

# **INSTRUCTION MANUAL**

# **PRECISION SIZER**

**STYLE - CVH1**

**MANUAL NUMBER – 604-1EC**

**YEAR OF MANUFACTURE - 2001**

## **CARTER DAY**

Carter Day International, Inc.  
500 73rd Avenue N.E., Minneapolis, Minnesota 55432  
(763)571-1000 FAX: (763)571-3012

*READ AND FOLLOW THE GUIDELINES ESTABLISHED WITH THIS MANUAL TO ENSURE HOURS OF TROUBLE-FREE OPERATION.*

   **WARNING**   

INTERNAL MOVING PARTS CAN BE DANGEROUS.

BEFORE ATTEMPTING SERVICE OR INTERNAL INSPECTION,  
DISCONNECT AND LOCKOUT ELECTRIC POWER.

DO NOT OPERATE THIS EQUIPMENT WITHOUT REQUIRED  
SAFETY GUARDS OR COVERS IN PLACE.

KEEP HANDS CLEAR OF INLETS AND OUTLETS.

**CARTER DAY**

# IMPORTANT

Shown below is an example of a nameplate from a Carter Day machine. Please locate the nameplate on your machine and fill in the Order No., Serial No., and Style No. from it onto the nameplate on this page, for future reference. Having this information at hand when you call us for parts or service will be helpful.

ORDER NO.	<input type="text"/>
SERIAL NO.	<input type="text"/>
STYLE NO.	<input type="text"/>
MANUFACTURED IN U.S.A. BY <b>Carter-Day Company</b> 500 73rd Ave., N.E., Minneapolis, MN 55432	

## **Appendices**

### **12" Precision Sizer**

Style - CVH1  
Part Number -  
Manual Number - 604-1EC  
Serial Number -  
Year of Manufacture - 2001



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## Introduction

The Precision Sizer is designed to use perforated cylinders for sizing granular material. A feeder may be used to divide the incoming material to the cylinders. The smaller material passes through the perforations in the cylinder shells and the large material is carried to the end of the cylinder to discharge as overs. Refer to the Installation Data drawing for the location of the discharge outlets.

All material should be precleaned to remove all roughage and metal before it enters this machine.

## Pre-Installation Check

Upon arrival, check equipment for damage and missing parts. Notify Carter Day immediately, if there are any problems. Once this inspection is completed, ensure that all shipping blocks and packing material are removed.

The section of this manual dealing with installation should be read carefully to ensure that any items shipped loose or wired to the equipment are assembled before proceeding. If the unit was shipped with motors check voltages.

All equipment is test run, for a short period, before leaving the factory; however, a rough or long transport can loosen bolts. Check all bolts visually and with proper tools where this is practical. Pay particular attention to auxiliary items that may be bolted to the machine proper. These could include drive bases, spouts, ladders, platforms, etc.

All machinery leaves the factory suitably protected from the elements. These protective measures have been designed to accommodate normal shipping and installation schedules. If the equipment will be subjected to weather for more than a few days before installation, special arrangements should be made to keep it dry. An accumulation of moisture on sensitive parts could lead to premature failure and unnecessary maintenance costs.

### **WARNING**

**Do not attempt to run the machine without reading this manual completely.**

**Failure to do so could result in serious injury to the operator and other personnel or cause damage to the machine.**

## Installation

A few parts may have been removed from the machine for shipping, such as the electric motor, gear unit speed reducer and feed hopper with spouting. These parts can be added to the machine by referring to the Installation Data and Section drawings for their proper location. The Installation Data drawing also shows the proper wrap of the belts or chains.

### Lifting the Precision Sizer

Only licensed personnel should lift the Precision Sizer. Incorrect lifting techniques can result in damage to the machine. Use the provided lifting lugs and spreader bars to lift the Precision Sizer. Make certain that all product has been emptied from the machine before lifting.

To use the spreader bars, remove the bolts and nuts from each end. Hold the spreader bars over the machine and slide one end of the spreader bars into a lifting lug holes. Insert the opposite end of the spreader bars into the opposite lifting lug holes. Center the bar and install the bolts and nuts into each end of the spreader bars. The bars should now be "captive" on the machine. Attach lifting chains to the lugs on the spreader bars to lift. Note that the lugs maybe removed after installation.

### **\* \* \* CAUTION \* \* \***

**Chain angles should not be less than 45° from the horizontal.**

**See Installation Data drawing for the net weight of the machine.**

### Installation Site / Foundation

Referring to the Installation Data drawing, check the site for clearances noted for maintenance, adjustments, spouting, etc.

The machine requires a level and solid floor or structure to function. It should be fastened to the floor structure using Grade 8 / Class 10.9 DIN 931 bolts. Holes are provided on the end or side plate flanges.

### Electrical Connections

Electrical connections are to be made by licensed personnel. Starters and controls are supplied by the customer. Motors may also be customer supplied.

### **◆ ◆ ◆ ◆ ◆ ATTENTION ◆ ◆ ◆ ◆ ◆**

This equipment is suitable for IIG hazardous locations provided it is equipped with a IIG rated motor installed to meet IIG electrical requirements.

## Pre-StartUp

The primary concern of the pre-startup check is to ensure the safety of any personnel that may be in the proximity of the machine. All guards should be installed.

All windows, doors, and piping connections should be in their operating positions. Check to see if the process adjustments are close to their operating positions.

## Machine Startup

After all spouting has been connected, the equipment should be test run empty for a minimum of 10 to 15 minutes. Once the machinery is processing material, noise levels will be higher and mechanical problems may go unnoticed.

Specifically check the following:

1. Motors must rotate in the direction as indicated on the Installation Data drawing.
2. Check motor running amps against the nameplate rating.
3. Belt tension and sheave alignment.

### **WARNING**

**Do not attempt to make any adjustments unless the machine is stopped and all motors are locked out.**

**Any guards removed to install motors/drives, etc., must be in place at all times when the equipment is operating.**

**Failure to do so could result in serious injury to the operator and other personnel or cause damage to the machine.**



# Operation

## Capacity and Surge Feeding

Low feed rates could result in poor distribution of product to various cylinders or cause some products to bounce excessively and misgrade.

For best results, stay within Carter Day's stated low and high capacity recommendations and avoid surging product. A steady even flow at the inlet will provide the uniform results.

## Gravity Feeders (optional)

The gravity feeder has counter weights on the feed gate which should be regulated so that the material level will be maintained with the sight glass range of visibility. The cam on the side of the feed hopper can be set to establish the minimum opening of the valve in the feed hopper, thus reducing the travel on the valve, and still use the pressure of the weights on the valve to hold the material level up to the sight glass.

## Vibrating Feeders (optional)

The high speed and short throw on these feeders gives a very uniform distribution of material to the cylinders. Once the counterweights are set and the most efficient speed is found, the machine requires very little attention.

## Feed Control

It is necessary that the material be discharged from the feeder in a uniform depth across the full width of the feeder to evenly distribute the material into the compartments directing the material to the separate cylinders.

## Air Suction

The top cover plate has a 3" x 15" opening where a suction line may be attached. a suction volume of 100 CFM per cylinder is recommended for normal operating conditions. When this machine is equipped with an optional vibrating conveyor feeder, the normal suction connection is inaccessible. In this case, we recommend that a suction hood be installed at the discharge end of the conveyor. This suction should reduce the dust.

## Speed

Normal operating speeds are from 45 to 60 RPM on the cylinders. The Carter Day factory or representative can recommend a speed for your separation. The most efficient speed varies with the type of material being handled. A variable pitch sheave on the motor is used to change the speed.

## Safety Considerations

This machine contains dynamic components which can be dangerous if precautions are not taken. Below is a list of items which require specific attention.

