CARTER DAY

CARTER
PRECISION
SIZER



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



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

INSTALLATION, OPERATION AND SERVICE

The No. 6 Carter Precision Grader is designed to use six perforated cylinders for sizing granular material. A feeder is used to evenly distribute the incoming material to the six 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 print for the location of the discharge outlets.

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

This machine should be installed, operated, and serviced by qualified persons. All drive guards must be secured in their proper place and inspection doors closed when this machine is running.

INSTALLATION

This machine should be set level on a solid structure and securely fastened. A clearance of 15" or more should be allowed on each side of the machine for the removal of the cylinders. Spouting should be provided for the throughs discharge and the tail over discharge. A magnet should be provided for the removal of metal pieces from the incoming material.

A few parts 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 very easily by looking at the photographs for their proper location. It will be necessary to remove the chain guard before the chain can be put on the sprockets. The photograph shows the proper wrap of the chain.

The motor rotation should be checked with the proper rotation of the cylinders before the V belt is installed. The oil level in the speed reducer should be checked as indicated on the instruction tag attached.

OPERATION

Air Suction

The top cover plate has a 3" x 15" frame where a suction line may be attached. 600 C. F. M. is recommended for normal operating conditions. When this machine is equipped with a 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 eliminate light material which can create trouble within the machine.

Speed

Normal operating speeds are from 45 to 60 R. P. M. on the cylinders. 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.

One H. P. is required for the machine. Machines equipped with vibrating feeders will Horse Power require an additional 1/3 H. P. Motor (see installation drawing).

It is necessary that the material be discharged from the feeder in a uniform depth across the full width of the feeder because as it leaves the feeder it falls into the six compartments directing the material to the six separate cylinders.

The gravity type feeder has counter weights on the feed gate which should be regulated so that the material level will be maintained within the sight glass range of visability. 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.

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

SERVICE

Maintain the oil level in the speed reducer according to the instruction tag attached to the unit.

All shafts are equipped with sealed ball bearings which are lubricated for the life of these bearings.

The roller chain drive should have a small amount of light oil occasionally.

Bearing Removal

The rubber blade cleaner 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 it is necessary to turn the bearing a one 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.

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, then one or two links should be removed from the overall length of the chain.

Changing Cylinders

The inspection doors with side plates can be removed by loosening the four wing nuts holding each plate. Remove the covers from the chain guard, unscrew the knob and remove it with its stud. Loosen the square head set screw that holds the collar and cylinder stub drive shaft to the drive shaft sleeve. While the discharge end of the cylinder assembly is held in place by one hand the collar with stub should be pulled out. It may be necessary to pry this shaft out with a screw driver inserted between the collar and the sprocket hub.

It will be necessary to 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.

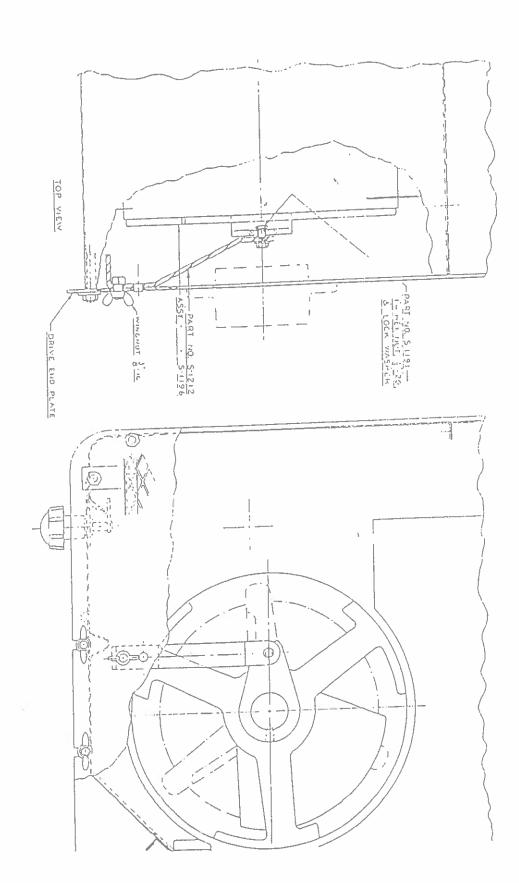
New cylinders can be installed by reversing the above procedure. Care must be exercised in handling the perforated cylinders because any distortion of the perforations will affect the separation. The cylinder assemblies should be held securely without end movement. See application print for slotted cylinder assemblies with cylinder baffle plate.

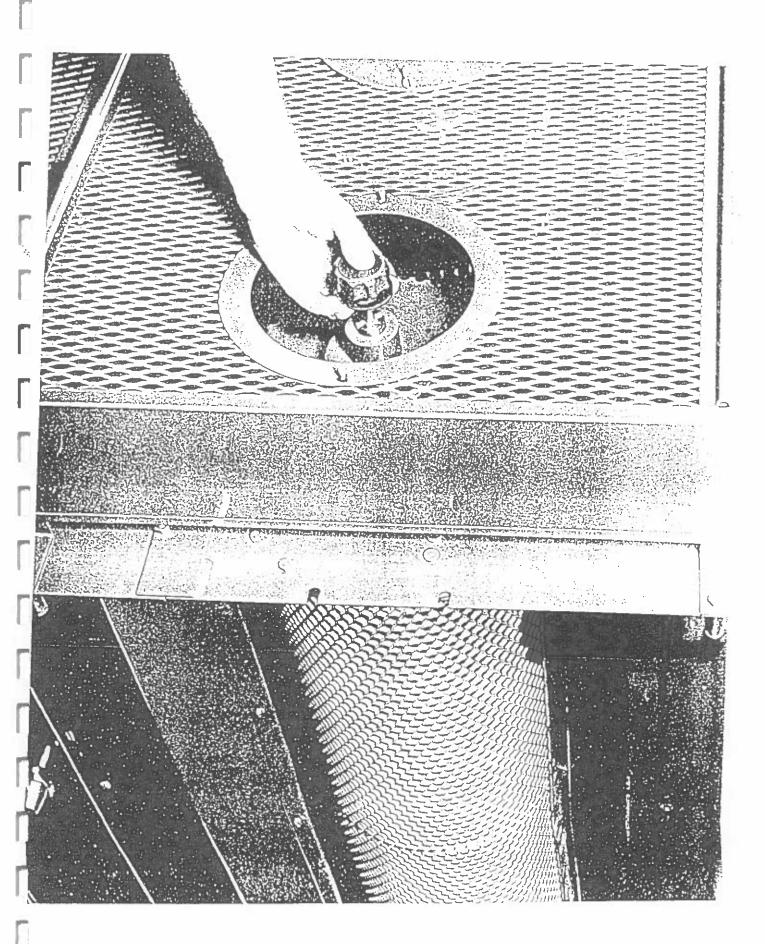
The rubber cleaner blades should be checked to make sure they are securely fastened and replaced when badly worn.

