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Included Service Manuals: DODGE TA6037H15 Gear Reducer

**PUGMILL SYSTEMS, INC**  
**212 Cemetery Ave.**  
**Columbia, Tennessee 38401**  
**Phone: 931-388-0626**  
**Fax: 931-380-0319**

## 500B Pugmill: Parts List

<u>Qty-Component</u>	<u>Manufacturer</u>	<u>Description</u>	<u>Part #</u>
2 - Motors	Reliance	40hp,1800rpm, TEFC,	#P32G4902
2 - Motor Sheave	Dodge	4G5V7.5-SF	# 455309
2 - Motor Sheave bushing	Dodge	QD, SF-2 1/8" bore	# 120474
2 - Reducer	Dodge	TA6307H15	# 906002
2 - Reducer bushing sets	Dodge	TA6307TB 3 7/16"	# 906020
2 - Rod Assembly	Dodge	TA6307RA	#906109
2 - Reducer sheave	Dodge	4G5V11.8-E	# 455318
2 - Reducer sheave bushing	Dodge	QD, E 2 3/16" bore	# 120509
8 - Belts	Goodyear	# 5VX560	# 5VX560
2 - Pillow Block Bearings	Dodge	P4B-TAF-307R	# 037610
2 - Pillow Block Bearings	Dodge	P2B-SCM-307	#126823
38 - Paddle tips	Pugmill Systems, Inc.	Hi-chrome cast iron	PT500
38 - Shanks	Pugmill Systems, Inc.	Mild FB	SH500
76 - SAE plow bolts and nuts	Pugmill Systems, Inc.	5/8" dia.x 2 1/2" & hex nut	-----
1 - Right Mixing Shaft	Pugmill Systems, Inc.	(8.375, 102, 24.5 )	MS500-134.875R
1 - Left Mixing Shaft	Pugmill Systems, Inc.	(8.375, 102, 24.5 )	MS500-134.875L
2 - Liner plates	Pugmill Systems, Inc.	(36, 80.25, 14.25) AR235	LP500-80.25

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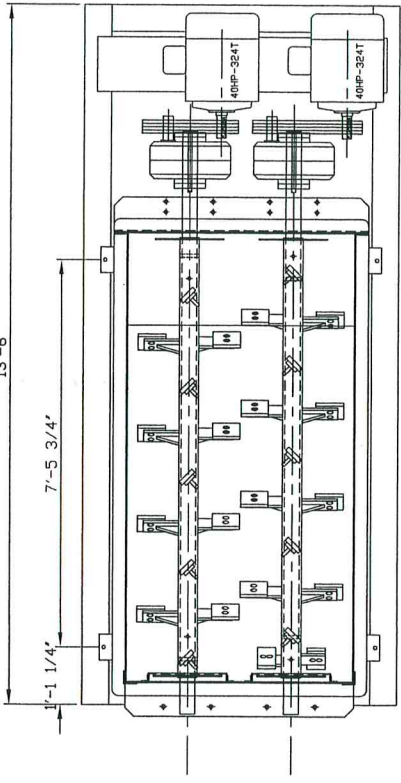
**PUGMILL SYSTEMS, INC.** 212 CEMETERY AVENUE  
COLUMBIA, TN 38402

CUSTOMER STANDARD JOB#

TITLE: **500-2 PUGMILL ASSEMBLY**

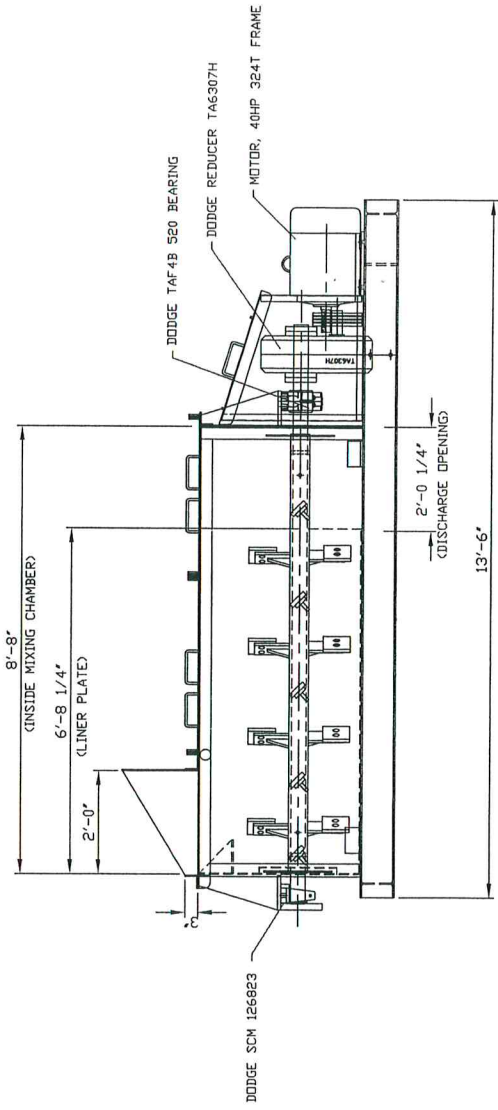
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1  
500-2

