

SERVICE MANUAL
AND
PARTS CATALOG
FOR YOUR
SUPER 47A



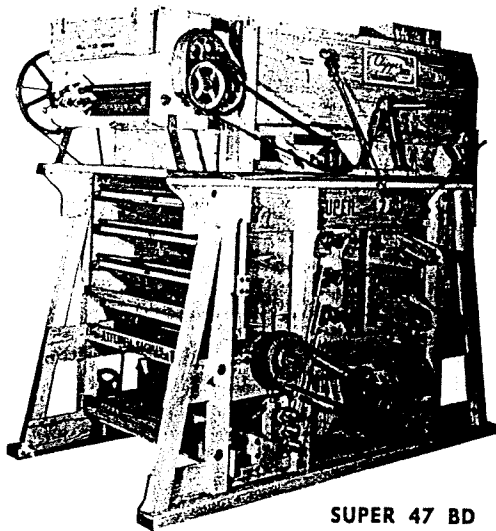
Grain, Seed and Bean Cleaners

1440 SOUTH ADAMS STREET BLUFFTON, INDIANA 46714 (800) 248-8318
Updated 5-3-2021

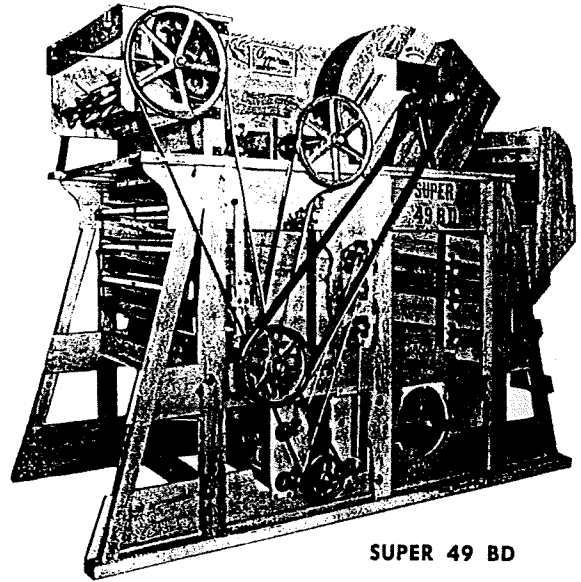
www.atferrell.com

THE SUPER 40 SERIES

Grass and Clover Seed Cleaners



SUPER 47 BD



SUPER 49 BD

In this series *B* designates 3-screen construction — *D* designates dustless or top fans construction.

The last numerical digit in the model number indicates the width of screens — 8 = 54 x 60 inch frame, 9 = 42 x 60 inch frame and 7 = 34 x 42 inch frame.

This Super 40 Series contains the following 12 models:

3-screen dustless	3-screen single fan
498-BD	498-B
49-BD	49-B
47-BD	47-B
2-screen dustless	2-screen single fan
498-D	498-A
49-D	49-A
47-D	47-A

Standard equipment of each of these models includes the following Clipper features:

- Clipper Bottom Blast Fan controlled by the variable air regulator
- Adjustable Pitch Screens for determining the speed of the seed travel over the screens
- Double Traveling Screen Brushes under each screen to automatically keep screens clean
- Instant Acting Brush Adjustment to compensate for bristle wear
- Anti-Friction Bearings throughout (ball bearing eccentrics and main bearings)
- V-belt Drives

The three-screen models in this classification such as the 47-BD and 49-BD (illustrated above) do an exceptional cleaning job on clovers and grass seeds.

for example — when cleaning red clover —

1. A 3/64 x 5/16 top screen removes dock, hares ear mustard, ragweed and other weed seeds only slightly larger than the clover.
2. A 1/15 or 1/16 middle screen is the smallest round hole screen that will pass the good seed and remove sticks, stems and other trash only slightly larger than the clover.
3. The properly selected lower screen, usually a 6 x 22 wire mesh, will make a thorough separation of small weed seeds, dirt and immature seeds of the crop being cleaned.

The three-screen dustless models, for reasons above, permit close, thorough cleaning of clovers and grasses that would otherwise have to be run twice through a two-screen machine and even through a 60 Series cleaner when the short scalper screen cannot be selected for close work.

These models will also effectively clean Grains, Beans and Peas for seed stock, however, the factory recommends the special screen arrangement advantages of the 60 Series models.

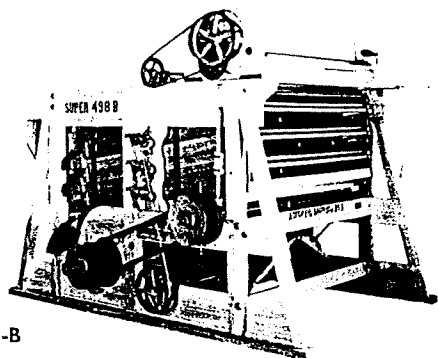
Two-screen models are used extensively where one top screen and one lower screen separation is adequate to do the job. In other words, when two top screen separations are unnecessary (refer to reverse page describing the two-screen models).

See other side for illustrations of each style and complete specifications.