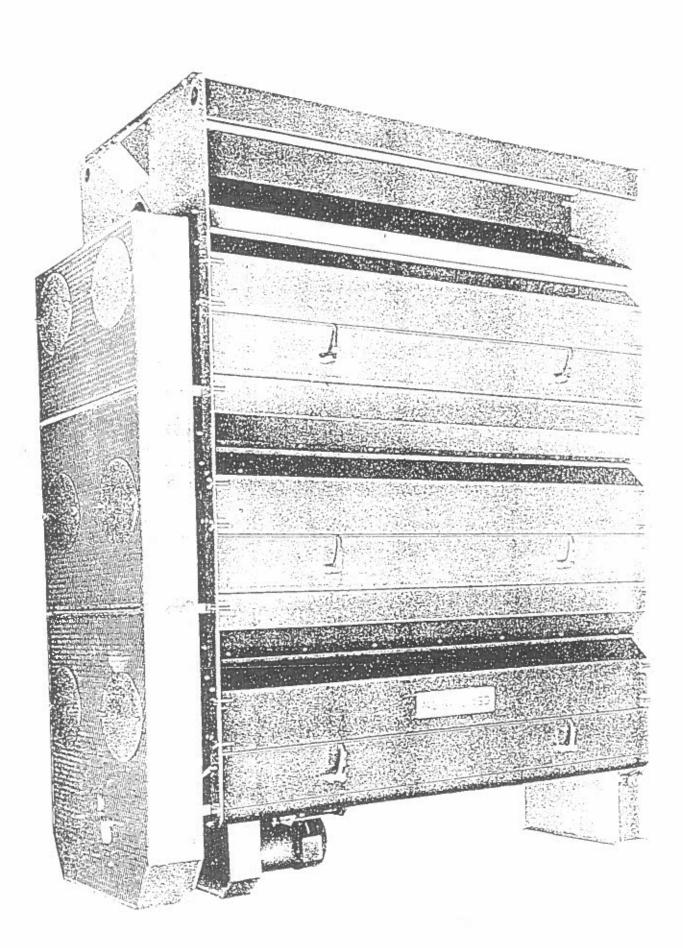
When making reference to this machine be sure to give the Style Number and Serial Number.

WARNING

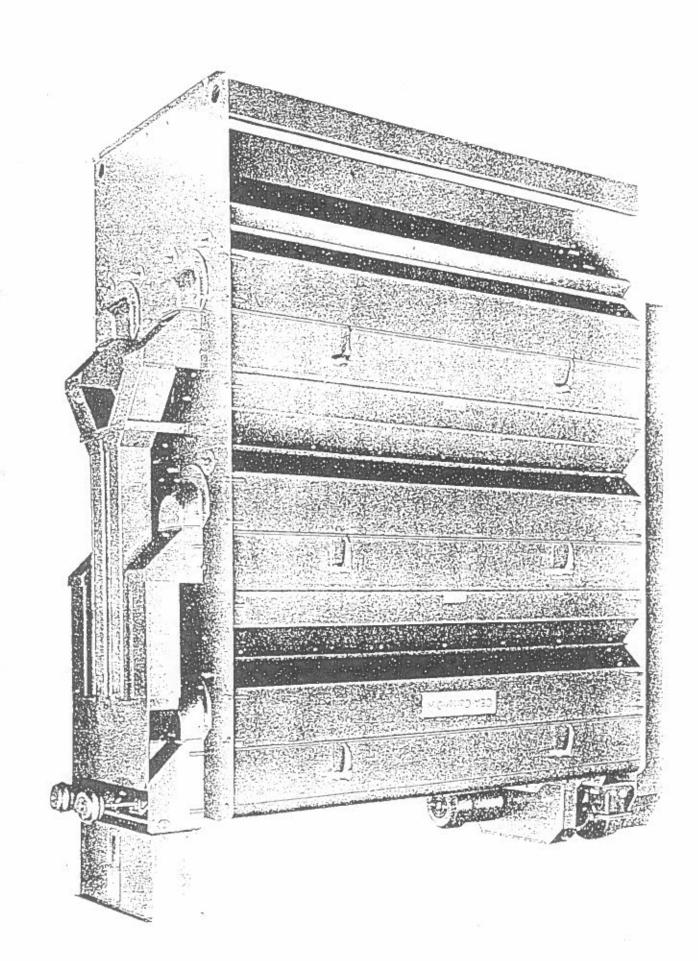
- 1. Do not open access doors while machine is in operation. Rotating machinery inside can be dangerous.
- 2. Before attempting to remove an obstruction or before starting maintenance procedures, all power to the equipment must be disconnected.
- 3. Keep hands clear from all discharge spouts while unit is in operation.