- ✓ Never operate the machine without guards, access windows, or doors.
- ✓ Never open the doors, remove guards, or make any mechanical adjustments to the machine before **ALL POWER IS LOCKED OUT TO ALL COMPONENTS.**
- ✓ Use care when using machine elements as steps. A properly designed catwalk or access platform is recommended for operator safety.
- ✓ Do not clean the machine before **ALL POWER IS LOCKED OUT TO ALL COMPONENTS.**
- ✓ Do not reach in or attempt to unplug any process connection (i.e., liftings discharge, etc.) before **ALL POWER IS LOCKED OUT TO ALL COMPONENTS.**
- ✓ Read and thoroughly understand the operator's manual prior to startup.
- ✓ Utilize licensed personnel for electrical maintenance, rigging, piping, and mechanical maintenance.
- ✓ Provide operational checklists at the machine control area, to provide quick reference.

## Service



**LOCK OUT ALL ELECTRICAL POWER.**

**Failure to do so could result in serious injury to the operator or other personnel.**

### **Lubrication**

Maintain the oil level in the speed reducer according to the instruction tag attached to the unit. The fluid should be changed after the first 100 hours of operation; 2500 hour intervals thereafter. (AGMA #8 or SHC 634).

All shafts are equipped with sealed ball bearings which are lubricated for the life of these bearings. The trunnion bearings supporting each cylinder at the feed inlet end have been sealed with lubricant.

### **Cleaner Blades**

A bladed cleaner shaft is mounted above each cylinder. The flexible blades tap the cylinder as the roller revolves to keep the holes clean. After the machine has been in operation for a week, it is necessary to check the screws to be sure the blades are securely fastened. It is recommended that these blades be checked monthly and replaced when no longer effective.

### **Shaft Bearing**

The shaft bearings can be removed by first loosening the set screws found in the collar locking the bearing to the shaft. Then remove both the bearings and the cast iron flange from the shaft. These bearings have a spherical seat in the flange, and to remove them from the flange, turn the bearing a quarter turn; the bearing will then be seated in the flange at only two points, and by rotating the bearing in the flange to coincide with the notches in the flange seat, the bearing will drop out of the flange.



## Changing Cylinders (With Quick Change Slide Coupling)



**LOCK OUT ALL ELECTRICAL POWER.**

**Failure to do so could result in serious injury to the operator or other personnel.**

Remove the inspection doors with side plates by loosening the four nuts holding each plate. Next, remove the plastic coupling clamp (black in color) from behind the slide coupling. This clamp prevents the slide coupling from working its way off the cylinder stub shaft during operation.

Next, locate the slide coupling on the stub shaft which is located on the end of the cylinder assembly. Depress the coupling toward the endwall and lift the cylinder assembly out through the opening in the side of the machine. (See photo of slide coupling; also, refer to Quick Change Fork Application sketch to remove shell.)

Note: The perforations on the cylinders can be sharp, care should be taken when handling them.

Shift the cylinder assembly toward the drive end until it comes off the feed spout. The cylinder can then be taken out through the side of the machine.

New cylinders can be installed by reversing the above procedure. Care must be exercised in handling the perforated cylinders because any distortion of the perforations will affect the separation capabilities. The cylinder assemblies should be held securely without end movement.

### High Capacity Shell Installation

The discharge end of the Hi-Capacity shell has been marked with the stencil "Discharge End" to ensure correct installation.

### Drive Chain Take Up

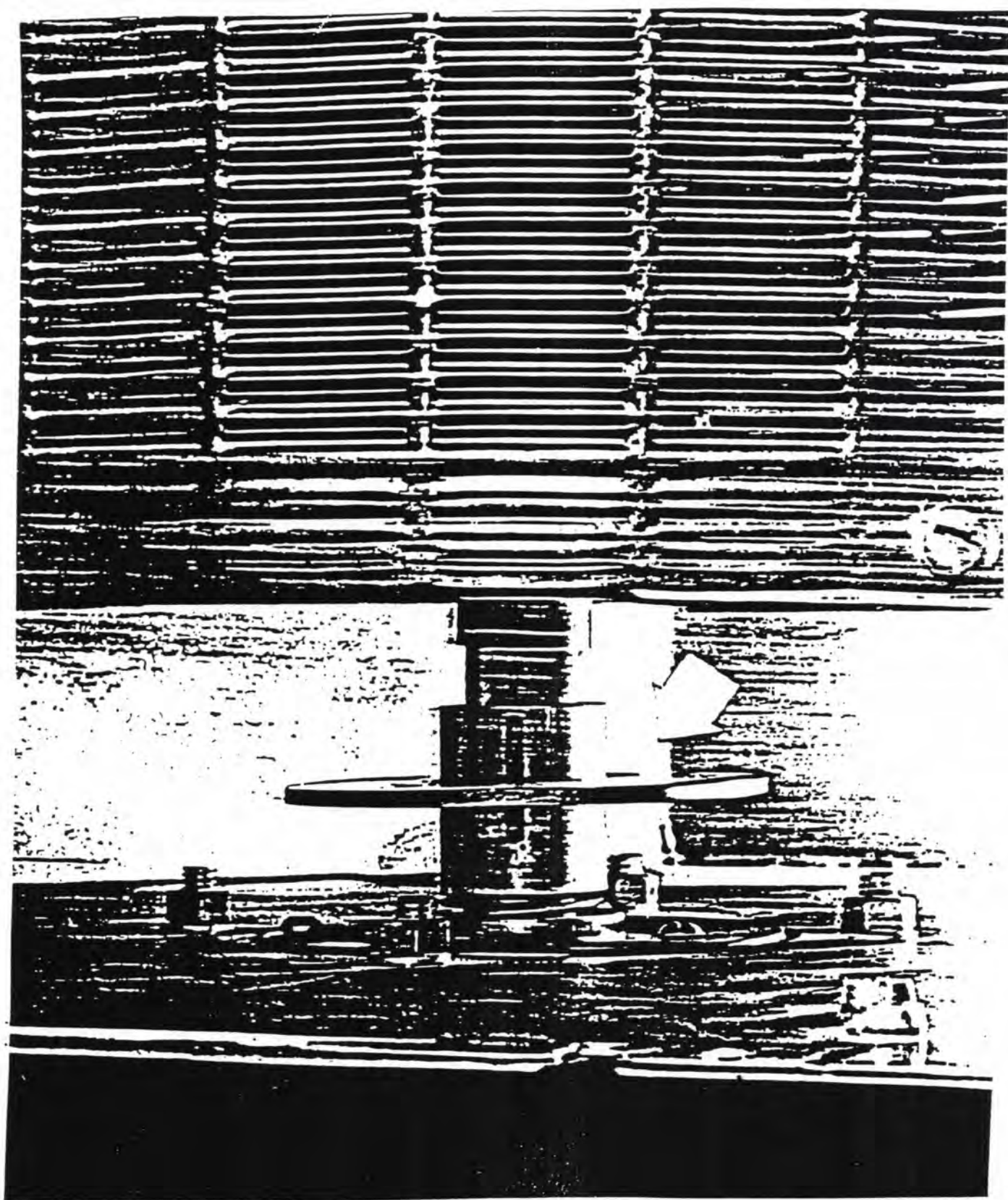
If the drive chain becomes slack to the point where the spring tensioned tightener no longer exerts tension on the chain, one or two links should be removed from the chain.

The drive chain should have a small amount of oil once each week of operation. A good grade of light S.A.E. motor oil is recommended for this chain.

### Belt Drive

The belts should be inspected every 300 hours of operation for wear, cracking, tension and alignment.

