

# **OWNER'S MANUAL**



## **Hi Cap 54 Grain Cleaner**

**DAVID MANUFACTURING CO.**

1600 12th Street N.E., Mason City, Iowa 50401 641-424-7010

# SAFETY INFORMATION

## PLEASE READ



**WATCH FOR THIS SYMBOL! IT POINTS OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS, “ATTENTION - BECOME ALERT! YOUR SAFETY IS INVOLVED!”**



It is recommended that you review the entire contents of this manual, paying particular attention to items preceded by this symbol. FAILURE TO HEED THESE INSTRUCTIONS CAN RESULT IN PERSONAL INJURY!

### OPERATOR QUALIFICATIONS



Operation of this farmstead equipment shall be limited to competent and experienced persons. In addition, anyone who will operate or work around power equipment must use good common sense. In order to be qualified, he or she must also know and meet all other requirements, such as:

- 1) Some regulations specify that no one under the age of 16 may operate power machinery. This includes farmstead equipment. It is your responsibility to know what these regulations are in your own area or situation.
- 2) Current OSHA regulations state in part: “At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved.” \*
- 3) Unqualified persons are to stay out of the work area. The “Work Area” is defined as any area where this equipment is installed.
- 4) A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

\* Federal Occupational Safety & Health Standards for Agriculture Subpart D, Section 1928.57 (a)(6).



# CAUTION



## BE A SAFE OPERATOR

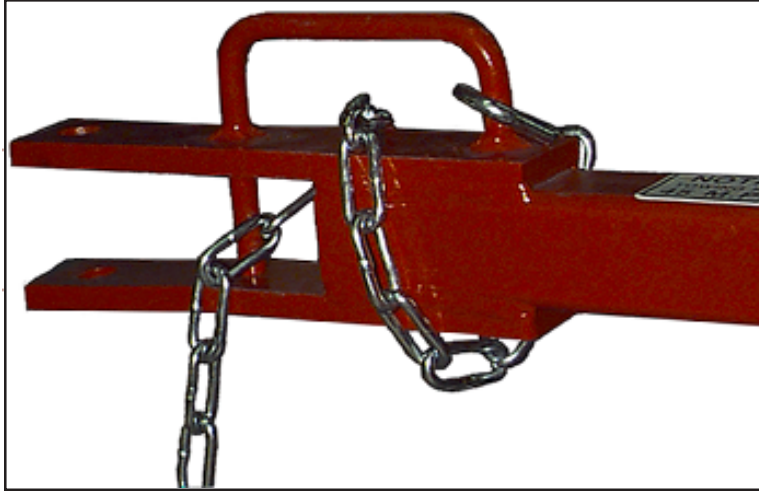
- 1) Read and understand the Owner's Manual.
- 2) Keep all safety shields in place.
- 3) Do not wear loose-fitting clothing while working with equipment in operation.
- 4) Keep hands and feet away from moving parts. Be sure all people are clear of the equipment before start-up.
- 5) Disconnect all electrical power before servicing, adjusting, or lubricating the equipment.
- 6) All electrical hook-ups should be in accordance to the National Electrical Code.
- 7) Ground all electrical equipment.
- 8) Towing speed for your Hi-Cap Cleaner should not exceed 45 miles per hour. A tow chain should be used when on a public roadway.
- 9) Only knowledgeable and trained personnel should operate this equipment.

**FAILURE TO FOLLOW THESE INSTRUCTIONS  
MAY RESULT IN PERSONAL INJURY OR  
PROPERTY DAMAGE.**

## SAFETY TOW CHAIN FOR 44 & 54 CLEANERS

P/N: 2051071

Two chain assemblies are provided to be used as safety chains whenever Models 44 & 54 Hi-Cap cleaners are towed. These pictures show the proper attachment of the chains to the cleaner tongue. Each chain should be wrapped through and around the tongue handle before being hooked to the rear of the handle. The other ends of the chains should be hooked to the towing vehicle with enough slack to provide clearance when turning.



## THE DECALS SHOWN ON THIS PAGE MUST BE DISPLAYED AS SHOWN

### REPLACEMENTS ARE AVAILABLE UPON REQUEST

Write to: David Manufacturing Co., 1600 12th Street NE  
Mason City, Iowa 50401

- Please note:
- 1) The decals on the page are not actual size
  - 2) Keep decals wiped clean at all times.
  - 3) Decals must be replaced if they are destroyed, missing, painted over, or can no longer be read.



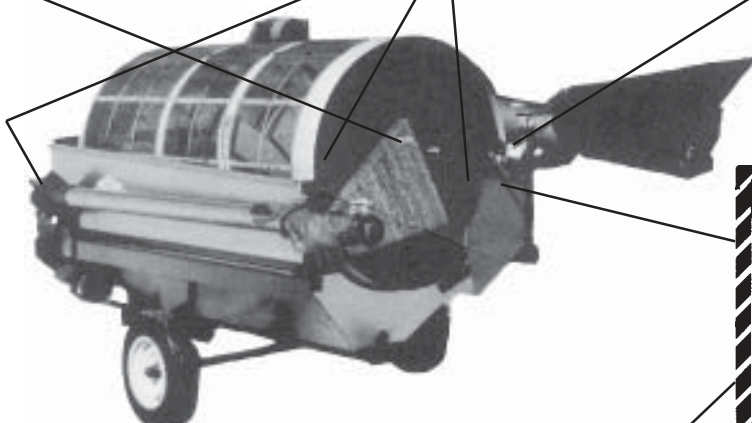
104L0014



202L0311



206L0007



205L0004



405L004



205L0011

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**DAVID MANUFACTURING CO.**

1600 12th Street NE  
MASON CITY, IOWA 50401

# INTRODUCTION

Congratulations! You made a very wise decision in purchasing a Model 54 Hi-Cap Grain Cleaner. With its counter-rotating drums, it will remove more trash and “fines” per bushel than other cleaner in its class. The Hi-Cap offers a wide range of screen sizes to take care of all your screening needs. With its dual screening action, it not only removes “fines”, chaff, etc., but also the large trash such as cob particles, straw and stalks. If properly adjusted and maintained, your Model 54 Hi-Cap Grain Cleaner investment will pay off for years to come.

## **SERVICE**

To assure maximum belt life, the proper tension must be maintained. Check the belts frequently during the operation of the Model 54 Hi-Cap Cleaner. If there is any accumulated trash in the pulley grooves, it should be removed.

## **OPERATION**

The outside cleaning drum should turn approximately 21 revolutions per minute, and rotate clockwise, while the inside drum turns counter clockwise when viewed from the feed-in end. The cleaner should be run until empty before stopping. It is not advisable to leave grain in the cleaner or start the cleaner with a load of grain in it.

### THE ADJUSTABLE JACK-STAND PROVIDES TWO FUNCTIONS:

- 1) It enables you to hook the Model 54 to your prime mover very easily, and
- 2) it also serves as a leveling jack when the Hi-Cap is in working position. A small level on the front main frame is standard equipment. It allows you to set your Hi-Cap Grain Cleaner at its proper operating position regardless of terrain conditions.

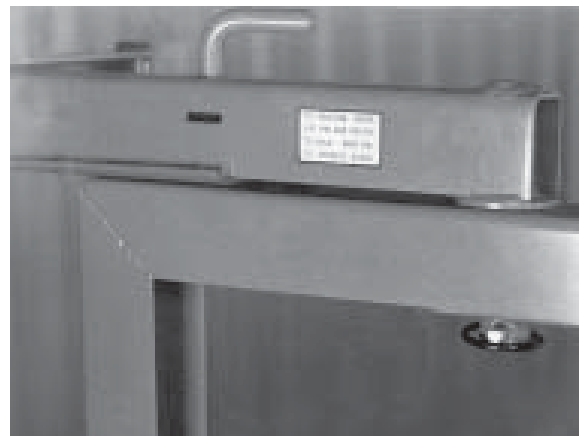
230-volt single-phase or three-phase power is required to operate your Model 54 Hi-Cap Cleaner. To avoid possible bodily injury or electrical shock, the customer must provide fuse disconnect or equivalent grounded AC power.

Hydraulic Drive is also available for your Model 54 Hi-Cap Grain Cleaner.

When lifting 5” trash auger into operating position, a screwdriver may be needed to assist in aligning the two sections of auger. Rotation of one section may be required, should drive pins coincide.

## **DROP PIN**

The feed-in auger swing arm is designed to hold the 10” auger from swinging while in transport position. To swing into operating position, simply lift drop pin and rotate a quarter turn. This will lock the pin up for easy movement. Once the auger is in operating position, the pin can be turned and lowered so that the feed-in auger will be kept in operating position.



## ***SCREENS***

A variety of screens can be obtained to fit your needs. See Page 50.

If screens are not properly placed on the cleaner, grain can get behind the lap and cause problems. The lap should also be over the tumbling bars. See Photo 39.

## ***TIRE PRESSURE***

20 PSI will give your tires maximum tire life and yet provide flotation for your Hi-Cap while being towed at highway speeds.

## ***TOWING SPEED***

Towing speed should not exceed 45 miles per hour. When on a public road, use a safety chain.

## ***OPTIONAL EQUIPMENT***

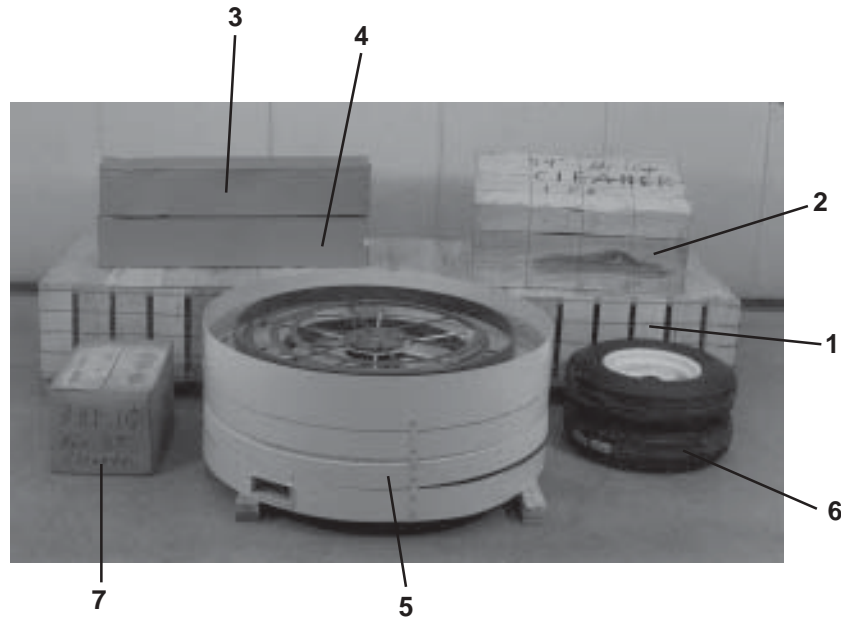
- 10" x 12' auger with hopper and slide gate
- 5 HP auger motor
- Screens to match your operation
- 3-phase electric power
- Hydraulic drive



# MODEL 54 HI-CAP GRAIN CLEANER

## ASSEMBLY INSTRUCTIONS

### TRANSPORT MODEL



### COMPONENT PARTS AS SHIPPED MODEL 54 GRAIN CLEANER

PART #	0005 #REQ	0032 #REQ	0010 #REQ	DESCRIPTION
1. 206N0011	1	1	1	SHIPPING CRATE, (54), (CHART HC-12)
2. 206N0012	1	-	-	ACCESS. BOX(54), SINGLE PHASE(CHART HC-10)
206N0013	-	1	-	ACCESS. BOX(54), THREE PHASE (CHART HC-10)
206N0026	-	-	1	ACCESS. BOX(54), HYDRAULIC, (CHART HC-10)
3. 206N0014	1	1	1	SCREEN BOX, OUTSIDE,(54)(CHART HC-18)
4. 206N0015	1	1	1	SCREEN BOX, INSIDE,(54)(CHART HC-19)
5. 206A0055-D	1	1	1	DRUM BUNDLE ASSEMBLY (54)
6. 206N0041	2	2	2	TIRE MOUNTED ON WHEEL, NEW15",4BOLT(HC-17)
7. 206E0010-C	1	-	-	3 HP/SINGLE PHASE MOTOR W/ PULLEYS MOUNTED
206E0016-C	-	1	-	3 HP/THREE PHASE MOTOR W/ PULLEYS MOUNTED
8. 206N0023 (not shown)	-	-	1	AUGER BOX, 10" HYD. (CHART HC-7)
9. 206N0040 (not shown)	-	-	1	AUGER BUNDLE, (10" x 12") (HC-6)

**PROPER ASSEMBLY ASSURES BETTER OPERATION**

- Step 1. Bolt axle frame supports to main axle assembly, using four 3/8" x 1" hex bolts, lock washers and hex nuts. See Photo 1.



Photo 1



Photo 2

- Step 2. Turn axle over on level floor as shown in Photo 2. Tighten bolts.



Photo 3

- Step 3. Bolt wheels to hubs, using eight 1/2" x 3/4" hub bolts. **TIGHTEN SECURELY.** See Photo 3.



Photo 4

- Step 4. Turn axle assembly with frame supports upright and bolt side channels to frame support, using four 3/8" x 1" hex bolts, lock washers and hex nuts. A weld nut has been provided on the base of the side frame channel that set on top of the axle frame support. Use two 3/8" x 1" hex bolts, and lock washers in conjunction with weld nut. **NOTE: RIGHT AND LEFT SIDE CHANNELS.** See Photos 4 and 5.



Photo 5

Step 5.

When bolting the front frame assembly to side channels, BE SURE FRAME ENDS ARE EQUAL HEIGHT ON BOTH SIDES. Secure with eight 3/8" x 1" hex bolts, lock washers, and hex nuts. Leave bolts loose.

Step 6.

Bolt rear frame assembly to side channels, using four 3/8" x 1" hex head bolts, lock washers and hex nuts. See Photo 6. Bolts are to remain loose at this point.



Photo 6

Step 7.

Level and square main frame assembly and tighten loose bolts from Steps 5 and 6. See Photo 7.

Step 8.

Bolt front tongue and trash pan bottom assembly into position by placing pan portion on axle and securing, using two 3/8" x 1" carriage bolts, SAE flat washers, lock washers and hex nuts. BOLTS MUST REMAIN LOOSE AT THIS TIME. See Photo 8.



Photo 7



Photo 8

- Step 9. Bolt front brace extensions to front frame assembly and to trash pan bottom, using six 3/8" x 5" hex bolts, lock washers and nuts. See Photos 9 and 10. **SECURE ALL LOOSE BOLTS FROM STEPS 8 AND 9.**

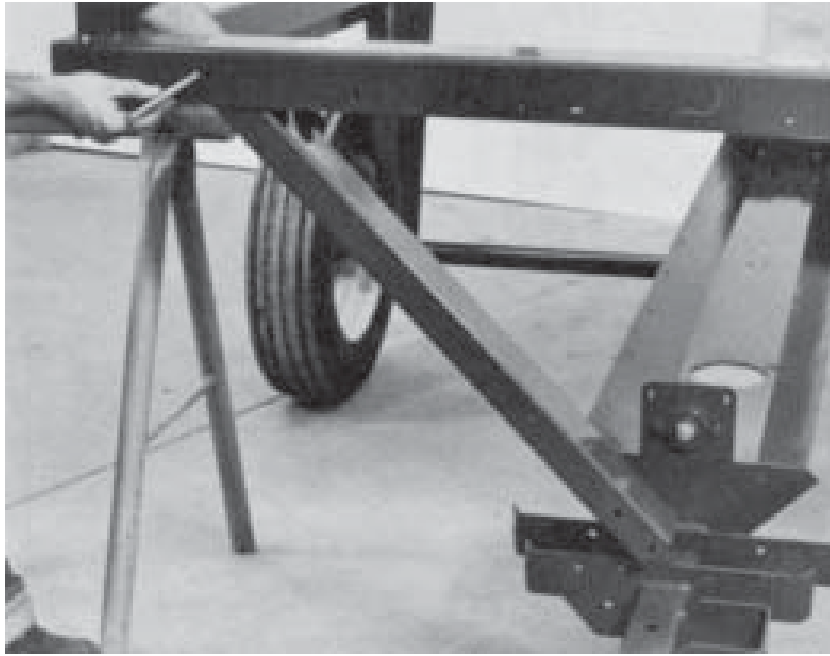


Photo 9

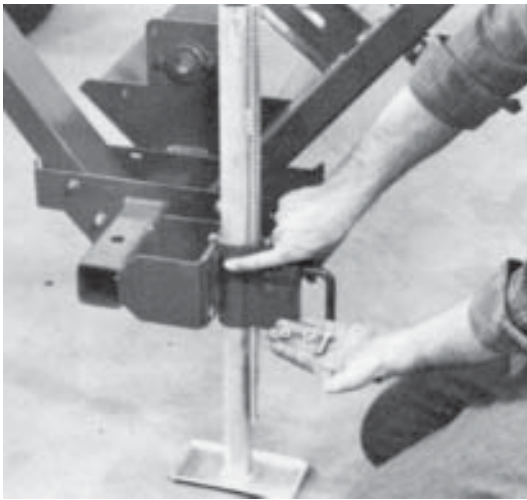


Photo 10

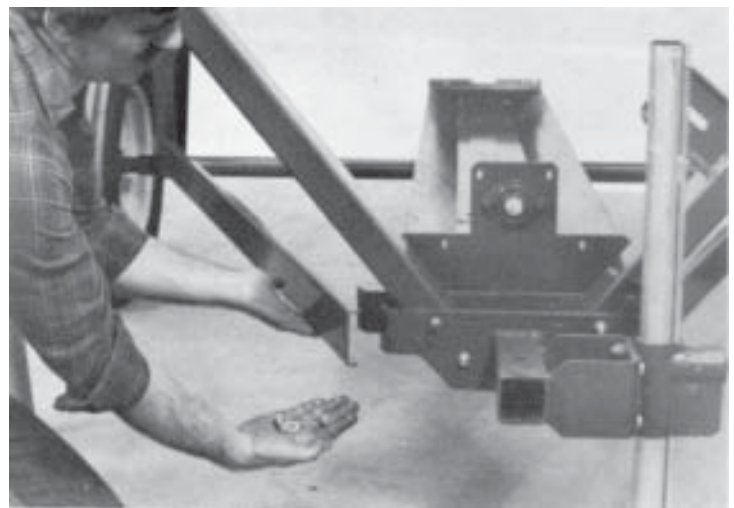


Photo 11

- Step 10. Bolt the jack assembly to the tongue assembly, using four 3/8" x 1" hex bolts, lock washers and hex nuts. See Photo 10.

Next, bolt lower frame braces to axle assembly frame supports and front tongue trash pan bottom, using six 3/8" x 1" hex bolts, 3/8" SAE flat washers, lock washers, and hex nuts. BE SURE side channels are even and square. See Photo 11.

- Step 11. Trash pan assembly consists of a left and right side panel and two ends. Start by positioning side panel as shown in Photo 12.  
**NOTE: STRAIGHT END OF PANEL TOWARD FRONT.**  
Secure to cleaner side channel. Secure to trash pan bottom with 1/4" x 5/8" hex flange screws and hex flange lock nuts. **DO NOT TIGHTEN BOLTS OR PUT BOLTS IN FIRST AND LAST HOLE.**

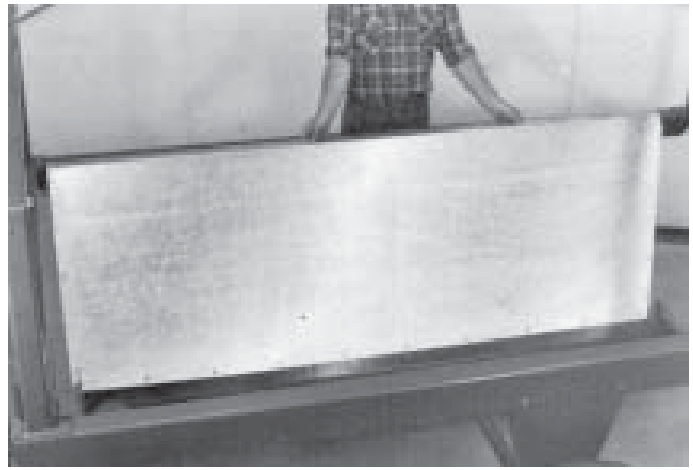


Photo 12

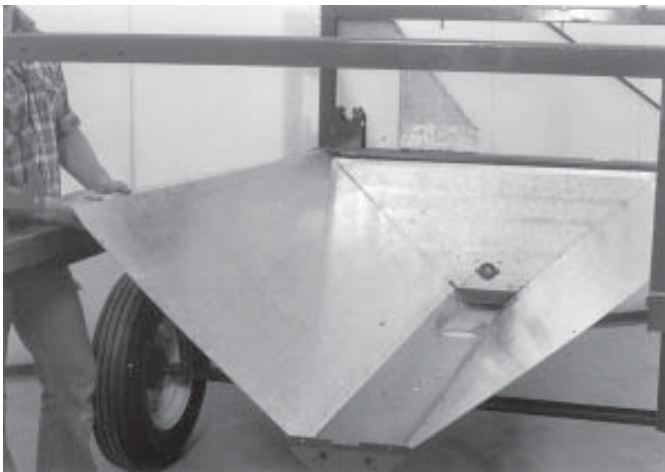


Photo 13

- Step 12. Bolt front end of trash pan into position by placing end panel lip under side panel, using fourteen 1/4" x 5/8" hex flange screws and hex flange lock nuts. See Photo 13.

### **DO NOT TIGHTEN BOLTS**

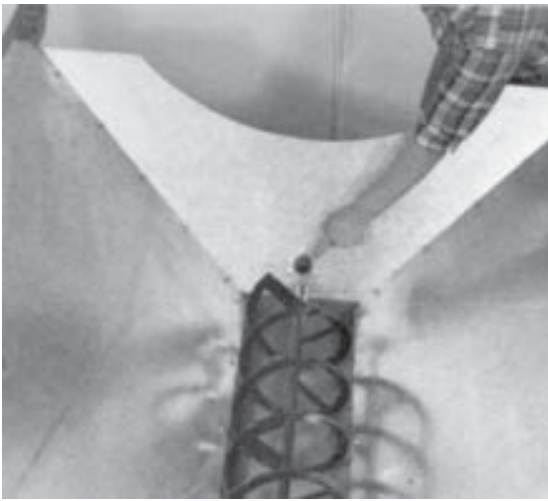
- Step 13. Continue by bolting other half of trash pan on to side rail and trash pan bottom. Be sure side panel lays on top of front panel lip. Use seven 1/4" x 3/4" hex bolts, flat washers, lock washers and hex nuts, and ten 1/4" x 5/8" hex flange screws and hex flange lock nuts. **OMIT BOTTOM BOLT AT THE REAR.** Do not tighten bolts at this time.



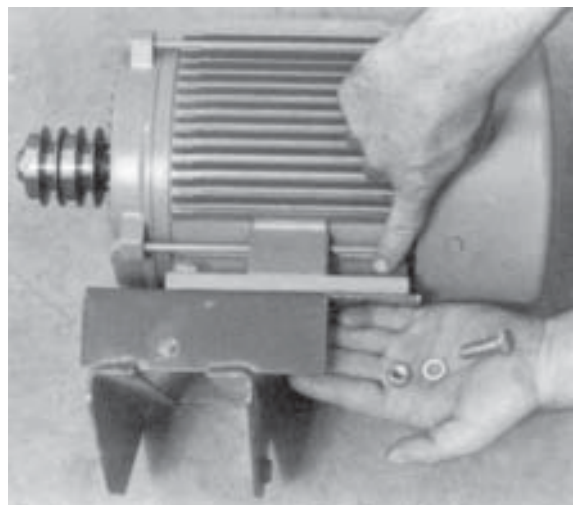
Photo 14

- Step 14. Install 10" trash pan auger (ribbon flighting) with key-way end of shaft installed into front trash pan bearing. See Photo 14.
- Step 15. Bolt rear panel of trash pan into position, using twelve 1/4" x 5/8" hex flange screws, hex flange lock nuts. **TIGHTEN ALL TRASH PAN BOLTS AT THIS TIME.**



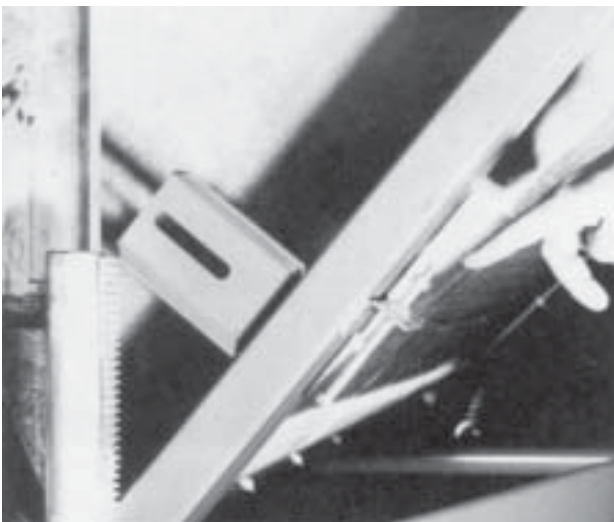


**Photo 15**



**Photo 16**

- Step 16. Slide 10" ribbon auger into rear trash pan bearing. See Photo 15.
- Step 17. Bolt three-horsepower motor to motor mount bracket using four  $\frac{3}{8}$ " x  $1\frac{1}{4}$ " hex bolts, lock washers and hex nuts. See Photo 16. For units equipped with hydraulic drive, see separate instructions on page 31.
- Step 18. Thread one  $\frac{3}{8}$ " x  $5\frac{1}{2}$ " full-thread hex bolt into belt tightener angle about  $4\frac{1}{2}$ ". Then thread one  $\frac{3}{8}$ " hex lock nut to the full-thread bolt approximately  $\frac{3}{4}$ ". Continue by placing motor and motor mount channel to front brace. Secure with one  $\frac{3}{8}$ " x 5" hex bolt. Do not tighten 5" bolt at this time. Slide motor mount down front brace to the tightener bolt. Finish by putting  $\frac{3}{8}$ " lock nut to tightener bolt. See Photos 17 and 18.