SUPER 40 SERIES

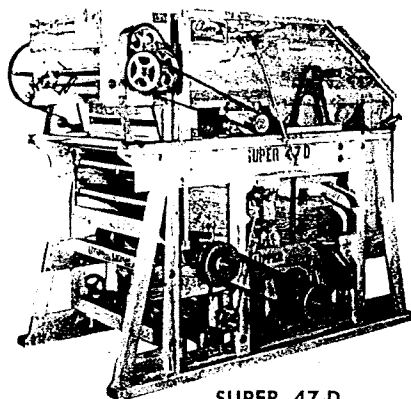
The two-screen cleaners are built approximately 7 inches lower in overall height than the three-screen models making them suitable for installations which require minimum head room.

Four of the 40 Series models can be supplied (as a packaged unit) with their own twin elevating system. This arrangement is completely illustrated and described on the Super 100 Series catalog page.

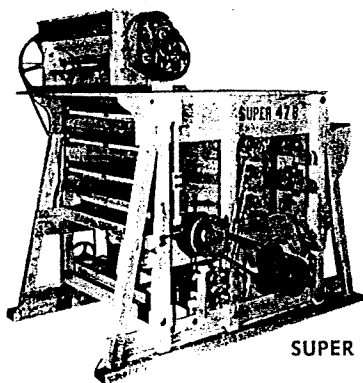


SUPER 498-B

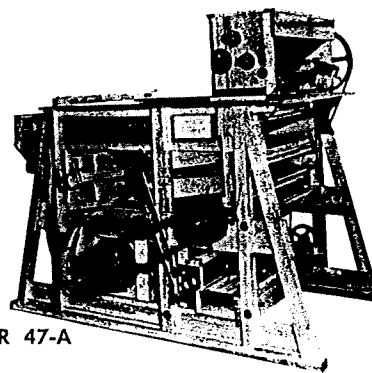
Shown with Cotton Seed Hopper recommended for cotton seed, brome and other grass seeds likewise difficult to feed.



SUPER 47-D



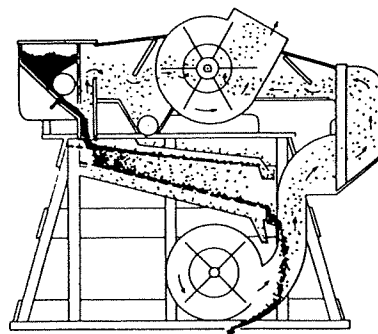
SUPER 47-B



SUPER 47-A

OPERATIONAL DETAILS FOR 2 SCREEN DUSTLESS CLEANING

The diagram at the right indicates the cleaning action of dustless type cleaners with two screens. As the seed is discharged from the hopper in a uniform layer across the full width of the top screen, it passes through an air leg connected to one of the top suction fans and dust and light chaffy material is removed. The heavier trash settles in the large settling chamber and is discharged at the side of the cleaner. The light dust is blown into the dust house or cyclone collector. After the seed passes through the top scalping screen and over the bottom sifting screen, it enters the vertical air column of synchronized blast and suction for a final, rapid air separation by weight to select only the choice, plump, full-weight kernels. The top suction fan on the left, synchronized with the bottom blast fan, removes the light-weight foreign material and dust left after the screening action. The heavier material removed settles in the settling chamber and the dust is blown out into the dust house or cyclone collector.



SPECIFICATIONS — CAPACITIES

Screen Cleaning Brushes on all Super 40 Series models are powered by the No. 80 Roller Chain Brush Drive.

Model number	47-A	47-B	47-D	49-A	49-B	498-A	498-B	47-BD	49-D	498-D	49-BD	498-BD
Screen size	34 x 42	34 x 42	34 x 42	42 x 60	42 x 60	54 x 60	54 x 60	34 x 42	42 x 60	54 x 60	42 x 60	54 x 60
Bu. per hr.—Seeds	30-50	30-50	30-50	60-80	60-80	75-100	75-100	30-50	60-80	75-100	60-80	75-100
Bu. per hr.—Seed grain	50-100	50-100	50-100	100-150	100-150	130-200	130-200	50-100	100-150	130-200	100-150	130-200
Bu. per hr.—Beans	75-150	75-150	75-150	200-300	200-300	250-400	250-400	75-150	200-300	250-400	200-300	250-400
No. of screens in cleaner	2	3	2	2	3	2	3	3	2	2	3	3
No. of screens furnished	12	12	12	12	12	12	12	12	12	12	12	12
Extreme length	79"	79"	91"	107"	107"	119"	107"	91"	114"	114"	114"	114"
Extreme width	59"	59"	62"	73"	73"	85"	85"	62"	73"	85"	73"	85"
Width between sills	38"	38"	38"	46"	46"	58"	58"	38"	46"	58"	46"	58"
Height to top of hopper	69"	76"	76"	72"	80"	72"	80"	83"	81"	81"	87"	87"
Height to drive shaft	28"	28"	70"	29"	29"	29"	29"	70"	76"	76"	76"	76"
Drive shaft speed (RPM)	410	410	900	410	410	410	410	900	900	900	900	900
Horsepower required	1½	1½	5	3	3	3	3	5	7½	10	7½	10
Shipping weight (lbs.)	1200	1300	1800	2000	2100	2200	2350	2000	2800	3000	2900	3200

