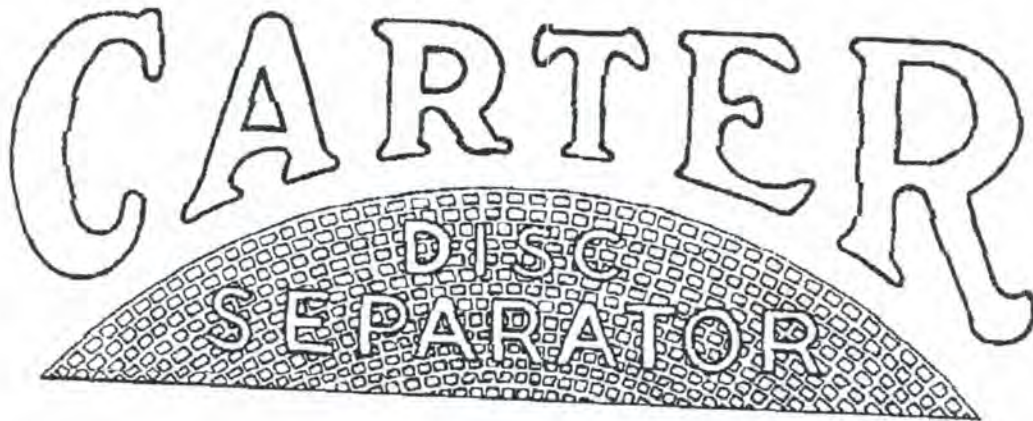


INSTRUCTIONS

FOR THE

15"

Roy



HART-CARTER COMPANY  
MINNEAPOLIS, MINNESOTA, U.S.A.

157

TOTAL P.01

## 15" CARTER DISC WHEAT & SEED SEPARATOR

### INSTALLATION

The 15" Carter Disc Wheat and Seed Separator should follow a Carter Disc Wheat and Oat Separator in the mill wheat cleaning system so that the wheat feeding into this machine is free of any material that is longer than the wheat. This machine will lift the seeds and broken wheat from the wheat. Additional cleaning such as aspirating must be done on other equipment following this machine in the mill wheat cleaning system.

The machine is comparatively light and runs without vibration. Place it directly on the floor or on a suitable foundation, shimming beneath the feet where necessary to make it level.

The efficiency of the machine is governed in a large measure by the speed. The normal speed is 60 R.P.M. on the drive shaft, but may range from 58 to 62 R.P.M. About one-half horse power is required, and a 3" drive belt is sufficient when transmitting power to the standard 18" x 3-1/2" drive pulley.

The grain troughs found between the discs just inside of the front inspection door should be centered between the discs so that they do not rub on the discs as the disc rotor revolves.

### OPERATION

#### Flow of Grain:

The grain to be cleaned is fed through the feed hopper into the machine where it makes contact with the discs. The pockets in the discs lift the seeds from the wheat as the grain is conveyed toward the discharge end of the machine by means of conveyor blades on the spokes of the discs. The seeds are discharged into the hopper running the full length of the machine while the wheat is discharged through the spout at the tail end.

It is important that a body of grain is maintained within the machine for making a good separation. The feed slide should be regulated so that a high and level grain line is established at the back of the machine. The rear inspection door should be opened to check the grain line properly.

If the grain line is too low the capacity of the machine will be decreased and seeds may discharge with the wheat. The tailings gate should be raised to help improve the grain line, the feed may be increased, or some of the conveyor blades should be removed from the spokes of the discs to slow down the movement of grain through the machine.

When the grain line is too high the wheat may be lifted with the seeds. This may mean that the feed to the machine is too heavy, the tailings gate may be set too high, or more conveyor blades should be added to the spokes of the discs if all of the seeds have been lifted before it reaches the tail end of the machine.



## ADJUSTMENTS

There are three adjustments on the machine, namely: the feed control slide, the adjustable tailings gate and the return trap doors.

## Feed Control

The feed to the machine is controlled by the slide in the feed hopper when it is fed from a bin. When feeding from a bin, open the slide until the discs are throwing a good stream. A majority of the discs at the discharge end should be left for cleaning up the wheat tailings. If seeds are being discharged with the wheat, there is a possibility that the machine is being fed over normal capacity.

When operating the machine on a stream, the feed slides should be kept in the wide open position -- it being understood that the machine must have sufficient capacity to handle the stream.

## Tailings Gate

An adjustable tailings gate has been provided at the opening thru which the wheat discharges. This gate may be raised or lowered by loosening the knob found just below the rotor shaft bearing. It may be stated that the gate should be kept in as high a position as possible, always leaving sufficient opening above the gate for the free exit of the wheat.

## Trap Doors

Just inside the inspection door will be found a series of trap doors, which cover a return conveyer. The adjustments of these trap doors provides a means for the operator to return to the feed end of the machine for recleaning the product lifted by the discs at the discharge end -- provided that this product contains a small percentage of wheat.

Adjust the trap doors so that the capacity and quality of work are as required, still keeping the wheat tailings free of seeds. If the tailings contain seeds, too many trap doors may have been left open, allowing too much grain to be returned to the feed end of the machine; or, it may be that the machine is being overfed. This may be overcome by closing some of the trap doors or by adjusting the feed slide until the seeds have been removed from the wheat without impairing the quality of the cleaned product. When raising the trap doors always begin at the discharge end and follow the reverse order when closing them.

A striking peculiarity of disc separation is the fact that when discs run in nearly all seed, as at the head-end of the machine, the pockets will reject small cracked wheat short enough to ledge in the pockets while at the tail-end of the head-end section the pockets will occasionally pick up cracked wheat because there is very little seed left in the mixture to fill the pockets. Because of this peculiar trait, it is necessary to open as many of the trap doors as possible (commencing at the tail-end of machine) and still obtain the required capacity.

The liftings of the tail-end section consists of all of the seeds and a small percentage of the broken wheat and shrunk kernels. Ordinarily all this product is returned to the head-end section, but in case the seeds are abnormally heavy in the mixture, the product of the first two or three discs of the tail-end section can be discharged from the machine by closing down the trap doors at the head-end of the section. These trap doors are placed in the machine for emergency only and should not be closed down unless the recleaner section is overworked or the mixture contains some abnormally large fowl seed which the small pockets of the recleaner section can not pick up.

The head-end or recleaner section operates on the concentrated mixture of seeds, broken wheat and shrunk kernels and throws out all the seeds such as cockle, wild peas, wild buckwheat, etc. The broken wheat and shrunk kernels are pushed through the hole in the partition between head-end and tail-end sections by the conveyor blades in the discs and, although these small kernels may circulate several times from section to section they are eventually tailed over with the large wheat at the end of the machine.

#### SERVICE

When the machine is being operated continually it is advisable to thoroughly clean it out at least once a week. A cleanout door has been provided at the bottom of the machine for this purpose. An occasional inspection of the discharge troughs should be made to see that they have not been forced out of their normal position by some foreign material which may have been fed into the machine with the grain. If something should lodge between the discs, the troughs will bend down out of place without danger of breaking the discs.

All of the ball bearings on this machine were packed with grease and sealed at the factory and should not need attention.

The chain guard should be removed occasionally and fresh oil should be applied to the chain.