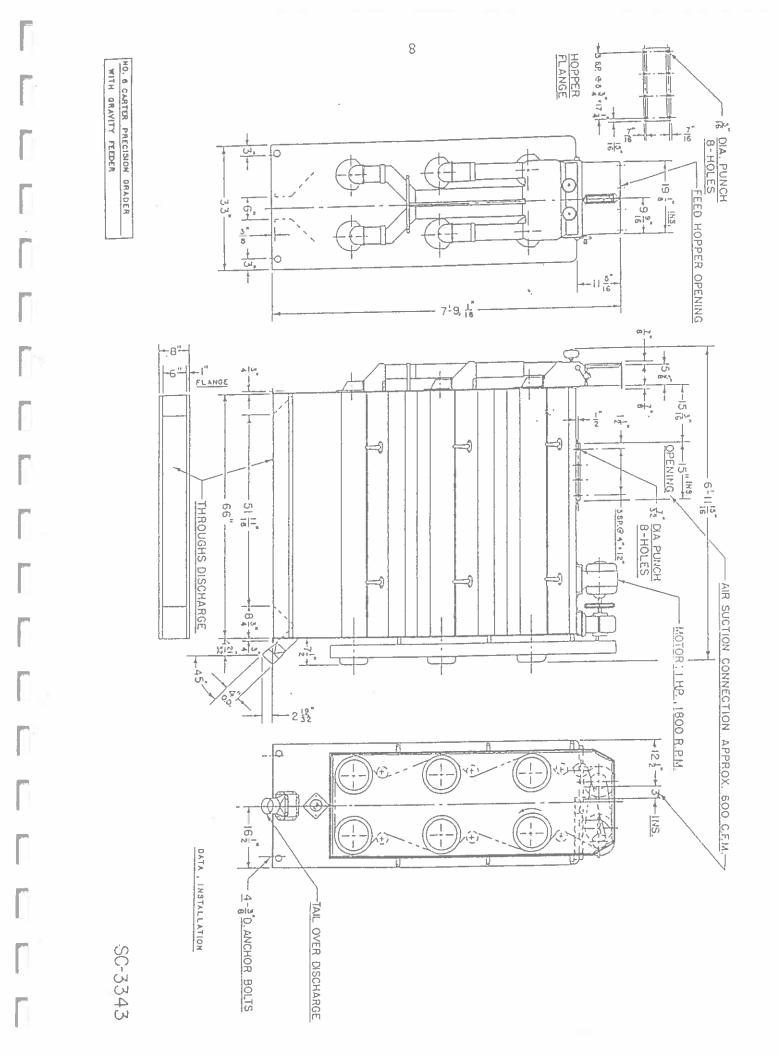












ILLUSTRATED PARTS LIST

NUMBER' 6

CARTER PRECISION GRADER

STYLE NUMBER ZM6

Motor and Drive Assembly - Group "A"

PARTS LIST

MOTOR AND DRIVE - ASSEMBLY GROUP "A"

	INDEX NUMBER	PART NUMBER		GROUP ''A'' QUANTITY REQ'D.	TOTAL QUANTITY PER MACHINE
				2	2
	-1 -2	60948 19422	V-BELT, No. A-38 CHAIN, WHITNEY MSL NO. 50, 5/8 in. pitch, 3/8 in. wide, 322 pitche	1	1
	-3	61242	201-1/4 in. long SHEAVE, ADJUSTABLE PITCH, 4-3/4 in outside diameter, 2 gr∞ve, 7/8 in. bore		1
	-4	60947	3/16 x 3/32 in. keyway SHEAVE, 7 in. pitch diameter, 2 groove, 3/4 in. bore	1	1
		20112	3/16 x 3/32 in. keyway KEY, 3/16 x 3/16 x 2 in.	1	1
, , , , , , , , , , , , , , , , , , ,	-5 -6	20110 60634	SPROCKET, 17 Teeth, No. 50 chain, 1 in. bore	1	1
	+3	COVIL	(ATTACHING PARTS) SCREW, SET, Hol. Hd., 3/8-16NC x 1/2 in.	2	26
1/4			*	1	1.
	-7 -8	10639 CCML	KEY, 1/4 x 1/4 x 1-1/4 in. MOTOR, ELECTRIC, 1-HP, 1800 RPM, Nema Frame No. 143T	1	1
	(-)	CONIL	(ATTACHING PARTS) BOLT, MACHINE, Hex Hd., 5/16-18NC x 1 in.	4	4
		· COMIL	· WASHER, LOCK, 5/16 in.	4	4
	-9	CONIL 60949	WASHER, CUT, 5/16 in. REDUCER, SPEED, WINSMITH MODEL NO. 800, Ratio 5.90 to 1	. 1	1
	er (COVIL	(ATTACHING PARIS) BOLT, MACHINE, Hex Hd., 3/8-16NC x 1-1/2 in.	4	4
1	200	COMIT	WASHER, LOCK, 3/8 in.	4	4
	10	33811	PLATE, MOTOR SUPPORT	1	1
	-10	JJULL	(ATTACHING PARTS)		
	AT 2	COVIL	SCREW, MACHINE, Rd Hd., 5/16-18NC x 1/2 in.	8 8	8 205
		COVIL	NUT, HEX, 5/16-18NC	0	
	-11	60636	PLATE, SUPPORT, Gear unit (ATTACHING PARTS)	1	1
1	120	COMIL	SCREW, CAP, Hex Hd., 5/16-18NC x 5/8 in.	2	2
100			7 0/0 III.		

PARTS LIST

MOTOR AND DRIVE - ASSEMBLY GROUP "A" CONT'D.