SUPER 47A CLEANER PARTS SET UP WITH BRUSH SCREEN CLEANING

BRUSH SCREEN CLEANING SYSTEM

ITEM NO.	PAGE NO.	PART NUMBER	QTY.	DESCRIPTION
38	7	F01004901	2	Brush Adjusters - Idler Side (Left Hand Side)
**	7	F01004902	2	Brush Adjusters - Idler Side (Right Hand Side)
43	7	F01106300	2	Idler Arm Support
**	7	F82080060	2	Bolt for Brush Adjusters (Both Sides)
39		F01003001	2	Brush Adjusters-Control Side (Left Hand Side)
**	7	F01003002	2	Brush Adjusters - Control Side (Right Hand Side)
42	7	F01105400	2	Adjustments Handle with Spring
**	7	F82080060	2	Bolt for Brush Adjusters (Both Sides)
**	9	F01000200	8	Rope Sheave Assembly Complete See attached picture
		F09500600	2	Brush Carrier Assembly 15" x 27" (Brushes not included) See attached picture 10
		F97700003	35	Wirelon Plastic Coated Steel Cable (In Feet)
		F01612107	2	Brush Carrier Shafts 1 3/16" x 44-9/16" <u>SEE NOTE BELOW</u>

NOTE: SOME OLDER MACHINES HAVE A 1" BRUSH CARRIER SHAFT THAT IS TURNED DOWN TO 3/4" ON EACH END (F01605804) AND USE 1" ROLLERS (F09501300)

****Refers to the previous listing number. May give parts within that assembly, right side-left side numbers, or numbers for parts that are specific to RH or LH machines.**

**BOTTOM FAN ASSEMBLY
With 1-1/2" Shaft**

ITEM NO.	PAGE NO.	PART NUMBER	QTY.	DESCRIPTION
		F01632400	1	Fan Shaft 1-1/2" X 59" (Includes Keys) See attached pictures 11 & 12
		Not Available	2	6715 Halfmoon Bridgetree Housing with Bearing
		F92400022	2	Bearing <u>Insert Only</u> for Above

**BOTTOM FAN ASSEMBLY
With 1-3/16" Shaft**

ITEM NO.	PAGE NO.	PART NUMBER	QTY.	DESCRIPTION
		F01608000	1	Fan Shaft 1-3/16" x 53" See attached pictures 11 & 12
		Not Available	2	Halfmoon Bridgetree Housing with Bearing
Note: If housing is bad Items 72 & 62 must be substituted				

ECCENTRIC SHAFT ASSEMBLY
With 1-1/2" Shaft

ITEM NO.	PAGE NO.	PART NUMBER	QTY.	DESCRIPTION
		F01603800	1	Eccentric Shaft 1-1/2" X 58" (Includes Keys) See attached pictures 15 & 16
		Not Available	2	6714 Halfmoon Flange Bearing (Old Style Housing)
		F92400022	1	1-1/2" Bearing <u>Insert Only</u> for Below
		F92053126	1	6714 Flange Bearing Conversion Kit
		F19503600	2	1-1/2" Throw Eccentric Assembly Complete See attached picture 15B

MAIN SHOE ASSEMBLY

ITEM NO.	PAGE NO.	PART NUMBER	QTY.	DESCRIPTION
		Not Available	1	Bottom Shoe Complete with Rockers
		F03117301	1	Right Shoe Side
		F03117302	1	Left Shoe Side
		F03109500??	1	Pitman Board 3/4" x 7-1/2" x 37"
		F03016510	2	Front Hanger with Block , Both Sides
		F03102601	2	Shoeside Hanger Support Block
		F03016520	2	Back Shoe Hanger with Block
		F03101720	2	Wood Sand Spout Track (Cut to Length)
		F03301002	2	Metal Sand Spout Guide (Cut to Length)
		F08306302	1	Sand Spout Left Hand Machines (Check Measurements)
		F08306301	1	Sand Spout Right Hand Machines (Check Measurements)
		F08301101	1	Straw Spout Left Hand Machines (Check Measurements)
		F08301100	1	Straw Spout Right Hand Machines (Check Measurements)
		F08305700	1	Straw Spout-Machines Built after 1974 (Check Measurements)
		F01200203	2	Pinion Gear with 3/4" Bore
		F01200203	2	Pinion Gear with 3/4" Bore
		F01200300	4	4" Long Rack
		F01801700	4	Escutcheon Plate
		F01608301	2	Tilting Rod 3/4" X 40-1/2"
		66276400	2	3/4" Hex Nut
		F03401500	1	Canvas Apron Assembly
		F03501300	1	Top Rocker Assembly Complete (Includes Parts Below)
		F03600801	1	Right Hand Wood Rocker Arm Only (Top and Middle)
		F03600802	1	Left Hand Wood Rocker Arm Only (Top and Middle)
		F03500800	2	Screen Hook Assembly
		F03800413	2	60" Screenway Liner (Cut to Length)
		F03801100	2	60" Rubber Holding Strip (Cut to Length)
		F91152006	8	Rubber Seal 2-1/2" Wide (In Feet)
		F03806000	2	Screen Stop
		F03800003	2	Bottom Rocker Brace
		F03310007	1	Grain Stop Assembly
		F03500600	2	Rocker Pivot Cup (Brush Style)
		F03505900	2	Rocker Pivot Cup (Ball Tray Cleaning)
		F90005305	1	Rocker Adjusting Girt
		F11302512	1	Adjusting Girt Cover Plate