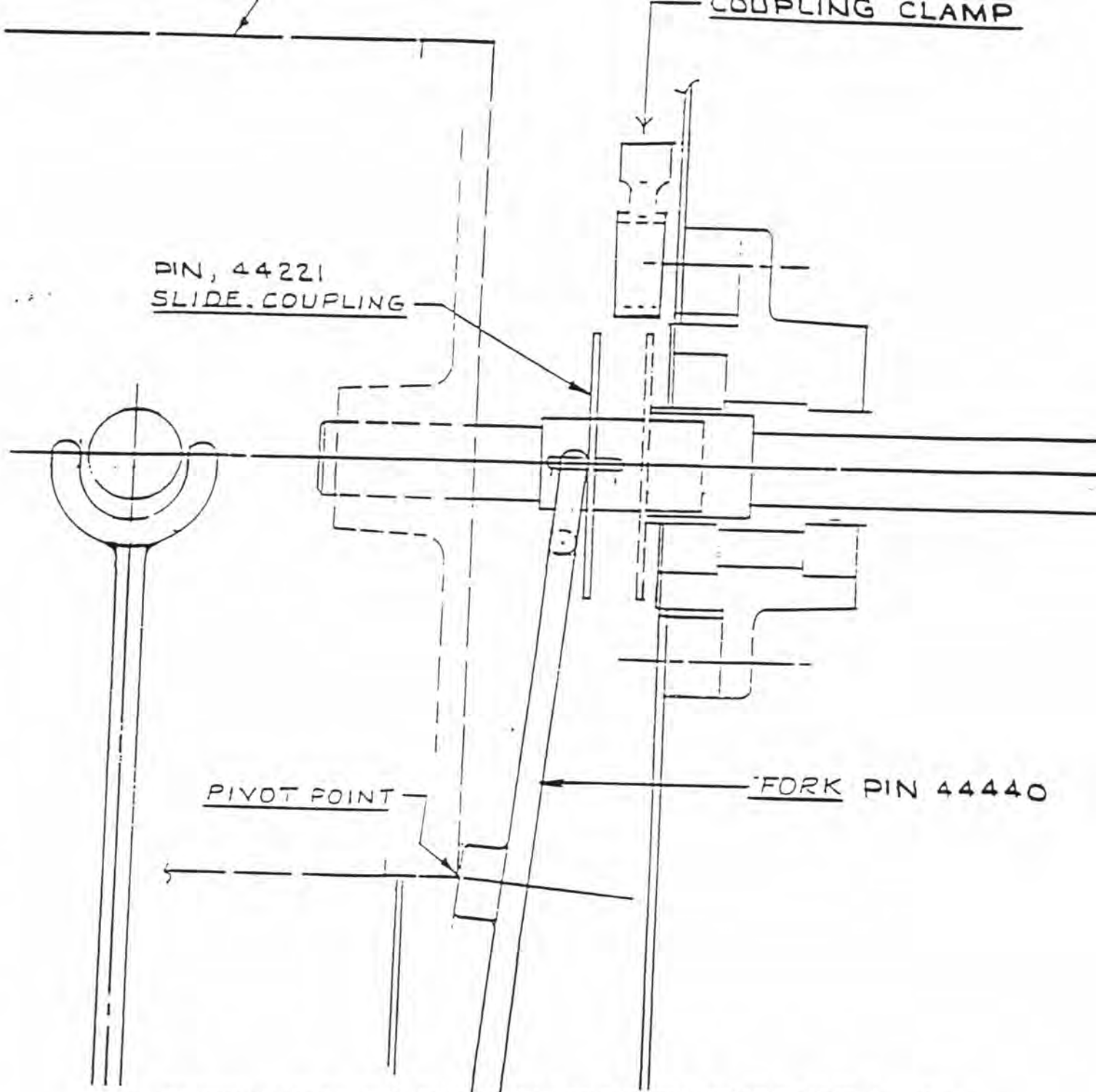




Photo, Quick Change Cylinder

12" Precision Size r  
604EC-1(rev. 00)

CARTER DAY



Note: To remove cylinder shells, FIRST PULL OFF THE COUPLING CLAMP, then place Quick Change Fork on slide coupling with pivot point at the outside edge of the cylinder shell. Lift cylinder up with one hand and pull fork handle toward cylinder to disconnect stub shaft. Remove shell through side opening.

### Quick Change Fork Application

## Factory Testing Service

In the event of a problem on a particular separation, contact the factory and submit a five pound sample of the material. A laboratory test will be run to duplicate the operation of the machine. An analysis of the results and a recommendation will then be made.

## To Order Parts

The appendices of this manual include parts lists. These lists, together with various drawings also included, makes it possible to identify the various components of the machine. When ordering parts, have the manual handy and try to identify the piece required by number and description.

Since equipment is constantly being updated and improved, the **style** and **serial number** should also be quoted. This information should have been recorded in the front of your instruction manual. If for some reason the information is not available, the information found on the metal tag affixed to the machine will have to be specified.

All of the above data is essential if parts are to be supplied quickly and correctly.

The **job number**, approximate **shipping date** and approximate **running time** would also be helpful when inquiring about a particular machine.

The Carter Day telephone number is (612)571-1000.

Ask for customer service.

The Carter Day fax number is (612)571-3012.

In many countries UPS or an equivalent parcel service is available to your site.

**Appendix A**  
**Recommended Spare Parts**



## Recommended Spare Parts for 12" Precision Sizers Belt Drive

The following list specifies minimum requirements for this unit. Keeping these parts on hand will minimize loss of production time in the event of a failure.

Any additional parts can be ordered from the indented parts list.

212	412	612	Part No.	Description
2	2	3	44221	Coupling Slide
2	4	6	45298	Quick Change Spring
2	4	6	47323	Spiral Pin
2	2	3	43891	Cylinder Stub Drive Shaft
2	4	6	61417	Bearing Stud
1	1	1	67526	V-belt, B-43
5	5*	10	19929	Wiper Blade
2	4	6	16179	Felt Washer
2	4	6	61418	Trunnion Bearing
2	2*	2	34030	Discharge Spider
2	2*	2	37757	Receiving Head
2	4	6	45315	Coupling Clamp