	INDEX NUMBER	PART NUMBER	DESCRIPTION	GROUP "A" QUANTITY REQ'D.	TOTAL QUANTITY PER MACHINE
	-	COML	NUT, HEX, 5/16-18NC	2	205
	-12	60633	ANGLE, SUPPORT, Gear unit (ATTACHING PARTS)	1	1
	- 13 -	9124 COML	BOLT, SPECIAL NUT, HEX, 5/16-18NC	3	13 205
	-14	19563	SPROCKET, 15 TEETH, No. 50 Chain 1-3/16 in. bore	6	6
	2	COML	(ATTACHING PARTS) SCREW, SET, Hol Hd., 3/8-16NC x 1/2 in.	12	26
	-15	19188	SPRING, TENSION (ATTACHING PARTS)	1	1
	-	COML	SCREW, MACHINE, Rd. Hd., 10-24NC x 3/4 in.	1	1
	-	COML	SCREW, MACHINE, Rd Hd., 1/4-20NC x 3/4 in.	1	25 1
	-	COMP	WASHER, CUT, 3/16 in. WASHER, CUT, 1/4 in. NUT, HEX, 1/4-20NC	1 1 2	1 185
	(4) (4)	COMF COMF	NUT, HEX, 10-24NC	1	1
	-16	36070	SPROCKET, IDLER, 15 Teeth, No. 50 Chain	1	1
	-17.	COML	(ATTACHING PARTS) NUT, HEX, 5/8-11 in.	1	1
	-18 -19	36082	BRACKET ASSEMBLY, CHAIN TIGHTENER (ATTACHING PARTS)	1	1
	-20	3184 COML	STUD, 5/8 in. diameter, 1/2-13NC NUT, HEX, Jam, 1/2-13 NC	1 3	1 9
Γ	-21 -22	37541 — 19260	KNOB ASSEMBLY, CYLINDER LOCK COLLAR, LOCKING (ATTACHING PARTS)	6	6 6
_	-	COML	SCREW, SET, Hol Hd., 3/8-16NC x 1/2 in.	12	26
A	-	COML	SCREW, SET, Sq hd., 3/8-16NC x 3/8 in.	6	6

PARTS LIST

MOTOR AND DRIVE - ASSEMBLY GROUP "A" CONT'D.

-	INDEX NUMBER	PART NUMBER	DESCRIPTION	GROUP "A" QUANTITY REQ'D.	TOTAL QUANTITY PER MACHINE
_	-23	37540	SHAFT, ASS'Y. CYLINDER STUB	6	6
	-24	60934	SPROCKET, 50 Teeth, No. 50 Chain 1-1/2 in. bore	6	6
	-	COML	(ATTACHING PARTS) SCREW, SET, Sq Hd,, 3/8-16NC x 1	in. 12	12
	- 25	11516	KEY, $1/4 \times 1/4 \times 2$ in.	6	6
1433	-26	19255	WASHER, BEARING LOCKING (ATTACHING PARTS)	12	12
	2	COML	SCREW, MACHINE, Rd Hd., 10-24NC	76	77
			x 3/8 in.	36	72
	27	COML	WASHER, LOCK, 3/16 in.	36	36
	-27	36198	BEARING, BALL No. 99508 NEW DEPAR	TURE 12	12
, add 1		36195	SLEEVE ASSEMBLY, CYLINDER SHAFT	6	6
	-28	18480	BUSHING, BRONZE	6	6
	- 29	36194	SLEEVE, CYLINDER SHAFT	6	6
	- 30	19252	FLANGE, BEARING	6	6
	-30	19232	(ATTACHING PARTS)		
	-	COML	SCREW, CAP, Hex Hd., 5/16-18NC x 1 in.	24	24
		COML	WASHER, LOCK, 5/16 in.	24	72
		COML	NUT, HEX, 5/16-18NC	24	205
		CONB	*		
	-31	19929	BLADE, ROLLER (ATTACHING PARTS)	30	30
-	-	COML	SCREW, CAP, Nylock, Flat Hd., Socket, 1/4-20NC x 5/8 in.	90	90
	-32	17526	SHAFT, ROLLER	6	6
	-33	17519	HUB, ROLLER BLADES	18	18
80	-33	1/519	(ATTACHING PARTS)		
	3 4 0.	COML	SCREW, SET, Hol Hd., 3/8-16NC x 3/8 in.	36	36
			*		1.0
	- 34	16536	BEARING, BALL No. 479206-103 S.K.	F. 12	12
-	-35	16872	FLANGE, BEARING (ATTACHING PARTS)	6	6
	**	COML	SCREW, CAP Hex Hd. 5/16-18NC x 3/4 in.	24	48
	rine .	COML	WASHER, LOCK 5/16 in.	24	72
	2	COML	NUT, HEX 5/16-18NC	24	205
	***	30.12	*		
	-36	17520	FLANGE, BEARING (ATTACHING PARTS)	6	6

PARTS LIST

MOTOR AND DRIVE - ASSEMBLY GROUP "A" CONT'D.