MAIN SHOE ASSEMBLY CONTINUED

ITEM NO.	PAGE NO.	PART NUMBER	QTY.	DESCRIPTION
		F03501200	1	Bottom Rocker Assembly Complete (Includes Parts Below)
		F03600901	1	Right Hand Wood Rocker Arm Only (Bottom)
		F03600902	1	Left Hand Wood Rocker Arm Only (Bottom)
		F03500800	2	Screen Hook Assembly
		F03800413	2	60" Screenway Liner (Cut to Length)
		F03801100	2	60" Rubber Holding Strip (Cut to Length)
		F91152006	8	Rubber Seal 2-1/2" Wide (In Feet)
		F03806000	2	Screen Stop
		F03800003	2	Bottom Rocker Brace
		F03310007	1	Grain Stop Assembly
		F03500600	2	Rocker Pivot Cup (Brush Style)
		F03505900	2	Rocker Pivot Cup (Ball Tray Cleaning)
		F90005305	1	Rocker Adjusting Girt
		F11302512	1	Adjusting Girt Cover Plate

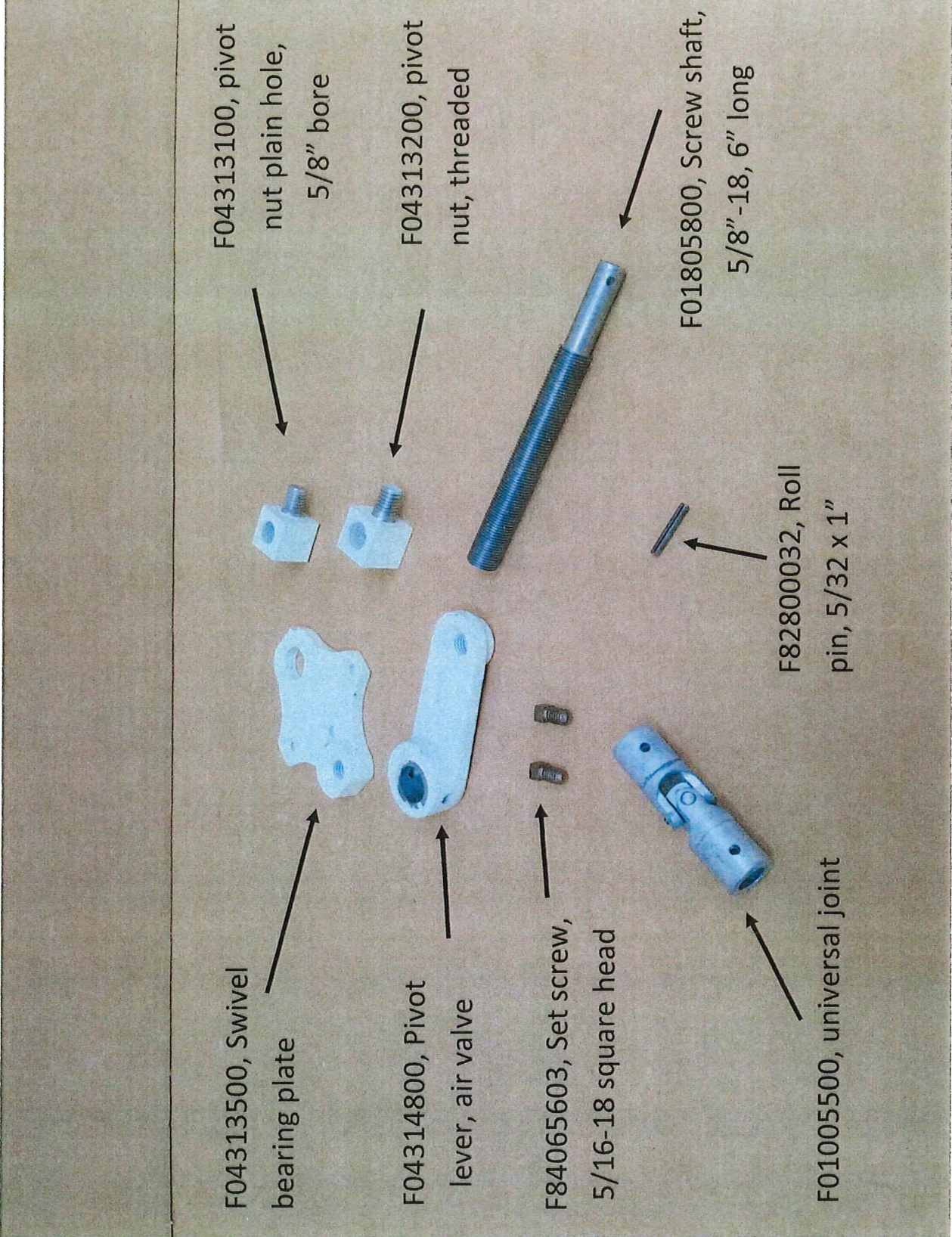
**Note: Front of the Machine is Where the Screens are Inserted Into the Machine.
Discharge Spouts are Determined by Standing at the Front and Facing the Machine.
Right Hand Discharge Spouts Would Discharge Towards Your Right Hand.**