#### CHANGING DISCS

To change the discs in this machine proceed as follows:  
Open bottom door and remove all grain from inside of the machine.  
Remove drive pulley and chain housing.  
Find the connecting link in the drive chain. This is the link with straight sides and pins having rounded ends. Turn the rotor until this link is half way between the sprockets, then grasp the chain at that point and bend it away from you. This forces the ends of the pins together and the outside plate can now be removed with the fingers. Next disconnect ends of chain and remove again. Remove chain sprocket from rotor shaft. Remove the front inspection door. This is done by driving out the hinge rod far enough to clear one of the end frames, then lift the door clear of the end frame and pull the other end of the hinge rod out of the other end frame, leaving the hinge rod in the door.

Remove the top plate. Remove the body partition between the recleaner section and the tail-end section. Remove the grain troughs between the discs and use the special socket wrench furnished with the machine to loosen the set screws in the hubs of the discs. See that the discs are free to slide on the shaft. Slide all discs as far as possible toward the head-end.

Block up under the body of the machine about six inches from the tail end high enough to raise the feet of the tail-end frame clear of the floor.

In the space between the discs and the tail-end frame block up under the discs so as to support the discs and shaft when the tail-end bearing is removed.

Loosen the collars that hold the inner race of the ball bearings to the rotor shaft, leaving the bearing and flanges in place.

Remove the two ball bearings with the flanges at the tail end.

Remove the screws through the sheet steel body plates of the machine at the tail-end and remove the tail-end frame.

Slide the discs off the shaft.

To reassemble this machine reverse the order of procedure as outlined above.

When placing the discs on the shaft, be sure they are put on in the proper sequence, and in such a way that the undercut pockets can lift the grain and discharge it into the discharge hopper. Each disc has an arrow along the inner edge of the pocket area to show the proper rotation.

You can find a symbol along the inner row of pockets of each disc which identifies the pocket size in the disc. The discs should be installed in the proper order of the rotor layout specified.

Replace the tail-end frame and bearings. Lock all bearings to the shafts. Replace sprocket and chain.

Space the balance of the discs on the shaft by lining up the center of the discs with the holes for the screws used to fasten the grain troughs. The spokes of the discs should be spaced so as to alternate; that is, the spokes of one disc should be opposite to the spaces between the spokes in the next disc.

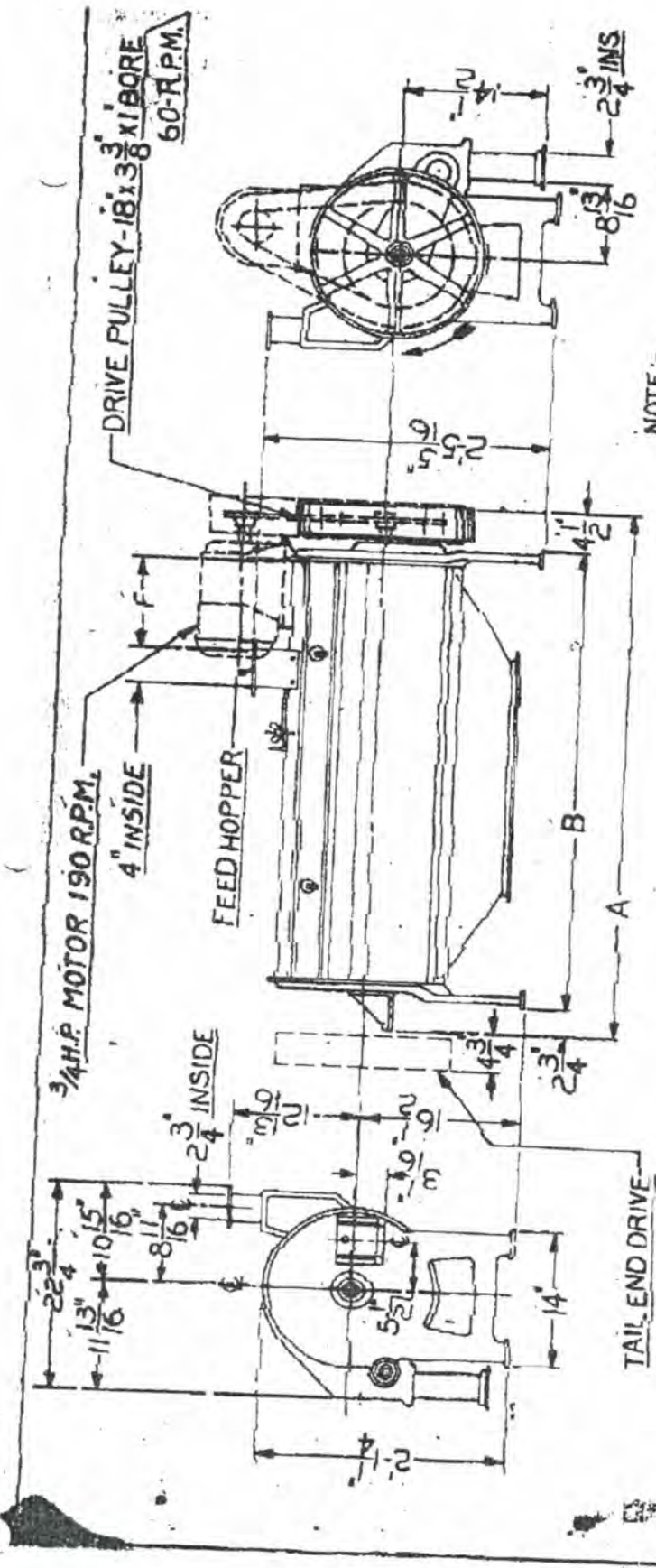
After fastening the discs, replace the body partition, grain troughs, and see that the discs revolve freely between them without touching.

See that all parts are replaced as they were before dismantling and that all screws are set up tight. Turn the machine by hand before putting on any power.

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

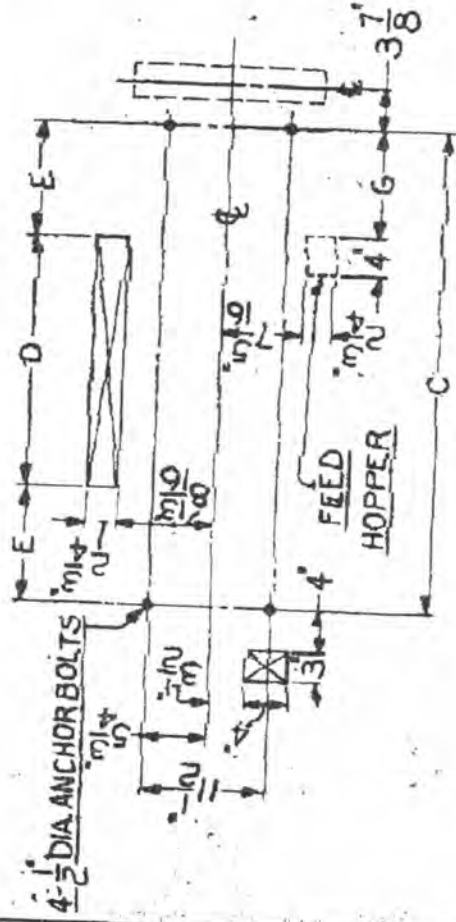
WATERLOO, CANADA  
Climax, Minn.