	INDEX NUMBER	PART NUMBER	DESCRIPTION	GROUP "A" QUANTITY REQ'D.	QUANTITY PER MACHINE
		COML	SCREW, CAP, Hex Hd., 5/16-18NC x 3/4 in.	24	48
I.		COM	WASHER, LOCK, 5/16 in.	24	72
P		COML	NUT, HEX, 5/16-18NC	24	205
l	-37	30418	TRUNNION BEARING ASSEMBLY (ATTACHING PARTS)	12	12
200		COML	NUT, HEX, Jam 1/2-13NC	24	24
3	C	20575	WASHER, SPECIAL	12	12
	- 38 - 39	20576	WASHER, SPECIAL	12	12
	-40	33943	GUARD, BELT (ATTACHING PARTS)	1	1
Table Transition		COML	SCREW, MACHINE, Rd. Hd. 1/4-20NC x 1/2 in.	4	
		COML	NUT, HEX, 1/4-29NC	41	

Frame Assembly - Group "B"

PARTS LIST

FRAME - ASSEMBLY GROUP "B"

	INDEX	PART NUMBER		GROUP ''B'' QUANTITY REO'D.	TOTAL QUANTITY PER MACHINE
	NUMBER	MOMPEK	ALL ATE	1	1
	-1	36476	NAMEPLATE (ATTACHING PARTS) SCREW DRIVE, No. 4 x 5/16 in.	2	2
	723	COML	*_	2	2
	- 2 - 3	31627 36627	TRANSFER, TRADE-MARK COVER, CHAIN GUARD (ATTACHING PARTS)	6 12	6 12
13	(1. 10)	COML	NUT, WING, 1/4-20NC	1.2	
Г	-4	60907	GUARD, CHAIN (ATTACHING PARTS)	1	1
In	-5	9124 COML	BOLT, SPECIAL NUT, HEX, 5/16-18NC	6 6	205
	<u> </u>		COVER, AIR CONNECTION	1	1
	-6	19210	(ATTACHING PARTS) SCREW, SHEET METAL, No. 8 x 1/2 in	n. 8	8
	2	COML	*	1	1
	- 7	19209	FLANGE, AIR CONNECTION (ATTACHING PARTS) SCREW, MACHINE, Rd Hd., 1/4-20NC	8	34
	-	COML	\times 1/2 in.	S	185
Г	-	COML	NUT, HEX, 1/4-20NC	1	1
	- 8	60903	PLATE, TOP (ATTACHING PARTS)	4	92
	- 9	9125 COML	BOLT, SPECIAL	4 12	205 62
I	_	COMP	SCREW, MACHINE, Rd Hd., 1/4-2010	12	
	-	COML	x 3/8 in. NUT, HEX, 1/4-20NC	12	185
1			SPOUT, FEED	6	6
	-10	20511 COML	(ATTACHING PARTS) SCREW, MACHINE, Rd Hd., 1/4-20NC	24	25
	-	COME	x 3/4 in. WASHER, LOCK, 1/4 in.	24	24
	7 5	COML	NUT, HEX, 1/4-20NC	24	185 6
400	-11	16179	WASHER, FELT	6 12	12
	-12	31414	DOOR LATCH (ATTACHING PARTS)	24	36
	7 <u>4</u> 0	COML	SCREW, MACH. RD. HD., 8-32 NC x 1/4 in.		

PARTS LIST FRAME - ASSEMBLY GROUP "B" CONT'D.

	INDEX	PART		GROUP "B" QUANTITY	TOTAL QUANTITY PER
			2.		
	-14	35210	LATCH	12	12
	-16	60892	DOOR, CYLINDER INSPECTION	3	3
pro.		COM	(ATTACHING PARTS) NUT, WING, 5/16-18NC	12	24 62
	-	COML	SCREW, MACHINE, Rd Hd., 1/4-2040	6	
per l		COML	x 3/8 in. NUT, HEX, 1/4-20NC	6	185
	(DOOR, CYLINDER INSPECTION	3	3
_	-17	60893	(ATTACHING PARTS)	12	24
	-	COML	NUT, WING, 5/16-18NC SCREW, MACHINE, Rd Hd., 1/4-20NC		62
	-	COML	x 3/8 in. NUT, HEX, 1/4-20NC	6	185
		60904	PLATE, TOP	1	1
	-18	00304	(ATTACHING PARTS)	7	92
	-19 -	9125 COML	BOLT, SPECIAL NUT, HEX, 5/16-18NC	7	205
	-20	60899	EXTENSION, PARTITION, Tailings h	opper 3	3
	-20		(ATTACHING PARTS)	3	62
	-21	17061 COML	BOLT, SPECIAL NUT, HEX 1/4-20NC	3	185 3
	-22	60900	EXTENSION, PARTITION, Tallings '	opper 3	5
	- in the	8	(ATTACHING PARTS) BOLT, SPECIAL	3	62
	-23	17061 COML	NUT, HEX, 1/4-20NC	3	185
	_		PLATE, SIDE	4	4
П	-24	60896	(ATTACHING PARTS)	4	13
	-25	9124	BOLT, SPECIAL	12	92
	-26	9125	BOLT, SPECIAL NUT, HEX, S/16-18NC	16	205
	and the second s	COML	SCREW, MACHINE, Rd Hd., 1/4-20N	C 28	62
	i=1	COML	x 3/8 in. NUT, HEX, 1/4-20NC	28	185
	-	COMP	*		

PARTS LIST

FRAME - ASSEMBLY GROUP "B" CONT'D.

