounds)

WB= Wheelbase of Truck (inches)

C = Center of Body to Center of

Rear Axle or Axles (inches)

Body and Load Weight on Front Axle:

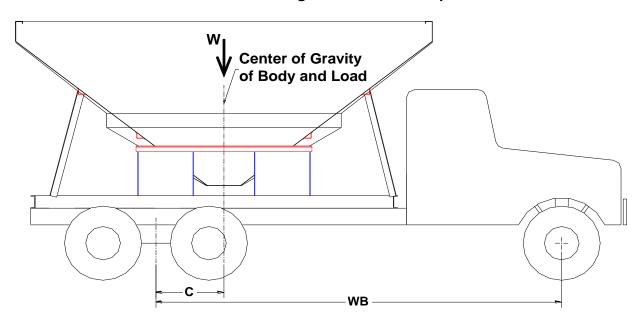
WxC

WB = Weight on Front Axle in pounds

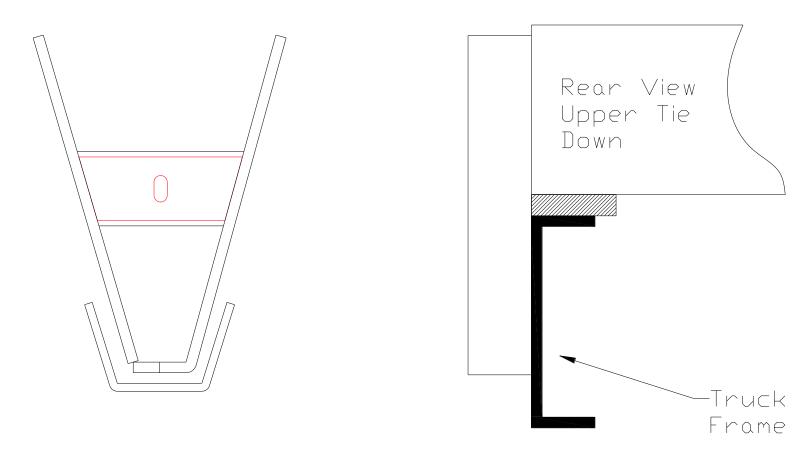
Body and Load Weight on Rear Axle:

W x (WB-C)

WB = Weight on Rear Axle in pounds

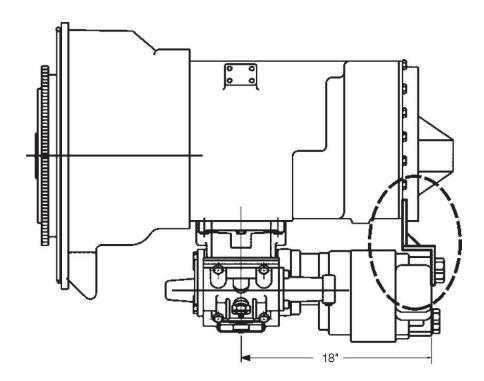


3) Tie Down Installation



Side Discharge Tenders using 1" x 4" Boards

4) Direct Mount Pump Support Recommendations



Use caution to ensure that bracket does not pre-load pump/P.T.O. mounting

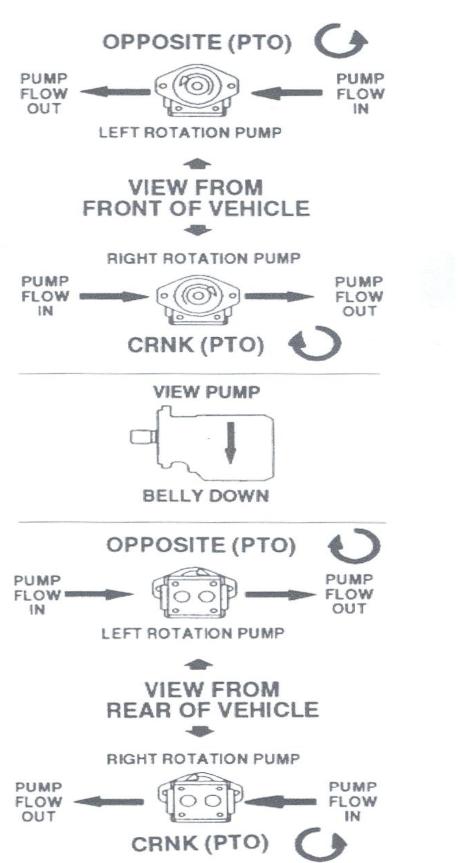
Chandler Equipment Co. strongly recommends the use of pump supports (Support Brackets) in all applications.