NOTE:-  
 DRIVE SHAFT-1" DIA. 4 1/8" KEYWAY

| SIZE | A      | B      | C      | D       | E       | F      | G       |
|------|--------|--------|--------|---------|---------|--------|---------|
| 1515 | 43 7/8 | 35 1/2 | 33 1/4 | 14"     | 9 7/8"  | 7 1/8" | 8 3/4"  |
| 1518 | 48 7/8 | 41 1/2 | 39 1/2 | 14"     | 12 1/4" | 7 7/8" | 8 3/4"  |
| 1522 | 56 3/4 | 49 1/2 | 47 1/2 | 24 1/2" | 11 1/4" | 9 1/4" | 10 1/2" |



DATA, INSTALLATION

HART-CARTER CO.

MINNEAPOLIS, MINN.

DRAWN BY V.L.T. 4-24-39. SCALE 3/4"=1'-0"

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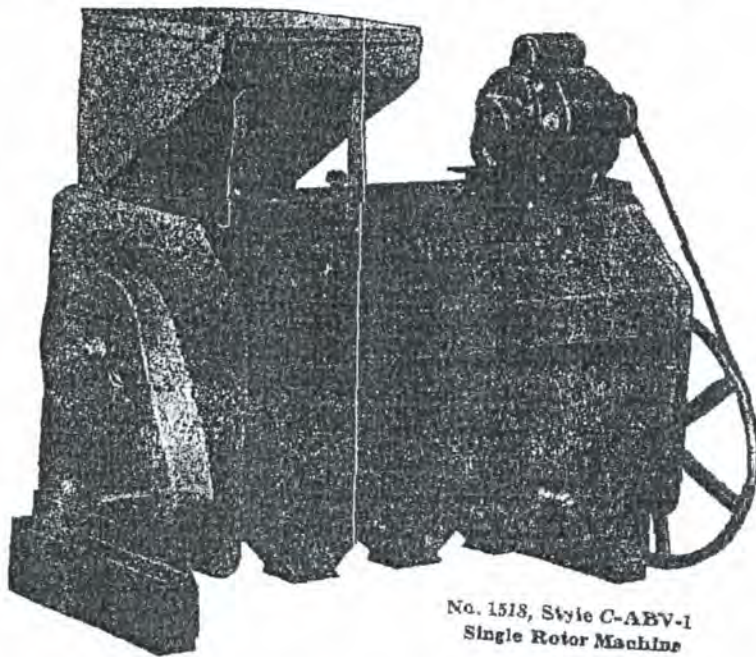
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APPD BY

HC-24456

15" CARTER DISC WHEAT & SEED SEPARATOR

REPAIR PRICE LIST  
for  
**1518 and 1539 Carter  
Disc Separators**



No. 1518, Style C-ABV-1  
Single Rotor Machine

Prices Effective March 1, 1960 F.O.B. Winnipeg

**HART EMERSON SIMON LTD.**  
Box 488, Winnipeg 3, Man.

STOCKS AT  
WINNIPEG — REGINA — SASKATOON — MEDICINE HAT — EDMONTON



| Part No. | Cast No.  | DESCRIPTION                        | Price   |       |
|----------|-----------|------------------------------------|---------|-------|
| 17737    |           | Plate, seal                        | ZW1-ZW2 | 3.35  |
| 18001    |           | Strip, rubber                      | ZW1-ZW2 | .15   |
| 18003    | H.C. 2938 | Flange No. 1103 KILB Fafnir Brg.   | ZW1-ZW2 | 6.25  |
| 18321    |           | Plate top                          | ZW1     | 19.10 |
| 18324    |           | Door inspection                    | ZW1-ZW2 | 0.10  |
| 18325    |           | Plate, upper back                  | ZW1-ZW2 | 4.55  |
| 18326    |           | Plate, back bottom                 | ZW1-ZW2 | 4.05  |
| 18327    |           | Plate, front bottom                | ZW1-ZW2 | 4.55  |
| 18328    |           | Slide, clean out                   | ZW1-ZW2 | 8.05  |
| 18329    |           | Plate, conveyor back side          | ZW1-ZW2 | 2.45  |
| 18330    |           | Door cleanout                      | ZW1-ZW2 | 2.65  |
| 18331    |           | Plate, conveyor front side         | ZW1-ZW2 | 6.65  |
| 18334    |           | Tailings, end plate                | ZW2     | 27.20 |
| 18335    |           | Plate, back                        | ZW1-ZW2 | 6.40  |
| 18337    |           | Plate, lower front                 | ZW1-ZW2 | 6.65  |
| 18340    |           | Feed end plate                     | ZW2     | 25.35 |
| 18341    |           | Plate, back, discharge hopper      | ZW1-ZW2 | 4.55  |
| 18342    |           | Gusset                             | ZW2     | 1.15  |
| 18343    |           | Gusset                             | ZW2     | 1.15  |
| 18344    |           | Pipe, disc, rotor                  | ZW1-ZW2 | 1.75  |
| 18345    |           | Guard chain                        | ZW1-ZW2 | 14.00 |
| 18347    |           | Shaft, rotor                       | ZW1-ZW2 | 7.25  |
| 18348    |           | Shaft conveyor                     | ZW1-ZW2 | 11.55 |
| 18351    | H.C. 2468 | Sprocket, 80T No. 449 Chain 1 1/2" | ZW1-ZW2 | 27.00 |
| 18384    | H.C. 2973 | Lever valve control                | ZW1     | 2.30  |
| 18385    |           | Rod, Valve control                 | ZW1     | .35   |
| 18388    | H.C. 2978 | Bearing valve control shaft        | ZW1     | .50   |
| 18395    | H.C. 2641 | Knob, control                      | ZW1-ZW2 | .60   |
| 19527    |           | Baffle plate                       | ZW2     | 1.50  |
| 19580    |           | Feed hopper                        | ZW2     | 18.85 |
| 19581    |           | Top plate                          | ZW2     | 19.10 |
| 19582    |           | Hopper support                     | ZW2     | .60   |
| 19608    |           | Feed slide                         | ZW2     | 1.40  |
| 19813    |           | Rubber strip                       | ZW2     | .15   |
|          |           | Extension for "H" tailings spout   | ZW1-ZW2 | 4.35  |
|          |           | Motor base                         |         | 4.95  |