**Photo 17**



**Photo 18**

- Step 19. To install the main drive shaft, remove six  $\frac{5}{16}$ " x  $\frac{3}{4}$ " carriage bolts which hold the bearing flanges together. Place shaft into "U" bearing support brackets with single pulley to the rear. Using two  $\frac{5}{16}$ " x  $\frac{3}{4}$ " carriage bolts, lock washers and hex nuts, bolt rear bearing so that the flanges are outside of the bearing support. See Photo 19.

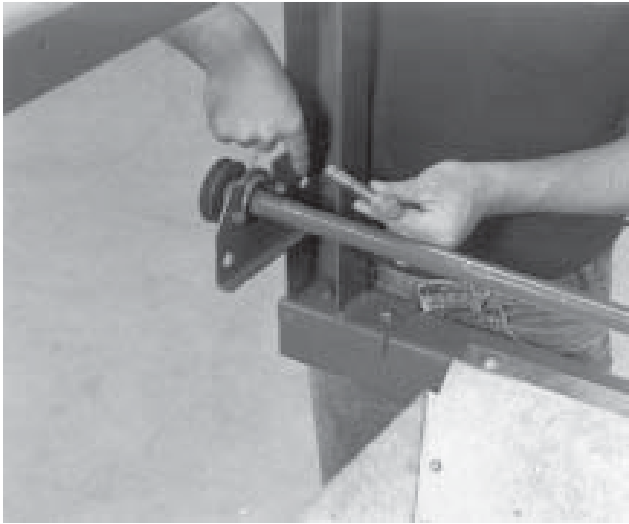


Photo 19

Step 20.

Lift front end of drive shaft up from brackets and place three A-136 drum drive V-belts over shaft. Then place two trash pan auger drive belts (A-91) over the two-groove pulley on the main drive shaft located between the bearings. Loosen the locking collars holding the two front bearings. Then bolt the bearing flanges outside of the support brackets using four 5/16" x 3/4" carriage bolts, lock washers and hex nuts. Finish by locking the bearing collars in the direction of the shaft rotation. Rotation would be clockwise when viewed from the front. See Photos 20 and 21.



Photo 20

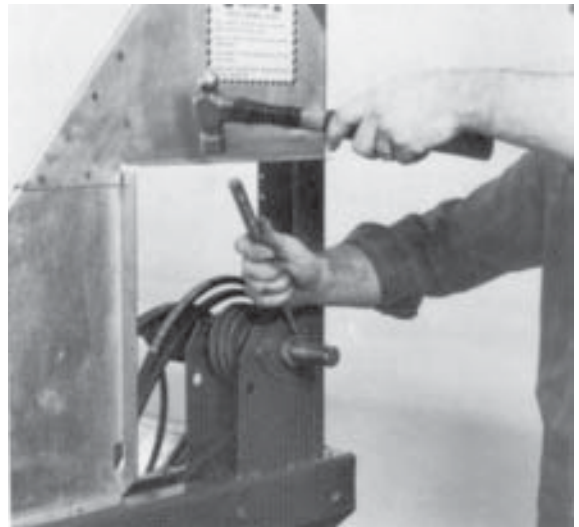


Photo 21

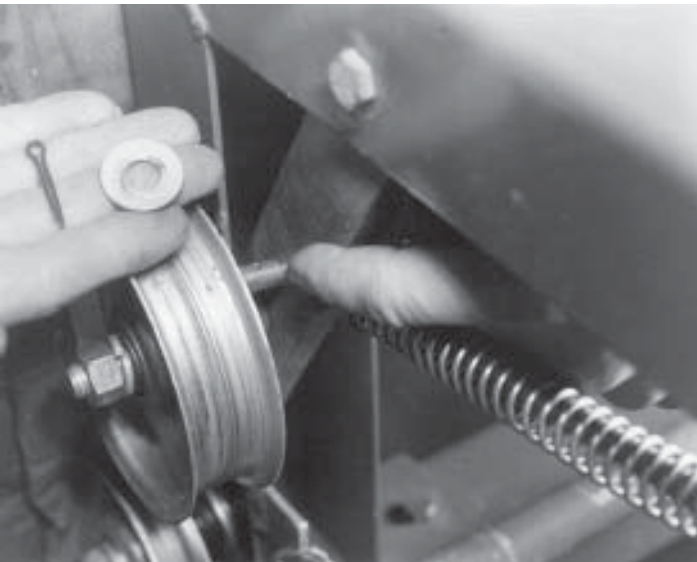


Photo 22

Step 21.

Install drum drive belt idler assembly using one 5/8" SAE flat washer and one 5/32" x 1" cotter pin. Attach two extension springs to the idler arm. See Photo 22.

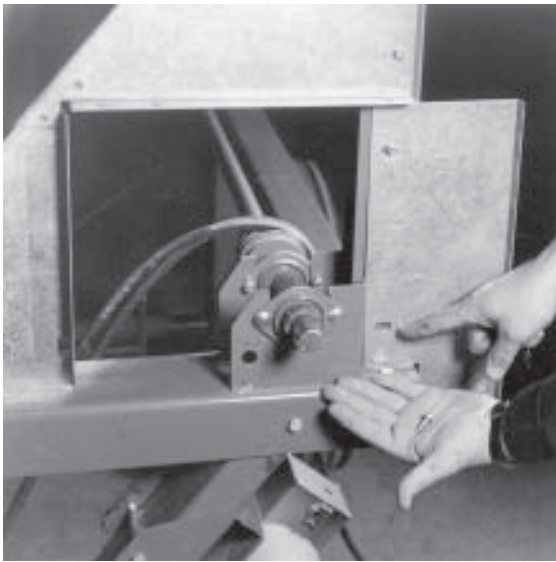


Photo 23

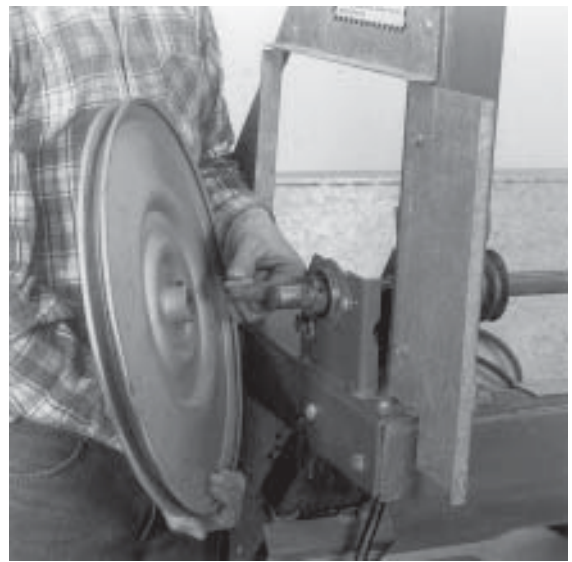


Photo 24

Step 22. Fasten motor belt shield back panel, using two 1/4" x 3/4" self-tapping screws. Have the flange facing toward front. Slotted holes are provided in case adjustment of the panel is necessary when the front drive belt shield is installed. See Photo 23.

Step 23. Install 16" double-groove front drive pulley using 1/4" x 2-1/4" square key. Place pulley on the shaft with hub out. Shaft must be brought through pulley approximately 1/8" to be in proper position. Check alignment with motor pulley. Securely tighten set screws. See Photo 24.



Photo 25

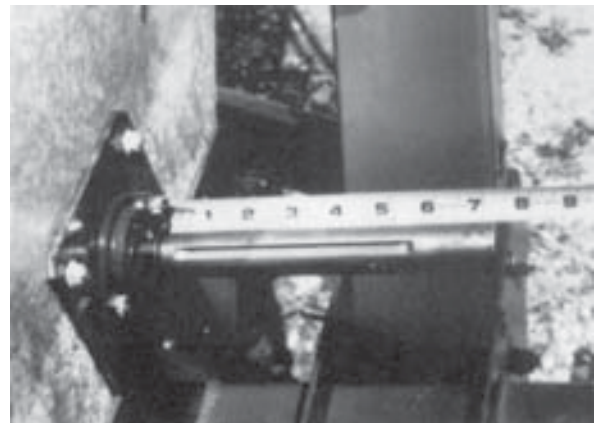


Photo 26

Step 24. Install two A-66 drive belts between motor and 16" pulley, and adjust tension to the point that the belt will have approximately 3/8" deflection. See Photo 25. BE SURE MOTOR PULLEY AND 16" PULLEY ARE PROPERLY ALIGNED. TIGHTEN 3/8" X 5" BOLT HOLDING MOTOR MOUNT.

Step 25. Place 1" locking collar on to 10" ribbon auger shaft. Pull shaft through bearing until 7-1/4" of shaft is protruding past the lock collar in direction auger turns (clockwise). See Photo 26.



- Step 26. BOLT, BUT DO NOT TIGHTEN, the adjusting plate with two 5/16" x 1" hex bolts, 5/16" flat washers, lock washer and hex nut. Position the lower bolt on the opposite side of the 5" trash auger.
- Step 27. Place the 28 tooth sprocket on the trash pan auger shaft using 1/4" x 1-1/4" square key. Position sprocket, hub outward, so there is 2-3/8" distance from the front mounting plate to the center of the sprocket teeth.
- Step 28. Place 8" cast two-groove pulley on to trash pan auger shaft, using 1/4" x 2" square key. Position pulley 4-5/8" from the front of the trash pan panel to the center of the first groove from panel. Securely tighten set screws. Place the two A-91 belts, installed in Step 20, over the trash pan auger shaft. See Photos 27 & 28.

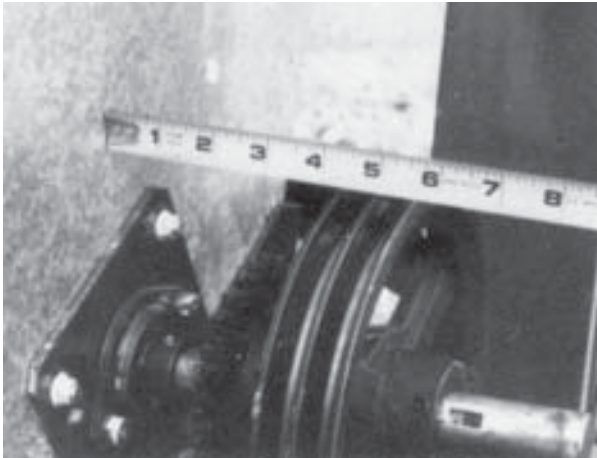


Photo 27

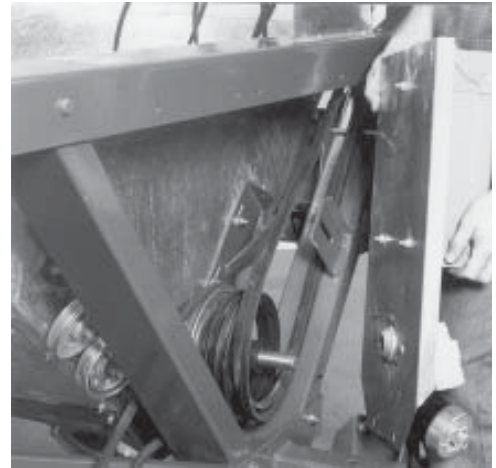


Photo 28

- Step 29. Bolt front switch box plate with 1" wood bearing for trash auger shaft into position using four 1/4" x 5/8" flanged head screws and hex flanged lock nuts. (Should wood bearing need alignment, bolts holding bearing may have to be loosened) See Photo 28.
- Step 30. Insert wire for three-horsepower motor through flared hole at lower end of front brace extension. Push through center of tube and out the top. Connect to the motor, using water-tight connector. Correct rotation is clockwise when looking at motor shaft in mounted position.



Photo 29

- Step 31. Bolt the 3-1/2" flanged idler pulley for A-91 belts into position using 3/4" spacer, 1/2" x 3" hex bolt, two flat washers, lock washer and hex nut. Place the 3/4" spacer between the mounting bracket and pulley with one flat washer on each side of adjustment slot. Finish by putting the A-91 V-belts on to pulleys and tighten belts to approximately 3/8" deflection. See Photo 29. Check alignment of pulleys and idler.

- Step 32. Bolt V-belt idler pulley to rear frame position, using one 1/2" x 4-1/2" full-thread hex bolt, two 1/2" flat washers, one 1/2" x 3/4" spacer bushing and lock washers, and hex nuts. See Photo 30.
- Step 33. Bolt on rear belt shield bracket, using two 5/16" x 3/4" hex bolts, lock washers and hex nuts. Next, place 3/8" SAE washer and compression spring on rod attached to idler arm. Put rod through shield bracket hole. Fasten the pulley and idler bracket to the grain cleaner, using one 3/8" x 3" hex head bolt, and 3/8" lock nut. DO NOT OVERTIGHTEN. THE ARM AND PULLEY ASSEMBLY MUST SWING FREELY. See Photo 31.

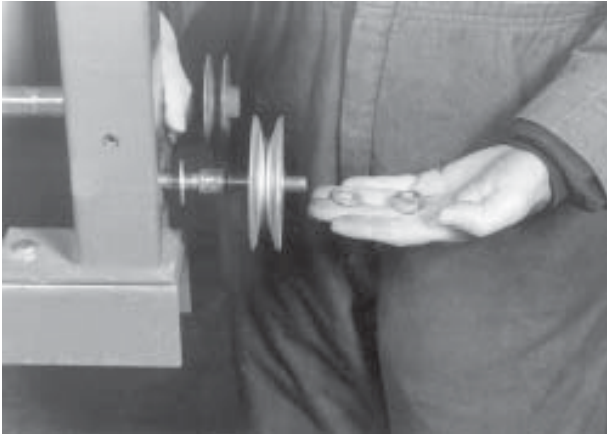


Photo 30

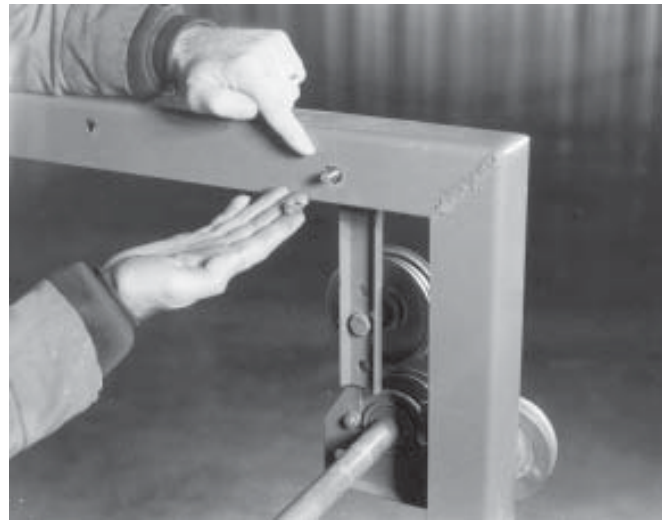


Photo 31

## DRUM SET-UP PROCEDURE

The main component parts of the drum are shown in their respective position in Photo 32.

- Step 34. Bolt the large, six-spoke cone ring to the disc on the shortest end of drum axle, using three 3/8" x 1" hex bolts, lock washers and hex nuts. See Photo 33.

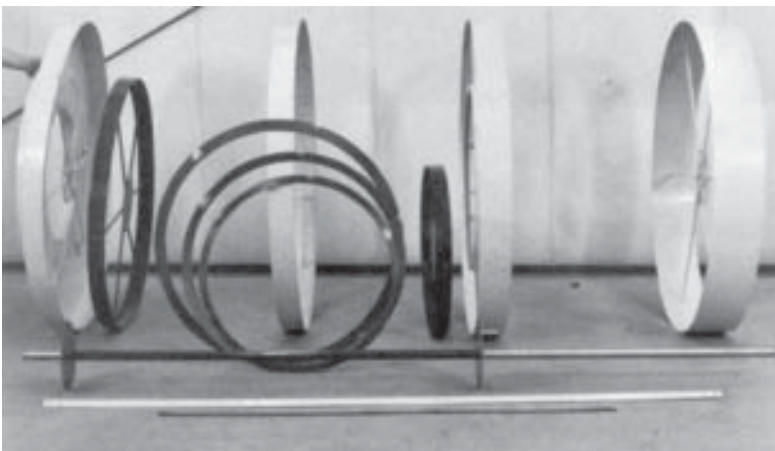


Photo 32

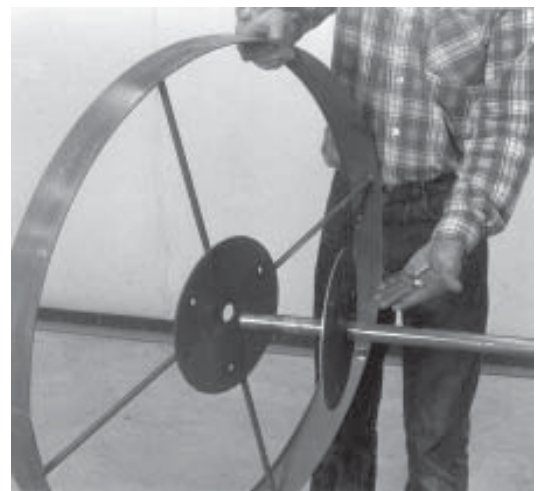


Photo 33

Step 35. Place the three flow rings over cone drum axle. Continue by bolting the small cone ring to the drum axle using three 3/8" x 1" hex bolts with lock washers and hex nuts. See Photo 34.

Step 36. Bolt six screen support bars to cone rings, using twelve 1/4" x 5/8" hex flange screws and hex flange lock nuts. Bolt bars underneath cone ring flanges with slotted end of bar attached to the small ring. Tighten securely. See Photo 35.



Photo 34

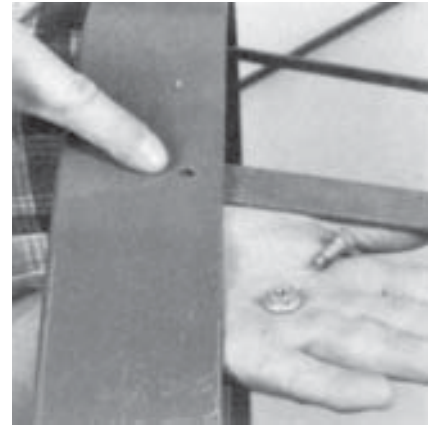


Photo 35



Photo 36

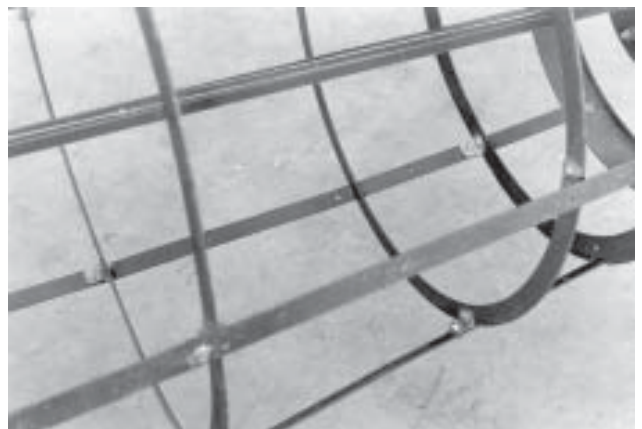


Photo 37

Step 37. To attach cone flow rings to the screen support bars, bolt angle bracket to cone flow rings using shortest end of angle. Proceed to bolt cone flow rings to the screen support bars with the longest end of the angle pointing toward inlet end of drum. See Photo 36. The entire operation requires eighteen 1/4" x 5/8" flange head screws and flange lock nuts. See Photo 36.

**BOLT CONE FLOW RINGS TO ALTERNATE SCREEN SUPPORT BAR. (See Photo 37)**



Step 38. **CONE SCREEN INSTRUCTIONS:**  
There are three sections of screen for the cone and twenty-four #10 x 3/4" self-tapping washer-head screws. Take one piece of screen and attach to the screen support bar. Wrap screen around drum, taking second and third piece of screen and continue process until the cone is completely covered. **NOTE:** Screens must be properly lapped so that during operation, grain will be forced between the screen laps. See Drawing and Photos 38-40.

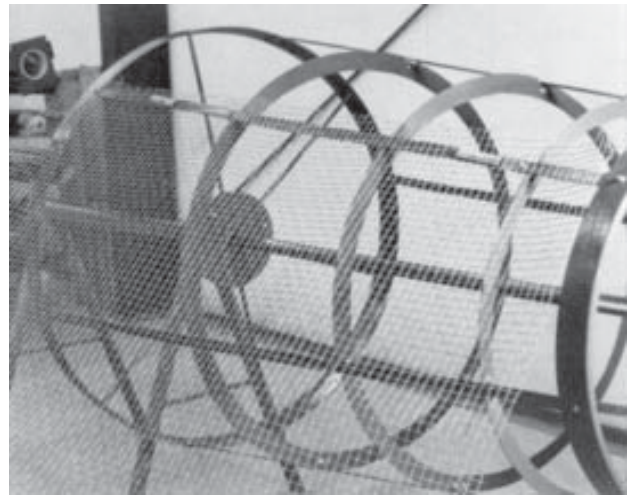


Photo 38

Finish attaching cone screens by placing straps on each end of drum. Secure with 1/4" x 2-1/2" bolt and 1/4" hex nuts.

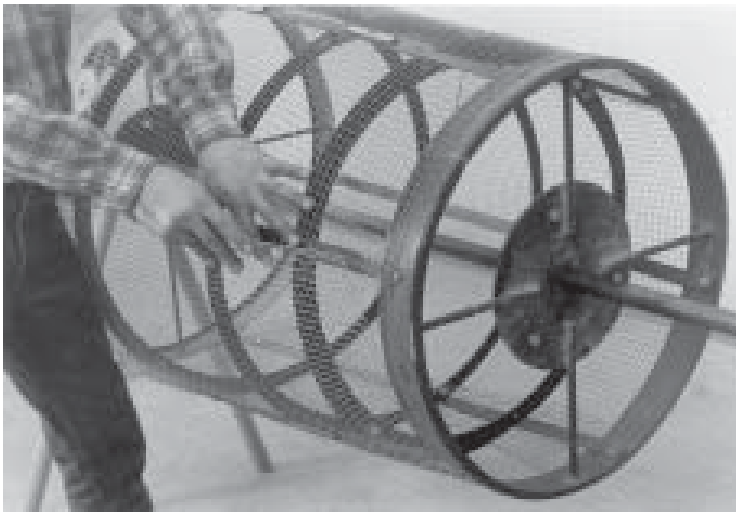
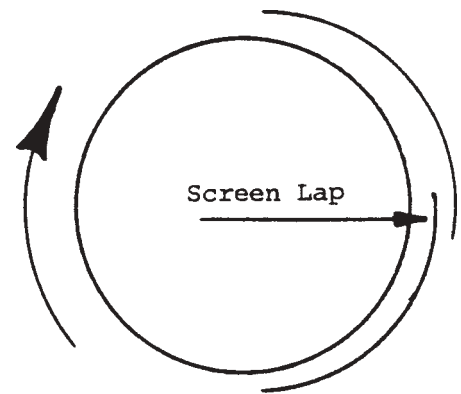


Photo 39



**DIRECTION OF ROTATION**  
As viewed from the small end  
of cone drum.

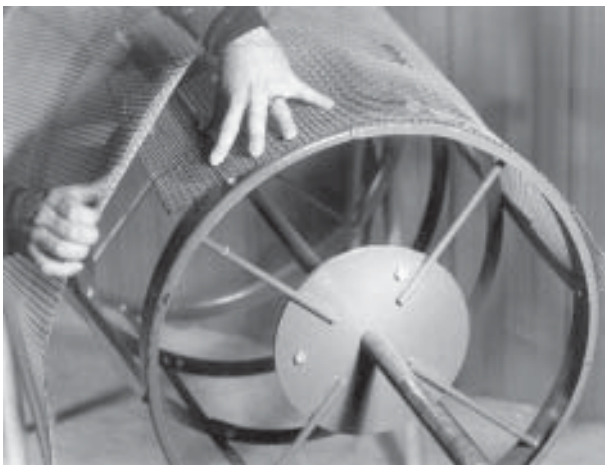


Photo 40

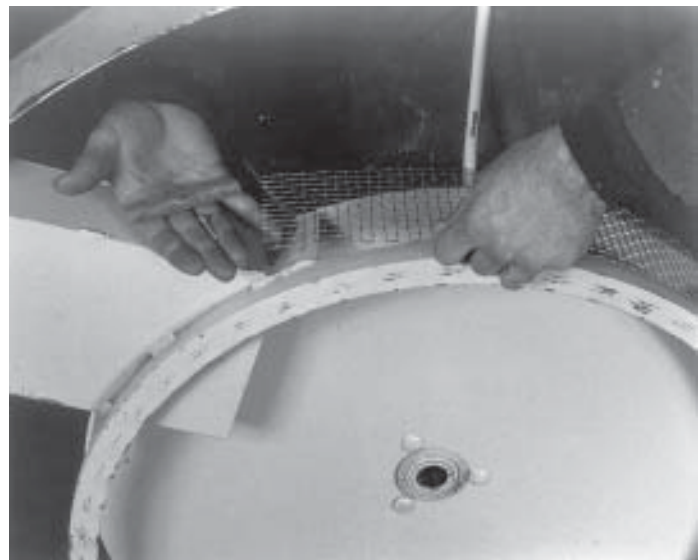


Photo 41

Step 39. TRASH CHUTE SCREEN: (a) May come installed from the factory, or; (b) to install, connect screens to main drum ring, with eight screen clamps and eight self-tapping #10 x 3/4" washer head screws as shown in Photo 41.