P.T.O. warranty will be void if a pump bracket is not used when:

- 1) The combined weight of pump, fittings and hose exceed **40 pounds**
- 2) The combined length of the P.T.O. and pump is **18 inches** or more from the P.T.O. centerline to the end of the pump

ALSO: Remember to pack the female pilot of the P.T.O. pump shaft with grease before installing the pump on the P.T.O. (reference Chelsea grease pack 379688)

5) Hydraulic Pump Installation



6) Hydraulic Drive System Requirements

The Chandler Rear Discharge Tender comes standard with a Commercial P-20 1.5" x 1.5" tandem pump. The tender requires approximately 20-22 GPM @ 2200 PSI. This can be obtained from a 1650 RPM input from the PTO to the pump. Use the following equation below to match Desired Truck RPM and PTO % combination.

Example: ($1650 \text{ PTO RPM} \div 1800 \text{ Truck RPM}$) x 100% = 92%

Truck RPM	PTO %
1200	140
1400	120
1500	110
2000	85

PTO% = (1650 PTO RPM
$$\div$$
 _____ Desired Truck RPM) x 100% = ____%

Note: If pump and PTO combination are not available contact your Local Dealer or Chandler Equipment Service Department at 1-800-243-3319

- GPM (Gallons Per Minute)
- PSI (Per Square Inch)
- PTO (Power Take Off)

Hydraulic Oil Requirements

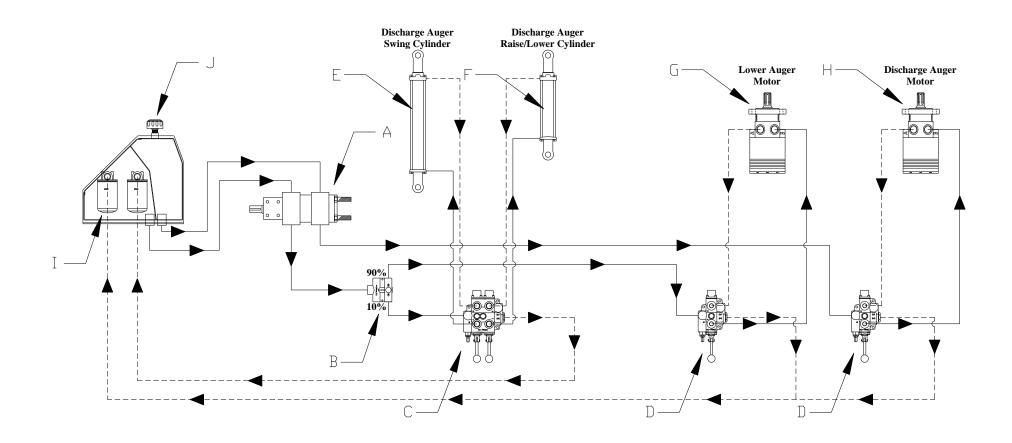
Oil Type – 46 Series (10 to 15 W)