**Repair Parts for No. 1518 Carter Disc Separator Style HK1**

| Part No. | Cast No. | DESCRIPTION                                  | Price |
|----------|----------|--|-------|
| 38       |          | Bearing, wood 3/4"                           | .85   |
| 39       |          | Housing for wood bearing 3/4"                | .75   |
| 52       |          | Bearing, Wood 1 1/2"                         | 1.00  |
| 53       |          | Housing for wood bearing 1 1/2"              | .80   |
| 91       | CM315    | Frame, Head end                              | 23.00 |
| 92       | CM314    | Frame, Tail end                              | 24.85 |
| 96       | CM286    | Housing, Chain                               | 2.00  |
| 97       |          | Wrench, socket                               | 1.60  |
| 98       |          | 15" Discs                                    | 3.35  |
| 100      |          | Locks bottom door                            | 7.20  |
| 101      | CM393    | Pulley, drive 12"                            | 20.25 |
| 102      |          | Cover, Body Assy.                            | 6.65  |
| 103      |          | Door Cleanout and lower hopper support assy. | 25.75 |
| 105      |          | Hopper, discharge (four valve)               | 10.00 |
| 106      |          | Hopper, feed                                 | 2.05  |
| 107      |          | Gate, Tailings                               | 1.75  |
| 108      |          | Saddle for hopper                            | 1.65  |
| 109      |          | Slide, feed                                  | .55   |
| 110      |          | Guide for feed slide                         | .40   |
| 111      |          | Strip, cover for comb.                       | 3.90  |
| 113      |          | Shaft counter 3/4"                           | 6.10  |
| 114      |          | Shaft, rotor 1 1/2"                          | 5.35  |
| 115      |          | Sprocket, 36 tooth for rotor shaft           | 3.20  |
| 116      |          | Sprocket, 10 tooth for counter shaft         | 1.75  |
| 117      |          | Chain, drive                                 | 8.95  |
| 282      | CM394    | Pulley, Drive 14"                            | 9.85  |
| 283      | CM317    | Pulley, Drive 16"                            | 9.85  |
| 2840     |          | Catch  | .20   |
|          |          | Motor Base                                   | 8.00  |

**Repair Parts for No. 1539 Carter Disc Separator Style BM2**

| Part No. | Cast No. | DESCRIPTION                       | Price   |
|----------|----------|-----------------------------------|---------|
| 1        | CM540    | Frame head end                    | \$60.65 |
| 2        | CM539    | Frame tail end                    | 57.25   |
| 3        |          | Pan outer feed                    | 4.45    |
| 4        |          | Spout inside feed head end        | 1.70    |
| 5        |          | Spout conveyor discharge head end | 6.65    |
| 6        |          | Spout conveyor discharge tail end | 1.65    |
| 7        |          | Plate side upper rotor back       | 5.05    |
| 8        |          | Cover top                         | 4.55    |
| 9        |          | Plate side lower rotor back       | 4.35    |



**Repair Parts for No. 1518 Carter Disc Separator Style ABV-1**

| Part No. | Cash No.  | DESCRIPTION                                 | Price |
|----------|-----------|---|-------|
| 98       |           | 15" Discs                                   | 1.60  |
| 97       | C.M. 432  | Socket Wrench                               | 1.60  |
| 831      |           | 1 1/4" L.H. Blades for Discs (With Bolts)   | .20   |
| 1116     | C.M. 838  | 50 Tooth Sprocket 1 1/4" Bore for Rotor     | 8.50  |
| 2678     |           | 2 1/4" L.H. Blades for Discs (With Bolts)   | .20   |
| 9124     |           | 1/2" x 2 1/4" Spec. Conn. Rod Bolt          | .10   |
| 9125     |           | 1/2" x 1 1/4" Spec. Conn. Rod Bolt          | .10   |
| 15758    | H.C. 2641 | Feed Slide Knob                             | .60   |
| 16401    |           | 3/4" Bearing No. 1706204 - 012              | 2.80  |
| 17517    |           | 1 1/4" Bearing No. 1706206 - 101            | 3.95  |
| 17879    |           | Tailings Spout                              | 3.40  |
| 17737    |           | Seal Plate                                  | .35   |
| 18003    | H.C. 2938 | Flange for No. 1705205 - 101 - 1 1/4" Brg.  | 5.75  |
| 18378    | H.C. 2972 | Flange for No. 1706204 - 012 - 3/4" Bearing | 4.85  |
| 18395    | H.C. 2641 | Control Knob                                | .60   |
| 19496    |           | Cleanout Slide                              | 4.95  |
| 19497    |           | 74 links 1/2" Pitch Roller Chain            | 2.00  |
| 19498    |           | Filler Plate                                | 2.00  |
| 19499    |           | Tailings Gate Guide                         | .90   |
| 19500    |           | Tailings Gate                               | 1.50  |
| 19501    |           | Discharge Hopper Valve                      | 1.00  |
| 19504    |           | Cover Strip                                 | .80   |
| 19505    |           | 1 1/4" x 42" Rotor Shaft                    | 2.90  |
| 19506    |           | 3/4" x 48" Counter Shaft                    | 2.65  |
| 19508    |           | Inspection Door                             | 4.35  |
| 19510    |           | Front Bottom Plate                          | 4.05  |
| 19511    |           | Back Bottom Plate                           | 4.05  |
| 19512    |           | Top Plate                                   | 6.10  |
| 19513    |           | Deflector Plate                             | 2.65  |
| 19516    |           | Back Plate                                  | 8.70  |
| 19519    |           | Chain Guard                                 | 8.70  |
| 19520    |           | Tail End Plate                              | 23.10 |
| 19521    |           | Feed End Plate                              | 26.60 |
| 19523    |           | 15 Tooth Control Sprocket on Counter shaft  | 5.25  |
| 19580    |           | Feed Hopper                                 | 13.85 |
| 19582    |           | Hopper Support                              | 1.60  |
| 19608    |           | Feed Slide                                  | 3.40  |
| 19812    |           | Discharge Hopper                            | 28.35 |
| 19813    |           | Rubber Strip                                | .15   |
|          |           | Extension for Tailings Spout                | 4.55  |
|          |           | Motor Base                                  | 4.85  |

**Repair Parts for No. 1539 Carter Disc Separator Style ZW1 and ZW2**

| Part No. | Cash No.  | DESCRIPTION  | Model No. | Price |
|----------|-----------|--|-----------|-------|
| 97       | H.C. 432  | Wrench, socket 3/8" S.S.   | ZW1-ZW2   | 1.60  |
| 98       |           | 15" Discs  |           | 1.60  |
| 1678     |           | Callar, set. 7/8" x 2 1/8" x 1/2"                                | ZW1-ZW2   | 1.10  |
| 1853     |           | Chain diamond No. 449, 5/8" P. 3/8" W. 1 1/2" pitches (80" long) | ZW1-ZW2   | 11.00 |
| 14360    |           | Assy. fighting composed of parts 4653 and 14359                  | ZW1-ZW2   | 7.25  |
| 15758    | H.C. 2641 | Feed slide knob  | ZW2       | .60   |
| 16189    | H.C. 2749 | Sprocket 15T No. 449 chain 1 1/4" B                              | ZW1-ZW2   | 5.50  |
| 16177    |           | Stud, bracket  | ZW1-ZW2   | 1.50  |
| 16872    | H.C. 2846 | Flange No. 1103 KILB Fafnir Brg.                                 | ZW1       | 5.75  |
| 17044    | H.C. 2642 | Knob adjusting   | ZW1       | .90   |
| 17517    |           | Bearing No. 1101 KILB Fafnir brg.                                | ZW1-ZW2   | 3.95  |
| 17862    |           | Conveyor hop valve   | ZW2       | 1.00  |
| 17865    |           | Discharge hopper valve   | ZW2       | 1.00  |
| 17874    |           | Spout draw off   | ZW1-ZW2   | 4.95  |
| 17875    |           | Spout, conveyor discharge  | ZW1-ZW2   | 2.25  |
| 17878    | H.C. 2011 | Cover, end   | ZW1-ZW2   | 17.30 |
| 17879    |           | Spout, tailings  | ZW1-ZW2   | 3.40  |
| 17885    |           | Ring, tailings gate  | ZW1-ZW2   | 1.50  |
| 17886    |           | Ring, tailings gate  | ZW1-ZW2   | 1.50  |
| 17887    |           | Upper end plate  | ZW2       | 1.50  |
| 17888    |           | Plate, divider   | ZW1-ZW2   | .75   |
| 17891    |           | Assy. chain tightener bracket composed of parts 17689 & 16177    | ZW1-ZW2   | 6.85  |
| 17692    | H.C. 2218 | Gate, tailings   | ZW1-ZW2   | 1.50  |
| 17695    |           | Base, end plate  | ZW1-ZW2   | 23.35 |
| 17696    |           | Spout, feed lower rotor  | ZW1       | 1.75  |
| 17697    |           | Plate, baffle  | ZW1       | 1.50  |
| 17703    |           | Rod, Valve hinge   | ZW1       | 1.10  |
| 17711    |           | Assy. sprocket composed of parts 17710 and 17712                 | ZW1-ZW2   | 6.65  |
| 17712    |           | Bushing, olive bronze 7/8" I.D.                                  | ZW1-ZW2   | 1.30  |
| 17714    |           | 1 1/2" O.D. 1 1/2" long A01108-16                                | ZW2       | 1.80  |
|          |           | Conveyor box partition   |           |       |