Step 40. Slide spacer tube to short end of drum axle. Then, slide drum axle through front drum bearing with bearing collar to the outside. After pressing bearing and spacer bushing against axle disc, place bearing locking collar to shaft and lock collar in opposite direction of drum rotation. See decal on front of drum ring for rotation.

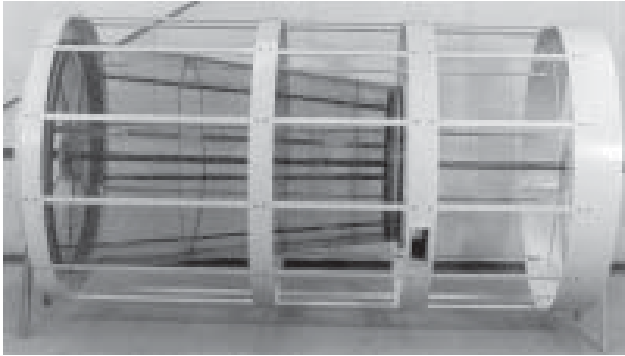


Photo 42

Step 41. Place tumbling bar support ring approximately half way on to cone drum. Next, slide center drum ring and bearing locking collar to drum axle shaft with bearing collar to outside. Leave locking collar loose at this time. See Photo 42.

Step 42. Slide rear drum ring and locking collar on drum axle shaft, with bearing lock outward. Do not set locking collar at this time. See Photo 42.

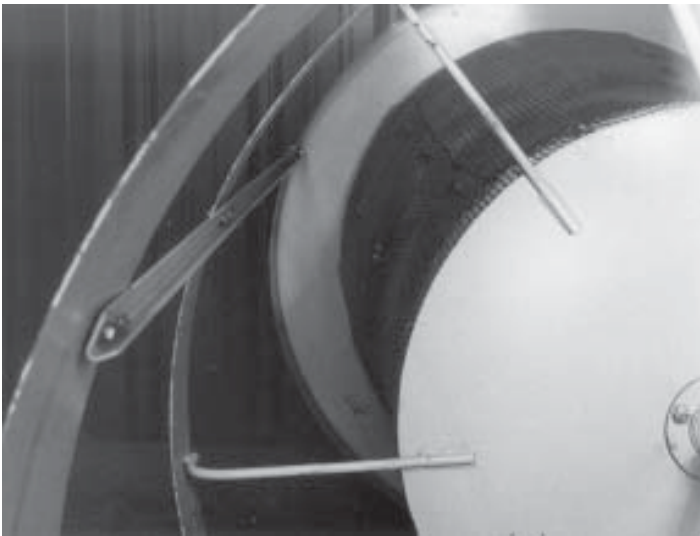


Photo 43



Photo 44

Step 43. Bolt drum rings together with tumbling bars. Place tumbling bars to the inside of the drum rings. Secure with 1/4" x 5/8" hex flange-head screws and hex flange locknuts. DO NOT TIGHTEN TUMBLING BAR BOLTS FIRMLY UNTIL DRUM HAS BEEN SQUARED. See Photos 43 and 44. Tumbling bar bolts should be torqued to 120-inch pounds.

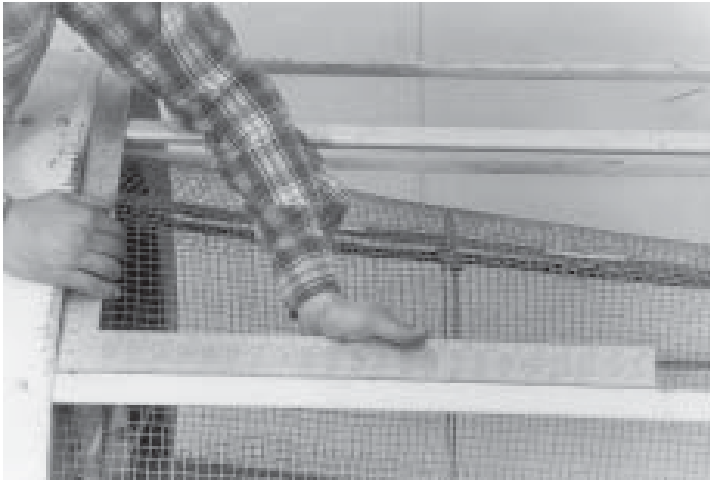


Photo 45

Step 44. After all the tumbling bars are bolted into place, the drum must be squared. See Photo 45. The bearing flange bolts may have to be loosened to allow for bearing movement. Once the drum is squared, all the bolts should be firmly tightened, and center bearing collars left loose from Step 41 and 42 must be locked in direction of shaft rotation (clockwise) and the set screw tight-

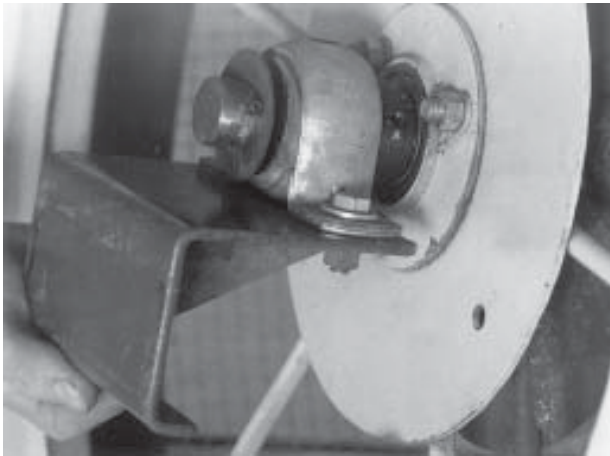


Photo 46

Step 45. Bolt front drum support angle bracket to front wood bearing, using two 3/8" x 1" hex head bolts, lock washers and nuts. Slide wood bearing and bracket on to front axle shaft. Secure front bearing with 1-1/2" x 14 gauge machine bushing and 1/4" x 2" spring pin. See Photo 46.

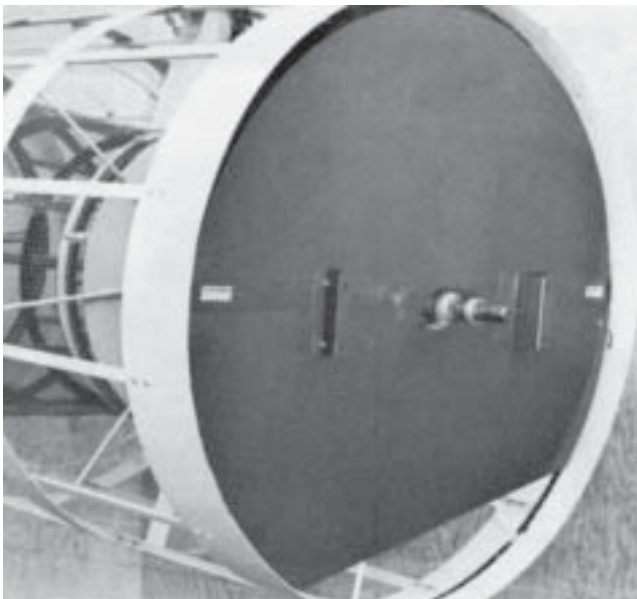


Photo 47

Step 46. Place drum discharge shield into drum as shown in Photo 47. Next, slide wood bearing on to rear axle shaft along with shaft collar. The final collar position will be set when the drum is mounted to the cleaner transport.

- Step 47. Lift drum on to cleaner transport. As drum is being lowered toward the transport, BE SURE TO HOOK DRUM DRIVE BELTS OVER DRUM BEARING ANGLE SUPPORT. See Photos 48 and 49.
- Step 48. Bolt front drum support angle bracket to front frame, using two 3/8" x 3-1/2" hex head bolts, lock washers and hex nuts. The bearing should be mounted under the bracket. See Photo 49.

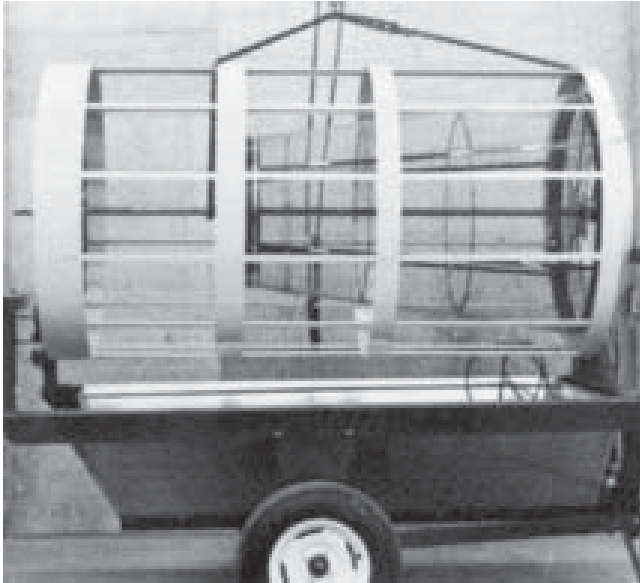


Photo 48

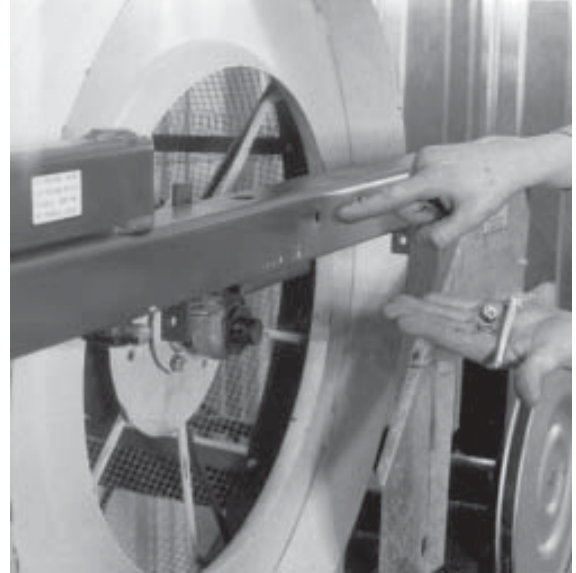


Photo 49

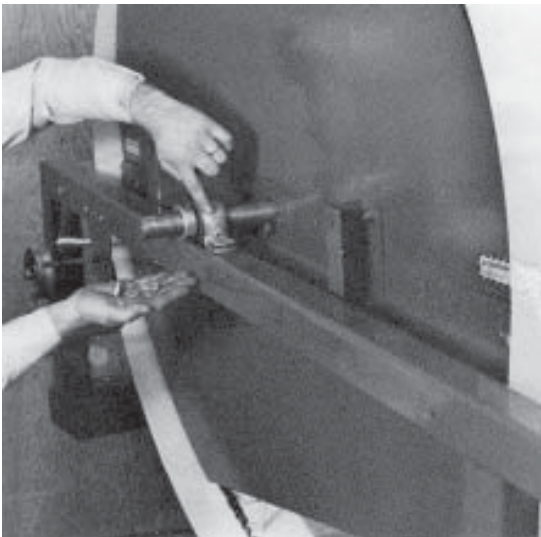


Photo 50

- Step 49. Bolt rear drum bearing to rear frame, using two 3/8" x 1" hex head bolts, lock washers and hex nuts. After wood bearing is secured, pull drum toward rear until front roll pin is against front bearing. Finish by locking rear shaft collar against wood bearing. See Photo 50.

- Step 50. Using two 5/16" x 3/4" hex bolts, lock washers and hex nuts, bolt drum discharge shield to rear frame, as shown in Photo 51.
- Step 51. Bolt 10" auger lift assembly on to rear frame, using one 3/8" x 3-1/2" hex head bolt and hex lock nut. NOTE: DO NOT OVERTIGHTEN NUT AS THE LIFT ASSEMBLY MUST PIVOT FREELY. See Photo 51.



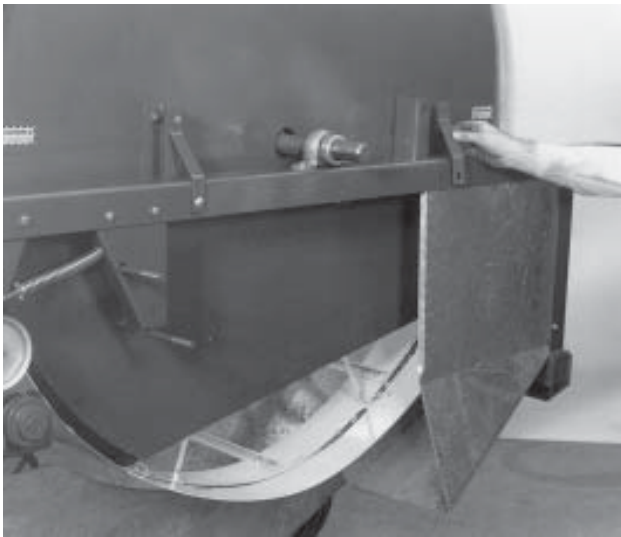


Photo 51

Step 52. Bolt 10" auger winch to rear frame, using two 3/8" x 1" hex bolts, lock washers and hex nuts. Unwind small portion of cable and place over lift assembly pulley. Remove clevis pin and place cable loop over clevis pin. Re-install. See Photo 51.

Step 53. Bolt discharge spout to rear frame, using two 1/4" x 5/8" hex flange screws and hex flange lock nuts. Third spout bolt is used in conjunction with drum shield braces. See Photo 51.

Step 54. Install two rear drum shield braces. Braces should be positioned with long leg down. Bolt upper end of braces to shield bracket using two 5/16" x 3/4" hex bolts, lock washers and hex nuts. Secure slotted end of brace brackets with two 5/16" x 3/4" carriage bolts, 1/4" flat washers, lock washers and hex nuts. Tilt top of drum shield in or out for proper alignment. Then, tighten the bolts. See Photo 51.



Photo 52

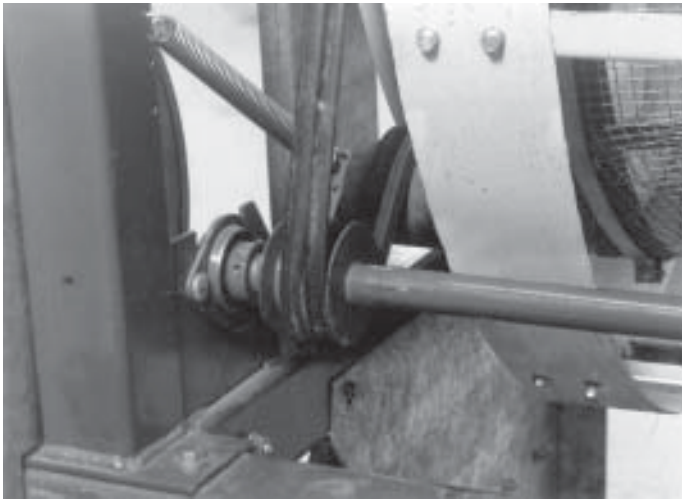
Step 55. Install 24' cone drive pulley on to drum axle with hub of pulley to the outside. Align pulley with spring loaded idler and small "V" drive pulley. BE SURE 3/8" x 1-3/4" square key is in position. After alignment, tighten set screws firmly. Next, install BB-120 double "V" belt on to cone drive pulleys. See Photo 52.



Photo 53

Step 56. Install rear cone drive belt shield, using six 1/2" flat washers and six hex nuts. BE SURE THERE IS A FLAT WASHER ON EACH SIDE OF CONE DRIVE BELT SHIELD. Adjust shield so it is as close to the pulleys as possible. Do not allow shield to drag on the pulleys. See Photo 53.



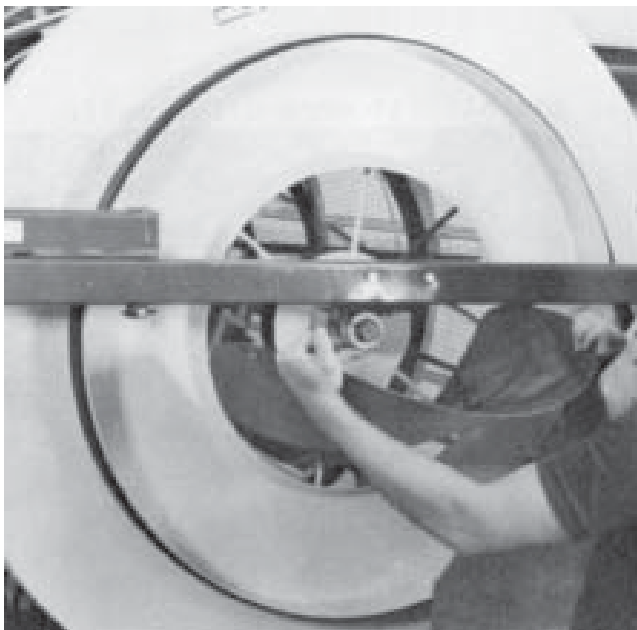


**Photo 54**



**Photo 55**

- Step 57. Position drum drive belts onto the drum drive ring and hook springs to front support and on idler so drum belts are tight. See Photo 54.
- Step 58. Using 7/16" diameter snap-over retaining pin, install auger support arm and secure. See Photo 55.



**Photo 56**



**Photo 57**

- Step 59. Using two 3/8" x 1" hex bolts, lock washers and hex nuts, install intake pan to brackets welded onto front frame. See Photo 56.
- Step 60. Using one 5/16" round nylon spacer and two #6 x 1-1/8" round head machine screws and hex nuts, install operating angle level. Place round head screws through holds provided in level, slide the nylon spacer on to one bolt, install on cleaner frame, next to the decal, with nylon spacer closest to the drum. See Photo 57.

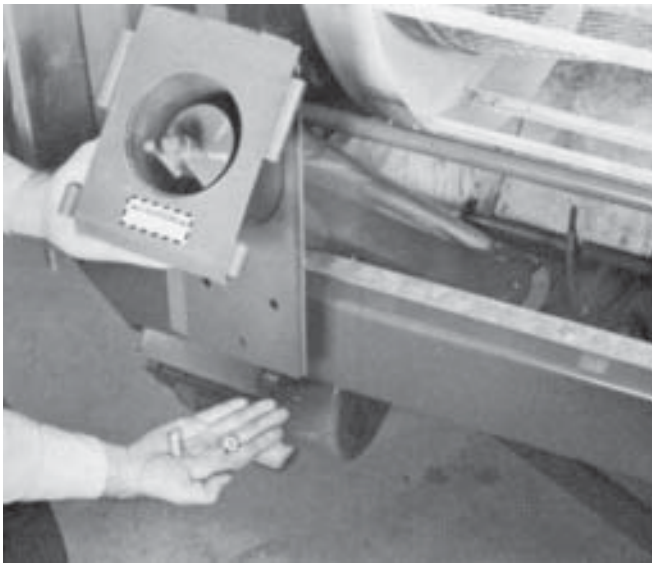


Photo 58

Step 61. Determine what side of Model 54 5" trash auger is to be mounted. Insert lower section of 5' trash auger into trash pan bottom near front. Attach to side channel of cleaner using three 3/8" x 1" hex bolts, SAE flat washers, lock washers and hex nuts. See Photo 58.



Photo 59

Step 62. Two 5' auger positioning holes are provided in the bottom of the trash pan. After the 5" lower section of the auger has been installed, close the opening which has not been used with small galvanized cover and two 5/16" lock washers and hex nuts. See Photo 59.

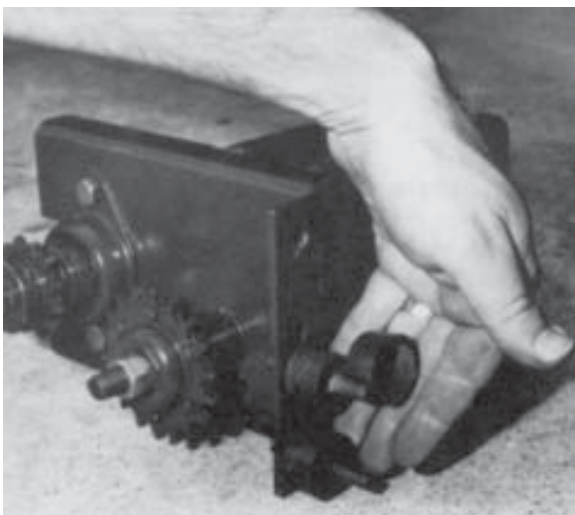


Photo 60

Step 63. Attach the two threaded shock mounts to the gear drive assembly, using the two lower holes IF the trash auger is mounted ON THE RIGHT SIDE OF THE CLEANER. (See Photo 60) If on the left side, use the two upper holes.

Secure threaded shock mounts into the drive assembly with 5/16" lock washer and hex nut.

Step 64. Position the two shock mount rings over the rubber shock mounts and secure the shock mounts to the gear drive assembly support bracket with a 5/16 inch flat washer, a lock washer and a hex nut. (See Photo 60)

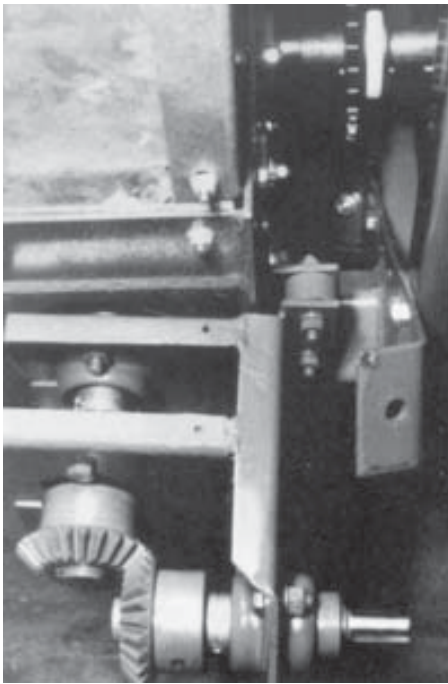


Photo 61



Photo 62

Step 65. Apply a thin line of grease to the 3/4" gear drive shaft, and slide the shaft into the five (5) inch auger tube end until the 1/4" holes line up with the set screw hole in the bearing. Screw the 1/4" x 1-1/4" set of screws through the bearing collar, tube and shaft until it seats against the other side of the bearing collar. Only about 1/16" of the set screw should be exposed. Tighten both set screws in the bearing collar.

Attach the drive cover with the #10 x 3/4" self-tapping screws.

NOTE: LOWER FRAME BRACE REMOVED FOR PHOTOGRAPHIC PURPOSES.

Step 66. Install the #40 drive chain. Align the sprockets and tighten the idler. See Photos 61 & 62.



Photo 63

Step 67. Install two front panel extensions (left and right) beside front switch box, using six 1/4" x 5/8" hex flange screws and 1/4" lock washers and hex nuts.

Step 68. INSTALLATION OF OUTSIDE DRUM SCREENS: There are three sections of outside screens provided, along with one screen tool. Simply take the screen that is the same width as the section of drum you intend to screen, wrap the screen around the drum, and be sure to lap the screen as shown in Photo 63, or see Drawing on Page 19.

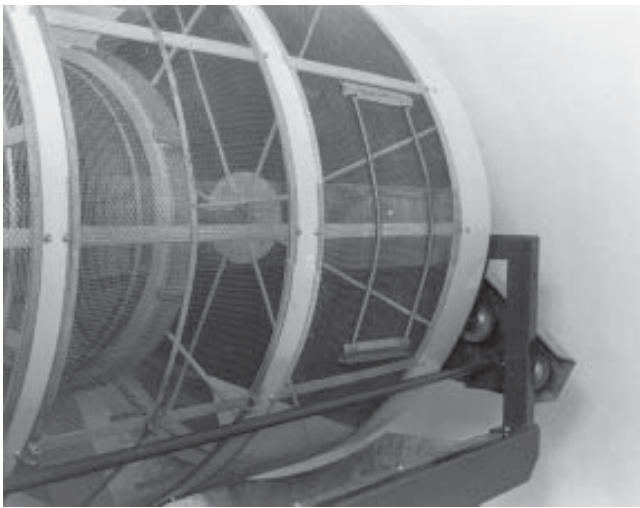


Photo 64

Step 69.