	INDEX	PART		GROUP ''B'' QUANTITY REQ'D.	TOTAL QUANTITY PER MACHINE
ger.	NUMBER	NUMBER		12.	12
	-27	60878	STRIP, SEAL, TAILINGS HOPPER (ATTACHING PARTS) SCREW, MACHINE, Rd Hd., 1/4-20NC	24	34
	4	COML	x 1/2 in. NUT, HEX, 1/4-20NC	24	185
•	i=	COML	*	2	2
100	-28 -29	60895 60894	PLATE, HOPPER BOTTOM PLATE, HOPPER BOTTOM	2	2
		0125	(ATTACHING PARTS) BOLT, SPECIAL	24	92 205
	-30 -	9125 COML	NUT, 5/16-18NC	24	3
p	- 31	60891	PLATE, CENTER DEFLECTOR (ATTACHING PARTS)	3	92
		0125	BOLT, SPECIAL	11	18
	-32	9125	ROLT, SPECIAL	12 23	205
	-33	9126 COML	Hrv C/16_18NL		1
	-	COML	SCREW, MACHINE, Flat Hd., 1/4-20NG	٦ ٦	_
11	5.		x 2 in. NUT, HEX, 1/4-20NC	1	185
	#E	COML	*	1	1
	-34	60909 60910	PLATE, LOWER HOPPER BOTTOM PLATE, LOWER HOPPER BOTTOM	1	1
	- 35	00310	(ATTACHING PARTS)	20	92
	- 36	9125	BOLT, SPECIAL	20	205
	- 30	COML	NUT, HEX, 5/16-18NC		2
	-37	60911	PLATE, CENTER BAFFLE (ATTACHING PARTS)	2	2
			BOLT, SPECIAL	6	92 18
- 100	-38	9125	BOLT, SPECIAL	6	205
1888	-39 -	9126 COML	NUT, HEX, 5/16-18NC	12	
_			PLATE, TAILINGS DIVIDER	2	2 2
	-40 -41	60913 60912	PLATE, TAILINGS DIVIDER (ATTACHING PARTS)	2	
			BOLT, SPECIAL	24	62 185
	-42 -	17061 COML	NUT, HEX, 1/4-20NC	24	1
			DIRECTION TOP Tailings hopper	1	1
	-43	60898	DIRECTON MIDDLE TAILINGS NOPP	er 1	1
	-44	60901	PARTITION, BOTTOM, Tailings hopp	er 1	7
	-45	60915	(ATTACHING PARTS)		60
3	-46	17061 COML	BOLT SPECIAL NUT, HEX 1/4-20NC	18 18	62 185
	-				

PARTS LIST

FRAME - ASSEMBLY GROUP "B" CONT'D.

	INDEX NUMBER	PART NUMBER	DESCRIPTION	GROUP ''B'' QUANTITY REQ'D.	TOTAL QUANTITY PER MACHINE
	-47 -48	35539	WINDOW, PLEXIGLAS	1	1
Γ	- 40	COML	(ATTACHING PARTS) SCREW, MACHINE, Rd Hd., 1/4-20NC x 5/8 in.	4	4
1031	-49	60897	SPOUT, ADAPTER, Tailings discharge	1	1
	_	COME	(ATTACHING PARTS) SCREW, MACHINE, Rd Hd., 1/4-20NC	4	62
		COML	x 3/8 in. NUT, HEX, 1/4-20NC	4	185
	-50	60908	SPOUT, TAILINGS DISCHARGE	1	1
	-50		(ATTACHING PARTS)	6	185
1	_	COML	NUT, HEX, 1/4-20NC	6	62
	(<u>1</u> 2)	COML	SCREW, MACHINE, Rd Hd., 1/4-20NC x 3/8 in. PLATE, DIVIDER	1	1
ı	-51	60914	(ATTACHING PARTS)		
<u> </u>	-52	17061 COML	BOLT, SPECIAL NUT, HEX, 1/4-20MC	8 8	62 185
1			*	1	1
П	-53	17837	PLATE, BOTTOM HOPPER (ATTACHING PARTS)	2	34
	1 - 1	COMIL	SCREW, MACHINE, Rd Hd., 1/4-20NC x 1/2 in.	8	185
	_ 	COML 17061	NUT, HEX, 1/4-20NC BOLT SPECIAL	6	62
1 2	-54	60882	CHANNEL, SIDE	2	2
68	-55	0000	(ATTACHING PARTS)	8	92
I,	-56	9125 COML	BOLT, SPECIAL NUT, HEX, 5/16-18NC	8	205
			_	3	3
	-57	36335	PLATE, GUARD (ATTACHING PARTS)	6	9
	ш	COML	SCREW, MACHINE, Rd Hd., 1/4-20NC x 1/4 in.	_	1,500
-			PLATE, DRIVE END	1	1
40	-58	60922	PLATE, FEED END	1	1
	-59	60923	PLATE, BACK, CHAIN GUARD	1	1
	-60	33967 COML	(ATTACHING PARTS) SCREW, MACHINE, Rd. Hd. No. 10-24N	C 4	81
			x 3/8 in.		

Gravity Flow Feeder - Group "C"

PARTS LIST

GRAVITY FLOW FEEDER - ASSEMBLY GROUP "C"

STYLE NO. ADS1

	INDEX NUMBER	PART NUMBER		GROUP "C" (UANTITY REQ!D.	TOTAL QUANTITY PER MACHINE
_	-	60052	GRAVITY FEED HOPPER ASSEMBLY (ATTACHING PARTS)	1	1
		9125	BOLT, SPECIAL	4	4 6
	-1 -	COML	NUT, HEX, 5/16-18NC	4	G
	- 2	8859	FRAME, WINDOW (ATTACHING PARTS)	1	1
-	-	COML	SCREW, MACHINE, Rd Hd., 5/16-18: x 3/4 in.	NC 2	2
	¥	COML	NUT, HEX, 5/16-18NC	2	6
-	0.00	8860	GLASS, WINDOW	1	1
	-3	19230	KNOB, FEED CONTROL	1	1
1	-5	19231	·CAM, FEED CONTROL (ATTACHING PARTS)	1	Ţ
$ x^2 $		COML	SCREW, MACHINE, Rd Hd., 3/8-16N x 2 in.	C 1	1
		COML	NUT, HEX, Jam, 3/8-16NC	2	2
	-	COME	WASHER, CUT, 3/8 in.	1	1
	- 6	60985	LEVER ASS'Y., FEED CONTROL (ATTACHING PARTS)	1	1
	12	COML	SCREW, SET, Hol Hd., 5/16-18NC x 3/8 in.	2	2
	-7	19202	HOPPER, FEED	1	1
	0 7 0	COML	(ATTACHING PARTS) SCREW, CAP, Hex Hd., 1/4-20NC	4	6
100	-	COML	x 3/8 in. NUT, HEX, 1/4-20NC	4	97
		4	WEIGHT, BALANCE LEVER	2	2
	-8	17053	STUD, BALANCE LEVER	2	2
	-9	15468	NUT, HEX, Jam, 1/2-13NC	4	4
*	-	COML	BRACKET, BALANCE LEVER	2	2
-	-10	16188	(ATTACHING PARTS)		
	-	COML	SCREW, MACHINE, Rd Hd., 1/4-20N	4C 8	8
		COM	x 5/8 in. WASHER, LOCK, 1/4 in.	8	8
	-	COME	NUT, HEX, 1/4-20NC	8	97
1	-	COML	101, NDN, 17 6-2014		4
	-11	1561	COLLAR, SET (ATTACHING PARTS)	1	1