F01002803	1	Belt Idler Assembly Complete 5-1/2" See attached picture
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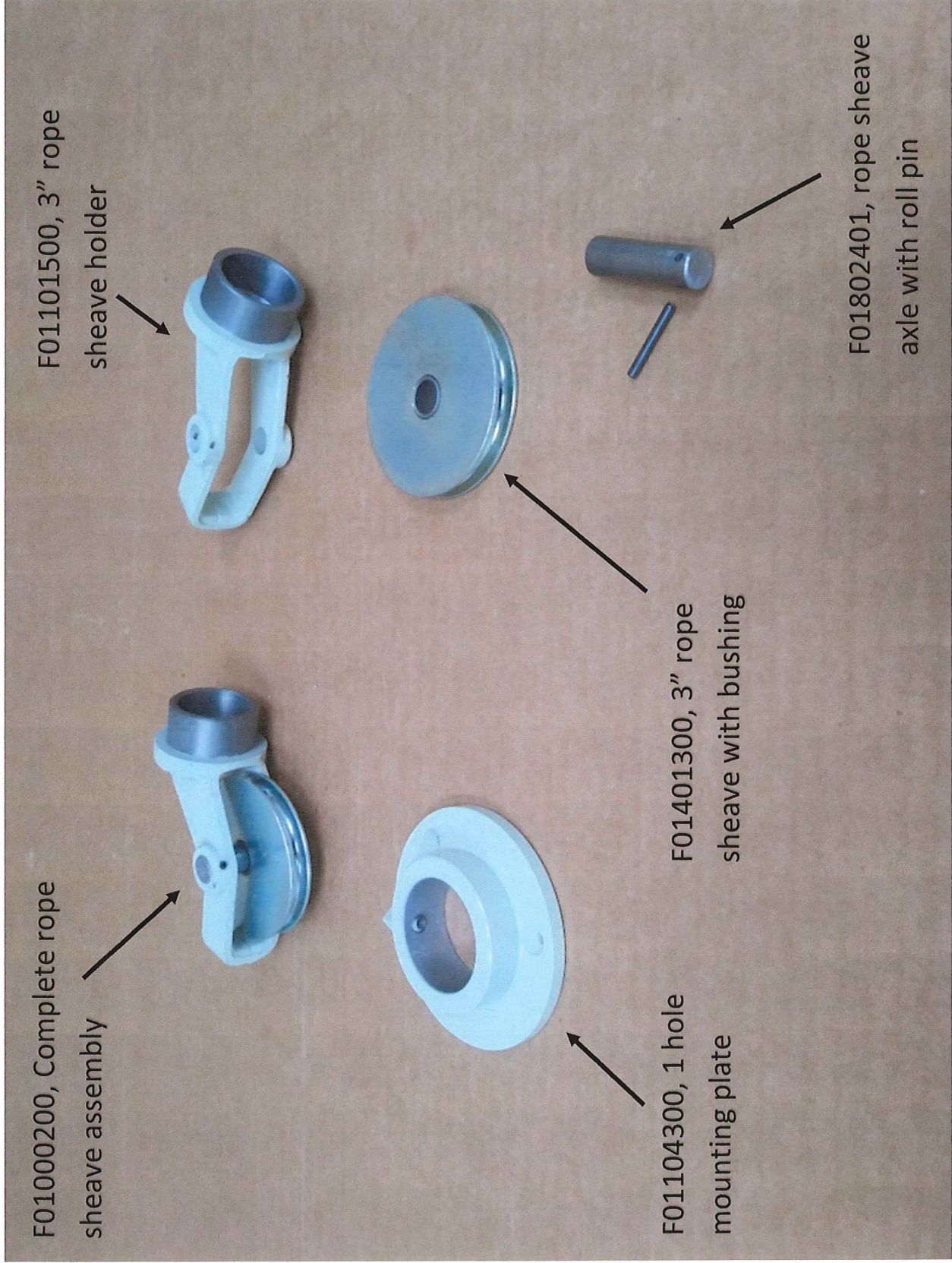
**The Following Are the Ball Tray Kit Parts That were
Installed on the Super 47 Cleaners in the Past**

**Old Style Ball Trays with 1" Square Turkey Wire That Came Out
With the Screens. Ball Trays were not attached to the Screens.**

F90005067	2	Ball Tray Weldment for 1 Piece Screens
F80026101	144	Black 1-3/8" Balls
F11301710	4	Ball Tray Support Rail 23"
F11301716	4	Ball Tray Support Rail 14"