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Section 2

Hydraulic System

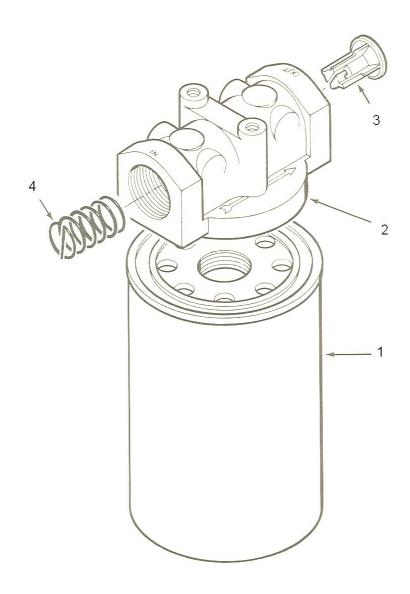
Hydraulic System SDT-MH - Truck Tender



Hydraulic System Parts List

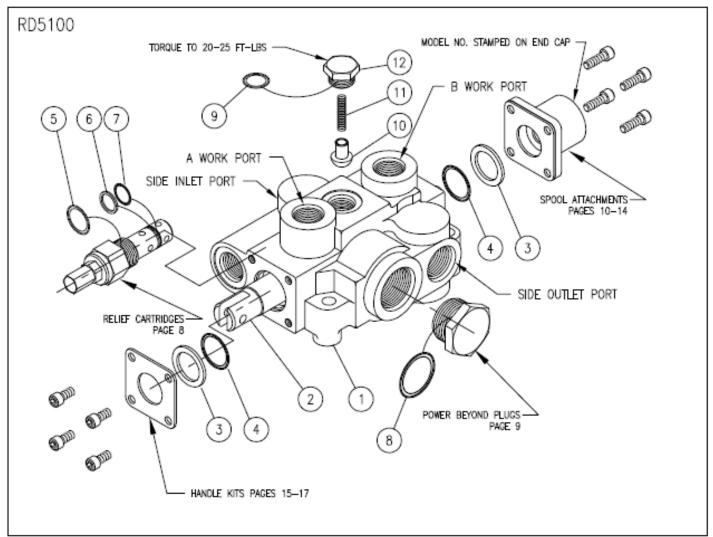
Ref.	Part Number	Description	Qty
A	400-C-217A	P-2100 1.5" x 1.5" - Tandem Pump	1
В	400-1-353	B-50, 3/4 90:10 SPLITTER	1
С	400-1-336	RD526 PRINCE VALVE DOUBLE RD526CCAA5A4B1-DBL	1
D	400-1-337	RD516 PRINCE VALVE SINGLE - DETENT RD516CB5A4B1	2
E	400-1-304	2.5" X 14" Cylinder – Swing Out	1
F	400-1-300	2.5" X 8" Cylinder – Raise/Lower	1
G	400-R-107A	MB22 Torque Motor – Lower Auger	1
н	400-R-103	MB12 Torque Motor – Discharge Auger	1
ı	400-1-318 400-1-319	Hydraulic Filter Assembly Filter Element - Only	2 2
	400-1-319	Filter Liement - Only	2
J	400-1-317	Breather Cap	1
*	400-1-322	Sight Gauge (Oil Tank)	1

Hydraulic Filter Assembly



- 1) Filter Element 400-1-319
- 2) Filter Head 400-1-319A (when ordering this part # items 3,4 are included

Hydraulic Valve (Prince – RD5100 Series)

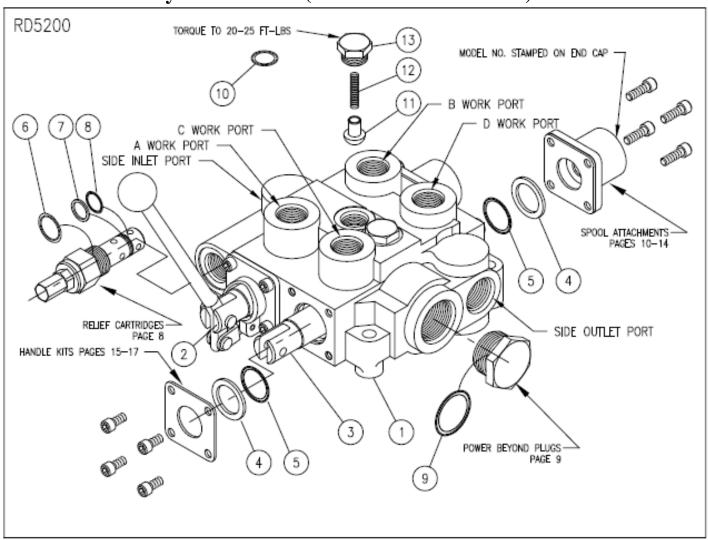


RD5100 1 SPOOL MONO-BLOCK VALVE

ITEM	QTY	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12	1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SEE NOTE 1 670500010 240000213 240000116 240019015 240000015 240000916 240000908 670100001 670300007 671600001	1 SPOOL VALVE BODY SPOOL SPOOL SEAL BACK-UP 213 O-RING 116 O-RING 015 BACK-UP 015 O-RING 916 O-RING 908 O-RING LOAD CHECK POPPET LOAD CHECK SPRING LOAD CHECK PLUG These are matched parts and are not sold seperately. SEAL KIT 660551001 (PLUS OTHERS) LOAD CHECK POPPET LOAD CHECK SPRING LOAD CHECK PLUG

NOTE: Chandler Equipment only stocks a limited selection of replacement parts for this style valve. Please check with your local dealer or our Parts Department for availability of replacement parts.