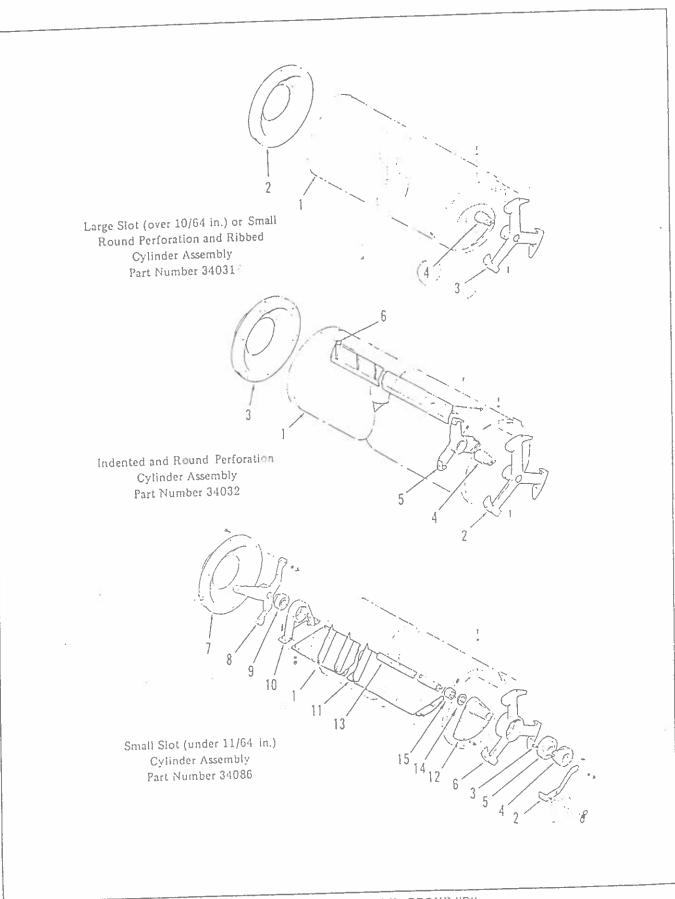
PARTS LIST GRAVITY FLOW FEEDER - ASSEMBLY GROUP "C" CONT'D.

		_	STYLE NO. ADS1		TOTAL
	INDEX	PART NUMBER		GROUP "C" QUANTITY REQ'D.	QUANTITY PER MACHINE
	NUMBER	COML	SCREW, SET, Hol Hd., 3/8-16NC x 3/8 in.	1	1
r ^{ang}		19204	VALVE, FEED HOPPER	1	1
	-12	COML	(ATTACHING PARTS) ' SCREW, MACHINE, Rd Hd., 10-24NG	3	3
m25.1	17	00110	x 1/2 in.	1	1
Γ'	-13	19205	ROD, VALVE HINGE		
	-17	34835	HOPPER, DISTRIBUTOR	1	1
	21				
	- 32	60737	SPOUT, CONNECTING	2	2
Phones.	-	COML	(ATTACHING PARTS) SCREW, MACHINE, Rd Hd., 10-24NC x 3/8 in.	2	22
	(4.7)	60757	SPOUT, CONNECTING	2	2
	-33	COML	(ATTACHING PARTS) SCREW, MACHINE, Rd Hd., 10-24NC	2	22
_	-34	36350	x 3/8 in. SPOUT, FEED	4	4
		17061 COML	(ATTACHING PARTS) BOLT, SPECIAL NUT, HEX, 1/4-20NC	2 2	
				14:	1
	-38	60742	SUPPORT, CONNECTING SPOUT (ATTACHING PARTS)	6	22
	12	COML	SCREW, MACHINE, Rd Hd., 10-24NC x 3/8 in.	V	
			22		

PARTS LIST

GRAVITY FLOW FEEDER - ASSEMBLY GROUP "C" CONT'D. STYLE NO. ADS1

INDEX NUMBER	PART NUMBER	DESCRIPTION	GROUP "C" QUANTITY REQ'D.	TOTAL QUANTITY PER MACHINE
-39 -40	60735 60736	SPOUT, CONNECTING, Lower SPOUT, CONNECTING, Lower	1 1	1



CYLINDER OPTIONS - ASSEMBLY GROUP "D"

PARTS LIST

CYLINDER OPTIONS - ASSEMBLY GROUP "D"