F01013500, Gate valve adjusting assembly, ALL



F01000200, Complete rope sheave assembly

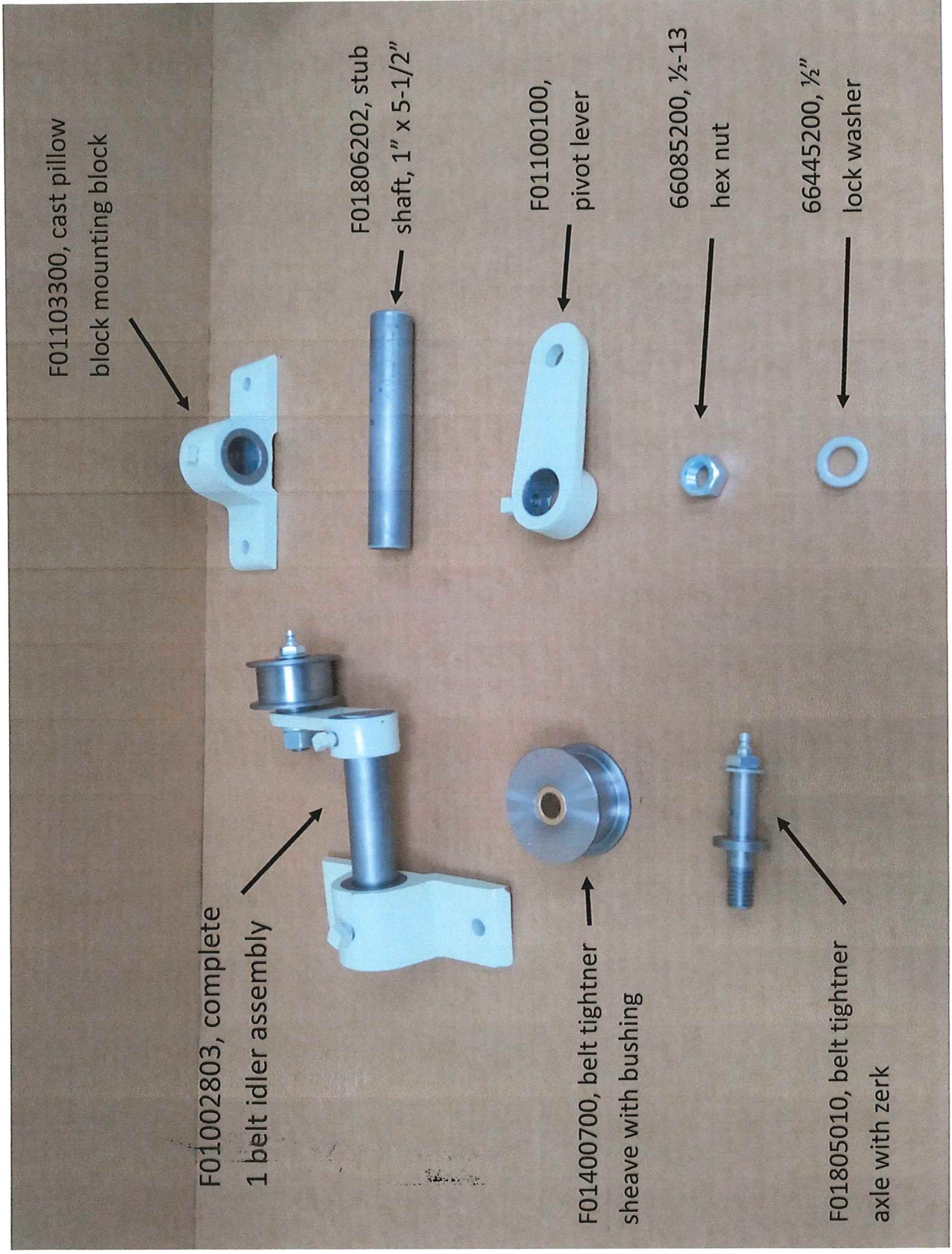
F01101500, 3" rope sheave holder

F01104300, 1 hole mounting plate

F01401300, 3" rope sheave with bushing

F01802401, rope sheave axle with roll pin

3" Rope sheave assembly



F01103300, cast pillow
block mounting block

F01002803, complete
1 belt idler assembly

F01806202, stub
shaft, 1" x 5-1/2"