Hydraulic Valve (Prince – RD5200 Series)

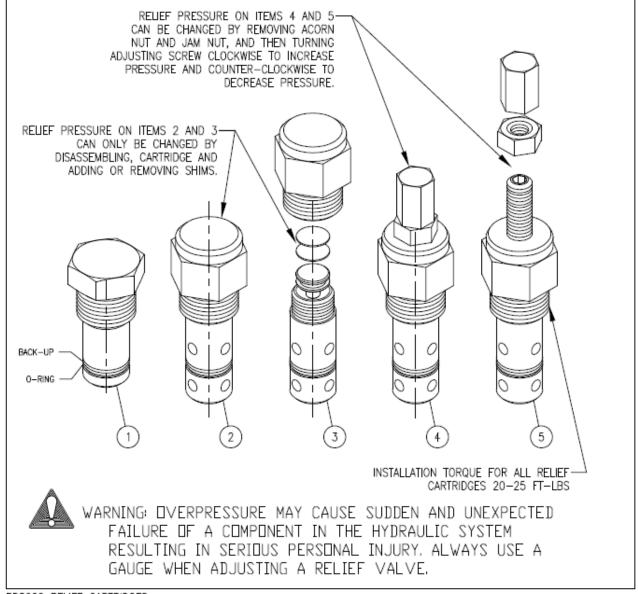


RD5200 2 SPOOL MONO-BLOCK VALVE

ITEM	QTY	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13	1 1 4 4 1 1 1 2 2 2 2 2	SEE NOTE 1 SEE NOTE 1 670500010 240000213 240000116 240019015 240000015 240000916 240000908 670100001 670300007 671600001	2 SPOOL VALVE BODY These are matched parts and are not sold seperately. SECOND SPOOL SPOOL SEAL BACK-UP 213 O-RING 116 O-RING O15 BACK-UP O15 O-RING O16 O-RING 916 O-RING 908 O-RING LOAD CHECK POPPET LOAD CHECK SPRING LOAD CHECK PLUG CAUCHER CAUCHE

NOTE: Chandler Equipment only stocks a limited selection of replacement parts for this style valve. Please check with your local dealer or our Parts Department for availability of replacement parts.

Hydraulic Valve – Relief Pressure Adjustment

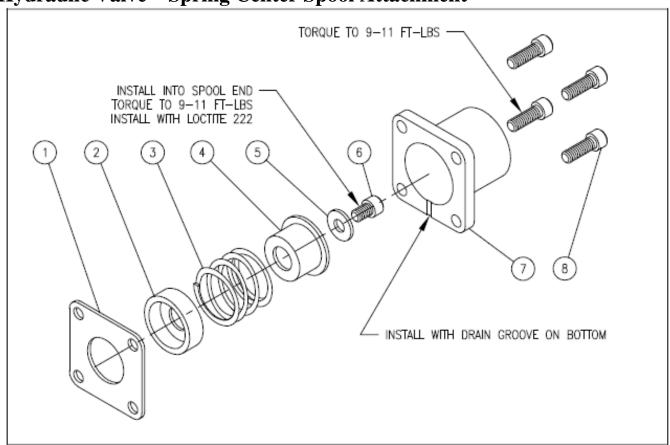


RD5000 RELIEF CARTRIDGES

ПЕМ	QTY	PART NO. (UNTESTED)	DESCRIPTION	PRESET CARTRIDGE	SETTING
1 2 3 4 5	1 1 1 1 1	660250006 660250005 660250004 660250003 660250002 672000101 672000102 672000103	NO RELIEF PLUG (OPTION 1) SHIM ADJUSTABLE RELIEF 500-1500 (OPTION 2) SHIM ADJUSTABLE RELIEF 1500-3000 (OPTION 3) ADJUSTABLE RELIEF 500-1500 (OPTION 4) ADJUSTABLE RELIEF 1500-3000 (OPTION 5) .015 SHIM .033 SHIM .060 SHIM	RV-ONL RV-ONH RV-OL RV-OH	1000 PSI 2000 PSI 1000 PSI 2000 PSI

NOTE: Refer to relief cartridges 4 and 5 for relief pressure adjustment. **NOTE:** Chandler Equipment only stocks a limited selection of replacement parts for this style valve. Please check with your local dealer or our Parts Department for availability of replacement parts.