| Part No. | Cast No. | DESCRIPTION                                      | Page  |
|----------|----------|--|-------|
| 10       |          | Plate straight side                              | 2.65  |
| 11       |          | Door rear inspection                             | 4.35  |
| 12       |          | Door cleanout & bottom sheet assembly            | 6.40  |
| 15       |          | Door upper front inspection and side plate assy. | 8.95  |
| 16       |          | Valve wing for conveyor box                      | 1.75  |
| 19       |          | Hopper discharge assy.                           | 20.58 |
| 21       |          | Trunk air  | 15.00 |
| 23       |          | Spout return discharge                           | 4.05  |
| 25       |          | Spout upper rotor tallings                       | 4.55  |
| 26       |          | Gate tallings                                    | 2.25  |
| 32B      |          | Fan assembly complete with hub                   | 17.80 |
| 37       |          | Shaft fan  | 8.40  |
| 38       |          | Bearing wood 3/4"                                | .85   |
| 39       |          | Housing for wood bearing 3/4"                    | .75   |
| 43       | CM669    | Pulley fan drive                                 | 11.00 |
| 45       |          | Pulley wood idler for belt tightener             | 1.80  |
| 51A      |          | Flight assembly                                  | 5.25  |
| 52       |          | Bearing wood 1 1/4"                              | 1.60  |
| 53       |          | Housing for wood bearing 1 1/4"                  | .75   |
| 58       | CM549    | Pulley drive 14 x 3 3/4" x 1 1/8"                | 14.75 |
| 67       | CM432    | Wrench socket                                    | 1.60  |
| 68       |          | 15" Discs  | 9.55  |
| 79       | CM540    | Arm valve on feeder                              | 1.00  |
| 260      |          | Collar set 1 1/8"                                | 1.15  |
| 1099     | CM823    | End feed roll feeder                             | 2.00  |
| 1106     | CM824    | Wheel hand for feed gate                         | 3.80  |
| 1110     | CM828    | Pinions for feed gate                            | 1.15  |
| 1112     | CM827    | Rack for feed gate                               | .95   |
| 1117     | CM617    | Bearing support for feeder                       | 2.25  |
| 1118     |          | Brake hand wheel for feeder                      | .50   |
| 1185     | CM963    | Housing for fan                                  | 19.85 |
| 1301     | CM060    | Bracket belt tightener                           | 1.60  |
| 1202     | CM987    | Bracket chain tightener                          | 4.95  |
| 1208     | CM961    | Hub for fan                                      | 2.80  |
| 1206     | CM942    | Gear bevel for feeder                            | 1.15  |
| 1207     | CM990    | Housing gear feeder                              | 8.80  |
| 1210     | CM980    | Plate side for feeder right hand                 | 15.60 |
| 1211     | CM981    | Plate side for feeder left hand                  | 15.60 |
| 1213     | CM982    | Pulley drive for feed roll                       | 5.25  |
| 1212     | CM962    | Pulley, fan                                      | 3.20  |
| 1214     | CM983    | Pulley driven for feed roll                      | 5.25  |
| 1216     | CM985    | Sprocket chain tightener 13 tooth                | 4.25  |
| 1217     | CM985    | Sprocket drive 13 tooth                          | 4.35  |
| 1218     | CM988    | Sprocket rotor 3/4 tooth                         | 6.40  |
| 1221     |          | Collar for feeder 3/4"                           | 1.00  |
| 1222     |          | Shaft counter for feeder                         | .75   |
| 1224     |          | Shaft lower rotor                                | 5.50  |
| 1225     |          | Shaft pinion for feeder                          | .70   |
| 1226     |          | Shaft upper rotor                                | 5.50  |
| 1228     |          | Comb. for upper rotor                            | 5.70  |
| 1229     |          | Elbow air trunk connection                       | 11.00 |
| 1230     |          | Door cleanout for feeder                         | 1.00  |
| 1231     |          | Gate feed for feeder                             | 2.15  |
| 1232     |          | Hopper feed                                      | 16.75 |
| 1233     |          | Indicator feed gate for feeder                   | .40   |
| 1234     |          | Plate back for feeder                            | 1.65  |
| 1235     |          | Plate back bottom for feeder                     | 1.00  |
| 1236     |          | Plate back top for feeder                        | .75   |
| 1237     |          | Roll for feeder                                  | 4.05  |
| 1238     |          | Screen for feed hopper                           | 6.65  |
| 1239     |          | Sheet inside curved for feeder                   | 1.00  |
| 1240     |          | Sheet lower curved for feeder                    | 1.75  |
| 1241     |          | Sheet upper curved for feeder                    | 2.25  |
| 1242     |          | Belt for feeder drive                            | 1.15  |
| 1243     |          | Belt endless for fan drive                       | 1.75  |
| 1244     |          | Chain drive                                      | 2.85  |
| 1272     | CM989    | Bracket bearing feeder left hand                 | 4.05  |
| 1273     |          | Spout lower rotor tallings                       | 8.30  |
| 1299     | CM984    | Bracket bearing feeder right hand                | 4.05  |
| 3623     |          | Box conveyor                                     | 15.00 |
| 6712     |          | Shaft main drive with conveyor complete          | 12.15 |
| 14381    |          | Shaft conveyor                                   | 6.10  |

**Repair Parts for Old Style Double Rotor Carter Disc Separator Prior to Style BM2**

| Part No. | DESCRIPTION                  | Price   |
|----------|------------------------------|---------|
| 55       | Sprocket double drive        | \$14.00 |
| 64       | Sprocket rotor 4 1/2 tooth   | 9.55    |
| 72       | Chain, drive for upper rotor | 2.25    |
| 73       | Chain drive for lower rotor  | 2.15    |

When ordering repairs be sure to state the style and serial number of the machine.

**PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

AC 41-2M-60



CARTER DAI  
MINNEAPOLIS, MINNESOTA

SEPARATIONS:

SEPARATION - DISC APPLICATIONS

| Discs: RR, DD, SS, AD     |                               |                           |
|---------------------------|-------------------------------|---------------------------|
|                           | Lifts (Short)                 | Rejects (Long)            |
| Scalp <u>All</u> Grasses* | Grass seeds, including brome  | Straw, hay, roughage      |
| Peanuts, etc.             | Peanuts (spanish and runners) | Peanut stems and sticks   |
| Oat & Barley              | Oats and tailless barley      | Straw, long tailed barley |

Note: \*All grasses must be put over a sieve machine before the Carter Disc.

1547 CARTER DISC SET-UPS (Starting at Feed End of Machine)

| Set-Up         | Rotor  | Discs Required                       |
|----------------|--------|--------------------------------------|
| Wheat          | Top    | 4-J 2 1/4", 13-J 1", 5-A 1"          |
|                | Bottom | 7-V 5 1/2, 11-N, 7-K, all 2 1/4"     |
| Durum          | Top    | 5-A 2 1/4", 14-A 1", 3-B 1"          |
|                | Bottom | 8-N, 10-K, 7-C, all 2 1/4"           |
| Special Wheat  | Top    | 6-J 2 1/4", 16-A 1"                  |
|                | Bottom | 13-N, 12-K all 2 1/4"                |
| Barley         | Top    | 6-B 2 1/4", 16-B 1"                  |
|                | Bottom | 7-N, 10-K, 6-J, all 2-1/4"           |
| Special Barley | Top    | 6-B 2 1/4", 16-B 1"                  |
|                | Bottom | 16-K, 5-C, 4-J, all 2 1/4"           |
| Flax (*)       | Top    | 11-N, 11-K, all 2 1/4"               |
|                | Bottom | 5-V3 1/2, 9-V3 3/4, 11-V4 all 2 1/4" |

NOTES:

The combination of pocket sizes used in the set-up of discs above are to be considered as a guide only. When special separations are required, a sample should be submitted for testing in our lab.

When changing from one set-up to another, it is important that the discs be in the proper sequence of pocket sized and also that each disc be mounted so that they will lift material. It is important that the proper arrangement of blades be maintained because the flow or movement of the grain through the machine is determined by these conveyor blades. The discs must be evenly spaced on the rotor shafts.

(\*) Special set-ups of discs can be recommended for flax, etc., if a sample is submitted for testing.



## CARTER DAY DISC POCKET RECORD - STANDARD WEIGHT

| Disc<br>Symb. | Pocket Dimensions-Inches |        |       | Pocket Angles |     |       |       | Drawing<br>Number |
|---------------|--------------------------|--------|-------|---------------|-----|-------|-------|-------------------|
|               | Length                   | Width  | Depth | Bottom        | Top | Inner | Outer |                   |
| A             | .328"                    | .344"  | .156" | 15°           | 40° | 15°   | 15°   | 2027              |
| B             | .328"                    | .406"  | .156" | 15°           | 40° | 15°   | 15°   | 2164              |
| C             | .265"                    | .250"  | .125" | 15°           | 40° | 15°   | 15°   | 3088              |
| J             | .297"                    | .297"  | .141" | 15°           | 42° | 15°   | 15°   | 2180              |
| K             | .235"                    | .205"  | .120" | 17°           | 47° | 22°   | 22°   | 3131              |
| L             | .250"                    | .2275" | .120" | 15°           | 47° | 20°   | 20°   | 2199              |
| M             | .265"                    | .250"  | .122" | 15°           | 47° | 22°   | 22°   | 2207              |
| N             | .218"                    | .187"  | .115" | 17°           | 47° | 22°   | 22°   | 3278              |
| Q             | .200"                    | .170"  | .100" | 17°           | 47° | 20°   | 20°   | 3213              |
| T             | .328"                    | .375"  | .156" | 15°           | 47° | 20°   | 20°   | 2247              |
| X             | .328"                    | .344"  | .156" | 15°           | 45° | 35°   | 25°   | 2202              |
| Y             | .219"                    | .300"  | .100" | 0°            | 47° | 22°   | 22°   | 2373              |
| CC            | .219"                    | .328"  | .120" | 15°           | 47° | 22°   | 22°   | 2778              |
| DD            | .600"                    | .594"  | .317" | 15°           | 35° | 15°   | 15°   | 2527              |
| EE            | .281"                    | .281"  | .148" | 15°           | 42° | 18°   | 18°   | 2528              |
| MM            | .328"                    | .344"  | .187" | 15°           | 40° | 15°   | 15°   | 20192             |
| AC            | .265"                    | .263"  | .125" | 15°           | 45° | 25°   | 25°   | 23700             |
| AD            | .787"                    | .719"  | .442" | 15°           | 35° | 15°   | 15°   | 25803             |
| AE            | .720"                    | .672"  | .406" | 15°           | 35° | 15°   | 15°   | 26156             |
| R 3 1/4       | .133"                    | .133"  | .075" | 5°            | 47° | 20°   | 20°   | 2371              |
| R 3 3/4       | .147"                    | .147"  | .078" | 15°           | 47° | 20°   | 20°   | 20046             |
| R 4           | .156"                    | .156"  | .085" | 15°           | 47° | 20°   | 20°   | 2412              |
| R 4 1/4       | .163"                    | .163"  | .090" | 15°           | 47° | 20°   | 20°   | 20047             |
| R 4 1/2       | .172"                    | .172"  | .094" | 17°           | 47° | 20°   | 20°   | 2370              |
| R 4 3/4       | .187"                    | .187"  | .101" | 15°           | 47° | 20°   | 20°   | 20003             |
| R 5           | .196"                    | .196"  | .107" | 15°           | 47° | 20°   | 20°   | 2413              |
| R 5 1/2       | .216"                    | .216"  | .114" | 15°           | 47° | 20°   | 20°   | 20193             |
| R 6           | .236"                    | .236"  | .118" | 15°           | 47° | 20°   | 20°   | 20788             |
| V 2 1/4       | .098"                    | .098"  | .051" | 5°            | 40° | 17°   | 17°   | 2649              |
| V 2 1/2       | .108"                    | .108"  | .056" | 5°            | 40° | 17°   | 17°   | 20822             |
| V 3           | .118"                    | .118"  | .061" | 5°            | 40° | 17°   | 17°   | 2665              |
| V 3 1/2       | .138"                    | .138"  | .078" | 5°            | 40° | 17°   | 17°   | 2650              |
| V 3 3/4       | .148"                    | .148"  | .084" | 5°            | 40° | 17°   | 17°   | 20769             |
| V 4           | .157"                    | .157"  | .090" | 5°            | 40° | 17°   | 17°   | 2651              |
| V 4 1/2       | .177"                    | .177"  | .102" | 5°            | 40° | 17°   | 17°   | 2652              |
| V 5           | .197"                    | .197"  | .113" | 5°            | 40° | 17°   | 17°   | 2653              |
| V 5 1/2       | .216"                    | .216"  | .126" | 5°            | 40° | 17°   | 17°   | 2654              |
| V 5 3/4       | .226"                    | .226"  | .130" | 5°            | 40° | 17°   | 17°   | 20004             |
| V 6           | .236"                    | .236"  | .138" | 5°            | 40° | 17°   | 17°   | 2655              |
| V 6 1/2       | .256"                    | .256"  | .153" | 5°            | 40° | 17°   | 17°   | 20005             |