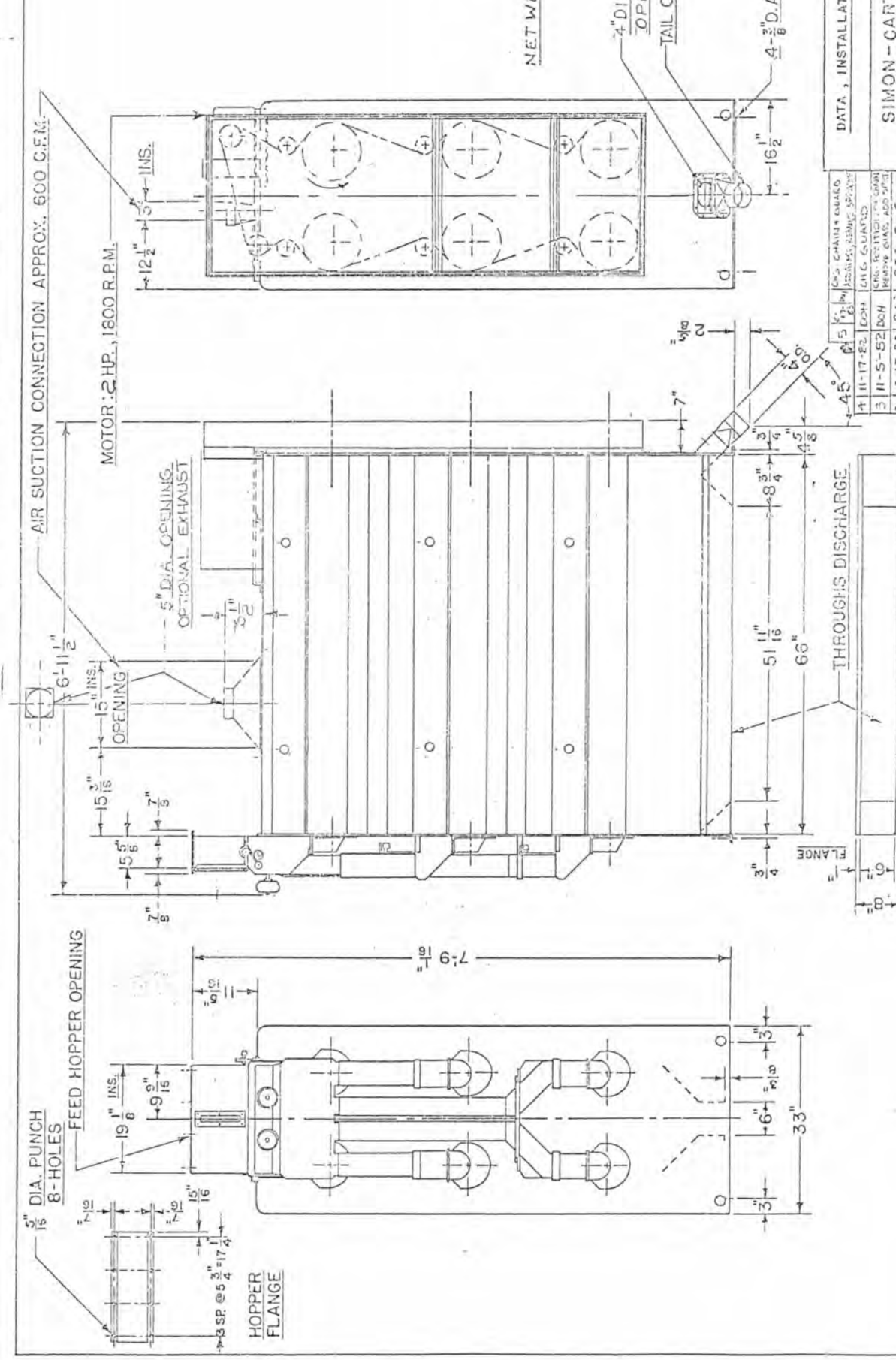
- \* These are the most common parts supplied with this machine. Check your order to see if the blades in your machine are different from these. If your machine is equipped with baffles in the cylinders, see your cylinder assembly for the correct discharge and receiving heads.

# **Appendix B**

## **Drawings**

**Drawings  
for  
Style CVH1**

Installation Data	SC-3343
Top View	CD-D2569
Section thru Shafting	CD-D2411
Section thru Sheet Metal	CD-D2122
Belt Drive	CD-C2582
Cylinder Assembly	CD-C2708
Gravity Feeder Assembly	SC-5111
Hopper, Feeder Assembly	SC-4262



AIR SUCTION CONNECTION APPROX. 600 C.F.M.

MOTOR: 2 HP, 1800 R.P.M.

5/16" DIA. PUNCH  
8-HOLES

FEED HOPPER OPENING

5" DIA. OPENING  
OPTIONAL EXHAUST

HOPPER  
FLANGE

THROUGH DISCHARGE

NET WEIGHT: 2346 #

4" DIA INSPECTION  
OPENING

TAIL OVER DISCHARGE

4-5/8" D. ANCHOR BOLTS

DATA, INSTALLATION

SIMON-CARTER CO.  
MILWAUKEE, WIS.

DRAWN BY J.C.S. 6-11-52  
CHECKED BY J.A.L. 6-10-52  
SCALE 3/4" = 1'-0"  
SC-3343

1	11-17-52	DOH	1016	GUARD	DES. CHAIN & GUARD
2	3-17-50	DOH	1016	GUARD	DES. CHAIN & GUARD
3	11-5-52	DOH	1016	GUARD	DES. CHAIN & GUARD
4	11-17-52	DOH	1016	GUARD	DES. CHAIN & GUARD

NO.	DATE	LOCATION	REVISIONS
1	11-5-2-67		

NO. 6 CARTER PRECISION GRADER  
WITH GRAVITY FEEDER

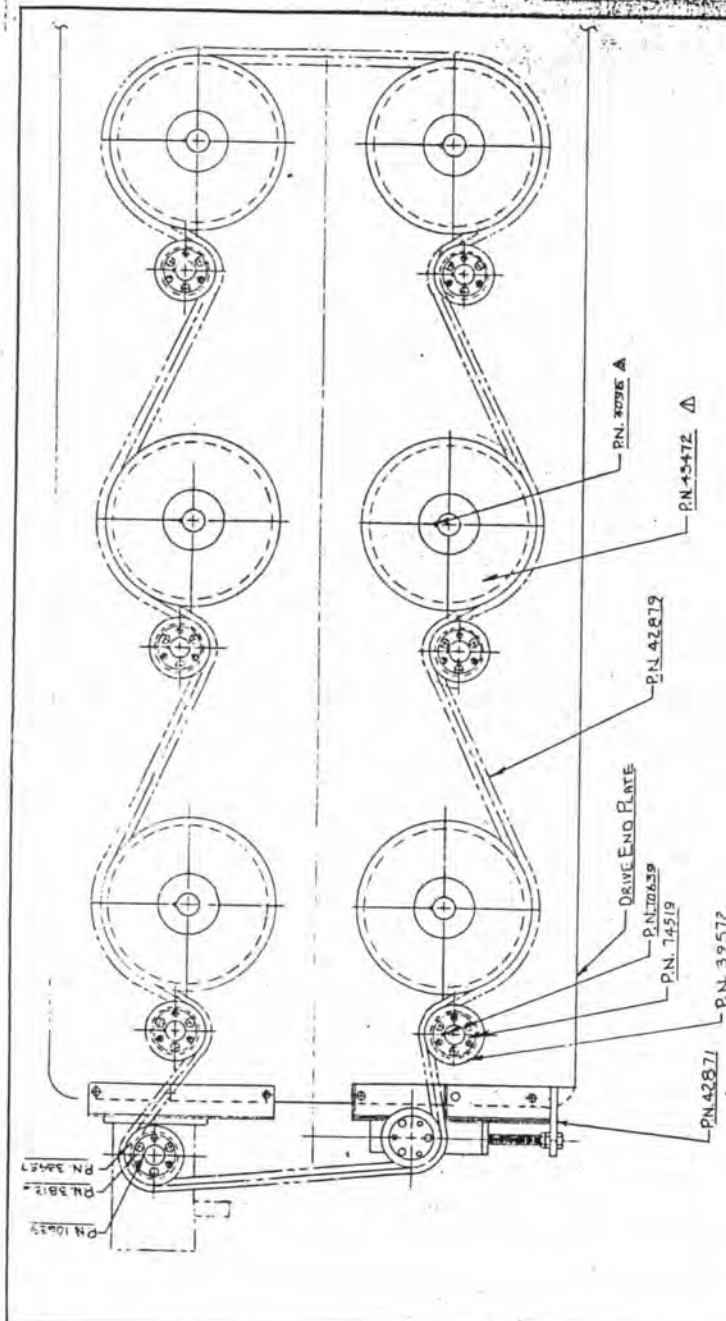












NO	QTY	PART NO.	DESCRIPTION
1	1	39134	BUSHING, O.D. TYPE, 3/4" I.D. x 1.000
2	1	39135	SHEAVE, B.S. 2.00 I.D. x 2.00
3	1	10329	KEY, 3/4" x 1/2" x 1/2"
4	1	42871	TAKE UP ROLLER BEARING ASSY
5	2	42879	WHEEL, 2.00 I.D. x 2.00
6	1	39572	BUSHING, O.D. TYPE, 3/4" I.D. x 1.000
7	1	43472	SHEAVE, B.S. 2.00 I.D. x 2.00