Hydraulic Valve – Spring Center Spool Attachment



RD5000	SPRING	CENTER	SPOOL	ATTACHMENT	

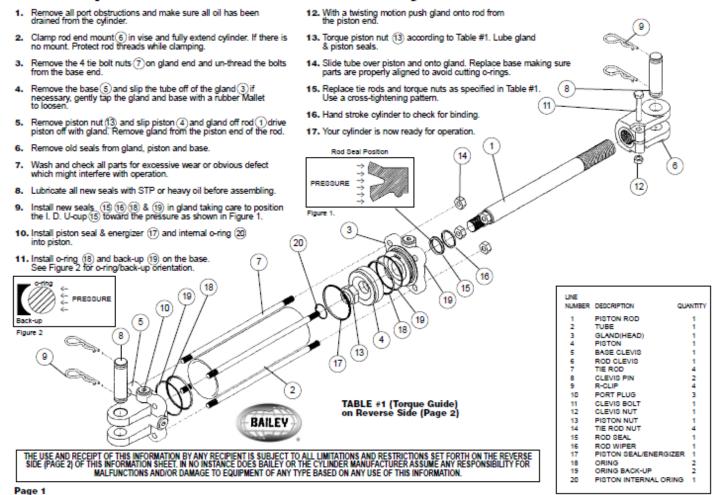
ПЕМ	QTY	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8	1 1 1 1 1 1 1 1 4	670500003 671400001 670300001 671400011 670500004 170003007 670500005 170003008	RETAINER PLATE STOP CUP (INNER) CENTERING SPRING* STOP CUP (OUTER) WASHER SOCKET HD. CAP SCREW END CAP SOCKET HD. CAP SCREW

^{*}STANDARD CENTERING SPRING CAN BE REPLACED WITH MEDIUM HEAVY SPRING PART NO. 670300047 OR HEAVY SPRING 670300043.

NOTE: Chandler Equipment only stocks a limited selection of replacement parts for this style valve. Please check with your local dealer our Parts Department for availability of replacement parts.

Hydraulic Cylinder

Seal Replacement Guide for Tie Rod Cylinders



Parts Available from Chandler Equipment

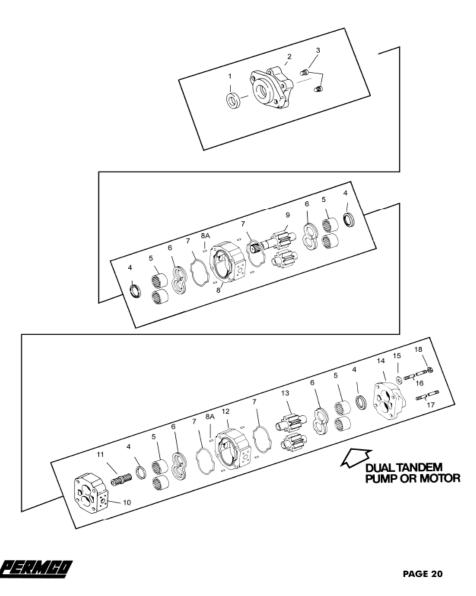
Part #	Description	QTY
400-1-298	Seal Kit - 2.5" Cylinder	1
400-1-293	Clevis Pin Kit	2

08/11/2014

P2100 1.5" x 1.5" – Tandem Pump

2100 SERIES

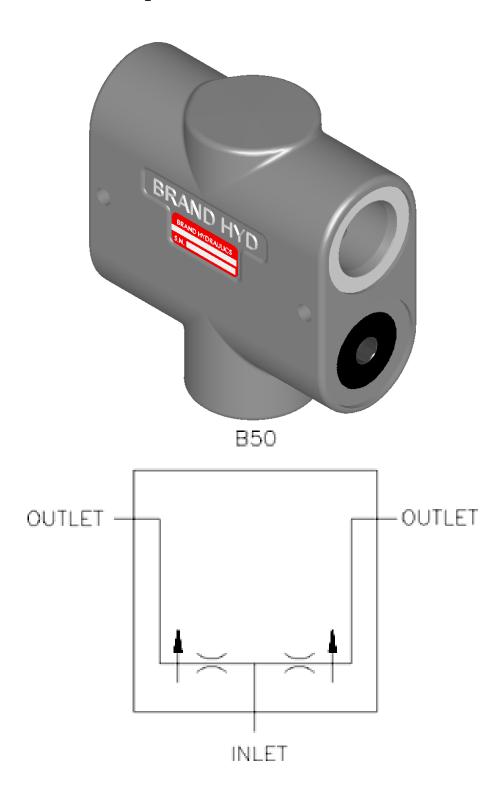
EXPLODED VIEW FOR P2100B286AXXE15-14AXE15-1