Hook the screen tool to each end of the screen at the lap and tap the screen gently with a rubber hammer or broom handle. The tapping allows the screen tool to tighten the screens securely around the drum. See Photo 64.

Attach the outside drum screen straps by placing a strap over each end of screen. Be sure strap splice is directly over a tumbling bar, preferably a different tumbling bar than where the screen itself is spliced. Securely tighten the straps that are on the ends of the screen and over drum rings.

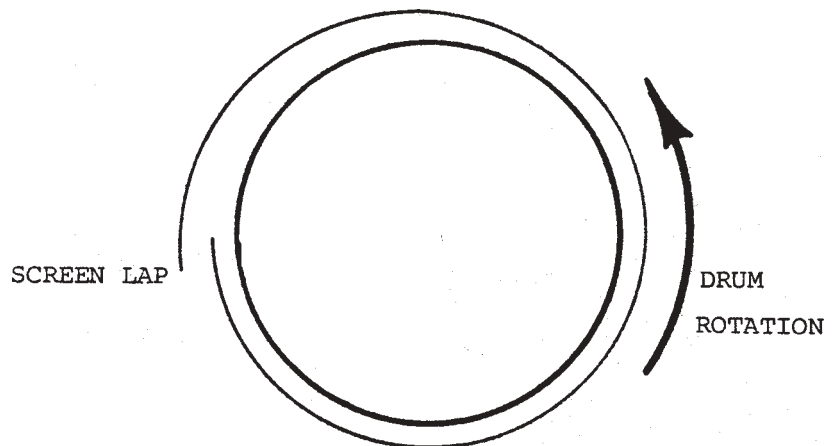
WHEN INSTALLING OUTSIDE SCREENS, ANY PORTION OF SCREEN THAT LAPS MORE THAN SIX INCHES SHOULD BE CUT OFF.

Step 70. Remove the screen tool and continue to place the remainder of the straps around the drum. Do not overtighten the straps that are placed in the center of the drum as they could bend the tumbling bars and cause the screens to come off. The straps for the center of the drum are only there to carry the weight of the grain when in use.

Repeat the same process for the second section of drum.

Straps needed for Model 54 are:  
3' sections 4 straps  
2' sections 3 straps

Connect straps with 1/4' x 2-1/2" round head machine screws.



DRAWING SHOWING DISCHARGE END OF DRUM

DRUM FULLY SCREENED NOTICE

Screen lap and strap splice do not come on same tumbling bar.

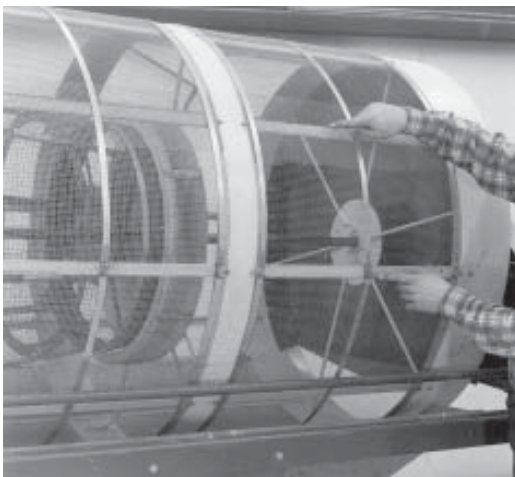


Photo 65



- Step 71. Mount the drum side panels. Before securing, determine which panel will go on the side opposite 5" trash auger. Bolt the cover over the opening on the inside of the side panel, using four 1/4" x 5/8" hex flange screws and hex flange lock nuts. See Photo 66. Continue by bolting side panels to cleaner frame, using four 5/16" x 3/4" hex flange screws on each side. Before tightening the two rear flange screws on the side of the 5" auger, mount the rear 5" auger carrier by inserting heads of bolts through the slots of the carrier bracket. Push bracket down and finish by securely tightening all the side panel bolts. See Photo 67.

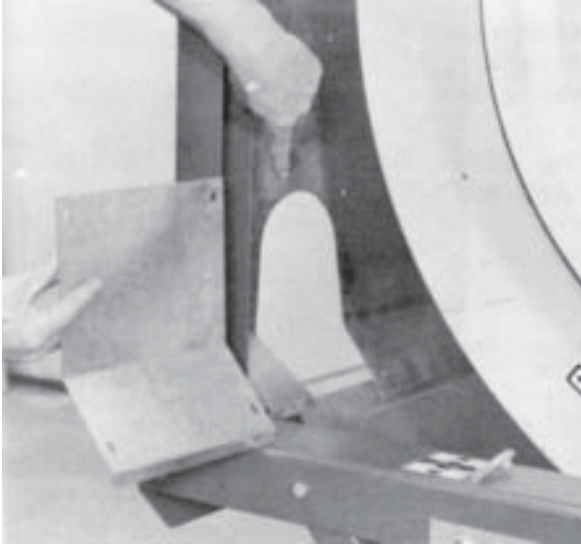


Photo 66

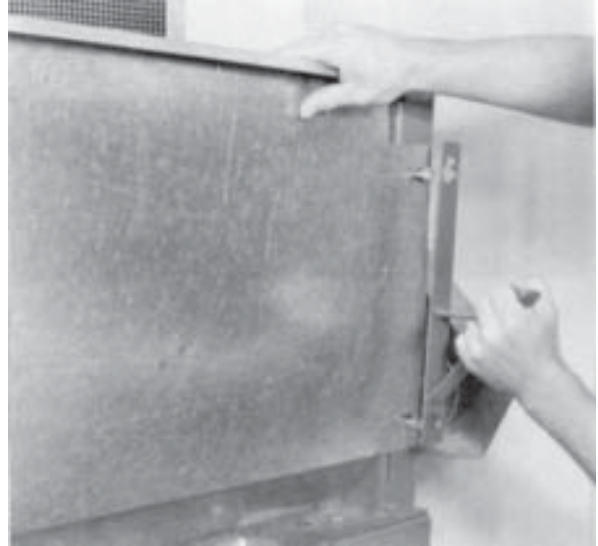


Photo 67



Photo 68

- Step 72. Lay discharge end of 5" auger into auger carrier. Align hinge and insert hinge pin from lower side. Secure with hair pin cotter. To put 5" auger in operational position, tip auger up and insert second hinge pin and hair pin cotter. See Photo 68.

WHEN LIFTING 5" TRASH AUGER INTO OPERATING POSITION, A SCREWDRIVER MAY BE NEEDED TO ASSIST IN ALIGNING THE TWO SECTIONS OF AUGER. ROTATION ON ONE SECTION MAY BE REQUIRED SHOULD DRIVE PINS COINCIDE.

- Step 73. Fasten vinyl drop chute to 5" auger, using two 4" rubber tie straps. See Photo 69.

With 5" auger in transport position, BE SURE RUBBER STRAP IS USED TO HOLD AUGER IN CARRIER.

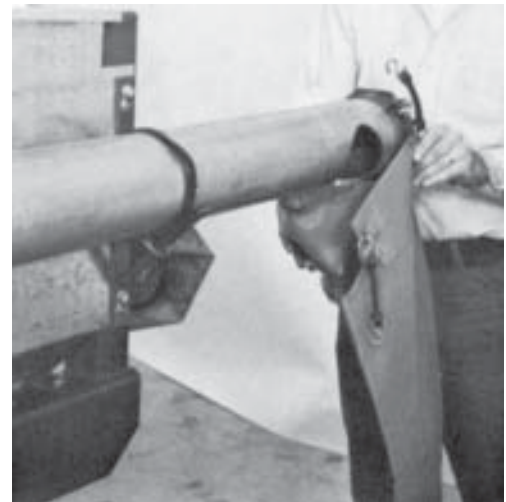


Photo 69



Photo 70

Step 74.

**MOTOR DRIVE BELT SHIELD.** Loosen two 1/4" x 3/4" self-tapping screws holding small back panel shield. Slide back panel shield away from 16" pulley. Hook drive belt shield locating pins into upper shield holding bracket. Next, slide back panel shield against belt shield. Carefully lift belt shield up and remove. Then firmly tighten 1/4" x 3/4" self-tapping screws holding back panel. Hook drive belt shield back to cleaner, latching into position.

Step 75. Insert tongue in front portion of grain cleaner and secure with a 5/8" hitch pin and hair pin cotter. See Photo 70. Have handle and decal on top.

BE SURE SAFETY DECALS ARE IN PLACE AND READABLE. IF NOT, REPLACE THEM. SEE PAGE iv.

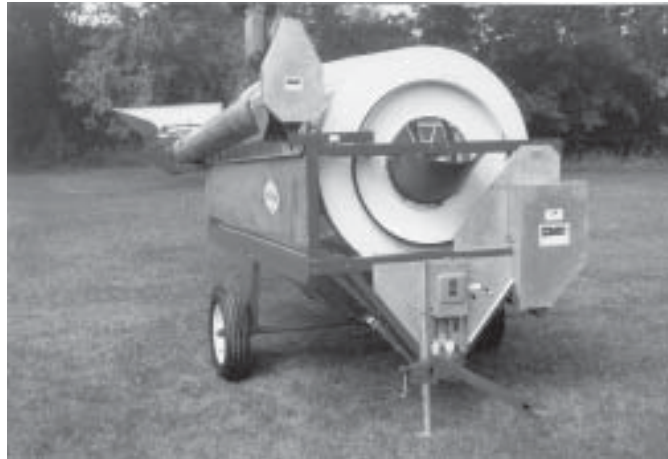


Photo 71

MODEL 54 HI CAP GRAIN CLEANER - Right Side



Photo 72

MODEL 54 HI CAP GRAIN CLEANER - Left Side

# MODEL 54 10" X 12' FEED-IN AUGER ASSEMBLY INSTRUCTIONS

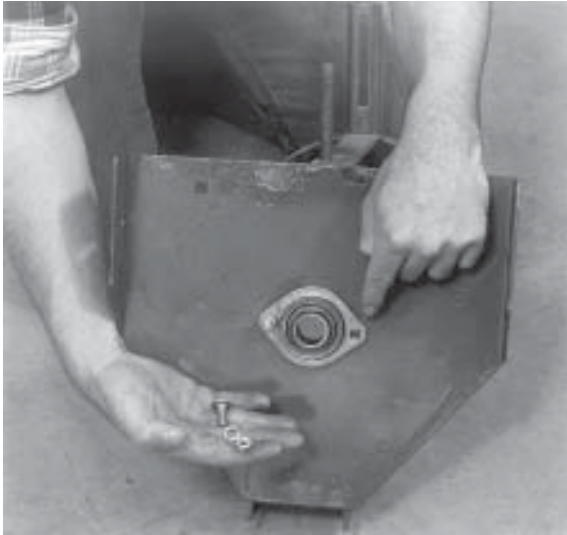


Photo 73

Step 1.

Place sealed bearing between bearing flanges, and bolt to auger head. BE SURE eccentric lock collar is on the outside. Use two 5/16" x 3/4" carriage bolts, lock washers and nuts. See Photo 73.

Step 2.

Slide the sleeve bushing on to the 8-3/8" x 1" stub shaft. Insert both pieces into the upper end of auger flighting shaft. BE SURE keyway is left exposed. Finish by bolting together with two 3/8" x 2" Grade 5 bolts and 3/8" lock nuts. See Photo 74.

Step 3. Place auger head over auger tube, sliding stub shaft through bearing. See Photo 75.

Step 4. Install 1" locking collar on bearing. BE SURE to lock the collar with the rotation of the shaft. Auger shaft should stick through the locking collar 2-5/8". Securely tighten locking collar set screw. See Photo 76.

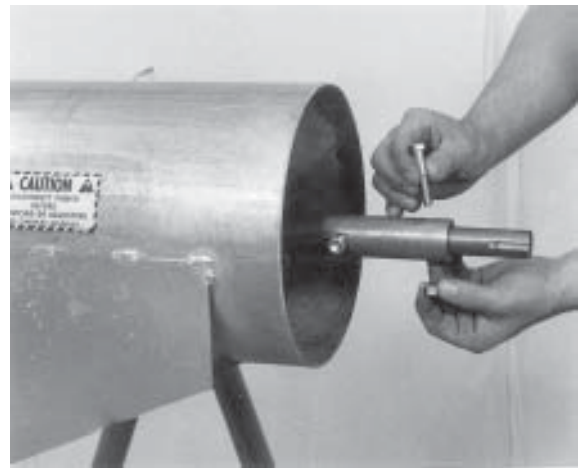


Photo 74

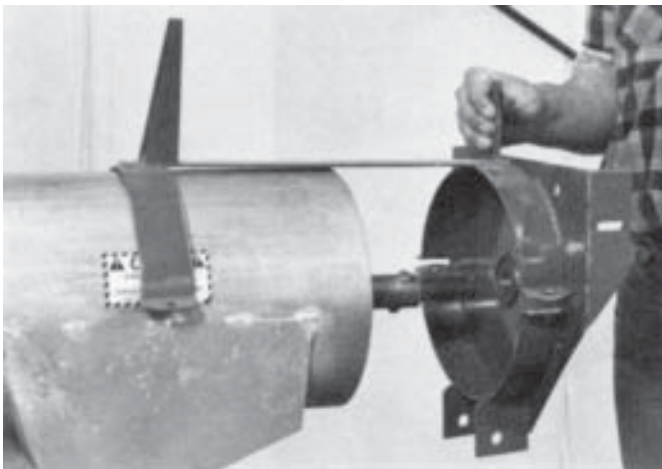


Photo 75

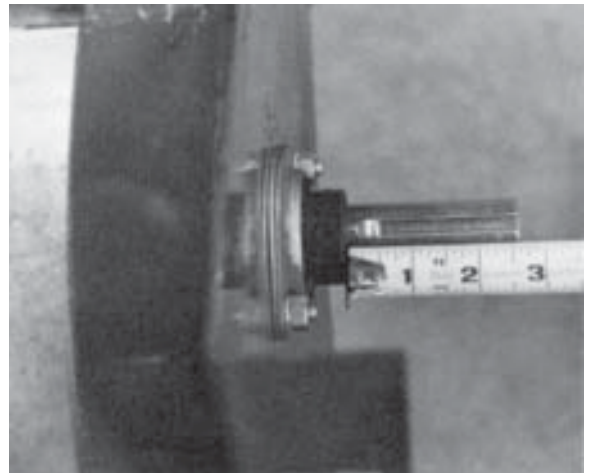


Photo 76

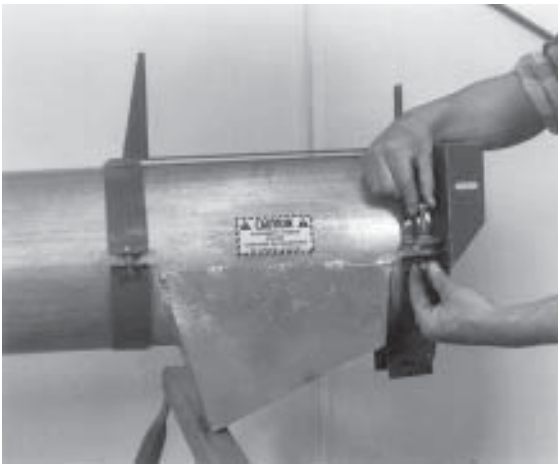


Photo 77



Photo 78

Step 5. Using one 2" strap bracket, four 3/8" x 1-1/4" bolts and nuts, fasten auger head securely to auger tube. See Photo 77.

Step 6. Place a 1/2" nut on the threaded bolt on the auger head. Slide motor mount angle over bolts and thread another 1/2" nut over the angle. Install motor mount base plate to the auger head, using two 3/8" x 3/4" carriage bolts, lock washers and nuts. DO NOT TIGHTEN AT THIS TIME. See Photo 78. For units equipped with hydraulic drive, see separate instructions, Page 32.



Photo 79

Step 7. Put two 5/16" x 3/4" carriage bolts, lock washers and nuts through the motor mount angle, and motor mount base plate. 5 HP motor mount position for Model 54 as shown in Photo 79.

Step 8. Using 5/16" carriage bolt, flat washer, lock washer and nut, bolt the rear of the motor mount base plate to the rear support on the auger head.

Step 9. Bolt the auger pivot pin to under side of the auger head, using 1/2" x 4-1/2" hex bolt and lock nut. Auger pivot must have free movement. See Photo 80.

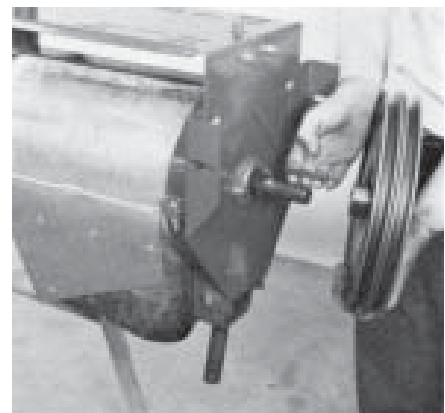


Photo 80



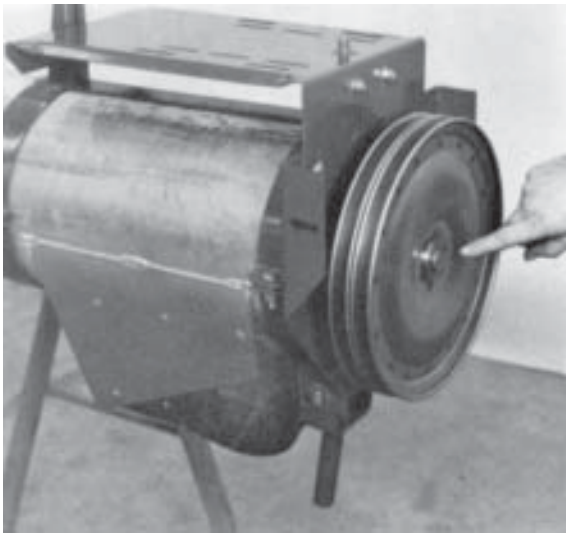


Photo 81

Step 10. Install 1/4" x 2" key into auger shaft. Then put 12" double groove pulley on shaft, hub first. Make shaft flush with the outer edge of pulley. Tighten set screws. See Photos 80 and 81.

Step 11. Bolt the motor to the motor mount base plate, using four 3/8" x 1-1/4" hex head bolts, 3/8" flat washers, lock washers and hex nuts.

Step 12. Align 3" motor pulleys with 12" auger pulley and install B-48 V-belts. Adjust belt tension by raising the 1/2" nuts on the threaded bolt. After belt tension adjustment has been made, tighten all loose bolts of motor mount assembly. See Photo 82. At this time, check for proper rotation, which is clockwise when viewed from the pulley end.

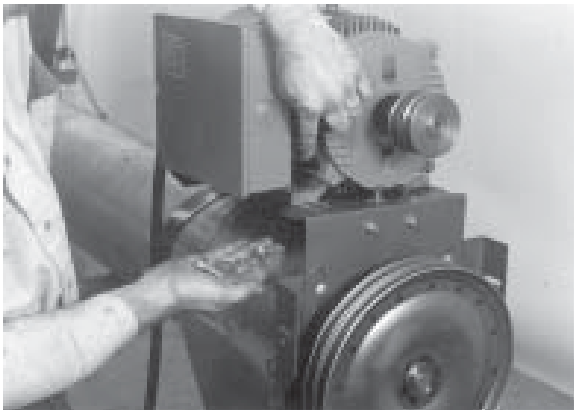


Photo 82

Step 13. Using two 5/16" x 3/4" carriage bolts, lock washers and hex nuts, bolt belt shield to tabs on auger head. See Photo 83.

Step 14. Put wooden bearing between bearing flanges and bolt to tail cage hopper with three 3/8" x 3/4" carriage bolts, lock washers and nuts. See Photo 84.

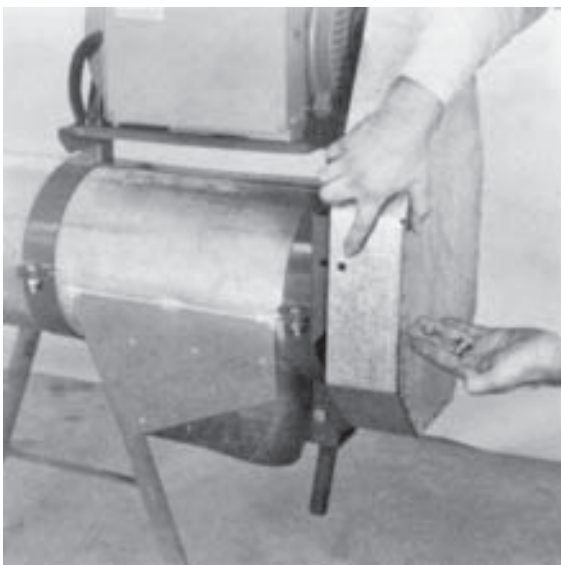


Photo 83

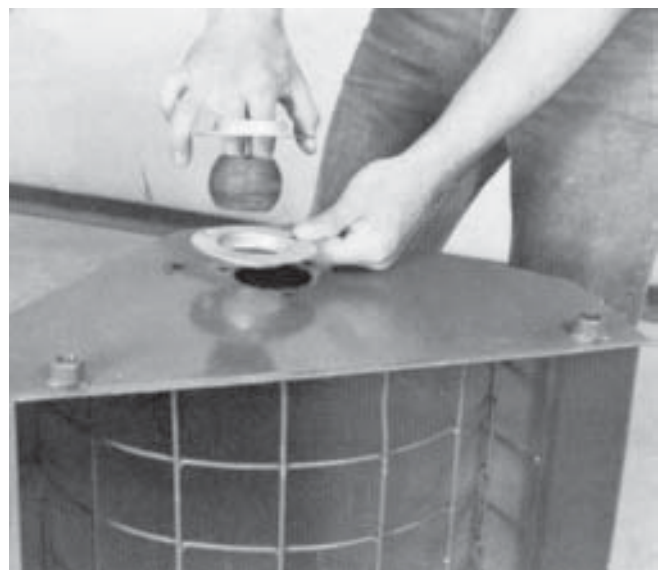


Photo 84

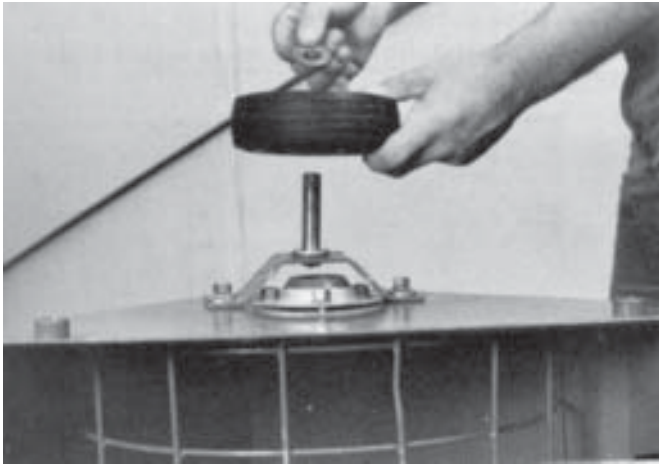


Photo 85

Step 15. Install hopper wheel bracket using two 3/8" x 3/4" carriage bolts, flat washers, lock washers and nuts. Slide two 5/8" SAE washers on the shaft, then the wheel, another 5/8" SAE washer. Finish by installing a 1-1/4" cotter pin. See Photo 85.

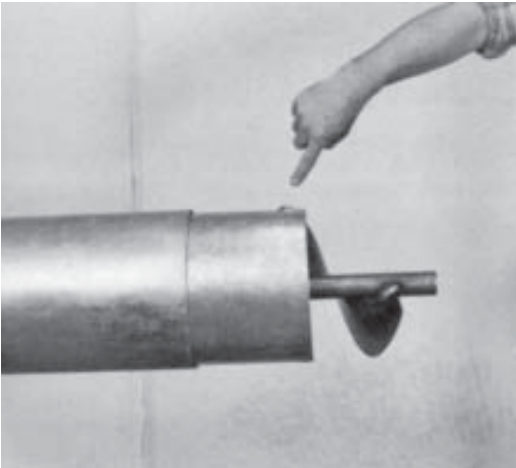


Photo 86

Step 16. Slide flow-restrictor tube into intake end of auger tube with nut welded on to restrictor tube on the outer end. See Photo 86.



Photo 87

Step 17. Put tail cage hopper assembly on auger tube. Insert end of auger shaft into wooden bearing. Secure tail cage hopper assembly to auger by using two 2" strap brackets. (Be sure to put 2" strap bracket with pipe and threaded nut toward the top of tail cage assembly as shown in Photo 87). Securely fasten with four 3/8" x 1-1/4" hex head bolts.