INDEX NUMBER	PART NUMBER	DESCRIPTION	GROUP "D" QUANTITY REQ'D.	TOTAL QUANTITY PER CYLINDER
		CYLINDER ASSEMBLY - PART NUMBER 34086 (SMALL SLOT - UNDER 11/64	in.) m	
-1	SPECIAL	SHELL, CYLINDER (Optional - speci perforation size required). (ATTACHING PARTS)	fy 1	1
8	COML	SCREW, MACHINE, Rd Hd., 1/4-20NC x 1/2 in.	3	3
	COML	SCREW, MACHINE, Rd Hd., 1/4-20NC x 3/8 in.	3	3
	COML	WASHER, LOCK, 1/4 in.	6	11
- 2	60902	ARM, LOCATING (ATTACHING PARTS)	1	1
-3	60886	PIN, LOCATING	1	1
-	COML	NUT, HEX, 1/4-20NC	1	5
-	COML	WASHER, LOCK, 1/4 in.	1	11
2	COML	NUT, WING, 3/8-16NC	1	1
- 4	60884	CLAMP, BAFFLE (ATTACHING PARTS)	1	1
+	COML	SCREW, SET, Hol Hd., half dog pt., 3/8-16NC x 5/8 in.	, 1	1
-5	16227	BEARING	1	1
-6		HEAD, CYLINDER DISCHARGE	1	1
- 7	34085	HEAD, CYLINDER RECEIVING (ATTACHING PARTS)	1	1
(2) ()	COML	SCREW, CAP, Hex Hd., 5/16-18NC x 1-1/4 in.	3	3
_	COML	WASHER, LOCK, 5/16 in.	3	6
-	COML	NUT, HEX, 5/16-18NC	3	6
-8	16209	HUB, RECEIVING HEAD (ATTACHING PARTS)	1	1
-	COML	SCREW, SET, Sq Hd., 1/2-13NC x 5/8 in.	1	1
-	COML	KEY, WOODRUFF, No. 13	1	1
-9	17517	BEARING	1	1

PARTS LIST

CYLINDER OPTIONS - ASSEMBLY GROUP "D" CONT'D.

_MR.1				COOLD HDH	OUANTITY
				GROUP "D" QUANTITY	PER
	INDEX	PART	DECEDIDATION	REQ'D.	CYLINDER
	NUMBER	NUMBER	DESCRIPTION	1.2Q 0.	CIBINDEN
	-10	17516	BRACKET, BEARING (ATTACHING PARTS)	1	1
	-	COML	SCREW, MACHINE, Rd Hd., 1/4-20NC x 3/4 in.	4	4]
		COML	NUT, HEX, 1/4-20NC	4	5
	7	COME	WASHER, LOCK, 1/4 in.	4	11
116104	-	COME	*		
5.000	-11	16212	PLATE, CYLINDER BAFFLE (ATTACHING PARTS)	1	1
-		COML	NUT, HEX, 5/16-18NC	3	6
	-	COML	WASHER, LOCK, 5/16 in.	3	6
		J 4	*		
	-12	60885	SUPPORT ASSEMBLY, CYLINDER BAFFLE	1	1
	-13	60889	SHAFT, CYLINDER	1	1
	-14	3773	WASHER, FELT	1	1
	-15	280	COLLAR, SET	1	1
_	-13	200	(ATTACHING PARTS)		
	-	COML	SCREW, SET, Hol Hd., 3/8-16NC x 3/8 in.	1	1
—			*		

PARTS LIST

CYLINDER OPTIONS - ASSEMBLY GROUP "D" CONT'D.

INDEX NUMBER	PART NUMBER	DESCRIPTION	GROUP "D" QUANTITY REQ'D.	TOTAL QUANTITY PER CYLINDER
		CYLINDER ASSEMBLY - PART NUMBER 34032 (INDENTED AND ROUND PERFORATED)		
-1	SPECIAL	SHELL, CYLINDER (Optional - specify perforation required)	1	1
(7.7)	COML	(ATTACHING PARTS) SCREW, MACHINE, Rd Hd., 1/4-20 x 1/2 in.	6	18
7.0	COML	WASHER, LOCK, 1/4 in.	6	18
- 2	34030	HEAD, CYLINDER DISCHARGE (ATTACHING PARTS)	1	1
7.	COML	SCREW, SET, Sq Hd., 3/8-16 x 5/8 in.	2	4
-3	34029	HEAD, CYLINDER RECEIVING	1	1
-4	60880	SHAFT, CYLINDER STUB	1	
-5	31162	SPIDER, CYLINDER BLADES (ATTACHING PARTS)	1	1
1.2	COML	SCREW, SET, Sq Hd., 3/8-16 x 5/8 ir	1. 2	4
- 6	34033	BLADE, CYLINDER (ATTACHING PARTS)	3	3
	COML	SCREW, MACHINE, Rd Hd., 1/4-20 x 1/2 in.	12	18
	COML ."	WASHER, LOCK, 1/4 in.	12	18
-	60968	PLUG, NYLON (Not shown)	2	2
		CYLINDER ASSEMBLY - PART NUMBER 34031 (LARGE SLOT OVER 10/64) (SMALL ROUND PERFORATION AND RIBBED))	
-1	SPECIAL	SHELL, CYLINDER (Optional - specify perforation size required) (ATTACHING PARTS)	1	1
2	COML	SCREW, MACHINE, Rd Hd., 1/4-20 x 1/2 in.	6	6
-	COML	WASHER, LOCK, 1/4 in.	6	6

PARTS LIST

CYLINDER OPTIONS - ASSEMBLY GROUP "D" CONT'D.

INDEX NUMBER	PART NUMBER	DESCRIPTION	GROUP ''D'' QUANTITY REQ'D.	QUANTITY PER CYLINDER
		CYLINDER ASSEMBLY - PART NUMBER -34031 (LARGE SLOT OVER 10/64) (SMALL ROUND PERFORATION AND RIBB	ED)	
- 2	34028	HEAD, CYLINDER RECEIVING	1	1
-3	34030	HEAD, CYLINDER DISCHARGE (ATTACHING PARTS)	1	1
1	COML	SCREW, SET, Sq Hd., 3/8-16 x 5/8	in. 2	2
-4	60880	SHAFT, CYLINDER STUB	1	1
TO SHOOT	60968	PLUG, NYLON (Not shown)	2	2