Ref.	Part Number	Description	Qty.
N/A	400-C-217A	P2100 1.5" x 1.5" – Tandem Pump	1
N/A	400-C-208	Seal Only – P2100	1
N/A	400-C-223	Shaft Gear Set - Spline 1-1/2"	1

NOTE: Chandler Equipment only stocks a limited selection of replacement parts for this style pump. Please check with your local dealer or our Parts Department for availability of replacement parts not listed.

Splitter Valve – B50 90:10

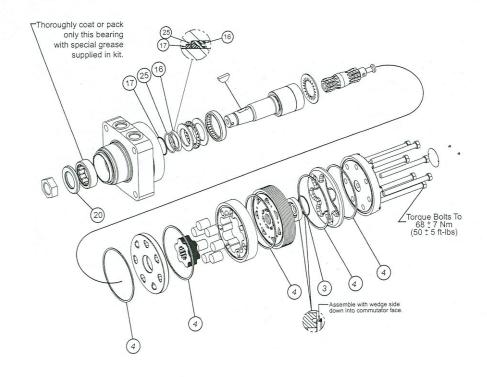


MB-220101 – Lower Auger Motor

Service Bulletin 050016 Issued February 2003 For TF (MB) and TG (ME) Torqmotor Seal Kits SK000092 (Buna), SK000093 (Fluorocarbon), SK000099 (Vespel Commutator Seal) Reference Torqmotor Service Manual SM1512.

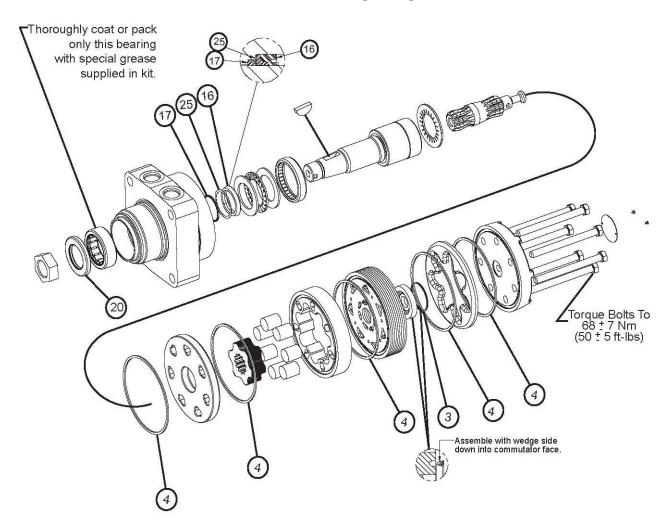


QTY	Item	Description	Buna P/N	Fluorocarbon P/N	Vespel P/N
1	17	Back up ring	028515	028515	028515
1	25	Back up washer	029118	029118	029118
1	3	Commutator Seal	032435	032435	032439
1	16	Shaft Seal	032817	032818	032817
6	4	Body Rings	032819	032820	032819
1	20	D&W Seal	478035	478035	478035
1	-	Bearing Lubricant	406018	406018	406018
1		Service Bulletin	050016	050016	050016



Part #	Description	QTY
400-R-107A	MB-220101AAAA – Motor	1
400-R-109	Seal Kit	4
400-K-109	Sear Kit	I
400-R-110	Motor Shaft	1

MB-120101 – Discharge Auger Motor



Description	QTY
MB-120101AAAA – Motor	1
Seal Kit	1
	•
Motor Shaft	1
	•

Tender Pressure Settings

1) Checking Pressure

- A) Run unit empty at ordinary operating speed for approximately 10 minutes. This allows oil to reach operating temperatures.
- B) Locate pressure gauge mounted above valve for each auger.
- C) Increase engine speed (RPM's) to normal operating speed.
 - See page 1-6 for PTO and engine running RPM's
- D) Slowly engage auger control valve while watching pressure gauge.
- E) Pressure gauge should read 2200 psi. If not adjust pressure as outlined below.