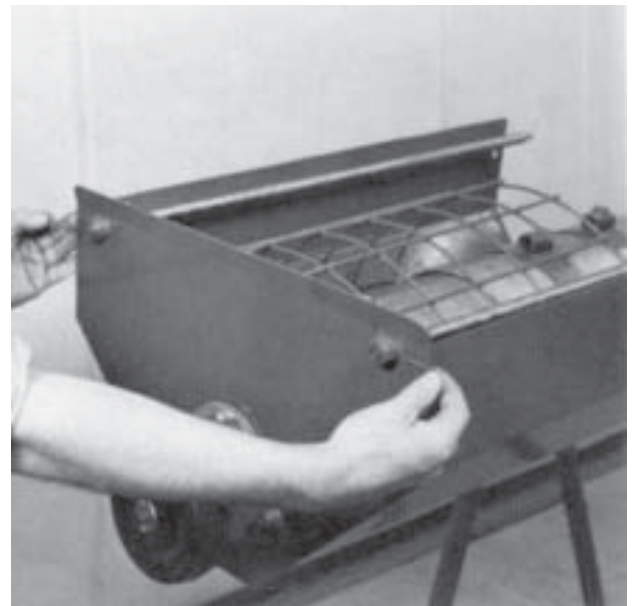


Photo 88

Step 18. Put flat end of glide rods into bushings provided at back of hopper. Align holes in rod with those in bushing and secure with 1/8" x 1-1/4" cotter pins as shown in Photo 88.

- Step 19. Place slide flow restrictor adjustment handle through bushing welded to 2" strap brackets and bolt to flow restrictor tube with one 5/16" x 1" hex head bolt and lock washer. Finish by turning wing bolt into nut welded on bushing of strap bracket. See Photos 89 and 90.

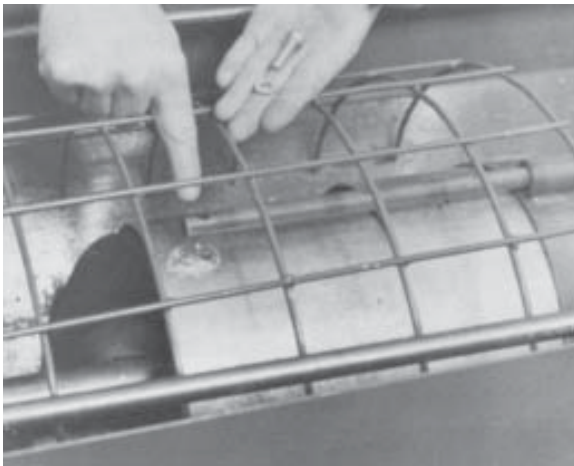


Photo 89

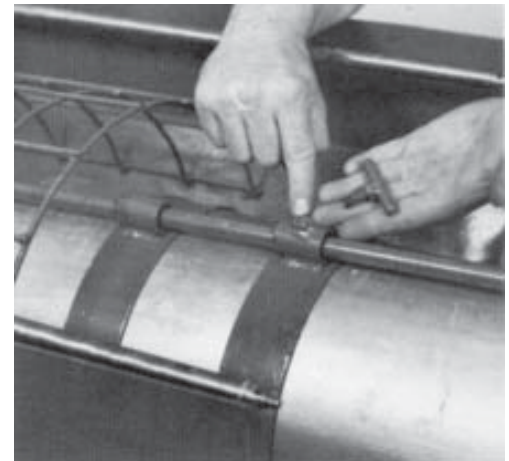


Photo 90

- Step 20. Install the hopper latch and upper glide rod support bracket by placing the ends of the glide rod support bracket through the holes in the hopper and on to the pointed glide rod ends. Fasten the latch to the hopper with two 3/8" flat washers, and two cotter pins. See Photo 91.

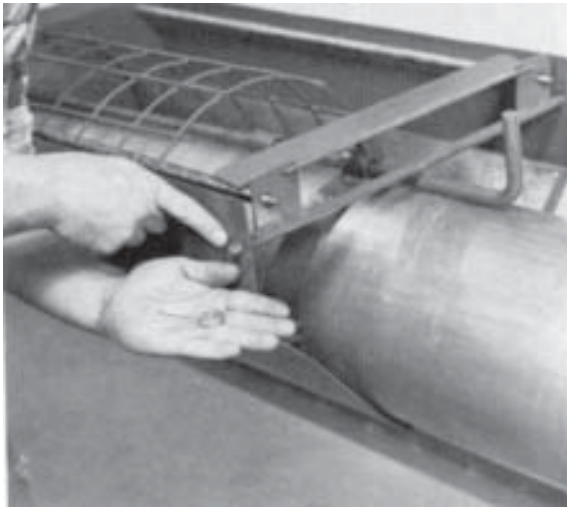


Photo 91

- Step 21. Assemble the hopper extensions using six 1/4" x 1/2" pan head machine screws, and 1/4" hex flange whiz lock nuts. Once the upper extensions have been assembled, fasten the glide rod brackets to the upper extensions, using ten 1/4" x 1/2" pan head machine screws and hex flange whiz lock nuts. Fasten securely. See Photos 92 and 93. **BE SURE TO INSTALL BOLTS SHOWN IN PHOTOS.**

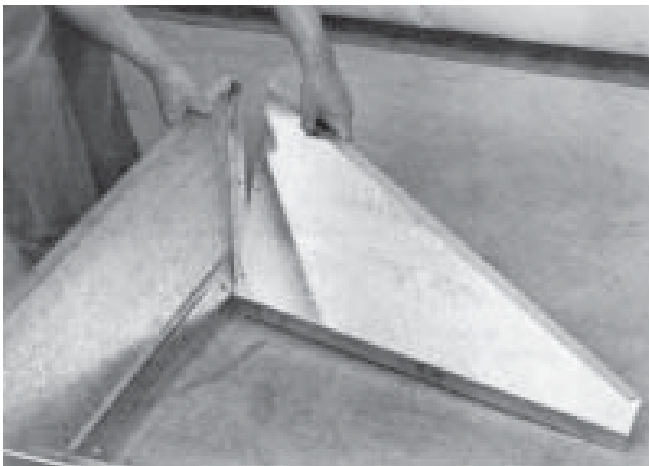


Photo 92

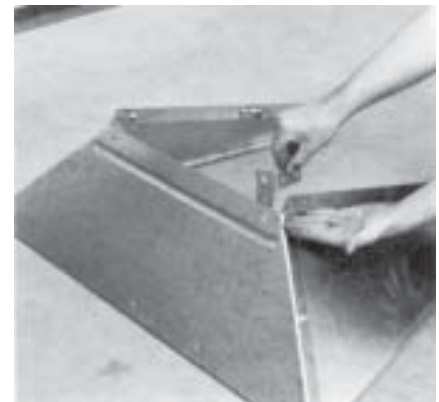
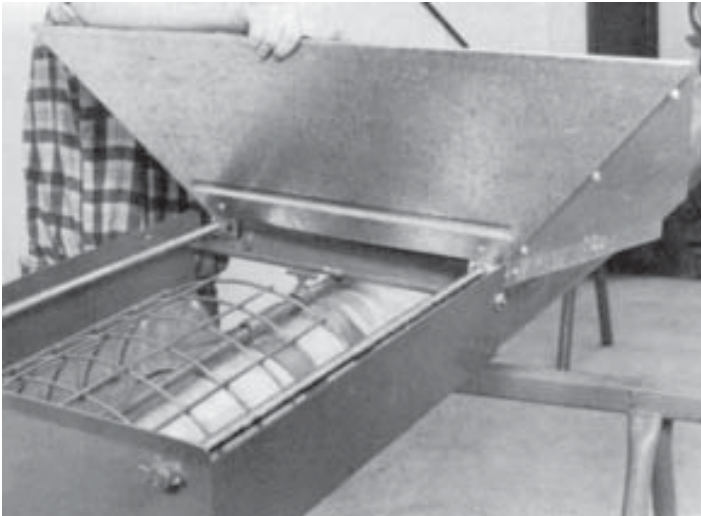


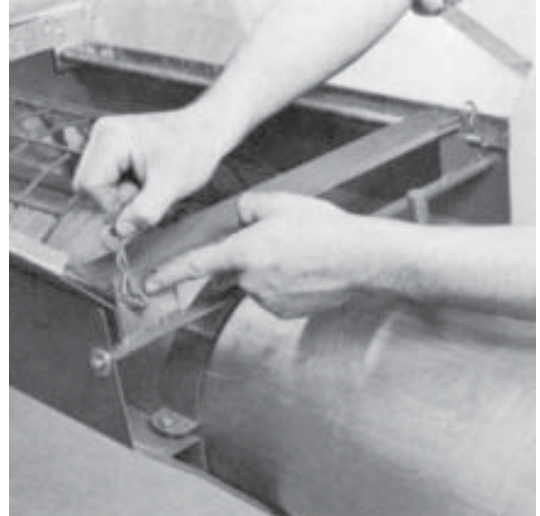
Photo 93



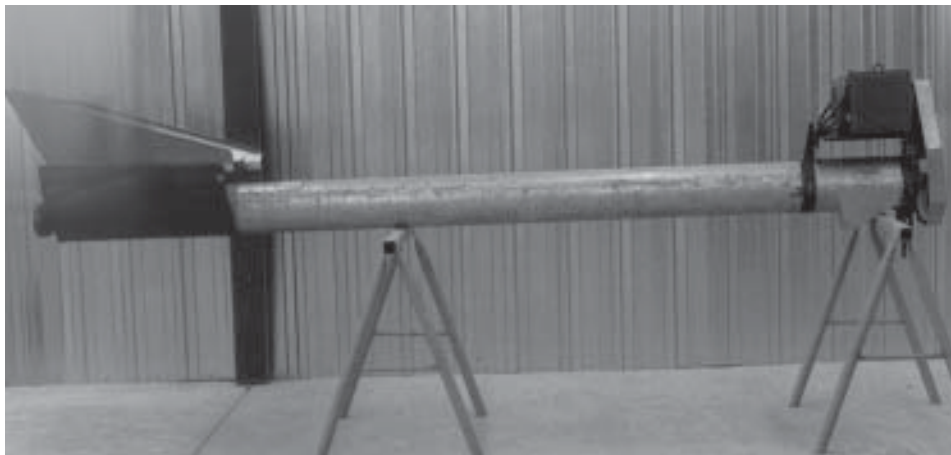
Step 22. Slide hopper extension assembly on the glide rods. Lift latch and finish assembly by placing hair pin clips though holes of guide rods. See Photos 94 and 95.



**Photo 94**



**Photo 95**



**Photo 96**

**OPERATE AUGER AND OBSERVE FOR PROPER ROTATION.**  
Change wire in motor for rotation correction.

Be sure safety decals are in place, and readable. IF NOT, REPLACE THEM. See Page iv.

# MOUNTING INSTRUCTION FOR 10" x 12' AUGER MODEL 54 GRAIN CLEANER

- Step 23. To place 10" auger on Transport Model 54 Grain Cleaner, lift motor end of auger up until auger pivot pin can be lowered into the hole provided in the auger support arm. Secure with one 3/16" x 1-1/2" cotter pin. See Photo 97.
- Step 24. Remove clevis pin from auger lift. Take cable in hand and tip auger lift assembly outward. Continue to unwind cable until enough slack is attained to take cable under 10" auger back up and over bottom pulley of lift assembly. Reconnect cable to clevis pin. See Photo 98.

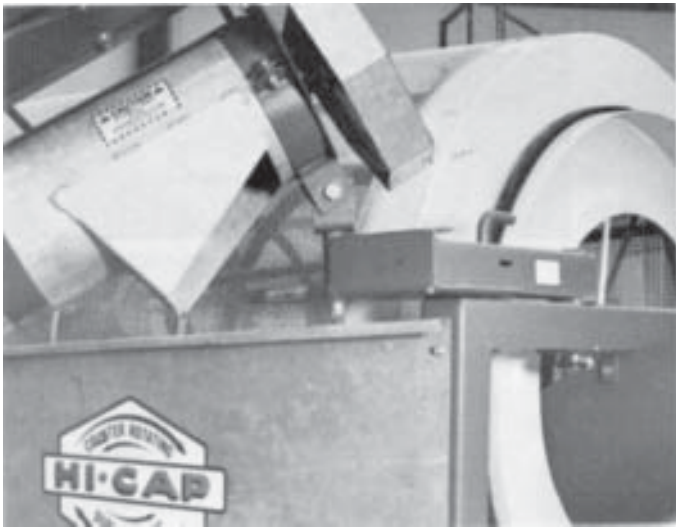


Photo 97

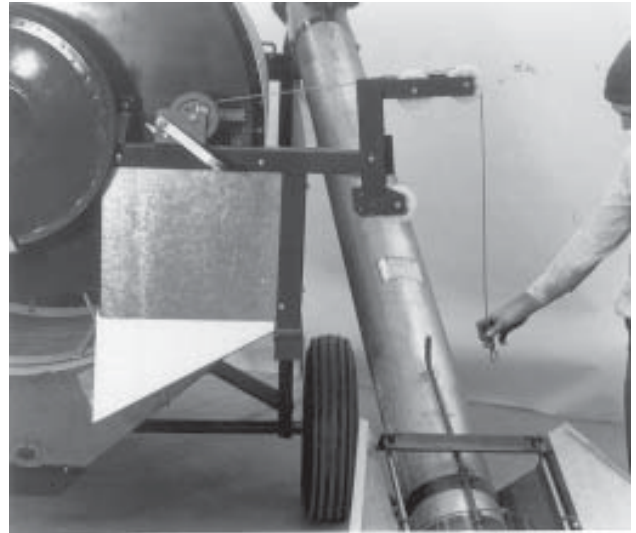


Photo 98

- Step 25. After cable has been put into position, winch 10" auger up as shown in Photo 99, until lift assembly pivots inward. This is the transport position. BE SURE CABLE IS TIGHT AND WINCH IS IN LOCKED POSITION WHEN TRANSPORTING.

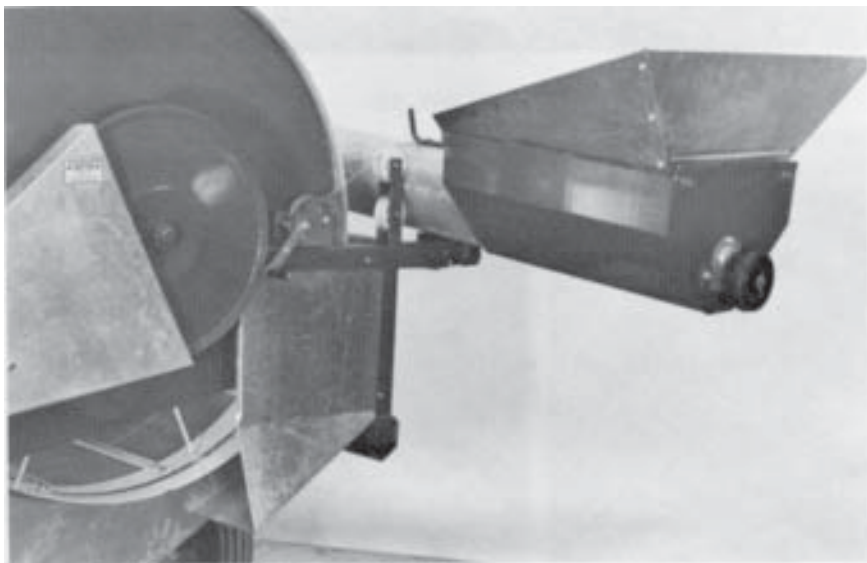
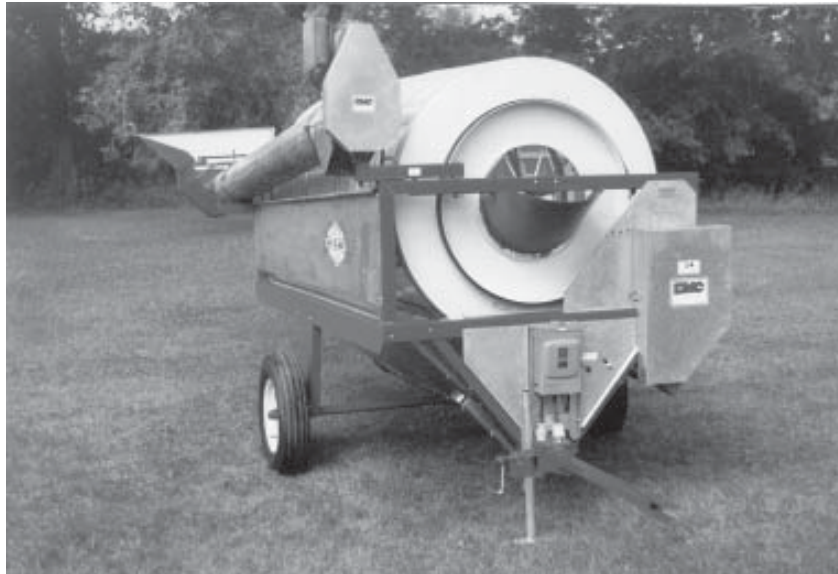


Photo 99

# **DIRECTIONS FOR CHANGING 5" TRASH AUGER TO OPPOSITE SIDE**

Remove both cleaner side panels. Turn to page 20 of this Owner's Manual. Start with Step 61 through 64, 67 through 69.



**Photo 100**

Trash Auger - Right Side



**Photo 101**

Trash Auger - Left Side

# HYDRAULIC SYSTEM INFORMATION

Following are the minimum requirements for the tractor hydraulic system to operate the Hi-Cap Grain Cleaner and auger at full load:

1. 13 G.P.M. output at remote outlets.
2. 1800 P.S.I. pressure at remote outlets.

Hydraulic motors must be properly filled with oil prior to any load application. For optimum hydraulic motor life, operate motor for one hour at 30% rated pressure, before fully loading.

## RECOMMENDATIONS

1. Maximum operating temperature - 180° F.
2. Oil viscosity range, 100 - 200 S.U.S.
3. Oil filtration - 10 micrometer or finer.
4. Tractor to Hi-Cap oil supply hoses, 1/2" minimum diameter, 3500 P.S.I. working pressure.

Attach oil supply hoses from tractor to front of hydraulic control panel. See arrows (page 33, Photo 109). System check valve controls the possibility of reversing rotation of cleaner and drum auger. Should the cleaner not operate after connecting to hydraulic hoses, switch hoses or move tractor hydraulic lever to opposite direction.

The flow-control is equipped with a pressure-relief valve, preset at 2000 P.S.I.

The system has two valves, a main control valve which controls both cleaner unit and auger, and a selector valve which controls the auger only. The main flow control valve has two functions. It is the on-off control for the complete cleaner and auger unit; and it also controls the operating speed for the cleaner drum and auger.

The cleaner drum should rotate at 21 R.P.M., +/- one. When running empty, using the rotation decal on the front of the drum as a reference point, check with a watch.

The flow control valve has a variable control arm located on the top of the control panel which moves on a scale of 0 through 10. The 0 on the scale is the OFF position.

The scale setting for optimum cleaner unit operation should be approximately 7.0 for the Model 54. Changing the setting will either increase or decrease the drum and auger R.P.M. After the recommended drum R.P.M. setting has been attained, set the stop arm provided on the control panel for easy return to the proper R.P.M. setting.

The manual selector valve allows you to stop and start the auger individually from the cleaner after the control valve has been engaged. Push the control handle in to start the auger and pull out to stop. The cleaner and auger should be run empty after each operation to avoid starting under full load.

# HYDRAULIC DRIVE ASSEMBLY INSTRUCTIONS

For proper assembly procedure, the following steps must be followed:

Steps 1 through 4 - See Cleaner Assembly on Page 1.

Step 5 - Bolt front frame assembly to side channels, using seven 3/8" x 1" hex bolts, lock washers and hex nuts. Leave bolt for front end of left side channel and front frame side. Bolt will be installed later in the assembly.

Steps 6 through 16 - See Cleaner Assembly.

Steps 17 and 18 - Eliminate.

Steps 19 through 22 - See Cleaner Assembly.

Steps 23 and 24 - Eliminate

Steps 25 through 28 - See Cleaner Assembly.

Step 29 - Hydraulic drive has plate with one inch wood bearing only. Secure as stated in Step 29, Photo 36 of the Cleaner Assembly.

Step 30 - Eliminate.

Steps 31 through 69 - See Cleaner Assembly.

Step 70 - Eliminate.

Step 71 - See Cleaner Assembly.

- Continue on Page 32 -

## HYDRAULIC DRIVE ASSEMBLY - 10" AUGER

Steps 1 through 5 - See Auger Assembly.

Steps 6 through 8 - Eliminate.

Step 9 - See Auger Assembly.

Steps 10 through 13 - Eliminate.

Steps 14 through 25 - See Auger Assembly.

- Continue on Page 32 -



# HYDRAULIC DRIVE INSTALLATION



Photo 102

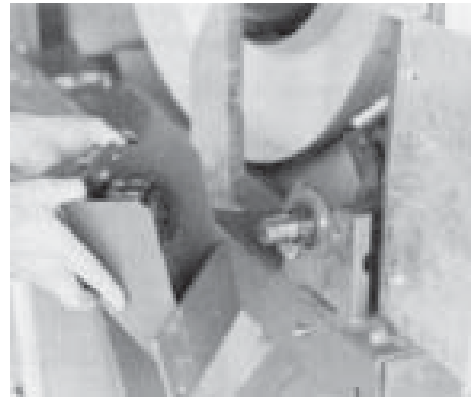


Photo 103

- Step A. Bolt hydraulic control panel to front assembly, using four 1/4" x 3/4" hex bolts, lock washers and hex nuts. See Photo 102.
- Step B. Remove hex nut and washer from 3/8" x 5-1/2" hex bolt at top left front brace extension. Next, install 1/4" x 1" square key into keyway of the drive shaft. Slide sprocket of hydraulic motor and chain coupler assembly onto the drive shaft and align coupling unit. Fasten to cleaner, using 3/8" x 5-1/2" bolt, and one 3/8" x 1-1/4" hex bolt, two SAE flat washers, lock washers and hex nuts. Tighten bolts & set screws in sprocket. See Photo 103.



Photo 104

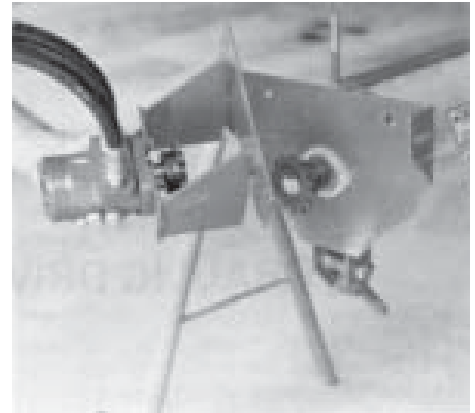


Photo 105

- Step C. Hydraulic Motor Shield: Loosen two 1/4" x 3/4" self-tapping screws holding small back panel shield. Slide back panel shield to outside. Hook hydraulic shield locating pins into upper shield holding bracket, slide panel shield against hydraulic motor shield. Remove shield. Retighten self-tapping screws holding back panel. Hook hydraulic motor shield on to cleaner and latch into position. See Photo 104.
- Step D. Auger: Install 1/4" x 1" square key into auger shaft, slide #50 x 14 tooth sprocket on auger shaft with hub to inside. **SCREWS ON SPROCKET SHOULD REMAIN LOOSE.** See Photo 105. Bolt hydraulic motor with mount to face of auger head using two 3/8" x 3/4" carriage bolts, lock washers and hex nuts. Align sprocket and tighten bolts. Position sprocket on auger shaft so the two sprockets are approximately 5/16" apart. Finish by installing #50 roller chain coupler.
- Step E. Install coupler cover shields using four 1/4" x 3/4" self-tap screws. See Photo 106.

Step F. See Cleaner Assembly. Page 28, Steps 23, 24 & 25

Step G. Connect two hoses from hydraulic cleaner motor to control panel. Connect the longest hose to "T" on back of selector valve. See arrow on Photo 107. Connect other hose to side of flow control. See Photo 107.

Step H. Connect two hoses from hydraulic auger motor to control panel. Hoses must be placed between cleaner frame and drum as shown in Photo 108. Connect shortest hose to "T" on back of selector valve. See arrow on Photo 107. Connect long hose to side of selector valve. See Photo 108.

Step J. Fasten hoses to front frame using two hose clamps and one 1/4" x 3-1/4" hex bolt. Complete with flat washer, lock washer & hex nut. Position hose with enough slack to allow auger to swing into operating position. BE SURE HOSES CANNOT RUB ON CLEANER DRUM. Finish by putting 5 tie strips on hoses. See Photo 108.

Step K. Install hydraulic hoses from tractor to control panel. See arrows Photo 109.