39134, 39135, 10329, 42871, 42879, 39572, 43472  
 ALL DIMENSIONS IN INCHES  
 UNLESS OTHERWISE SPECIFIED  
 TOLERANCES UNLESS SPECIFIED  
 FRACTIONS TO TWO DECIMAL PLACES  
 DECIMALS TO THREE PLACES  
 DIMENSIONS TO CENTER UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO SURFACE UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO EDGE UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CORNER UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTERLINE UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTER OF GRAVITY UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTER OF MASS UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTER OF PRESSURE UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTER OF BUOYANCY UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTER OF GRAVITY UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTER OF MASS UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTER OF PRESSURE UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS TO CENTER OF BUOYANCY UNLESS OTHERWISE SPECIFIED

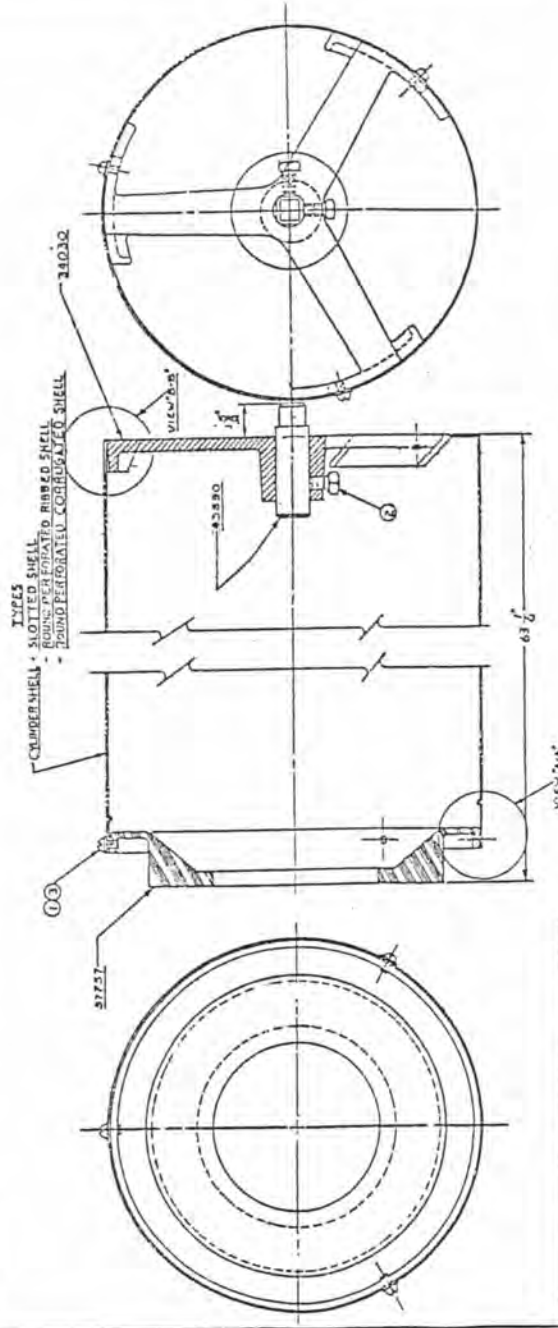
**Cartier-Day Company**  
 100 First Ave. S.E., Minneapolis, Minn. 55401  
 BELT DRIVE FOR NO. 612 &  
 532 PRECISION GRADER  
 DRAWING NO. 4-12-83  
 (DC-2502)

NO	QTY	PART NO.	DESCRIPTION
1	1	42871	TAKE UP ROLLER BEARING ASSY
2	2	42879	WHEEL, 2.00 I.D. x 2.00
3	1	39572	BUSHING, O.D. TYPE, 3/4" I.D. x 1.000
4	1	43472	SHEAVE, B.S. 2.00 I.D. x 2.00



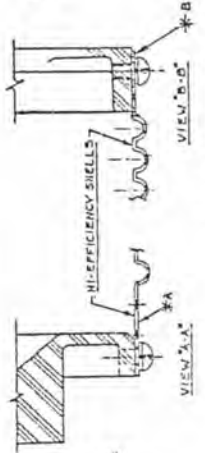
PART NO. 43394
REV. 1
37737
34039
34032
34030
34029
34028
34027
34026
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34024
34023
34022
34021
34020
34019
34018
34017
34016
34015
34014
34013
34012
34011
34010
34009
34008
34007
34006
34005
34004
34003
34002
34001

Δ  
 CEN. NO. 42878, MC. 4310, CD. C-2708, SC. 406, EC. 4307  
 SOUTH FERRIS ROLLER ROLLER COMPANY



QTY	NAME	DIA
1	SCREW MACH. BL. 1/20 x 1/2"	6
2	SCREW SET SQ. HD. CUP POINT	3/16 x 1/2
3	WASHER LOCK W.	6

#A NOTE:  
 ASSEMBLE HI-EFFICIENCY SHELL  
 WITH PRE-PUNCHED HOLES AT HEAD  
 END SHOWN AT VIEW 'A-A'



#B NOTE:  
 ASSEMBLE HI-EFFICIENCY SHELL  
 WITH WELDED RINGS FASTENED TO  
 CYLINDER DISCHARGE HEAD  
 SHOWN IN VIEW 'B-B'

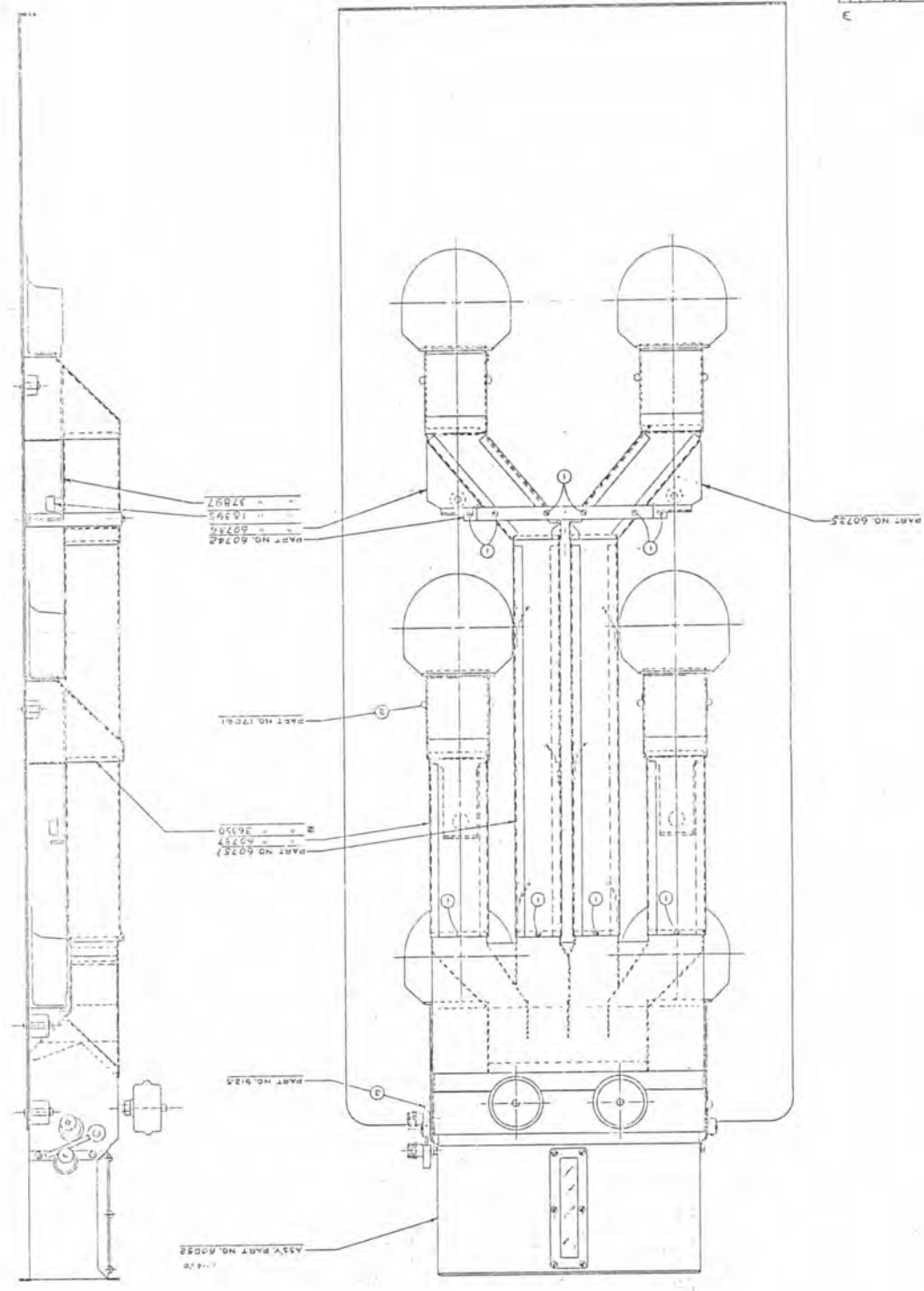
**CEA-CARTERDAY COMPANY**  
 1000 W. 10th St., Chicago, Ill. 60607  
 TEL. 312-341-1000