2) Adjusting Hydraulic Valve Pressure: (Refer to page 2-6)

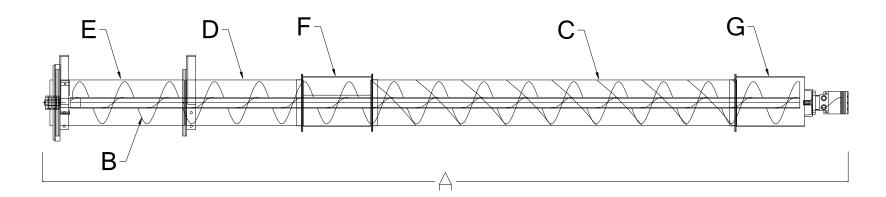
- A) Remove cap nut on valve (located on next to valve handle)
- B) Using a 5/16 Allen wrench turn adjustment screw "IN" to increase pressure or "OUT" to decrease pressure.
- C) Turn adjustment screw one half turn, then check pressure setting as outlined above.
- D) Continue this procedure until pressure gauge reads 2200 psi.

NOTE: If unable to obtain 2200 psi contact your local dealer or Chandler Equipment Service Department at 1-800-243-3319

Section 3

Auger Assembly

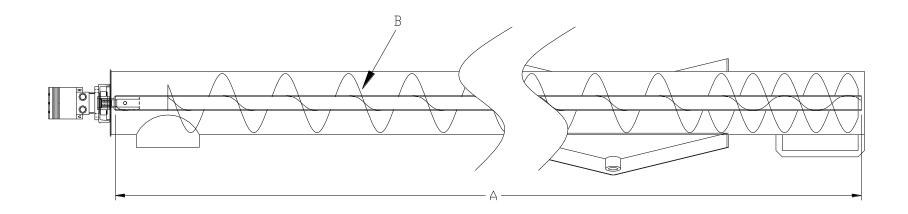
Lower Auger Assembly



Complete Auger A	Assembly Parts	List
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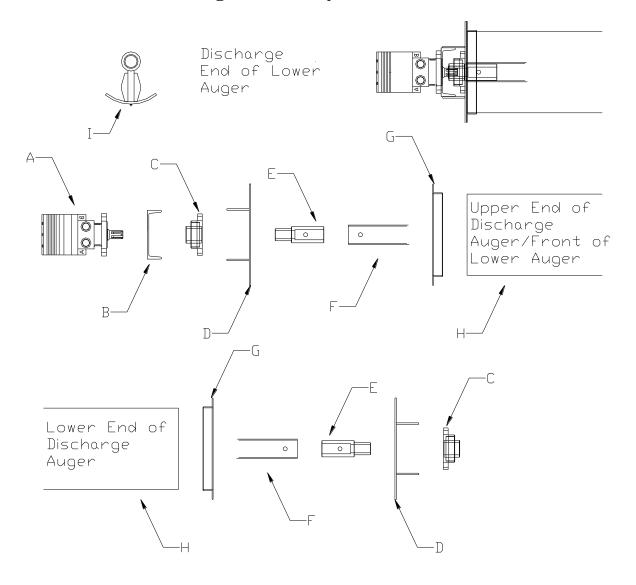
Ref.	Part Number	Description	Qty.
Α	900-6-101	Complete Lower Auger	1
В	900-6-102	Lower Auger (only)	1
С	900-5-103	Auger Tube – Forward/Aft	1
D	900-5-104	Auger Tube – Discharge	1
Ε	900-5-105	Auger Tube - Pivot Assembly	1
F	900-5-106	Transition Box	1
G	900-5-107	Front Transition Box	1

Discharge Auger Assembly



		Complete Auger Assembly Parts List	
Ref.	Part Number	Description	Qty.
A	900-6-201	Complete Discharge Auger	1
В	900-6-202	Discharge Auger (only)	1