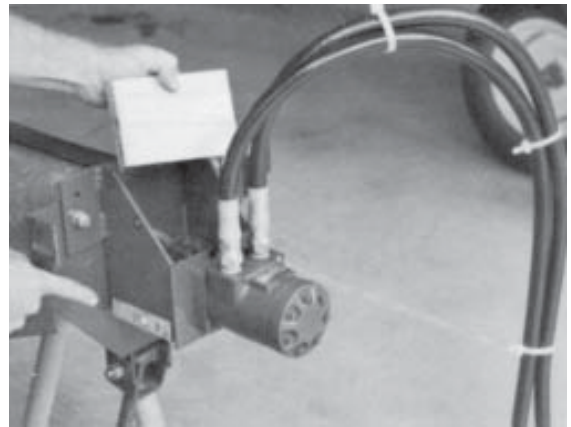


Photo 106

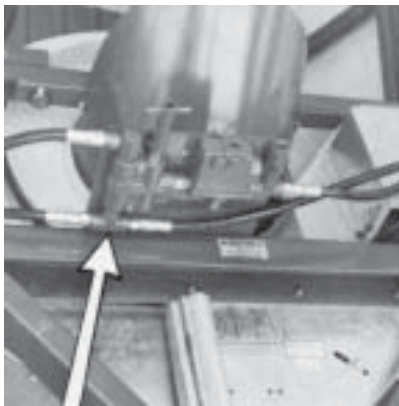


Photo 107

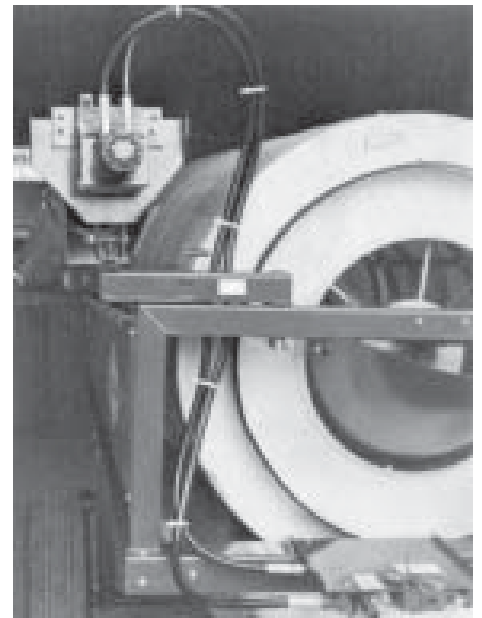


Photo 108

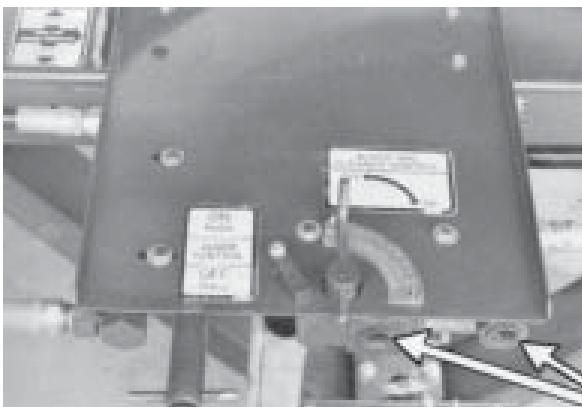


Photo 109

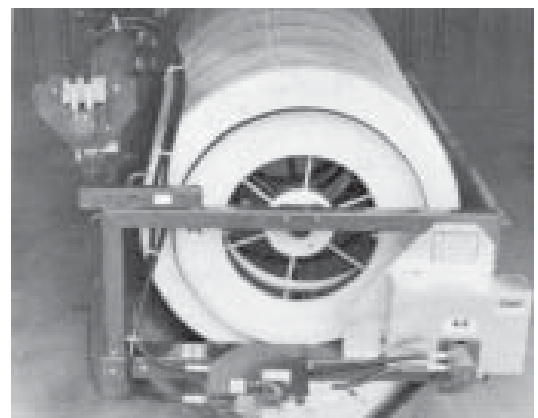
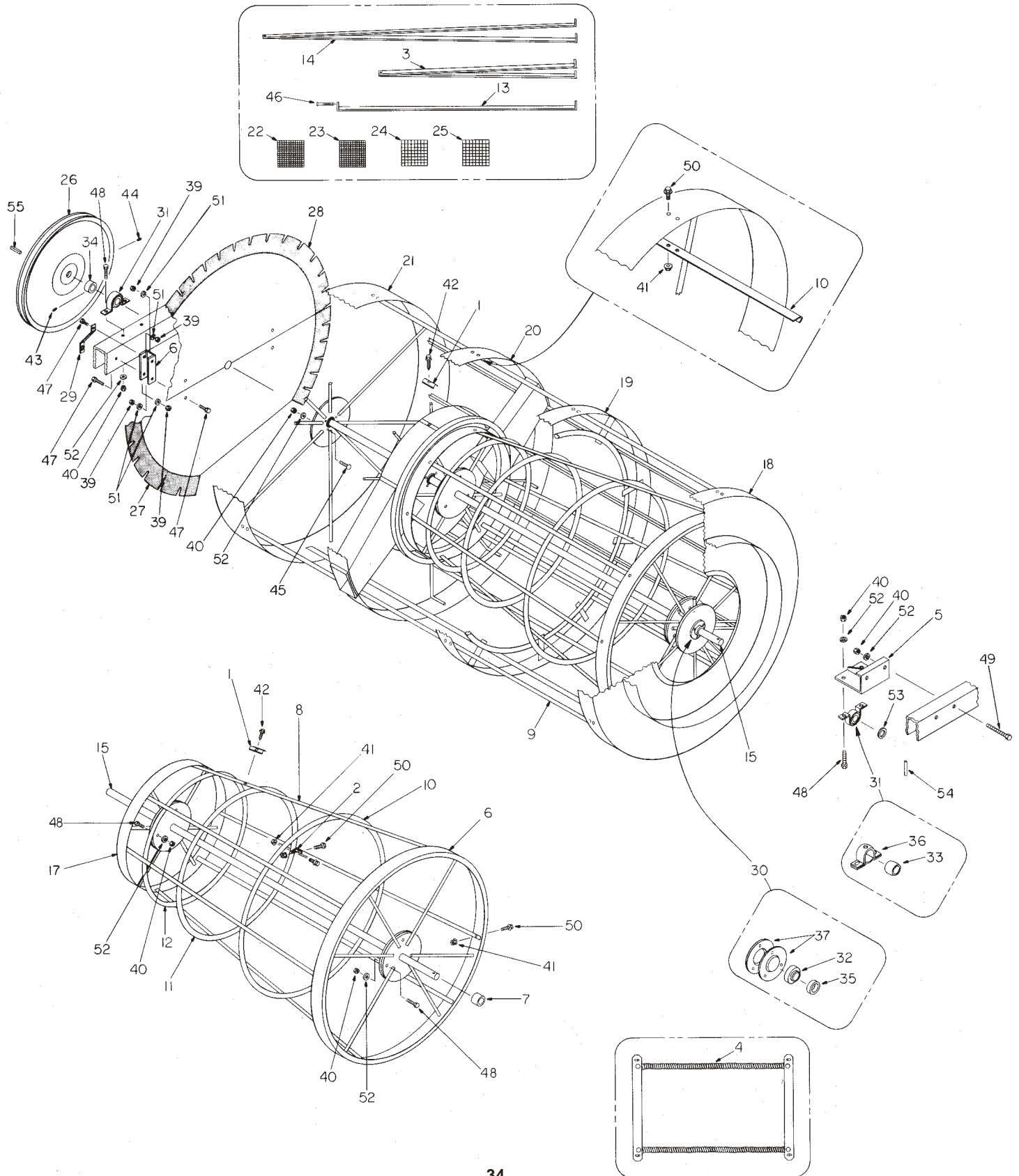


Photo 110

# MODEL 54 HI-CAP DRUM



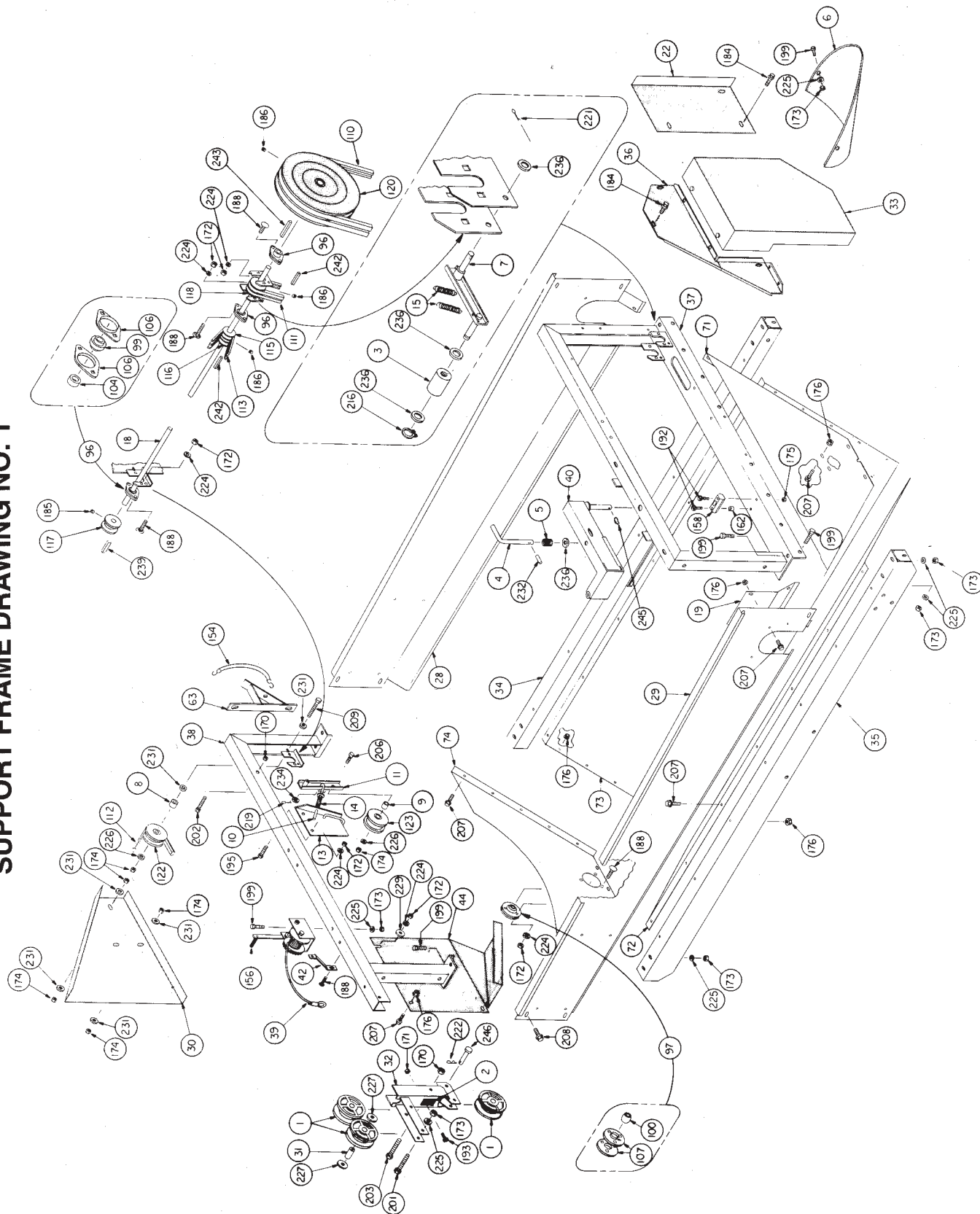
# MODEL 54 HI-CAP CLEANER

## DRUM PARTS LIST

REF. NO.	PART NUMBER	NO. REQ'D	DESCRIPTION
1.	205A0005	32	Screen Clamp
2.	205A0018	9	Flow Ring Angle Bracket
3.	205A0045	1	Strap Assembly
4.	205A0059	1	Screen Tool
5.	205B0003	1	Front Drum Support Angle Bracket
6.	205B0039	2	Discharge Shield Support Bracket
7.	206A0001	1	Drum Shaft Spacer
8.	206A0002	6	Cone Screen Support Bar
9.	206A0003	12	Drum Tumbling Bar
10.	206A0005	1	Front Cone Flow Ring
11.	206A0007	1	Center Cone Flow Ring
12.	206A0009	1	Rear Cone Flow Ring
13.	206A0010	1	Rear Inside Cone Screen Strap
14.	206A0012	10	Outside Drum Strap Assembly
15.	206A0015	1	Drum Axle
16.	206A0018	1	Front Cone Ring
17.	206A0020	1	Rear Cone Ring
18.	206A0025	1	Front Cone Ring
19.	206A0029	1	Middle Trussed Drum Ring
20.	206A0037	1	Center Discharge Drum Ring
21.	206A0041	1	Rear Drum Ring
22.	206A0043	2	Rear and Center Drum Screen - 24"
23.	206A0044	1	Front Drum Screen - 36"
24.	206A0045	2	Cone Screen Trash Spout Section
25.	206A0046	3	Cone Screen
26.	206A0047	1	Cone Drive Pulley
27.	206B0054	1	Lower Discharge Shield
28.	206B0058	1	Upper Discharge Shield
29.	206B0099	2	Discharge Shield Brace
30.	PT0130	3	Bearing with Eccentric Lock, 1-7/16" (Complete)
31.	PT0131	2	Wood Bearing, 1-7/16" (Complete)
32.	PT0226	1	Precision Bearing with Eccentric Lock, 1-7/16"
33.	PT0227	1	Wood Bearing, 1-7/16"
34.	PT0409	1	Shaft Collar, 1-7/16"
35.	PT0410	1	Collar with Eccentric Lock, 1-7/16"
36.	PT0411	1	Wood Bearing Housing, 1-7/16"
37.	PT0427	2	3 Hole Stamped Flangette
38.	1FH0763	12	Hex Nut, 1/4"
39.	1FH0764	8	Hex Nut, 5/16"
40.	1FH0765	21	Hex Nut, 3/8"
41.	1FH0970	126	Hex Flange Lock Nut, 1/4"
42.	2FH0477	32	Self-Tapping Hex Washer Head Screw, #10 x 3/4"
43.	2FH0512	2	Socket Head Set Screw, 5/16" x 5/16"
44.	2FH0520	1	Socket Head Set Screw, 3/8" x 3/8"
45.	2FH0660	9	Carriage Bolt, 3/8" x 1"
46.	2FH0735	12	Round Head Machine Screw, 1/4" x 2-1/2"
47.	2FH0828	6	Hex Bolt, 5/16" x 3/4"
48.	2FH0855	10	Hex Bolt, 3/8" x 1"
49.	2FH0865	2	Hex Bolt, 3/8" x 3-1/2"
50.	2FH0979	126	Hex Flange Whiz Lock Screw, 1/4" x 5/8"
51.	3FH0790	8	Lock Washer, 5/16"
52.	3FH0791	21	Lock Washer, 3/8"
53.	3FH0832	1	Machinery Bushing, 1-1/2" I.D. x 2-1/4" O.D. x 14 GA.
54.	3FH0898	1	Spring Pin, 1/4" x 2"
55.	3FH0140	1	Square Key, 3/8" x 1-3/4"

# MODEL 54 HI-CAP CLEANER

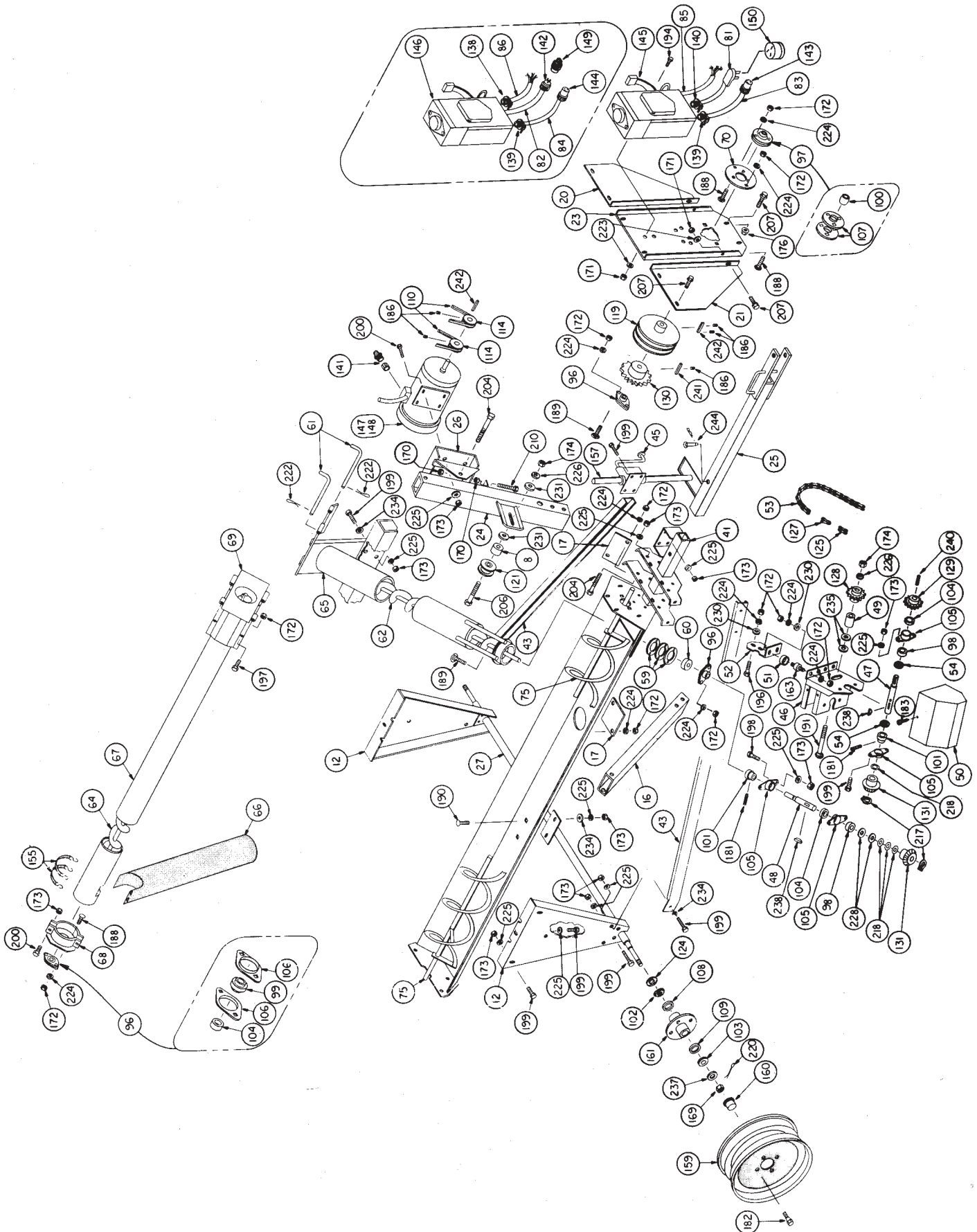
## SUPPORT FRAME DRAWING NO. 1





# MODEL 54 HI-CAP CLEANER

## SUPPORT FRAME DRAWING NO. 2



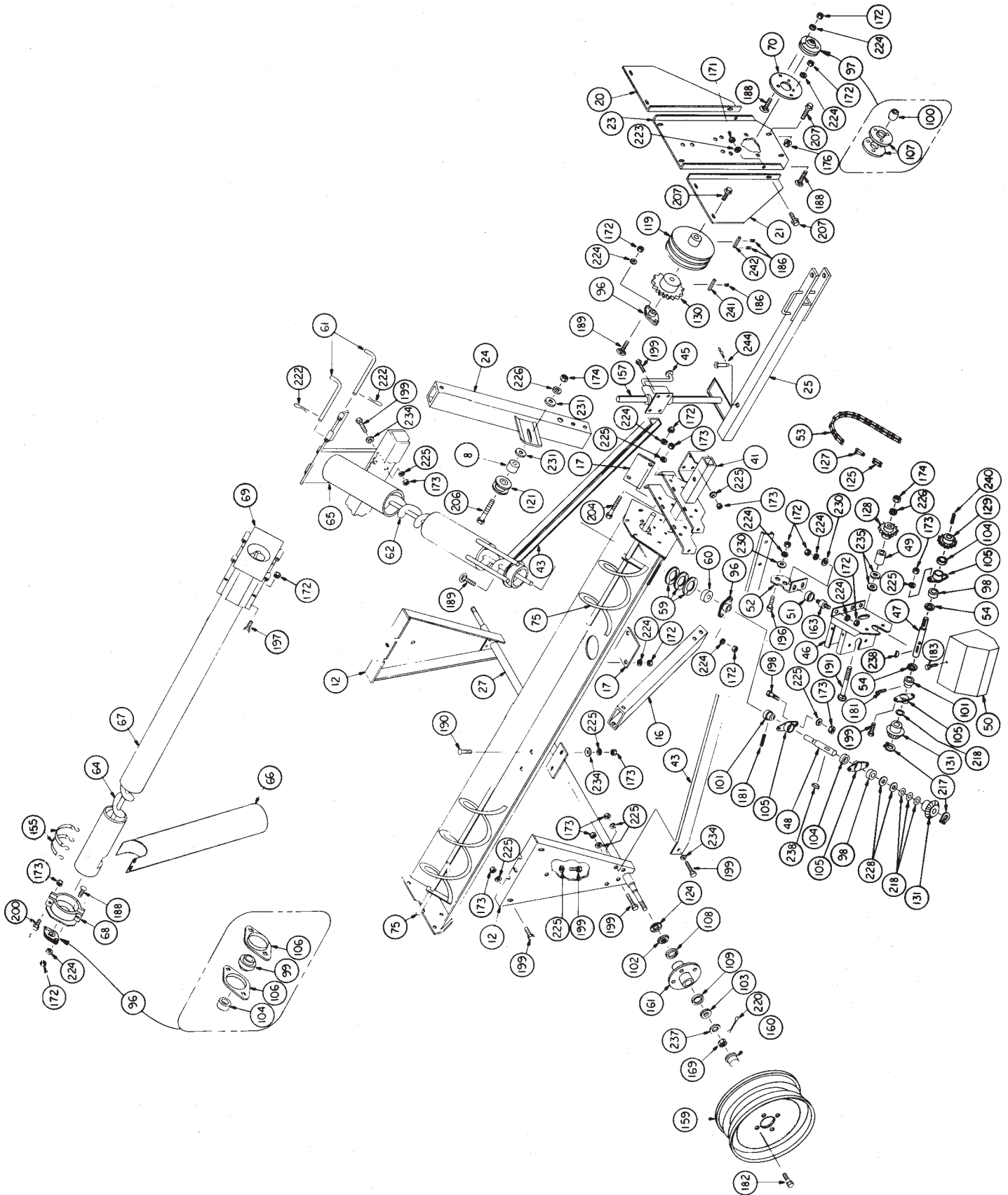
Exploded view diagram of the support frame assembly for a hydraulic crane. The diagram illustrates the main structural components and their assembly sequence, indicated by numbered callouts (1 through 246). Key components include:

- Base Frame (1-10):** The main structural frame, including the base plate (1), side rails (2, 3), and cross members (4, 5, 6, 7, 8, 9, 10).
- Hydraulic System (11-246):** The hydraulic crane mechanism, including the hydraulic cylinder (11), pump (12), motor (13), and various valves (14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246).
- Accessories (247-250):** Additional components such as the hydraulic cylinder (247), pump (248), motor (249), and various valves (250).

The diagram includes a note: "REFER TO HYDRAULIC CONTROLS DRAWING".