**ASSEMBLY CYLINDER**  
 \* GUNN'S CHANGE

CD-C-2708

PART NO. 43394  
 REV. 1

ITEM NO.	QTY.	SC	DATE	NO.	QTY.
1	1	1	1	1	1
2	1	1	1	1	1
3	1	1	1	1	1
4	1	1	1	1	1
5	1	1	1	1	1
6	1	1	1	1	1
7	1	1	1	1	1
8	1	1	1	1	1
9	1	1	1	1	1
10	1	1	1	1	1
11	1	1	1	1	1
12	1	1	1	1	1
13	1	1	1	1	1
14	1	1	1	1	1
15	1	1	1	1	1
16	1	1	1	1	1
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18	1	1	1	1	1
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22	1	1	1	1	1
23	1	1	1	1	1
24	1	1	1	1	1
25	1	1	1	1	1
26	1	1	1	1	1
27	1	1	1	1	1
28	1	1	1	1	1
29	1	1	1	1	1
30	1	1	1	1	1



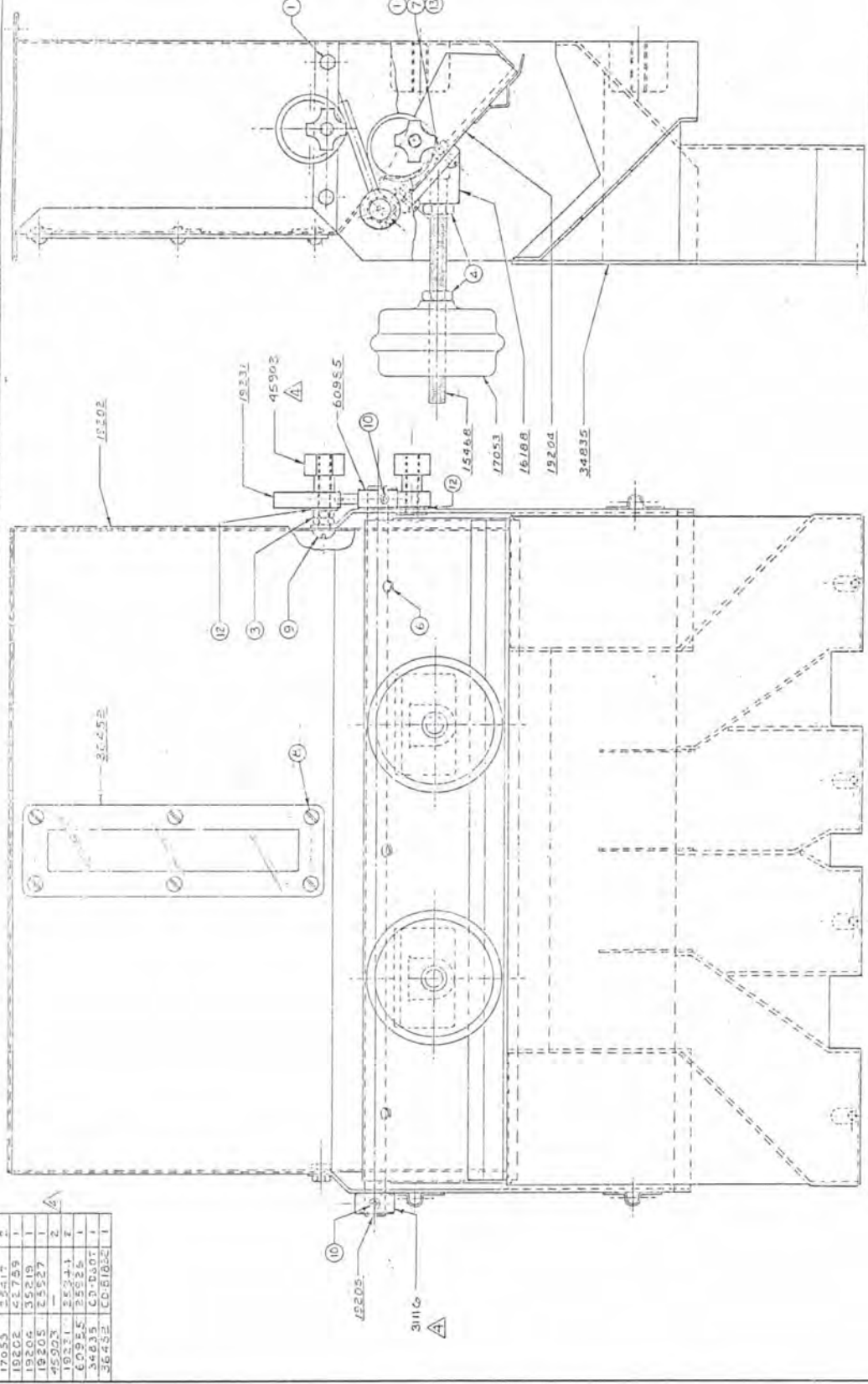
NO.	DESCRIPTION	QTY.
1	SCREW, MACH. RH. NO. 10-28 X 3/8"	1
2	NUT, HEX. 1/4"	1
3	WASHER, 1/4"	1

5. ADD DIMENSIONS TO FINISH  
 6. CHECK DIMENSIONS  
 7. CHECK DIMENSIONS  
 8. CHECK DIMENSIONS  
 9. CHECK DIMENSIONS  
 10. CHECK DIMENSIONS  
 11. CHECK DIMENSIONS  
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 29. CHECK DIMENSIONS  
 30. CHECK DIMENSIONS

SIMON CARTER CO.  
 DIVISION OF THE SIMON CARTER GROUP  
 SIMON CARTER CO.  
 1000 N. 10TH ST.  
 MILWAUKEE, WIS. 53233  
 PHONE 442-1000  
 TELETYPE 442-1000  
 CABLE SIMONCARTER  
 WISCONSIN  
 DATE: APPLICATION  
 SCALE: 1:1  
 DRAWING NO. 60252  
 SHEET NO. 1 OF 1  
 PROJECT NO. 60252