CARTER DAY  
MINNEAPOLIS, MINNESOTA

SEPARATIONS:

SEPARATION - DISC APPLICATIONS

| Discs: V2-1/2, V3, V3-1/2, R2-1/2, R3, R3-1/2                 |  |   |
|---|--|---|
|   | Lifts (Short)  | Rejects (Long)                              |
| Clovers   | Alsike, timothy, white dutch, etc.                         | Large buckhorn, canada thistle, cheat, etc. |
| Blue Grass  | Dodder, dock, sorrel, sedge, etc.                          | Blue grass seed                             |
| Hulled Grass, Slavage on Fescue, Orchard Grass, Crested Wheat | Dodder, dock, sorrel, short dirt, broken hulled seed, etc. | Hulled grass seed, buckhorn, oxeye daisy.   |

| Discs: V4, V4-1/2, V5, V6, R4, R4-1/2, R5, R6     |   |   |
|---|---|---|
|   | Lifts (Short)   | Rejects (Long)                            |
| Clovers   | Alfalfa, crimson, lespedeza, etc.                                       | Cheat, sticks, etc.                       |
| Blue Grass  | Blue grass seed   | Straw and longer inert                    |
| Orchard Grass, Fescues, Crested Wheat Grass, etc. | Dodder, dock sorrel, buckhorn, oxeye daisy, etc.                        | Grass seed                                |
| Blue Grass  | Curled dock in cluster, alfalfa spirals and smaller weeds               | Brome grass, hulled brome                 |
| Wheat, Oats, Rye, Barley, Vetches, Wild Peas      | Cockle, buckwheat, watergrass, crossbroken grain, vetches and wild peas | Whole grains free of all shorter material |

| Discs: V6, V6-1/2, J, A, MM    |  |   |
|--------------------------------|--|---|
|                                | Lifts (Short)                                  | Rejects (Long)                            |
| Orchard, Fescue, Crested Wheat | Good grass seed                                | Cheat and straw longer than grass seed    |
| Brome Grass                    | Dock clusters, small weeds, hulled brome, etc. | Brome grass, sticks, straw, doubles, etc. |
| Wheat, Rye                     | Wheat, rye, short barley                       | Oats, big barley, straw joints            |

CARTER DAY  
MINNEAPOLIS, MINNESOTA

SEPARATIONS:

SEPARATION - DISC APPLICATIONS

| Discs: RR, DD, SS, AD     |                               |                           |
|---------------------------|-------------------------------|---------------------------|
|                           | Lifts (Short)                 | Rejects (Long)            |
| Scalp <u>All</u> Grasses* | Grass seeds, including brome  | Straw, hay, roughage      |
| Peanuts, etc.             | Peanuts (spanish and runners) | Peanut stems and sticks   |
| Oat & Barley              | Oats and tailless barley      | Straw, long tailed barley |

Note: \*All grasses must be put over a sieve machine before the Carter Disc.

1547 CARTER DISC SET-UPS (Starting at Feed End of Machine)

| Set-Up         | Rotor  | Discs Required                       |
|----------------|--------|--------------------------------------|
| Wheat          | Top    | 4-J 2 1/4", 13-J 1", 5-A 1"          |
|                | Bottom | 7-V 5 1/2, 11-N, 7-K, all 2 1/4"     |
| Durum          | Top    | 5-A 2 1/4", 14-A 1", 3-B 1"          |
|                | Bottom | 8-N, 10-K, 7-C, all 2 1/4"           |
| Special Wheat  | Top    | 6-J 2 1/4", 16-A 1"                  |
|                | Bottom | 13-N, 12-K all 2 1/4"                |
| Barley         | Top    | 6-B 2 1/4", 16-B 1"                  |
|                | Bottom | 7-N, 10-K, 6-J, all 2-1/4"           |
| Special Barley | Top    | 6-B 2 1/4", 16-B 1"                  |
|                | Bottom | 16-K, 5-C, 4-J, all 2 1/4"           |
| Flax (*)       | Top    | 11-N, 11-K, all 2 1/4"               |
|                | Bottom | 5-V3 1/2, 9-V3 3/4, 11-V4 all 2 1/4" |

NOTES:

The combination of pocket sizes used in the set-up of discs above are to be considered as a guide only. When special separations are required, a sample should be submitted for testing in our lab.

When changing from one set-up to another, it is important that the discs be in the proper sequence of pocket sized and also that each disc be mounted so that they will lift material. It is important that the proper arrangement of blades be maintained because the flow or movement of the grain through the machine is determined by these conveyor blades. The discs must be evenly spaced on the rotor shafts.

(\*) Special set-ups of discs can be recommended for flax, etc., if a sample is submitted for testing.