# MODEL 54 HYDRAULIC HI-CAP CLEANER

## SUPPORT FRAME DRAWING NO. 2



# MODEL 54 HI-CAP CLEANER - PARTS LIST

REF. NO.	PART NUMBER	NO. REQ'D	DESCRIPTION
1.	104B1118	3	Wheel, 4" OD x 1-3/8" wide x 49/64" bore polypropylene
2.	204B015	1	Black Rubber Pad
3.	204B0018	1	Wood Flat Idler Pulley
4.	204C0006	1	Auger Support Arm Latch Pin
5.	204C0014	1	Auger Support Arm Compression Spring
6.	205B0018	1	Intake Pan
7.	205B0055	1	Front Idler Arm
8.	205B0057	2	Spacer Bushing 3/4"
9.	205B0068	1	Idler Bushing, 1" (Rear)
10.	205B0070	1	Idler Spring Rod
11.	205B0072	1	Rear Idler Arm
12.	205B0084	2	Axle Frame Support
13.	205B0086	1	Rear Belt Shield Bracket
14.	205B0097	1	Rear Idler Compression Spring
15.	205B0098	2	Drum Drive Extension Spring
16.	206B0001	1	Front Brace Extension - Right
17.	206B0002	2	Clean Out Cover Plate
18.	206B0003	1	Cone Drive Shaft
19.	206B0004	1	Drum Side Panel Cover Plate
20.	206B0005	1	Front Panel Shield Extension - Left
21.	206B0006	1	Front Panel Shield Extension - Right
22.	206B0007	1	Motor Belt Shield Back Panel
23.	206B0007	1	Front Panel
24.	206B0011	1	Front Brace Extension - Left
25.	206B0013	1	Tongue Extension
26.	206B0017	1	Motor Mount
27.	206B0020	1	Axle with Spindles
28.	206B0022	1	Drum Side Panel - Left
29.	206B0023	1	Drum Side Panel - Right
30.	206B0025	1	Rear Drive Belt Shield
31.	206B0026	3	Auger Lift Wheel Bushing
32.	206B0030	1	Auger Lift Frame
33.	206B0032	1	Motor Belt Shield
34.	206B0037	1	Side Frame Channel - Left
35.	206B0038	1	Side Frame Channel - Right
36.	206B0051	1	Drum Belt Shield
37.	206B0072	1	Front Frame
38.	206B0076	1	Rear Frame
39.	206B0078	1	Auger Lift Cable Assembly
40.	206B0090	1	Auger Support Arm
41.	206B0093	1	Tongue Guide and Lower Frame
42.	206B0099	2	Discharge Shield Brace
43.	206B0100	2	Lower Frame Brace
44.	206B0103	1	Discharge Chute
45.	206B0105	1	Jack Gear Box
46.	206B0107	1	Gear Drive Support
47.	206B0110	1	Sprocket Stub Shaft
48.	206B0111	1	Discharge Auger Stub Shaft
49.	206B0112	1	Idler Stand-Off
50.	206B0113	1	Gear Drive Cover
51.	206B0116	2	Shock Mount Ring
52.	206B0117	1	Drive Assembly Support Bracket
53.	206B0118	1	Roller Chain
54.	206B0120	2	Spacer Bushing, 2: x 1.39" x 10 GA.
59.	206C0034	3	Bearing Spacer
60.	206C0035	1	Felt Dust Seal
61.	206C0037	2	Hinge Pin
62.	206C0043	1	4" Discharge Auger - Lower Base Section
63.	206C0047	1	Discharge Auger Carrier
64.	206C0077	1	4" Discharge Auger Extensions
65.	206C0078	1	5" Discharge Auger Tube - Lower Base Section
66.	206C0080	1	Discharge Auger Drop Extension
67.	206C0088	1	5" Discharge Auger Tube Extension
68.	206C0094	1	5" Auger End Bearing Support
69.	206C0096	1	Hinge with Tube Clamp
70.	206D0003	1	Trash Pan Auger Front Bearing Plate
71.	206D0005	1	Trash Pan End Panel - Front
72.	206D0007	1	Trash Pan End Panel - Right
73.	206D0008	1	Trash Pan End Panel - Left
74.	206D0010	1	Trash Pan End Panel - Rear
75.	206D0015	1	10" Trash Pan Auger



# MODEL 54 HI-CAP CLEANER - PARTS LIST

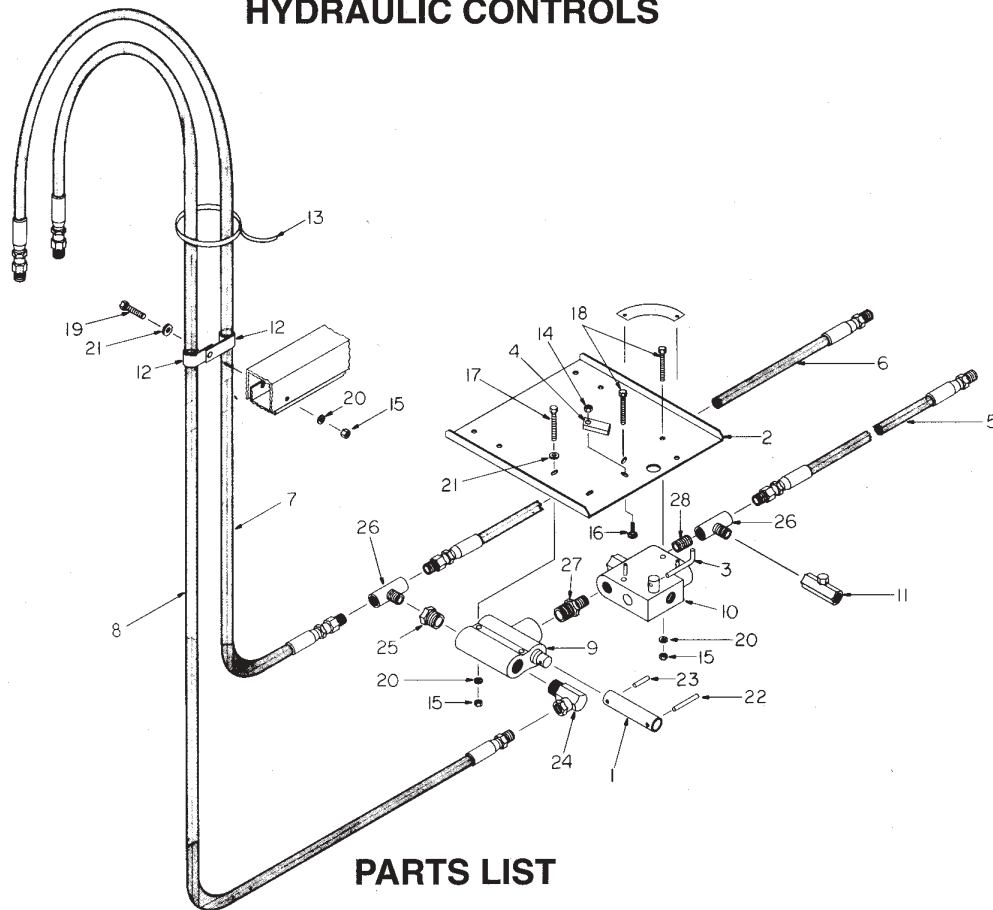
REF. NO.	PART NUMBER	NO. REQ'D	DESCRIPTION
81.	206E0004	1	Lead-in Power Cord and Plug-Single Phase
82.	206E0005	1	Lead-in Power Cord - Three Phase
83.	206E0006	1	Power Cord to Auger - Single Phase
84.	206E0007	1	Power Cord to Auger - Three Phase
85.	206E0008	1	Power Cord to Motor - Single Phase
86.	206E0009	1	Power Cord to Motor - Three Phase
87.	206H0003	1	Hydraulic Motor Mount
88.	206H0006	1	Hydraulic Motor Shield
89.	601B0005	2	Roller Chain Sprocket, #50 x 14T
90.	601B0049	1	Roller Chain Coupler
96.	PT0115	6	Bearing with Eccentric Locking Collar, 1" (Complete)
97.	PT0127	2	Wood Bearing, 1" (Complete)
98.	PT0202	2	Precision Bearing with Eccentric Locking Collar, 1"
99.	PT0203	4	Precision Bearing with Eccentric Locking Collar, 1"
100.	PT0220	2	Wood Bearing, 1" ID x 2" OD
101.	PT0236	2	Radial Ball Bearing, 1"
102.	PT0322	2	Wheel Bearing, 1-1/4"
103.	PT0326	2	Wheel Bearing, 3/4"
104.	PT0401	6	Collar with Eccentric Lock, 1"
105.	PT0415	4	2 Hole Stamped Flange Housing
106.	PT0420	8	2 Hole Bearing Mounting Flange
107.	PT0421	4	3 Hole Center Mount Bearing Flange
108.	PT0442	2	Inner Bearing Cap
109.	PT0446	2	Outer Bearing Cap
110.	PT0502	2	A-66 V-Belt (Matched)
111.	PT1175	2	A-91 V-Belt (Matched)
112.	PT0514	1	BB-120 Double V V-Belt
113.	PT0523	3	A-136 V-Belt (Matched)
114.	PT0613	2	Pulley, A Section, 1-1/8" x 1-1/2" (with set screw)
115.	PT0622	1	Pulley, A Section Single Groove, 1" x 3" (with set screw)
116.	PT0623	1	Pulley, A Section Double Groove, 1" x 3" (with set screw)
117.	PT0624	1	Pulley, B Section Single Groove, 1" x 3" (with set screw)
118.	PT0638	1	Pulley, A Section Double Groove, 1" x 4" (with set screw)
119.	PT0662	1	Pulley, A Section Double Groove, 1" x 8" (with set screw)
120.	PT0697	1	Pulley, B Section Double Groove, 1" x 16" (with set screw)
121.	PT0713	1	Flat Flanged Idler Pulley, 1/2" x 3-1/2"
122.	PT0716	1	Pulley, V-Belt Idler, 1/2" x 4" (with set screw)
123.	PT0717	1	Pulley, Idler, 1/2" x 4-1/2"
124.	PT0814	2	Wheel Bearing Seal
125.	PT1048	1	#40 Connector Link
126.	PT1050	1	Connecting Link, #50 Double Standard
127.	PT1052	1	#40 Offset Link
128.	PT1090	1	Idler Sprocket, #40-18T, 1/2" Bore
129.	PT1099	1	Sprocket - Hub Type, #40 - 12T, 3/4" Bore
130.	PT1102	1	Sprocket - Hub Type, #40 - 28T, 1" Bore
131.	PT1120	2	Miter Gear, 8 Pitch - 24T, 1" Bore
132.	PT1151	1	Hydraulic Motor, 10.3 cu. in./rev. disp.
138.	1EL0401	1	Connector, 3/8" (Three Phase Only)
139.	1EL0403	2	Connector, 3/4"
140.	1EL0404	1	Connector, 1" (Single Phase Only)
141.	1EL0411	1	Connector, 3/4" F2
142.	1EL0672	1	Twist Plug, 480 Volt, 30 Amp, Single Phase
143.	1EL0676	1	Twist Connector, 250 Volt, 30 Amp, Single Phase
144.	1EL0677	1	Twist Connector, 480 Volt, 20 Amp, Three Phase
145.	2EL0321	1	Switch Box, 240 Volt, A.C., 60 Amp, Single Phase
146.	2EL0322	1	Switch Box, 240 Volt, A.C., 30 Amp, Three Phase
147.	3EL5104	1	Motor, TEFC, Electric, 3 HP - Three Phase
148.	3EL5112	1	Motor, TEFC, Electric, 3 HP - Single Phase
149.	1EL3674	1	Twist Connector, 480 Volt, 30 Amp, Three Phase
150.	1EL0678	1	Heavy Duty Cord Connector, 230 Volt, 50 Amp, Single Phase
154.	MS0006	1	Hold Down Strap, 10"
155.	MS0008	2	Hold Down Strap, 4"
156.	MS0009	1	Hand Winch
157.	MS0013	1	Jack Post
158.	MS0023	2	Operating Angle Level, 3/8" x 1"
159.	MS0026	1	4 Hole Wheel Rim, 15"
160.	MS0036	2	Dust Cap
161.	MS0037	2	Wheel Hub
162.	MS0052	1	Nylon Spacer, 5/16" OD x .140 ID x 5/16"
163.	MS0069	2	Shock Mount, 5/16" - 18 UNC Studs

# MODEL 54 HI-CAP CLEANER - PARTS LIST

REF. NO.	PART NUMBER	NO. REQ'D	DESCRIPTION
169.	1FH0648	2	Slotted Hex Nut, 3/4" UNF
170.	1FH0736	4	Hex Lock Nut, 3/8"
171.	1FH0763	7	Hex Nut, 1/4"
172.	1FH0764	38	Hex Nut, 5/16"
173.	1FH0765	58	Hex Nut, 3/8"
174.	1FH0767	10	Hex Nut, 1/2"
175.	1FH0777	2	Hex Machine Screw Nut, #6-32
176.	1FH0970	47	Hex Flange Lock Nut, 1/4"
181.	2FH0508	2	Socket Head Set Screw, 1/4" x 1-1/4"
182.	2FH0410	8	Hub Bolt, 1/2" UNF x 3/4"
183.	2FH0477	2	Self-Tapping Slotted Hex Washer Head Screw, #10-3/4"
184.	2FH0479	6	Self-Tapping Slotted Hex Washer Head Screw, 1/4" x 3/4"
185.	2FH0502	1	Socket Head Set Screw, 5/16" x 1/4"
186.	2FH0512	9	Socket Head Set Screw, 5/16" x 5/16"
187.	2FH0513	2	Socket Head Set Screw, 5/16" x 3/8"
188.	2FH0645	18	Carriage Bolt, 5/16" x 3/4"
189.	2FH0647	2	Carriage Bolt, 5/16" x 1-1/4"
190.	2FH0660	2	Carriage Bolt, 3/8" x 1"
191.	2FH0675	1	Carriage Bolt, 1/2" x 3-1/4"
192.	2FH0700	2	Round Head Machine Screw, #6-32 x 1-1/8"
193.	2FH0728	2	Round Head Machine Screw, 1/4" x 1"
194.	2FH0803	7	Hex Bolt, 1/4" x 3/4"
195.	2FH0828	2	Hex Bolt, 5/16" x 3/4"
196.	2FH0830	2	Hex Bolt, 5/16" x 1"
197.	2FH0831	4	Hex Bolt, 5/16" x 1-1/4"
198.	2FH0853	8	Hex Bolt, 3/8" x 3/4"
199.	2FH0855	41	Hex Bolt, 3/8" x 1"
200.	2FH0856	7	Hex Bolt, 3/8" x 1-1/4"
201.	2FH0861	3	Hex Bolt, 3/8" x 2-1/2"
202.	2FH0863	1	Hex Bolt, 3/8" x 3"
203.	2FH0865	1	Hex Bolt, 3/8" x 3-1/2"
204.	2FH0869	5	Hex Bolt, 3/8" x 5"
205.	2FH0870	1	Hex Bolt, 3/8" x 5-1/2"
206.	2FH0911	2	Hex Bolt, 1/2" x 3"
207.	2FH0979	76	Hex Flange Whiz Lock Screw, 1/4" x 5/8"
208.	2FH0991	8	Hex Large Flange Whiz Lock Screw, 5/16" x 3/4"
209.	2FH1038	1	Hex Bolt, 1/2" x 4-1/2", Full Thread
210.	2FH1041	1	Hex Bolt, 3/8" x 5-1/2", Full Thread
216.	3FH0561	1	Snap Ring, 5/8"
217.	3FH0569	2	Snap Ring, 1"
218.	3FH0635	As req'd	Shim, 1" ID x 1-1/2" OD x .012
219.	3FH0712	2	Cotter Pin, 1/8" x 3/4"
220.	3FH0719	2	Cotter Pin, 5/32" x 1-1/4"
221.	3FH0721	1	Cotter Pin, 5/32" x 1"
222.	3FH0770	3	Cotter Hair Pin, 1/8" x 2-3/8"
223.	3FH0789	9	Lock Washer, 1/4"
224.	3FH0790	34	Lock Washer, 5/16"
225.	3FH0791	60	Lock Washer, 3/8"
226.	3FH0793	4	Lock Washer, 1/2"
227.	3FH0828	6	Machinery Bushing, 1-1/4" OD x 3/4" ID x 14 GA
228.	3FH0830	2	Machinery Bushing, 1" ID x 1-1/2" OD x 10 GA
229.	3FH0863	1	Flat Washer, 1/4"
230.	3FH0864	4	Flat Washer, 5/16"
231.	3FH0867	10	Flat Washer, 1/2"
232.	3FH0934	1	Spring Pin, 3/16" x 1-3/4"
234.	3FH0948	13	Flat Washer, 3/8" SAE
235.	3FH0952	2	Flat Washer, 5/8" SAE
236.	3FH0952	4	Flat Washer, 5/8" SAE
237.	3FH0954	2	Flat Washer, 3/4" SAE
238.	3FH0993	3	Woodruff Key, 1/4" x 1"
239.	3FH1024	1	Square Key, 1/4" x 3/4"
240.	3FH1015	1	Square Key, 3/16" x 1"
241.	3FH1027	1	Square Key, 1/4" x 1-1/4"
242.	3FH1030	4	Square Key, 1/4" x 2"
243.	3FH1031	1	Square Key, 1/4" x 2-1/4"
244.	3FH1220	1	Tongue Extension Pin with Hair Pin, 5/8"
245.	3FH1222	1	Snap-Over Retaining Pin, 7/16" x 1-3/4"
246.	3FH1242	1	Clevis Pin, 3/8" x 2-1/2"
	2051072	2	Safety Chain - (NOT SHOWN)

# MODEL 54 HYDRAULIC HI-CAP CLEANER

## HYDRAULIC CONTROLS

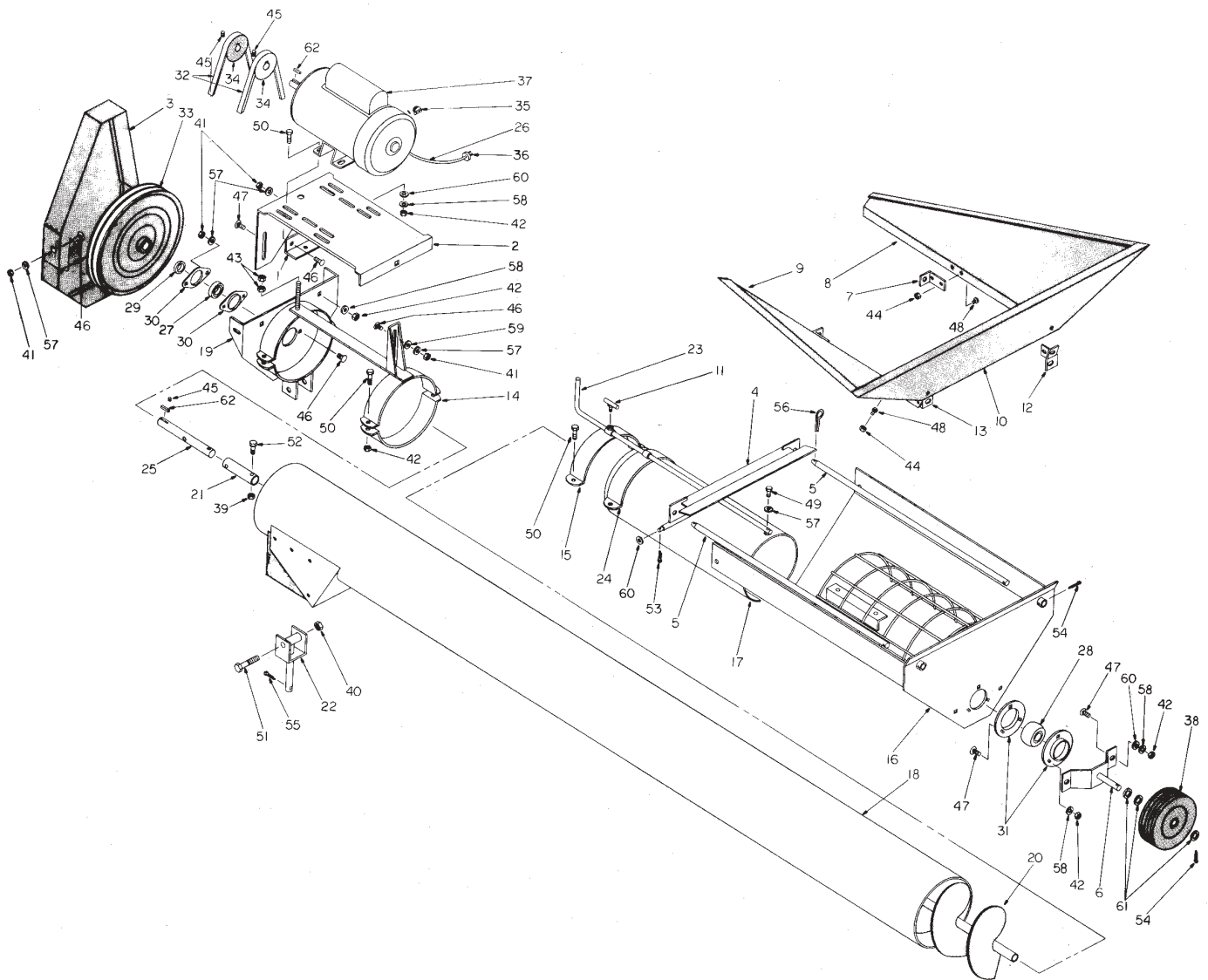


## PARTS LIST

REF. NO.	PART NUMBER	NO. REQ'D	DESCRIPTION
1.	205H0009	1	Handle Extension (Hydraulic Control)
2.	205H0011	1	Control Panel
3.	205H0012	1	Flow Control Lever
4.	205H0013	1	Flow Control Lever Stop Tab
5.	206H0007	1	Hydraulic Hose, 27-1/2", with Fittings
6.	206H0008	1	Hydraulic Hose, 39-1/2", with Fittings
7.	206H0009	1	Hydraulic Hose, 78", with Fittings
8.	206H0010	1	Hydraulic Hose, 87", with Fittings
9.	PT1135	1	Manual Selector Valve, 3/4" NPT
10.	PT1136	1	Full Range Flow Control, 1/2" NPT
11.	PT1137	1	Check Valve, 1/2" NPT
12.	1EL2093	2	Hose Clamp, Plastic Covered
13.	1EL2119	5	Tie Strap, 14-1/2" Long
14.	1FH0734	1	Hex Lock Nut, 1/4"
15.	1FH0763	5	Hex Nut, 1/4"
16.	2FH0631	1	Carriage Bolt, 1/4" x 3/4"
17.	2FH0809	2	Hex Bolt, 1/4" x 2"
18.	2FH0811	2	Hex Bolt, 1/4" x 2-1/2"
19.	2FH0815	1	Hex Bolt, 1/4" x 3-1/2"
20.	3FH0789	5	Lock Washer, 1/4"
21.	3FH0863	3	Flat Washer, 1/4"
22.	3FH0937	1	Spring Pin, 5/16" x 3"
23.	3FH0938	1	Spring Pin, 5/16" x 1-1/4"
24.	4FH0305	1	Male Pipe 90° Elbow, 3/4" NPT Male, 1/2" NPSM Female
25.	4FH0306	1	Pipe Thread Reducer, 3/4" NPT Male, 1/2" NPTF Female
26.	4FH0307	2	Male Branch Tee, 1/2" NPTF Male, 1/2" NPTF Male
27.	4FH0309	1	Hex Pipe Nipple, 3/4" NPTF x NPTF Male
28.	4FH0310	1	Nipple, 1/2" NPTF