PART NO. 60052		
PART NO.	DESC.	QTY.
1	SCREW, 1/4" X 1 1/2"	1
2	WASHER, 1/4"	1
3	WASHER, 1/4"	1
4	WASHER, 1/4"	1
5	WASHER, 1/4"	1
6	WASHER, 1/4"	1
7	WASHER, 1/4"	1
8	WASHER, 1/4"	1
9	WASHER, 1/4"	1
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21	WASHER, 1/4"	1
22	WASHER, 1/4"	1
23	WASHER, 1/4"	1
24	WASHER, 1/4"	1
25	WASHER, 1/4"	1
26	WASHER, 1/4"	1
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42	WASHER, 1/4"	1
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46	WASHER, 1/4"	1
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50	WASHER, 1/4"	1
51	WASHER, 1/4"	1
52	WASHER, 1/4"	1
53	WASHER, 1/4"	1
54	WASHER, 1/4"	1
55	WASHER, 1/4"	1
56	WASHER, 1/4"	1
57	WASHER, 1/4"	1
58	WASHER, 1/4"	1
59	WASHER, 1/4"	1
60	WASHER, 1/4"	1
61	WASHER, 1/4"	1
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QTY.	DESCRIPTION
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**CARTER-DAY COMPANY**  
 MINNEAPOLIS, MINNESOTA

ASSEMBLY, GRAVITY FEED HOPPER

PRECISION SIZER

DATE: 3-17-62  
 DRAWN BY: E.E. 715-21  
 SCALE: 1/2"  
 SHEET: OF

PART NO. 60052

PART NO. 60052

SC-4262

**Appendix C**  
**Bill of Materials**



PARENT ITEM NO. 99366      DESCRIPTION STYCVHI PRECISION SIZER #612      ITEM TYPE 1      LOW LEVEL 01  
 ENGR DRAW BELT DRIVE      STANDARD BATCH QUANTITY 1.000      UNIT MEAS EA      PLANNER 1

LL CD	COMPONENT ITEM NO.	DESCRIPTION	ENGINEERING DRAWING NUMBER	QUANTITY PER	ITEM UM TYP	OPT NO.	FIRST LT	ADJ	EFFECTIVE DATES FROM TO
03	04096	KEY SQUARE 1/4X1/4 X2	CM21225 REV02	6.000	EA 4				
03	09125	CONN BOLT 5/16-18X2.0	HC-23794 REV B	92.000	EA 4				
03	10639	KEY SQUARE 1/4X1/4 X1.25	CM21225 REV02	1.000	EA 4				
03	10R54	CONN BOLT 5/16-18X2.25	HC-23794 REV B	7.000	EA 4				
02	16179	WASHER FELT 5.010 X6.5 X.25	HC-25222 REV A	6.000	EA 4				
03	16536	BRG BALL 1.1878 YAR206-103 OR	YEL206-103 PFD	12.000	EA 4				
04	16781	CLIP HINGE 5/16	HC 25335 REV01	12.000	EA 2				
03	16872	HOUSING BRG 2.4409 ID SPH	HC-34482 REV03	6.000	EA 2				
03	16920	KEY SQUARE 3/16X3/16 X1.5	HC-24554 REV H	2.000	EA 4				
03	17061	CONN BOLT 1/4-20X1.375	HC-25240 REV F	62.000	EA 4				
02	17519	HUB ROLLER BLADES	HC-25501 REV H	18.000	EA 2				
03	17520	HOUSING BRG 2.4409 ID SPH	HC 34650 HC2895	6.000	EA 2				
02	17526	SHAFT WIPER 1-3/16D W/KEYWAY	HC25504 REV 07	6.000	EA 2				
02	17837	PLATE HOPPER BOTTOM	HC-25613 REV01	1.000	EA 2				
02	19255	WASHER BRG LOCKING	25946	12.000	EA 2				
02	19260	COLLAR LOCKING	43006	6.000	EA 2				
02	20511	SPOUT FEED	HC-26237 REV03	12.000	EA 2				
02	20575	WASHER .5311ID X2.5 X.125		2.000	EA 4				
02	31627	DECAL TRADEMARK PREC GRADER	CD-A1675	6.000	EA 4				
03	31674	DECAL ROTATION ARROW	CD-A1227	1.000	EA 4				
02	35263	DECAL CAUTION ROTATING MACH	CD-A1272 REV01	1.000	EA 4				
02	35539	WINDOW LEXAN 4.75 SQ X.125	NEW DEPART/EGL	12.000	EA 4				
03	36198	BRG BALL 1.57488 Z99508	CD-A1476	1.000	EA 4				
02	36476	NAMEPLATE PRECISION SIZER	CD-A1612 REV01	12.000	EA 4				
02	37763	WASHER CR .52ID X1.06 X.37	CD-A1614	1.000	EA 2				
02	37772	COVER AIR CONNECTION	CD-A1637 REV01	1.000	EA 4				
02	37872	SUPPORT MOTOR DRIVE BASE #6	CD-B2127 REV00	1.000	EA 2				
03	37907	SHEAVE A4.2784.6 PD X1 SDS	1/4X1/8 KWY	1.000	EA 4				
02	37952	SUPPORT MOTOR PLATE #6	WOODS/EGL	1.000	EA 4				
03	38136	BSHG SH QD TYPE 1.00 B		1.000	EA 4				
03	38149	BSHG IDLER SH-BB		1.000	EA 4				
02	38957	SHEAVE A3.4783.8 PD X2 SH		7.000	EA 4				
02	39572	SHEAVE A3.0783.4 PD X2 SH		6.000	EA 4				
04	410723	LABEL WARNING PICTORIAL	PPD	2.000	EA 4				
03	414212	NAMEPLATE TRADEMARK CARTER DAY	2.88X16.12 PPD	36.000	EA 4				
02	41446	MACH-SCR STL RH #10-24X.312 ZP	EXT SEMS SLT	12.000	EA 4				
03	41668	KNOB PLSTC DAVIES 3003-S 10-24	HC 25972 REV03	4.000	EA 2				
02	420557	LUG LIFTING 12IN SIZER	CD-B5854 REV00	3.000	EA 2				
02	42660	PLATE TAILING DEFLECTOR.	CD-C2548 REV03	1.000	EA 2				
02	42873	BRACKET TAKE UP IDLER #12	CD-C2580 REV K	2.000	EA 4				
02	42879	V-BELT DBL HEX 88-210		1.000	EA 4				
02	42940	RDR 10/1 2225-A-01 EX SHFT	ALLING-LANDER	90.000	EA 4				
03	43471	RETAINER U-NUT #C33700-1420	43471A REV A	6.000	EA 2				
02	43472	SHEAVE B11.0 2-6RV X1.508	CD-B3132 REV01	6.000	EA 2				
02	43867	CYL SLEEVE SHAFT ASSY12PG	CD-B3191 REV03	6.000	EA 2				
02	43891	SHAFT CYL STUB DRIVE SS304	CD-A2406 REV07	4.000	EA 2				
02	43998	PLATE SIDE 12IN CPS	CD-B3225 REV01	1.000	EA 2				
02	44220	SPACER SPROCKET 12 CPS	CD-A2446	1.000	EA 2				

PARENT ITEM NO. 49366  
 DESCRIPTION STYCVH1 PRECISION SIZER #612  
 ENGR DRAW BELT DRIVE  
 STANDARD BATCH QUANTITY 1,000