F01100100,
pivot lever

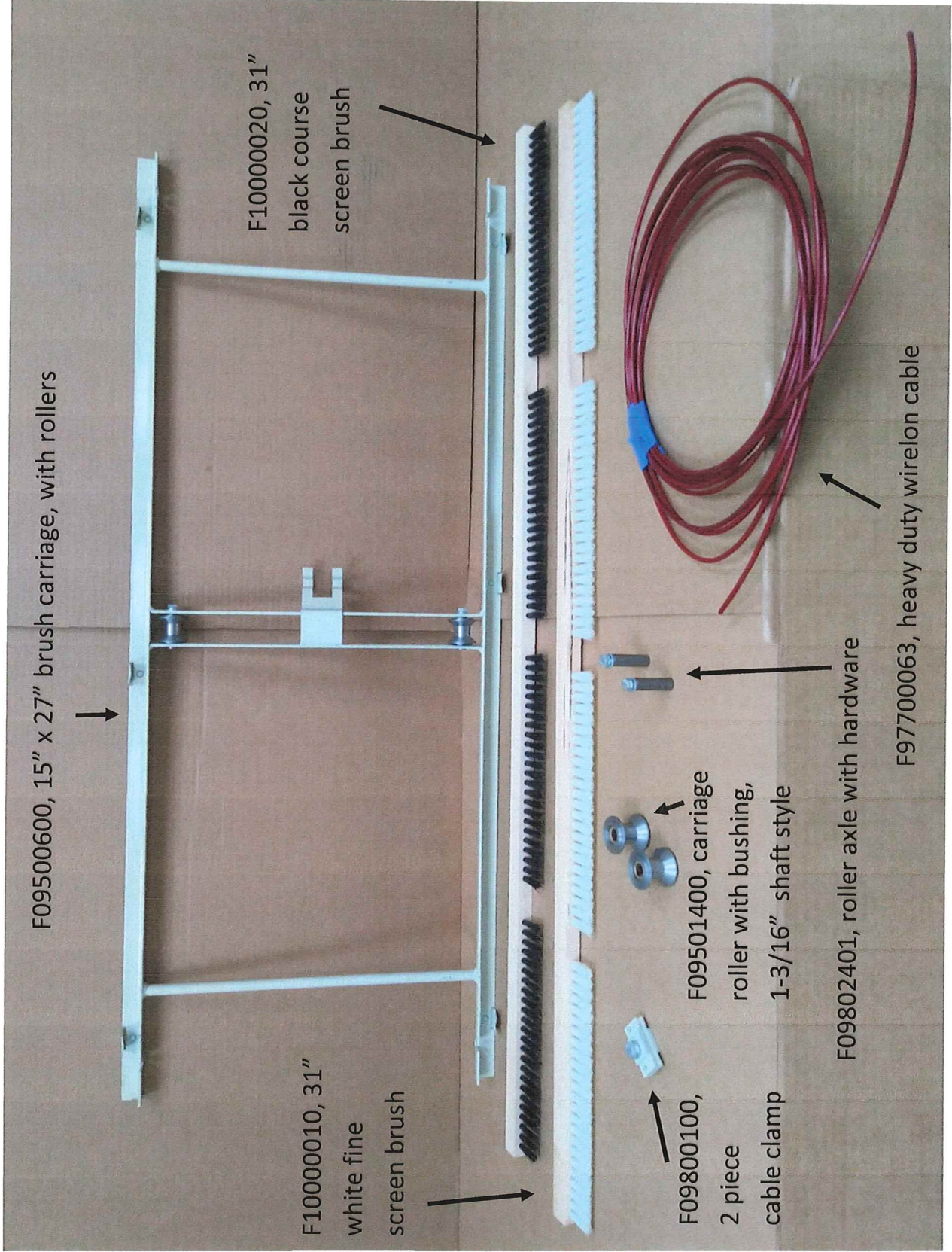
66085200, 1/2-13
hex nut

66445200, 1/2"
lock washer

F01400700, belt tightener
sheave with bushing

F01805010, belt tightener
axle with zerck

Belt tightener assembly



F095000600, 15" x 27" brush carriage, with rollers

F10000020, 31" black course screen brush

F10000010, 31" white fine screen brush

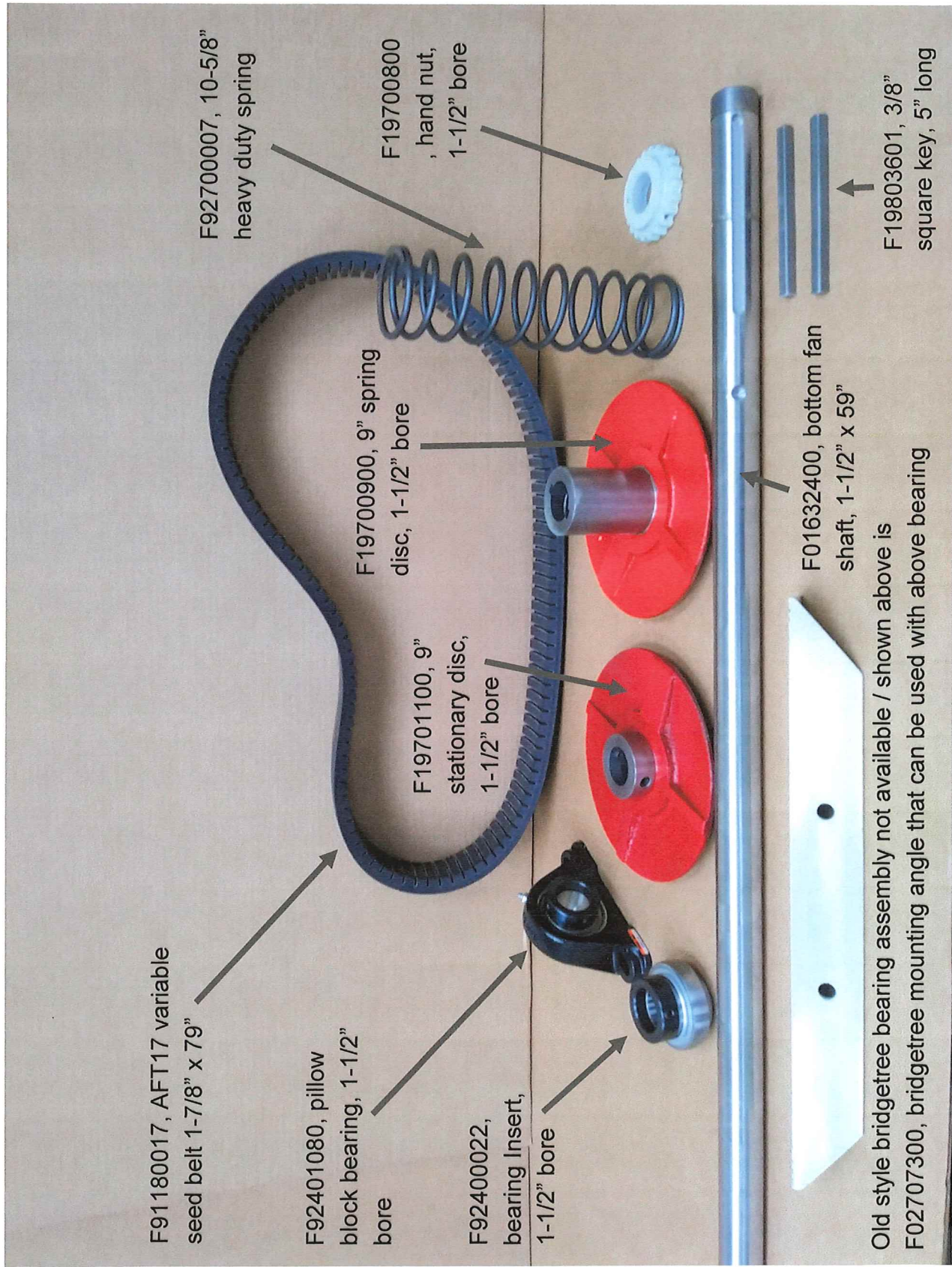
F09501400, carriage roller with bushing, 1-3/16" shaft style