## CARTER DAY DISC POCKET RECORD - STANDARD WEIGHT

| Disc<br>Symb. | Pocket Dimensions-Inches |        |       | Pocket Angles |     |       |       | Drawing<br>Number |
|---------------|--------------------------|--------|-------|---------------|-----|-------|-------|-------------------|
|               | Length                   | Width  | Depth | Bottom        | Top | Inner | Outer |                   |
| A             | .328"                    | .344"  | .156" | 15°           | 40° | 15°   | 15°   | 2027              |
| B             | .328"                    | .406"  | .156" | 15°           | 40° | 15°   | 15°   | 2164              |
| C             | .265"                    | .250"  | .125" | 15°           | 40° | 15°   | 15°   | 3088              |
| J             | .297"                    | .297"  | .141" | 15°           | 42° | 15°   | 15°   | 2180              |
| K             | .235"                    | .205"  | .120" | 17°           | 47° | 22°   | 22°   | 3131              |
| L             | .250"                    | .2275" | .120" | 15°           | 47° | 20°   | 20°   | 2199              |
| M             | .265"                    | .250"  | .122" | 15°           | 47° | 22°   | 22°   | 2207              |
| N             | .218"                    | .187"  | .115" | 17°           | 47° | 22°   | 22°   | 3278              |
| Q             | .200"                    | .170"  | .100" | 17°           | 47° | 20°   | 20°   | 3213              |
| T             | .328"                    | .375"  | .156" | 15°           | 47° | 20°   | 20°   | 2247              |
| X             | .328"                    | .344"  | .156" | 15°           | 45° | 35°   | 25°   | 2202              |
| Y             | .219"                    | .300"  | .100" | 0°            | 47° | 22°   | 22°   | 2373              |
| CC            | .219"                    | .328"  | .120" | 15°           | 47° | 22°   | 22°   | 2778              |
| DD            | .600"                    | .594"  | .317" | 15°           | 35° | 15°   | 15°   | 2527              |
| EE            | .281"                    | .281"  | .148" | 15°           | 42° | 18°   | 18°   | 2528              |
| MM            | .328"                    | .344"  | .187" | 15°           | 40° | 15°   | 15°   | 20192             |
| AC            | .265"                    | .263"  | .125" | 15°           | 45° | 25°   | 25°   | 23700             |
| AD            | .787"                    | .719"  | .442" | 15°           | 35° | 15°   | 15°   | 25803             |
| AE            | .720"                    | .672"  | .406" | 15°           | 35° | 15°   | 15°   | 26156             |
| R 3 1/4       | .133"                    | .133"  | .075" | 5°            | 47° | 20°   | 20°   | 2371              |
| R 3 3/4       | .147"                    | .147"  | .078" | 15°           | 47° | 20°   | 20°   | 20046             |
| R 4           | .156"                    | .156"  | .085" | 15°           | 47° | 20°   | 20°   | 2412              |
| R 4 1/4       | .163"                    | .163"  | .090" | 15°           | 47° | 20°   | 20°   | 20047             |
| R 4 1/2       | .172"                    | .172"  | .094" | 17°           | 47° | 20°   | 20°   | 2370              |
| R 4 3/4       | .187"                    | .187"  | .101" | 15°           | 47° | 20°   | 20°   | 20003             |
| R 5           | .196"                    | .196"  | .107" | 15°           | 47° | 20°   | 20°   | 2413              |
| R 5 1/2       | .216"                    | .216"  | .114" | 15°           | 47° | 20°   | 20°   | 20193             |
| R 6           | .236"                    | .236"  | .118" | 15°           | 47° | 20°   | 20°   | 20788             |
| V 2 1/4       | .098"                    | .098"  | .051" | 5°            | 40° | 17°   | 17°   | 2649              |
| V 2 1/2       | .108"                    | .108"  | .056" | 5°            | 40° | 17°   | 17°   | 20822             |
| V 3           | .118"                    | .118"  | .061" | 5°            | 40° | 17°   | 17°   | 2665              |
| V 3 1/2       | .138"                    | .138"  | .078" | 5°            | 40° | 17°   | 17°   | 2650              |
| V 3 3/4       | .148"                    | .148"  | .084" | 5°            | 40° | 17°   | 17°   | 20769             |
| V 4           | .157"                    | .157"  | .090" | 5°            | 40° | 17°   | 17°   | 2651              |
| V 4 1/2       | .177"                    | .177"  | .102" | 5°            | 40° | 17°   | 17°   | 2652              |
| V 5           | .197"                    | .197"  | .113" | 5°            | 40° | 17°   | 17°   | 2653              |
| V 5 1/2       | .216"                    | .216"  | .126" | 5°            | 40° | 17°   | 17°   | 2654              |
| V 5 3/4       | .226"                    | .226"  | .130" | 5°            | 40° | 17°   | 17°   | 20004             |
| V 6           | .236"                    | .236"  | .138" | 5°            | 40° | 17°   | 17°   | 2655              |
| V 6 1/2       | .256"                    | .256"  | .153" | 5°            | 40° | 17°   | 17°   | 20005             |











CARTER DAY  
MINNEAPOLIS, MINNESOTA

SEPARATIONS:

SEPARATION - POSITIVE LENGTH SEPARATIONS FOR GRASSES, GRAINS AND SEEDS

| Type of Pocket               | Will Lift   | Will Reject  |
|------------------------------|---|--|
| V2-1/2                       | alsike, timothy, lading white dutch, etc.                           | buckhorn canada thistle, etc.                            |
| V3                           | red clover, small sweet clover, etc.                                | thistle, sticks, etc.                                    |
| V3-1/2<br>V3-3/4             | alfalfa, sweet clover, water grass, etc.                            | hulled quack, large thistle, flax, etc.                  |
| V4                           | water grass, mustard, small cockle, small cracked grain, etc.       | wheat barley, pin oats, large flax, etc.                 |
| V4-1/2<br>V5<br>V5-1/2       | wild buckwheat, large cockle, vetch, cracked grain, etc.            | wheat, oats, barley, rye, etc.                           |
| V5-3/4<br>V6<br>V6-1/2       | flax, extra large cockle, vetch, large wild buckwheat, etc.         | unhulled quack, pin oats, wheat, barley, oats, rye, etc. |
| R3-1/2<br>R3-3/4<br>R4       | water grass, mustard, smart weed, etc.                              | flax, etc.   |
| R4-1/2<br>R5<br>R5-1/2<br>R6 | small seeds, cracked grain, wild buckwheat, etc.                    | wheat, barley, oats, pin oats, rye, etc.                 |
| K<br>L                       | large wild buckwheat, broken wheat, broken barley, etc.             | wheat, barley oats, pin oats, rye, etc.                  |
| M<br>AC<br>EE                | spring wheat, small or broken durum, pearled or broken barley, etc. | durum, large spring wheat, barley oats, pin oats, etc.   |
| J                            | spring wheat, small durum, etc.                                     | oats, wild oats, barley, etc.                            |
| A<br>MM                      | wheat, winter wheat, durum, small barley, hulled oats, rye, etc.    | oats, wild oats, ragged barley, etc.                     |
| B                            | barley  | oats, wild oats, sticks, etc.                            |
| R7<br>R8<br>RR<br>RS         | tailless barley, oats and all shorter grains.                       | sticks, stems, etc.                                      |



CARTER DAY  
MINNEAPOLIS, MINNESOTA

SEPARATIONS:

SEPARATION - DISC APPLICATIONS

| Discs: V2-1/2, V3, V3-1/2, R2-1/2, R3, R3-1/2                 |  |   |
|---|--|---|
|   | Lifts (Short)  | Rejects (Long)                              |
| Clovers   | Alsike, timothy, white dutch, etc.                         | Large buckhorn, canada thistle, cheat, etc. |
| Blue Grass  | Dodder, dock, sorrel, sedge, etc.                          | Blue grass seed                             |
| Hulled Grass, Slavage on Fescue, Orchard Grass, Crested wheat | Dodder, dock, sorrel, short dirt, broken hulled seed, etc. | Hulled grass seed, buckhorn, oxeye daisy.   |

| Discs: V4, V4-1/2, V5, V6, R4, R4-1/2, R5, R6     |   |   |
|---|---|---|
|   | Lifts (Short)   | Rejects (Long)                            |
| Clovers   | Alfalfa, crimson, lespedeza, etc.                                       | Cheat, sticks, etc.                       |
| Blue Grass  | Blue grass seed   | Straw and longer inert                    |
| Orchard Grass, Fescues, Crested Wheat Grass, etc. | Dodder, dock sorrel, buckhorn, oxeye daisy, etc.                        | Grass seed                                |
| Blue Grass  | Curled dock in cluster, alfalfa spirals and smaller weeds               | Brome grass, hulled brome                 |
| Wheat, Oats, Rye, Barley, Vetches, Wild Peas      | Cockle, buckwheat, watergrass, crossbroken grain, vetches and wild peas | Whole grains free of all shorter material |

| Discs: V6, V6-1/2, J, A, MM    |  |   |
|--------------------------------|--|---|
|                                | Lifts (Short)                                  | Rejects (Long)                            |
| Orchard, Fescue, Crested Wheat | Good grass seed                                | Cheat and straw longer than grass seed    |
| Brome Grass                    | Dock clusters, small weeds, hulled brome, etc. | Brome grass, sticks, straw, doubles, etc. |
| Wheat, Rye                     | Wheat, rye, short barley                       | Oats, big barley, straw joints            |