Auger Assembly Breakdown

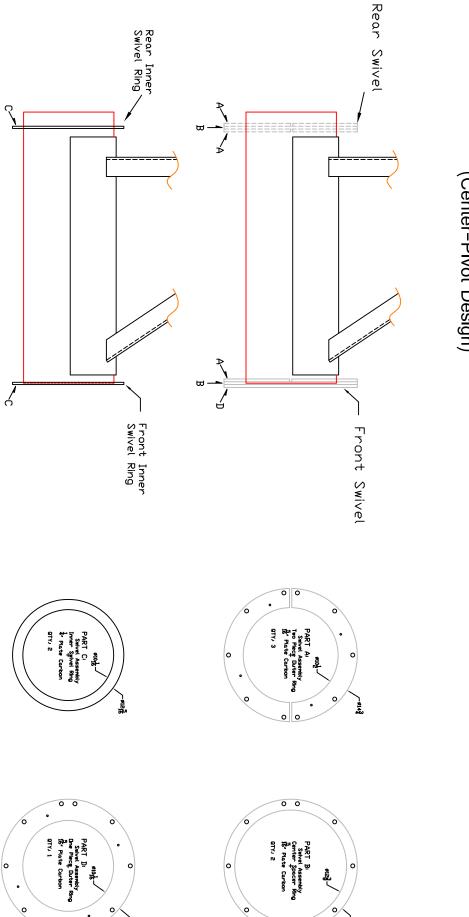


Auger Parts List

Ref.	Part Number	Description	Qty.
A	400-R-103	Torque Motor - Discharge Auger	1
*	400-R-107A	Torque Motor - Lower Auger	1
В	900-1-127	Motor Mount	2
С	UCF-208-24	UCF-208-24 1-1/2" Flange Bearing	4
*	900-1-128	1-1/2" Bearing Gasket	1
D	900-1-116	10" End Cap	1
Ε	900-1-111	Spline Sleeve - 2"	1
F	900-1-130	Auger Stub Shaft – At Lower End of Discharge Tube	1
G	900-1-133	Angle Ring -10" 304 Stainless	3
н	900-1-109A	10" - 304 Stainless Auger Tube	29'
ı	900-1-131	Hanger Bearing (New Style)	1
*	900-1-119	9" Flights - 10 Ga 304 Stainless	28
*	900-1-119A	9" Flights - 7 Ga 304 Stainless	4
**	900-1-121	10" End Cap, Motor Mount Complete, 1-1/2" Bearing	1

^{*} Not Shown

Side Unload Swivel Assembly (Center-Pivot Design)



Section 4

Operation & Maintenance

Basic Operation of Chandler SDT-MH Truck Tender

Basic Start Up:

1) Start Truck Engine

A) Refer to engine manufactures manual for proper starting/operating procedures.

2) Engage PTO

3) Rev Truck to Desired RPM

4) Adjusting Discharge Auger Height

- A) Slightly raise auger from rest
- B) Completely swing out auger
- C) Using the Raise and Lower valve adjust discharge auger to desired height.

5) Starting Discharge Auger

A) Start auger by moving the lever on the Discharge Auger Valve to the ON position.

6) Starting Lower Auger

A) Start auger by moving the lever on the Lower Auger Valve to the ON position.

7) Starting Flow of Material

- A) After following steps 1 5 open the gate of the compartment you wish to unload half way using the proper gate valve.
- B) After opening gate, adjust auger/engine speed if necessary, and then fully open the gate.

8) Stopping Side Discharge Auger Tender

(After unloading desired amount of material or compartment is empty)

- A) Close compartment gate.
- B) Turn off lower auger.
- C) Turn off discharge auger.
- D) Lower discharge auger.
- E) Swing in auger.
- F) Lower to auger rest.
- G) Disengage PTO.

Caution: Never load unit with gates open

Maintenance

Caution: Always turn OFF truck engine before performing any maintenance work on Tender

We are pleased you selected our equipment. We feel, as we are sure you do, that equipment must be maintained properly and made to last as long as possible. Outlined below are areas to be properly maintained.

1) Gates:

The gates and gate slides are manufactured from type 304 stainless steel. The only maintenance required should be occasionally cleaning the slides.

2) Auger:

Frequent cleaning of auger and auger tube is advisable.

3) Bearings:

Although Chandler tenders come with factory pre-greased bearings, we recommend that you grease all bearings before using your tender.

Do Not over grease bearings

Only one shot of grease per day.

Over greasing bearings will shorten the life of the bearings.

4) Hydraulic System:

Hydraulic filters should be changed every 120-200 hours or Every four months.

Chandler tenders come with 10-micron filters.

Use of filters not meeting these specifications could damage hydraulic components and void warranty.

Hydraulic Oil

Kendall Four Seasons ISO VG 46 SAE 15W

Hydraulic Oil Level - Chandler tenders come with oil level sight gauge.

Oil level should be to the top line on the gauge. Never let oil level get less than half way down on sight gauge

5) PTO/PUMP

Check for leaks and tightness of mounting bolts daily.

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