# MODEL 54 HI-CAP CLEANER

## 10" x 12' FEED IN AUGER





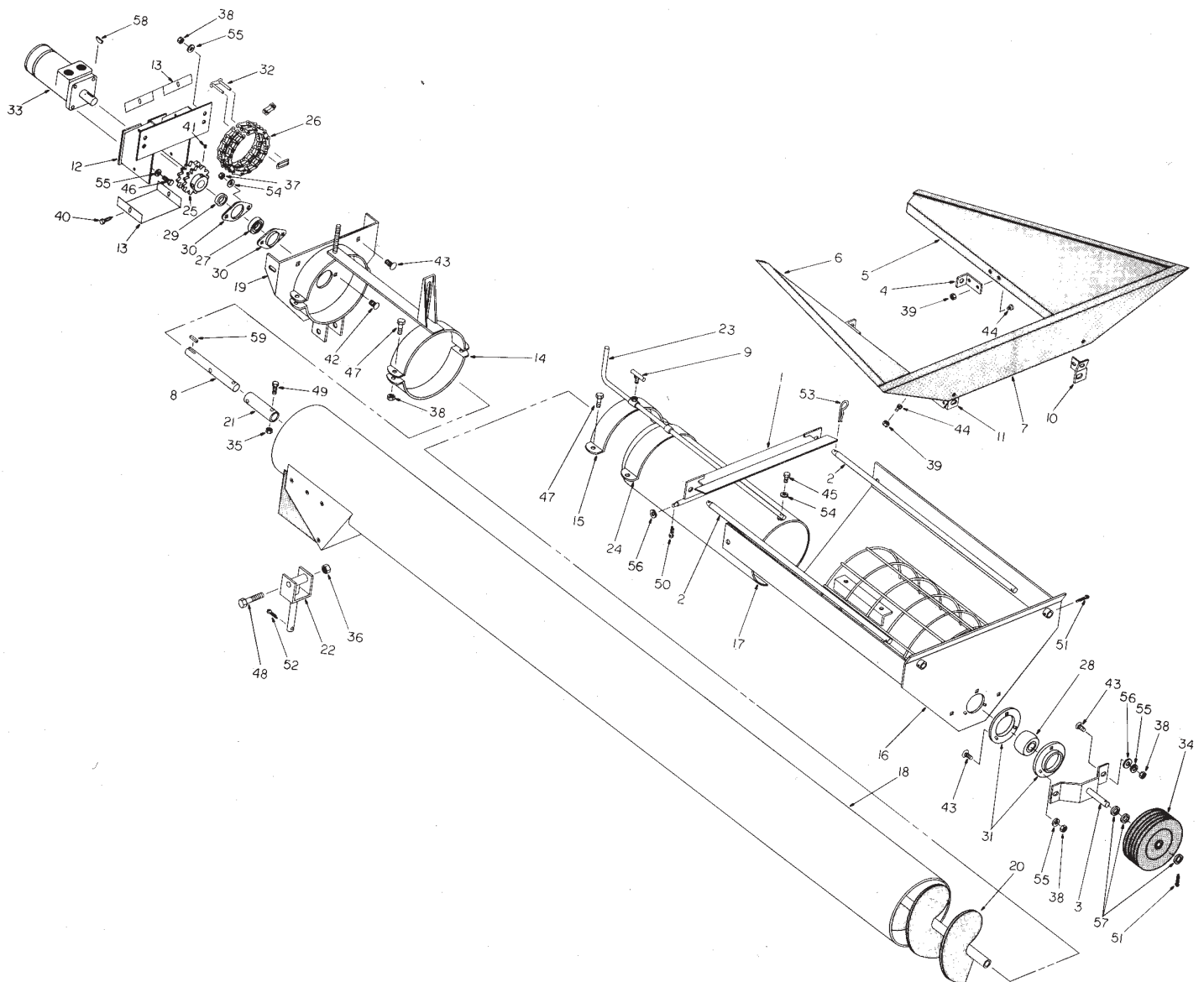
# MODEL 54 HI-CAP CLEANER

## 10" x 12' FEED-IN AUGER PARTS LIST

REF. NO.	PART NUMBER	NO. REQ'D	DESCRIPTION
1.	205C0003	1	Motor Mount Angle
2.	205C0005	1	Motor Mount Base Plate
3.	205C0012	1	Belt Shield - Motor
4.	205C0022	1	Latch and Glide Rod Support
5.	205C0025	2	Glide Rod
6.	205C0027	1	Hopper Wheel Bracket
7.	205C0030	2	Glide Rod Guide
8.	205C0031	1	Right Sliding Hopper Sheet
9.	205C0032	1	Left Sliding Hopper Sheet
10.	205C0038	1	Sliding Hopper End Sheet
11.	2FN0428	1	Sliding Hopper End Sheet
12.	205C0056	1	Right End Glide Rod Guide
13.	205C0057	1	Left End Glide Rod Guide
14.	206C0007	1	2" Strap Bracket
15.	206C0008	1	Flow Restrictor Strap Bracket
16.	206C0015	1	Tail Cage Hopper
17.	206C0016	1	Flow Restrictor Tube
18.	206C0018	1	Auger Tube, 10'
19.	206C0020	1	Auger Head
20.	206C0022	1	9" O.D. x 12' Auger
21.	206C0024	1	Sleeve Bushing
22.	206C0029	1	Auger Pivot
23.	206C0030	1	Flow Restrictor Adjustment Handle
24.	206C0032	1	Flow Restrictor Strap Bracket Without Nut
25.	206C0089	1	Stub Shaft, 8-3/8"
26.	206E0001	1	Power Cord - Single Phase
	206E0002	1	Power Cord - Three Phase
27.	PT0203	1	Sealed Bearing with Eccentric Lock, 1"
28.	PT0229	1	Wood Bearing, 1-1/2" Diameter Bore
29.	PT0401	1	Collar with Eccentric Lock, 1"
30.	PT0420	2	2 Hole Bearing Flange
31.	PT0424	2	3 Hole Center Flange Mount
32.	PT0490	2	V-Belt, B-48
33.	PT0684	1	Auger Pulley, 1" x 12", B Section, 2 Groove
34.	PT0708	2	Motor Drive Pulley, 1-1/8" x 3", B Section
35.	1EL0403	1	Connector, 3/4"
36.	1EL0669	1	Plug - 250 Volt, Single Phase
	1EL0671	1	480 Volt, Three Phase
37.	3EL5114	1	Electric Motor, TEFC - 5 HP., Single Phase
	3EL5120	1	5 HP., Three Phase
38.	MS0021	1	6" Rubber Wheel
39.	1FH0736	2	Lock Nut, 3/8"
40.	1FH0738	1	Lock Nut, 1/2"
41.	1FH0764	7	Hex Nut, 5/16"
42.	1FH0765	15	Hex Nut, 3/8"
43.	1FH0767	2	Hex Nut, 1/2"
44.	1FH0995	16	Hex Flange Whiz Lock Nut, 1/4"
45.	2FH0512	4	Socket Head Set Screw, 5/16" x 5/16"
46.	2FH0645	7	Carriage Bolt, 5/16" x 3/4"
47.	2FH0659	7	Carriage Bolt, 3/8" x 3/4"
48.	2FH0747	16	Pan Head Machine Screw, 1/4" x 1/2"
49.	2GH0830	1	Hex Bolt, 5/16" x 1"
50.	2FH0856	12	Hex Bolt, 3/8" x 1-1/4"
51.	2FH0916	1	Hex Bolt, 1/2" x 4-1/2"
52.	2FH1058	2	Hex Bolt, 3/8" x 2", Grade 5
53.	3FH0712	2	Cotter Pin, 1/8" x 3/4"
54.	3FH0714	3	Cotter Pin, 3/16" x 1-1/2"
55.	3FH0731	1	Cotter Pin, 3/16" x 1-1/2"
56.	3FH0770	2	Hair Cotter Pin, 1/8" x 2-3/8"
57.	3FH0790	8	Lock Washer, 5/16"
58.	3FH0791	11	Lock Washer, 3/8"
59.	3FH0864	1	Flat Washer, 5/16"
60.	3FH0865	8	Flat Washer, 3/8"
61.	3FH0952	3	Flat Washer, 5/8" SAE
62.	3FH1030	2	Square Key, 1/4" x 2"

# MODEL 54 HYDRAULIC HI-CAP CLEANER

## 10" x 12' FEED-IN AUGER

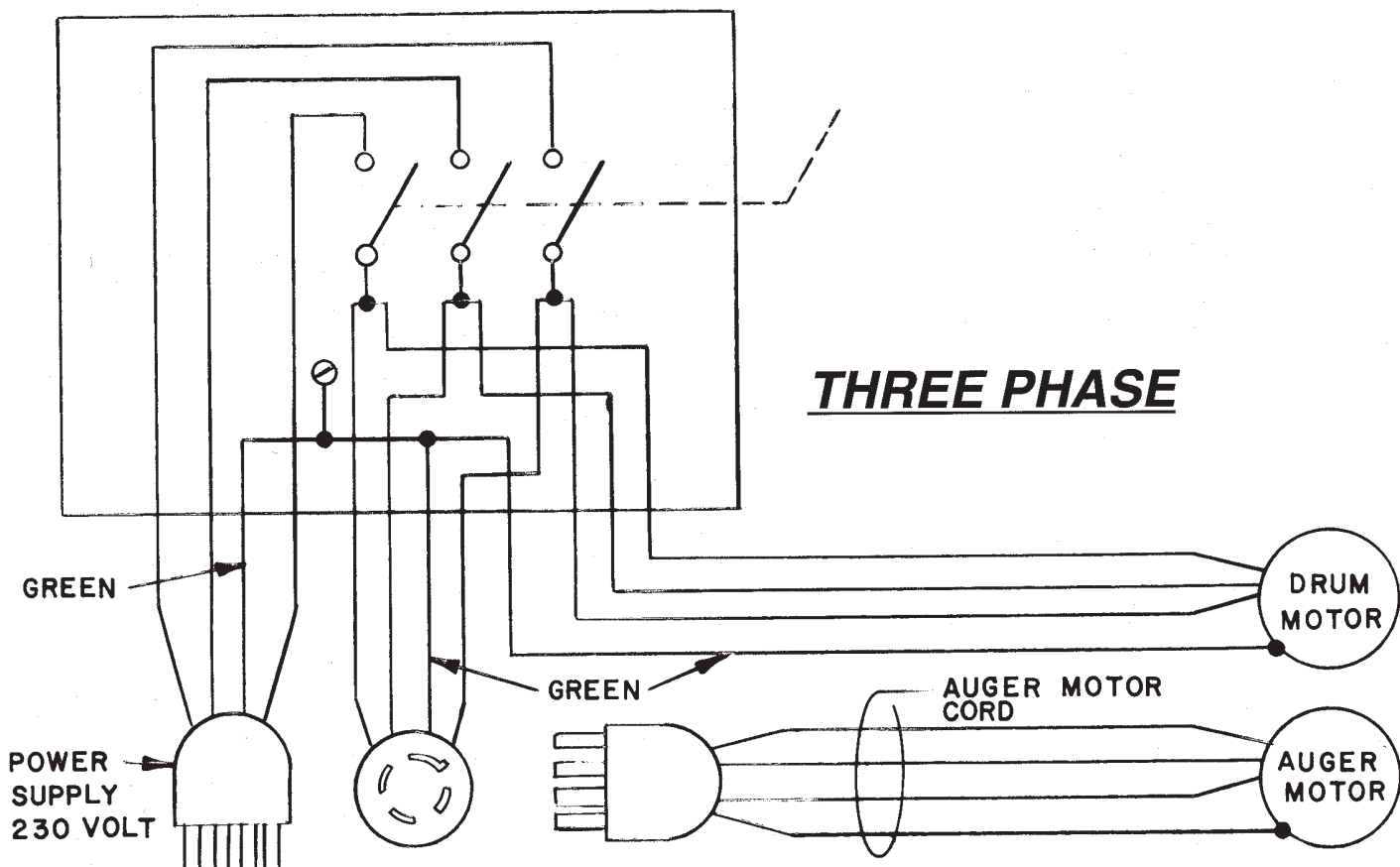
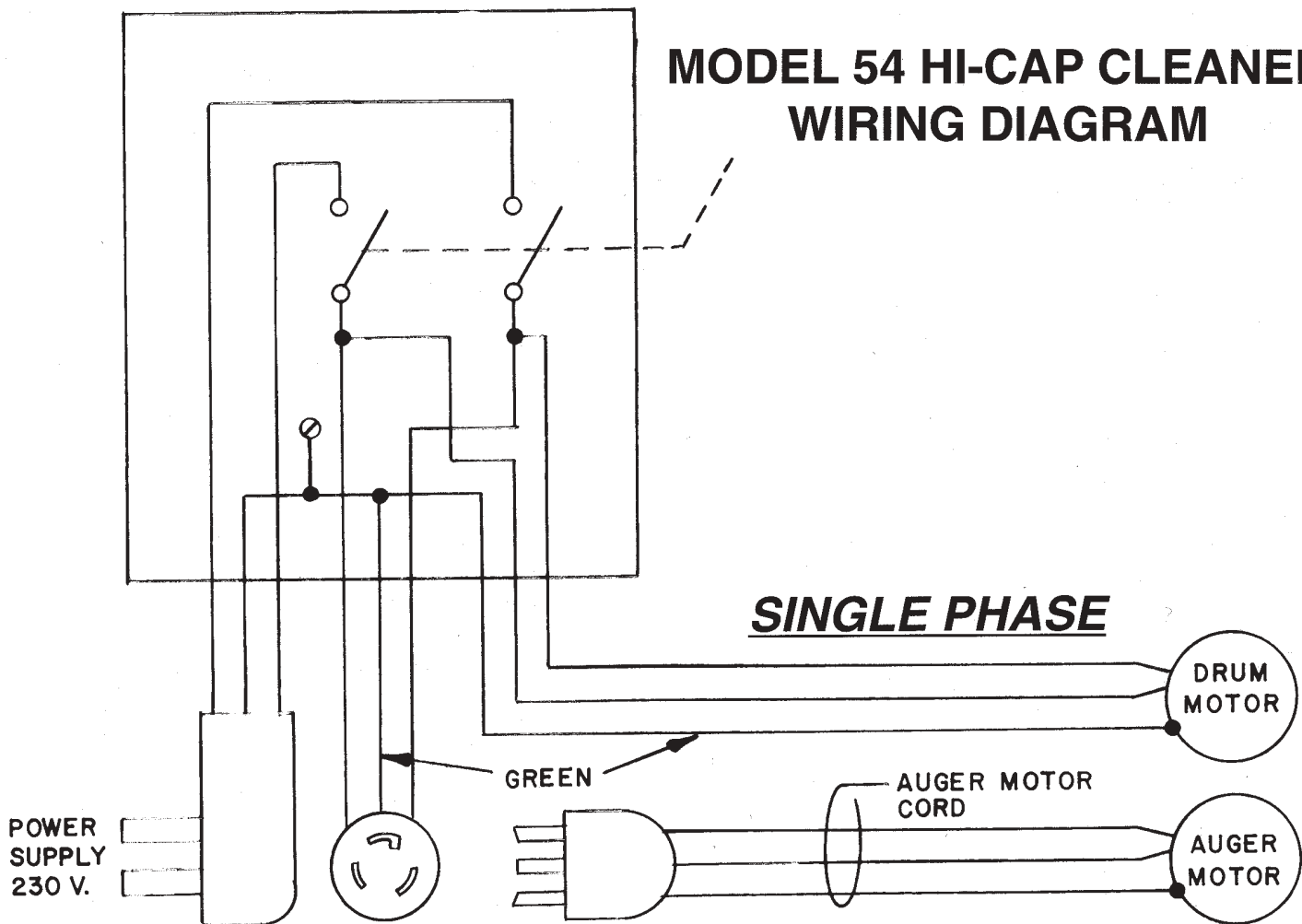


# MODEL 54 HYDRAULIC HI-CAP CLEANER

## 10" X 12' FEED-IN AUGER PARTS LIST

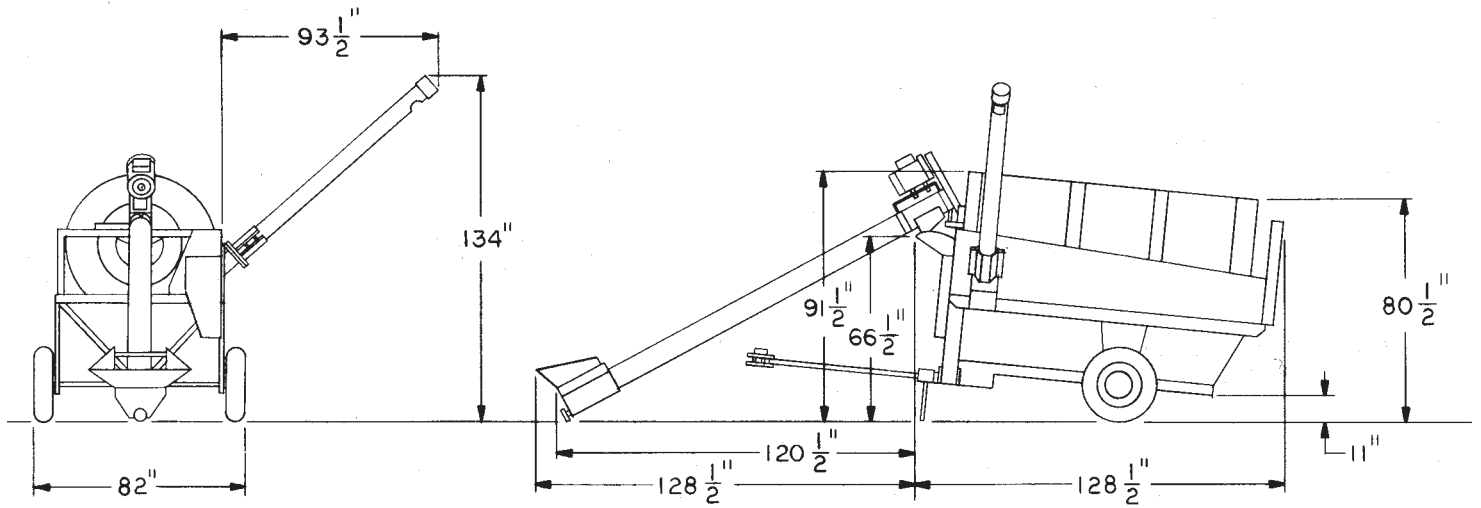
REF. NO.	PART NUMBER	NO. REQ'D	DESCRIPTION
1.	205C0022	1	Latch and Glide Rod Support
2.	205C0025	2	Glide Rod
3.	205C0027	1	Hopper Wheel Bracket
4.	205C0030	2	Glide Rod Guide
5.	205C0031	1	Right Sliding Hopper Sheet
6.	205C0032	1	Left Sliding Hopper Sheet
7.	205C0038	1	Sliding Hopper End Sheet
8.	205C0039	1	Stub Shaft
9.	205C0054	1	Wing Bolt
10.	205C0056	1	Right End Glide Rod Guide
11.	205C0057	1	Left End Glide Rod Guide
12.	205H0008	1	Hydraulic Motor Mount - Auger
13.	205H0010	2	Coupler Cover Shield
14.	206C0007	1	2" Strap Bracket
15.	206C0008	1	Flow Restrictor Strap Bracket
16.	206C0015	1	Tail Cage Hopper
17.	206C0016	1	Flow Restrictor Tube
18.	206C0018	1	Auger Tube, 10"
19.	206C0020	1	Auger Head
20.	206C0022	1	9" O.D. x 12' Auger
21.	206C0024	1	Sleeve Bushing
22.	206C0029	1	Auger Pivot
23.	206C0030	1	Flow Restrictor Adjustment Handle
24.	206C0032	1	Flow Restrictor Strap Bracket without Nut
25.	601B0005	2	Roller Chain Sprocket, #50 x 14T.
26.	604B0049	1	Roller Chain Coupler
27.	PT0203	1	Sealed Bearing with Eccentric Lock, 1"
28.	PT0229	1	Wood Bearing, 1-1/2" Bore
29.	PT0401	1	Eccentric Locking Collar, 1"
30.	PT0420	2	2 Hole Bearing Flange
31.	PT0424	2	3 Hole Center Flange Mount
32.	PT1050	1	Connecting Link, #50 Double Stranded
33.	PT1152	1	Hydraulic Motor, 6.2 Cu. In./Rev. Disp.
34.	MS0021	1	6" Rubber Wheel
35.	1FH0736	2	Hex Lock Nut, 3/8"
36.	1FH0738	1	Hex Lock Nut, 1/2"
37.	1FH0764	2	Hex Nut, 5/16"
38.	1FH0765	11	Hex Nut, 3/8"
39.	1FH0995	16	Hex Flange Whiz Lock Nut, 1/4"
40.	2FH0479	4	Self-Tapping Screw, 1/4" x 3/4"
41.	2FH0513	2	Socket Head Set Screw, 5/16" x 3/8"
42.	2FH0645	2	Carriage Bolt, 5/16" x 3/8"
43.	2FH0659	7	Carriage Bolt, 3/8" x 3/4"
44.	2FH0747	16	Pan Head Machine Screw, 1/4" x 1/2"
45.	2FH0830	1	Hex Bolt, 5/16" x 1"
46.	2FH0853	4	Hex Bolt, 3/8" x 3/4"
47.	2FH0856	8	Hex Bolt, 3/8" x 1-1/4"
48.	2FH0916	1	Hex Bolt, 1/2" x 4-1/2"
49.	2FH1058	2	Hex Bolt, 3/8" x 2", Grade 5
50.	3FH0712	2	Cotter Pin, 1/8" x 3/4"
51.	3FH0714	3	Cotter Pin, 1/8" x 1-1/4"
52.	3FH0731	1	Cotter Pin, 3/16" x 1-1/2"
53.	3FH0770	2	Hair Cotter Pin, 1/8" x 2-3/8"
54.	3FH0790	3	Lock Washer, 5/16"
55.	3FH0791	11	Lock Washer, 3/8"
56.	3FH0865	4	Flat Washer, 3/8"
57.	3FH0952	3	Flat Washer, 5/8" SAE
58.	3FH0993	1	Woodruff Key, 1/4" x 1"
59.	3FH1026	1	Square Key, 1/4" x 1"

# MODEL 54 HI-CAP CLEANER WIRING DIAGRAM

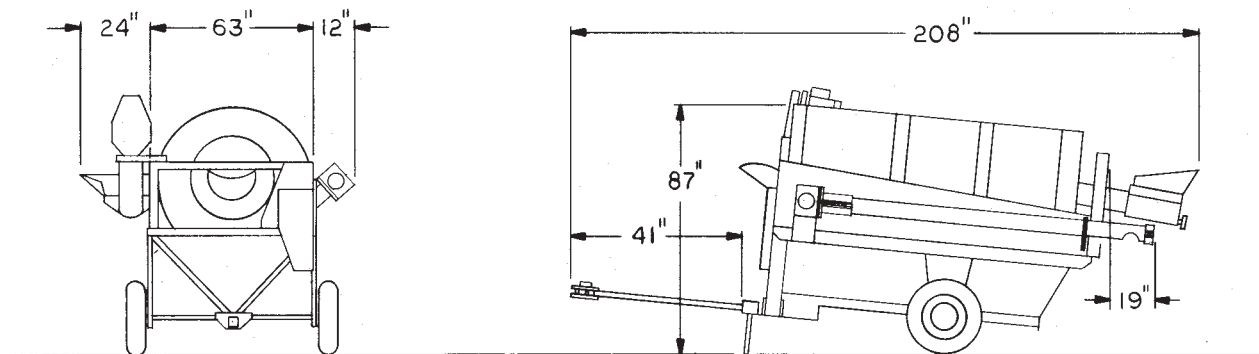




# MODEL 54 HI-CAP CLEANER OVERALL DIMENSIONS



## OPERATING POSITION



## TRANSPORT POSITION

# AVAILABLE SCREENS

## CORN SCREENS

### CONE SCREENS

2 x 2 x 19 ga wire - small  
5/8 x 5/8 x 17 ga wire - standard  
3/4 x 2/3 x 16 ga wire - large

### OUTSIDE DRUM SCREENS

4-1/2 x 4-1/2 x 2 ga wire - small  
4 x 4 x 23 ga wire - standard  
3-1/2 x 3-1/2 x 20 ga wire - large

## POPCORN SCREENS

4 x 4 x 23 ga wire - small  
3 x 3 x 21 ga wire - standard  
2 x 2 x 19 ga wire - large

8 x 8 x 25 ga wire - small  
6 x 6 x 25 ga wire - standard  
5 x 5 x 23 ga wire - large

## SOYBEAN SCREENS

3 x 3 x 21 ga wire - small  
2-1/2 x 2-1/2 x 19 ga wire - standard  
2 x 2 x 19 ga wire - large

6 x 6 x 25 ga wire - small  
5 x 5 x 23 ga wire - standard

### SCREENS RECOMMENDED FOR CLEANING SEED SOYBEANS:

3-1/2 x 3-1/2 x 20 ga wire - small  
3 x 3 x 21 ga wire - standard  
5 x 5 x 23 ga wire - small  
4-1/2 x 4-1/2 x 21 ga - standard

### SCREENS RECOMMENDED FOR CLEANING SEED SOYBEANS:

3 x 3 x 17 ga wire  
6 x 6 x 25 ga wire - small  
5 x 5 x 23 ga wire - standard

## WHEAT, MILO, OATS AND BARLEY SCREENS

4 x 4 x 23 ga wire - small  
3 x 3 x 21 ga wire - standard  
2 x 2 x 19 ga wire - large

10 x 10 x 23 ga wire - small  
9 x 9 x 29 ga wire - medium small  
8 x 8 x 25 ga wire - standard  
7 x 7 x 25 ga wire - medium large\*  
6 x 6 x 25 ga wire - large

\* For buckwheat out of wheat

## SUNFLOWER SCREENS

3 x 3 x 21 ga wire - small  
2 x 2 x 19 ga wire - standard  
5/8 x 5/8 x 17 ga wire - large

8 x 8 x 25 ga wire - small  
6 x 6 x 25 ga wire - standard  
5 x 5 x 23 ga wire - large

## RICE SCREENS

4 x 4 x 23 ga wire - standard  
3 x 3 x 21 ga wire - large

10 x 10 x 23 ga wire - standard  
8 x 8 x 25 ga wire - large

For other sizes contact David Manufacturing Company

## MODEL 54 HI-CAP CAPACITIES

<b>CAPACITIES (shelled corn)</b>	
15% moisture test	3000 BPH
25% moisture test	2100 BPH
30% moisture test	1600 BPH
35% moisture test	1100 BPH

The capacities listed above can vary with grains, amount of foreign material and test weights.

### ***LIMITED WARRANTY***

The Hi-Cap Cleaner is guaranteed for one drying season to be free of defects in materials or workmanship, when properly serviced and operated in accordance with the instructions. Warranted parts will be exchanged FOB Mason City, Iowa, without charge to the user. Damage resulting from negligence voids the warranty. *Warranty does not include labor, installation or the delivery of replacement parts.*

Electric motors are covered by the warranties of the respective manufacturers. Electric service centers are located in all regions. Consult your dealer.

The Hi-Cap Warranty, and the liability of David Manufacturing Company, its distributors, dealers and agents is limited to replacement, without charge, of defective parts, as outlined above. DAVID MANUFACTURING COMPANY makes no warranty on representation expressed or implied, except as stated herein, and disclaim all obligations and liabilities whatsoever.

The manufacturer reserves the right to make changes in specifications or prices without incurring obligation on previously produced merchandise.

### **DAVID MANUFACTURING COMPANY**

1600 12th STREET NE  
MASON CITY, IOWA 50401



# **HI-CAP 54 GRAIN CLEANER OWNER'S MANUAL**

**DMC markets across the U.S. and around the world.**

**For more information, contact the DMC Distribution Center nearest you.**

**DMC's Corporate Headquarters, Factory  
and North Central Sales Center**

1600 12th Street N.E.  
Mason City, Iowa 50401  
Phone: 641-424-7010  
FAX: 877-362-8238

**Dakota Distribution Center**

3520 Ninth Avenue S.W.  
Watertown, South Dakota 57201  
Phone: 605-882-3210  
FAX: 877-362-8031

**Ft. Wayne Distribution Center**

310 North Taylor Road  
P.O. Box 30  
Garrett, Indiana 46738-0030  
Phone: 219-357-5767  
FAX: 877-362-8032

**Illiana Distribution Center**

515 West Main  
P.O. Box 557  
Oakland, Illinois 61943-0557  
Phone: 217-346-3116  
FAX: 877-362-8033

**Southern Distribution Center**

11523 Highway 70  
Proctor, Arkansas 72376  
Phone: 870-732-4962  
FAX: 877-362-8034

**Nebraska Distribution Center**

210 South First Street  
P.O. Box 217  
Hampton, Nebraska 68843  
Phone: 402-725-3511  
FAX: 877-362-8035