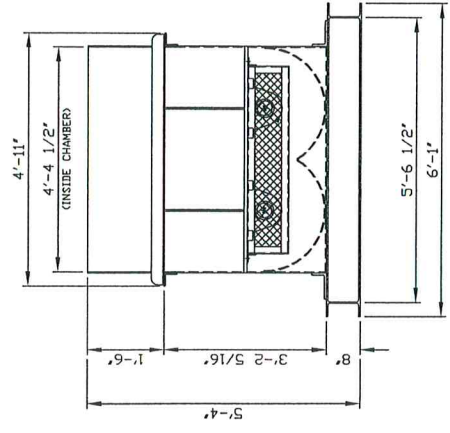


PLAN VIEW

NOTE: COVER, INLET CHUTE, SPRAY BARS & REDUCER GUARD NOT SHOWN IN THIS VIEW TO SHOW DRIVE AND SHAFT ASSEMBLIES.

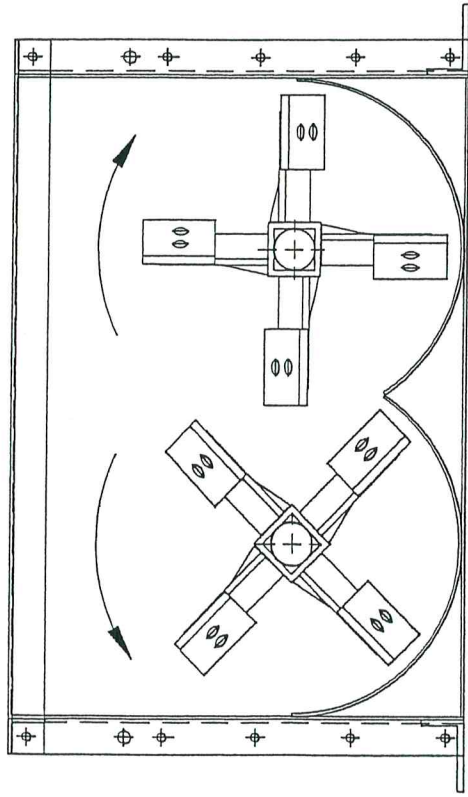


ELEVATION



END ELEV.

BEGINS WITH SERIAL # 1319



SHAFT ROTATION - DISCHARGE END VIEW

### III. OPERATION

Before starting the pugmill, it is necessary to take some basic precautions in order to prevent damaging your equipment and or endangering the plant's crew.

#### PRE-START CHECKLIST:

- 1.) Check fluid level in reducer (follow instructions in Dodge Service Manual, on back pages).
- 2.) Lubricate all four grease alemites on the mixing shaft bearings at discharge end and inlet end of pugmill.
- 3.) Check motor V-belt tension and signs of wear on belt.
- 4.) Return and secure all guards to their proper places, after servicing components.
- 5.) Start motor mixing shafts and compare rotation to drawing P-2 on page 4. If shafts are not rotating in the correct direction, the motor leads need to be reversed.

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#### IV. MAINTENANCE

In order to prolong the life of the equipment and to optimize performance, preventive maintenance must be practiced on a regular basis. The guidelines in this section should be helpful in planning a preventive maintenance schedule. However, the contents of this manual should be used as a guideline as this material deals only in general cases and in no way reflects a complete schedule.

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**!! NOTE !! -IMPORTANT INFORMATION !!**

**DO NOT PERFORM ANY MAINTENANCE OPERATIONS  
UNTIL YOU ARE ABSOLUTELY CERTAIN THAT ALL POWER IS  
REMOVED FROM THE MACHINE.**

**DO NOT REMOVE GUARDS UNLESS MACHINE IS DE-ENERGIZED AND  
LOCKED OUT. MAKE CERTAIN ALL GUARDS ARE IN PLACE WHEN  
MACHINE IS IN OPERATION.**

**NEVER ENTER MIXING CHAMBER TO LOOSEN MATERIAL UNLESS  
THE MAIN BREAKER IS LOCKED OUT.**

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**BEARINGS:**

All bearing fittings on pugmill should be greased DAILY. Use a Lithium based grease conforming to NLGI Grade #2 consistency. Thoroughly clean each fitting before greasing to avoid contaminating the grease with abrasive particles present everywhere on this plant. Pump the cavity full to force old grease and grime away from the bearing.

**BELTS:**

Belts are used to transmit power from the electric motors to the gear reducers. Worn or damaged belts can cause low efficiency and loss of power to a piece of equipment. These belts should be checked on a DAILY basis. Replace belts that show excessive wear and or damage. Also check to make sure belts are tight; when the belts are new they will stretch during operation.

If the belts have become loose or a belt must be replaced on the Pugmill, use the four bolt studs on the motor base frame to relieve or apply tension to the belts.