LL CD	COMPONENT ITEM NO.	DESCRIPTION	ENGINEERING DRAWING NUMBER	QUANTITY PER	ITEM UM TYP	OPT NO.	FIRST OP	LT SEQ	ADJ	EFFECTIVE DATES FROM TO
02	44221	CPLG SLIDE SS304	CD-B3266 REV03	6,000	EA 3					
02	44226	ANGLE SUPPORT DRIVE 612	CD-A2450 REV03	1,000	EA 2					
02	44227	BASE MOTOR DRIVE 612	CD-B3269 REV02	1,000	EA 2					
02	44284	PLATE TOP	CD-C2766 REV03	1,000	EA 2					
02	44285	PLATE TOP 12IN CPS	CD-C2767 REV04	1,000	EA 2					
02	44288	PLATE FEED END 612 CPS	CD-D2092 REV C	1,000	EA 2					
02	44440	FORK QUICK CHANGE	CD-A2468	1,000	EA 2					
02	44441	CLAMP TW-1/2 GB ELEC SUPPLY	CD-A2469 REV01	1,000	EA 4					
02	45217	DOOR INSPECT CYL	CD-B3410 REV00	6,000	EA 2					
02	45290	PANEL CYLINDER INSPECTION RH	CD-D2276 REV04	3,000	EA 2					
02	45291	PANEL CYLINDER INSPECTION LH	CD-D2277 REV05	3,000	EA 2					
02	45298	SPRING QUICK CHANGE PG	CD-D2277 REV01	6,000	EA 4					
02	45308	CAP SCR BHSOC 1/4-20X.875	NYLON PATCH	90,000	EA 4					
02	45315	CLAMP CPLG URETHANE	CD-A2548 REV02	6,000	EA 4					
02	47323	PIN SPIRAL 1/8 X1.125 HBK	PPD	6,000	EA 4					
02	47715	HOUSING BRG 3.1498 ID CYL	CD-B3691 C0214	6,000	EA 2					
02	48189	COVER DRIVE GUARD BACK 12 CPS	CD-C3316 REV00	1,000	EA 2					
02	48207	PLATE DRIVE END 612 CPS	CD-D2696 REV B	1,000	EA 2					
02	48847	EXT PARTITION TAIL HOPPER LH	CD-B3983 REV B	3,000	EA 2					
02	48848	EXT PARTITION TAIL HOPPER RH	CD-B3984 REV B	3,000	EA 2					
04	60624	LABEL WARNING DO NOT OPEN CVR	SC-2115 S-459	7,000	EA 4					
02	60878	STRIP SEAL TAILINGS HOPPER	SC-2311 REV02	12,000	EA 2					
02	60882	CHANNEL SLIDE	HC-25615 REV02	2,000	EA 2					
02	60891	PLATE DEFLECTOR CTR #212-612	SC-3322 REV01	3,000	EA 2					
02	60894	PLATE HOPPER BOTTOM #412&612	SC-3323 REV03	2,000	EA 2					
02	60895	PLATE HOPPER BOTTOM #412&612	SC-3323 REV03	2,000	EA 2					
02	60897	SPOUT ADPTR TAILING DISCH	SC-3325 REV04	1,000	EA 2					
02	60898	PARTITION TOP TAILING HPPR 612	SC-4247 REV06	1,000	EA 2					
02	60901	PARTITION MID TAILING HPPR 612	SC-4249 REV07	1,000	EA 2					
02	60908	SPOUT TAILING DISCH #212-612	SC-3329 REV07	1,000	EA 2					
02	60909	PLATE LOWER HPPR BOT #212-612	SC-4257 REV07	1,000	EA 2					
02	60910	PLATE LOWER HPPR BOT #212-612	CD-C2869 REV00	1,000	EA 2					
02	60911	PLATE CENTER BAFFLE #412&612	SC-3327 REV01	2,000	EA 2					
02	60913	PLATE TAILING DIVIDER #412&612	CD-C1858 S-1226	2,000	EA 2					
02	60914	PLATE DIVIDER #212-612	SC-2328 REV04	1,000	EA 2					
02	60915	PARTITION BOT TAILING HPPR 612	SC-4258 REV07	1,000	EA 2					
02	60968	NYLON PLUG FASTEX #207-290641	S-1345	12,000	EA 4					
02	61417	STUD BEARING	S-2396 SC-2540	12,000	EA 4					
02	61418	BRG BALL #669B 6303-2RS	SKF S-2397	12,000	EA 4					
04	63620	TAPE FELT #9 1/8X.625 PSA 1/S		33,000	FT 3					
02	74519	BSHG SH GD TYPE 1.1875 B		6,000	EA 4					
02	75223	NUT HEX G5 FULL 1/2-13 ZP	CD-C4305 REV G	8,000	EA 4					
03	75718	BSHG SDS GD TYPE .75 B		1,000	EA 4					
03	88166	MACH-SCR STL FH 1/4-20X2 ZP	CD-C4305 REV G	1,000	EA 4					
04	88190	CAP SCR G2 HH 5/16-18X.75 ZP		34,000	EA 4					
02	88245	NUT HEX STL CAP 5/16-18 ZP		107,000	EA 4					
03	88248	NUT HEX G2 FULL #10-24 ZP		1,000	EA 4					
04	88249	NUT HEX G2 FULL 1/4-20 ZP		69,000	EA 4					

PARENT ITEM NO. 49366  
 DESCRIPTION STYCVH1 PRECISION SIZER #612  
 ENGR DRAW BELT DRIVE  
 STANDARD BATCH QUANTITY 1.000

LL CD	COMPONENT ITEM NO.	DESCRIPTION	ENGINEERING DRAWING NUMBER	QUANTITY PER	ITEM UM TYP	OPT NO.	FIRST LT	ADJ	FROM	TO
04	88264	NUT HEX STD JAM 1/2-13 ZP		9.000	EA 4					
03	88311	SET-SCR SOC 3/8-16X.5	NYLOC/EQV	6.000	EA 4					
02	88328	SET-SCR SOC 3/8-16X.375	NYL P-KNURL C P	36.000	EA 4					
02	88334	SET-SCR SQH 3/8-16X1 NYL	CUP POINT	4.000	EA 4					
04	88358	WASHER STL FLAT 1/4 ZP		1.000	EA 4					
04	88360	WASHER STL FLAT 5/16 ZP		1.000	EA 4					
04	88362	WASHER STL FLAT 1/2 ZP		8.000	EA 4					
04	88366	WASHER SPRG LOCK 1/4 MED ZP		8.000	EA 4					
02	88369	WASHER SHPRF LOCK INT T 3/8 ZP		2.000	EA 4					
03	88373	WASHER SPRG LOCK 5/8 MED ZP		1.000	EA 4					
03	88395	MACH-SCR STL RH #8-32X.25 ZP		8.000	EA 4					
03	88402	MACH-SCR STL RH #10-24X.375 ZP		21.000	EA 4					
04	88404	MACH-SCR STL RH #10-24X.5 ZP		12.000	EA 4					
03	88406	MACH-SCR STL RH #10-24X.75 ZP		1.000	EA 4					
03	88409	MACH-SCR STL RH 1/4-20X.375 ZP		26.000	EA 4					
03	88410	MACH-SCR STL RH 1/4-20X.5 ZP		22.000	EA 4					
02	88411	MACH-SCR STL RH 1/4-20X.625 ZP		2.000	EA 4					
04	88412	MACH-SCR STL RH 1/4-20X.75 ZP		9.000	EA 4					
03	88421	MACH-SCR STL RH 5/16-18X.5 ZP		8.000	EA 4					
02	88434	MACH-SCR STL TRUSH 1/4-20X.625		30.000	EA 4					
03	88495	WASHER SPRG LOCK #10 MED ZP		24.000	EA 4					
04	88546	NUT HEX G2 FULL 5/16-18 ZP	NYL INS	2.000	EA 4					
02	88719	CAP SCR G5 HH 1/2-13X1 ZP		8.000	EA 4					
03	92086	PAINT C-D MET BLUE CER IC5057	CERAMIC IND CTG	2.500	GL 3					
03	98673	MANUAL INSTR		1.000	EA 4					