**MOTORS:**

Inspect motor for excessive dirt, friction, or vibration periodically. Check mounting bolts to insure they are tight. Ventilation openings should be kept clear to allow sufficient air flow to cool the motor. Also drain holes should be clear from debris. If the motor needs cleaning, compressed air may be used to blow dust and trash from inaccessible locations in the motor case.

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**PADDLE TIPS:**

Paddle tips should be checked for wear on a bi-weekly basis. Check that they are secure, tighten all loose bolts, and replace missing bolts. Should paddles show excessive wear rotate them or replace them if necessary.

**REDUCERS:**

The oil level on the reducer should be checked on a periodic basis to prevent early gear failure. Under average conditions, the lubricant should be changed every 2500 hours of operation, or every six months, whichever occurs first. Under extreme operating conditions, the oil should be changed every 1 to 3 months. For more detailed information, consult the DODGE Reducer service manual located in the back of this manual.

When changing the lubricant, drain the old lubricant, flush with kerosene, clean the magnetic drain plug, and refill to the proper level with new lubricant as specified in the following pages. The gear oil volume for the TA6307H15 Dodge Reducer is **5.5 U.S. quarts. USE CAUTION IN FILLING REDUCER, TOO MUCH OIL WILL CAUSE OVERHEATING AND TOO LITTLE OIL WILL RESULT IN GEAR FAILURE!!**

Tables 1 and 2 give the gear oil specification for the Dodge reducers throughout this plant. Also, particular brands of oil have been listed which meet the SAE or AGMA standards given in Tables 1 and 2 on the following pages.

**PUGMILL SYSTEMS, INC**  
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This agreement shall be governed by and construed in accordance with the laws of the State of Tennessee.

**Delivery:** Seller shall not be liable for failure to deliver or delays in delivery occasioned by causes beyond the Seller's control, including, without limitation, strikes, lockouts, fires, embargoes, war or other outbreak of hostilities, acts of God, inability to obtain shipping space, machinery breakdowns, delays of carriers or suppliers, and governmental acts and regulations. Seller shall not be liable for consequential or incidental damages resulting from any delay in delivery.

**Cancellation:** Pugmill Systems, Inc. shall have the absolute right to cancel and refuse to complete this work if at any time you do not strictly comply with all terms and conditions (including any requirement of progress payments) or if at any time you become bankrupt or insolvent. In the event of our cancellation as above set forth or of receipt by us of a request by you to stop work or to cancel the whole or any part thereof, you shall pay us an amount, determined by us, which shall be the same percentage of the total price as the percentage of the work completed.

This warranty does not extend to items not manufactured by Pugmill Systems, Inc. Purchaser shall have the benefit of all warranties made by the manufacturer of such items and Pugmill Systems, Inc. will assist Purchaser in securing the benefit of such warranties. This warranty is conditioned that the equipment be used normally, that it be kept properly lubricated, that it be operated in accordance with established engineering practice, and that Pugmill Systems, Inc. be given immediate notice in writing of the defect.

**Limitations Applicable to All Warranties:** No warranties shall be construed to make Pugmill Systems, Inc. liable for consequential or compensatory damage which may result from shut down time of equipment or any other such damages. The sole responsibility of Pugmill Systems, Inc. under all warranties being to replace defective parts or remedy defective conditions.

**Warranties: Used Equipment Only**  
Pugmill Systems, Inc. makes no warranty for used equipment, that we own, except the warranty of title and such additional warranties as may be written into the order.

THIS IS THE ONLY WARRANTY WE GIVE YOU AND THIS WARRANTY TAKES THE PLACE OF ANY EXPRESS OR IMPLIED WARRANTIES OF FITNESS, PURPOSE, MERCHANTABILITY OR ANY OTHER WARRANTY OF QUALITY.

**Warranty:** We (Pugmill Systems, Inc.) warrant that we own the product we have sold you (the Purchaser) and that when we ship it to you it will not have any defects in material or workmanship for that part we manufactured. This warranty is good for 90 days from shipment. We will repair or replace any defective part of the product which we manufactured. Buyer must bear the expense of removing and installing defective parts and material and the freight on shipping replacement parts and materials.

**Taxes:** Sales, use, or taxes of any nature imposed on this sale shall be the responsibility of the purchaser and should be paid directly by the purchaser. The purchaser shall immediately reimburse seller for any such tax hereinafter imposed upon seller with respect to these products or this sale.

Any sale is expressly limited and made conditional upon acceptance by Purchaser of the terms set forth herein only, without change. There shall be no understandings, agreements, or obligations (other than set forth herein) unless specifically set forth in writing and accepted by signature of an officer of Pugmill Systems, Inc. Pugmill Systems, Inc. reserves the right to correct any typographical or clerical errors that may be present in prices, specifications, acknowledgments or invoices. Purchaser agrees to pay a service charge at the maximum rate allowed by law on balances which are over 30 days from date of invoice. If referred for collection, purchaser agrees to pay all reasonable legal and collection costs.

**Terms and Conditions of Sale**