F09800100, 2 piece cable clamp

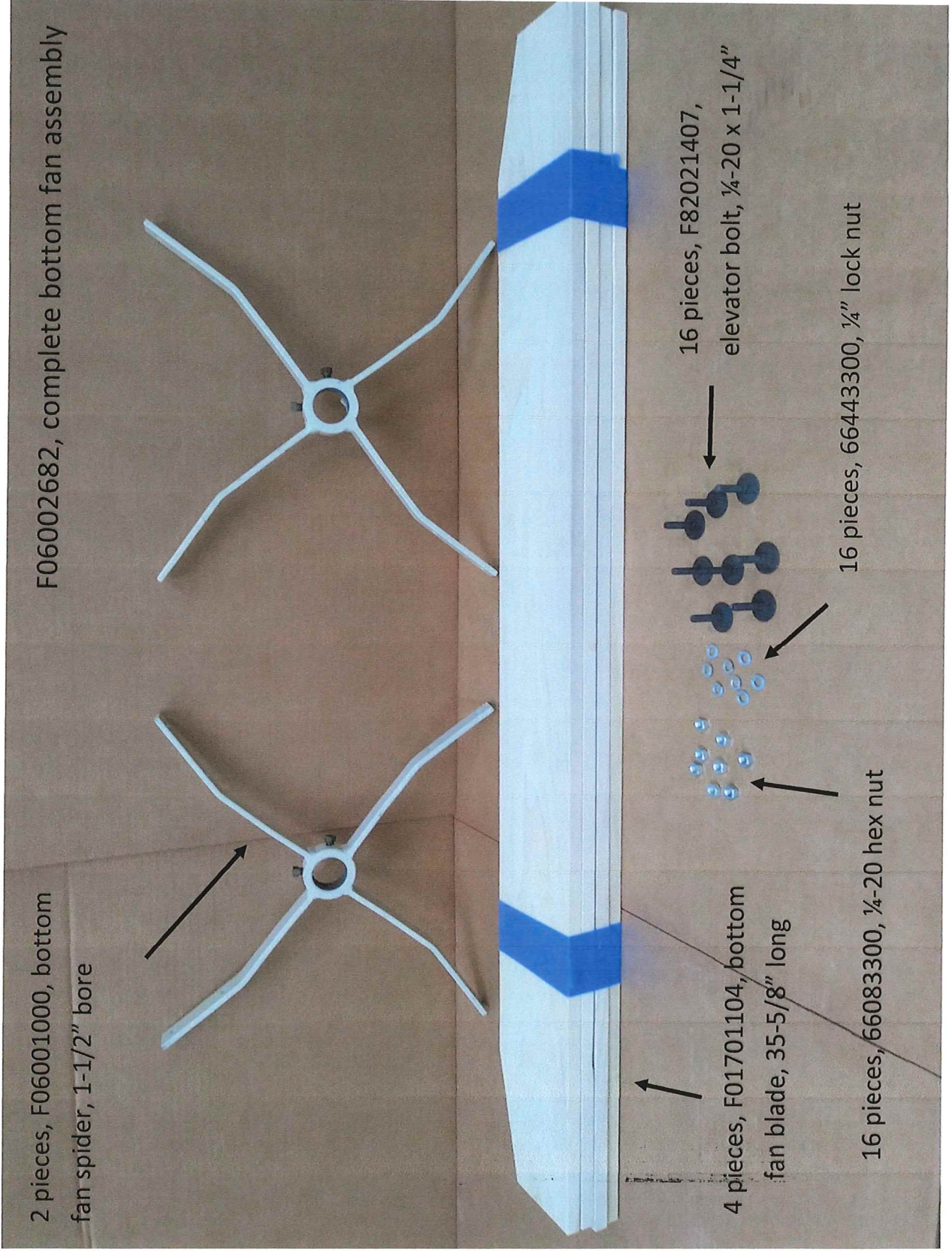
F09802401, roller axle with hardware

F97700063, heavy duty wirelon cable

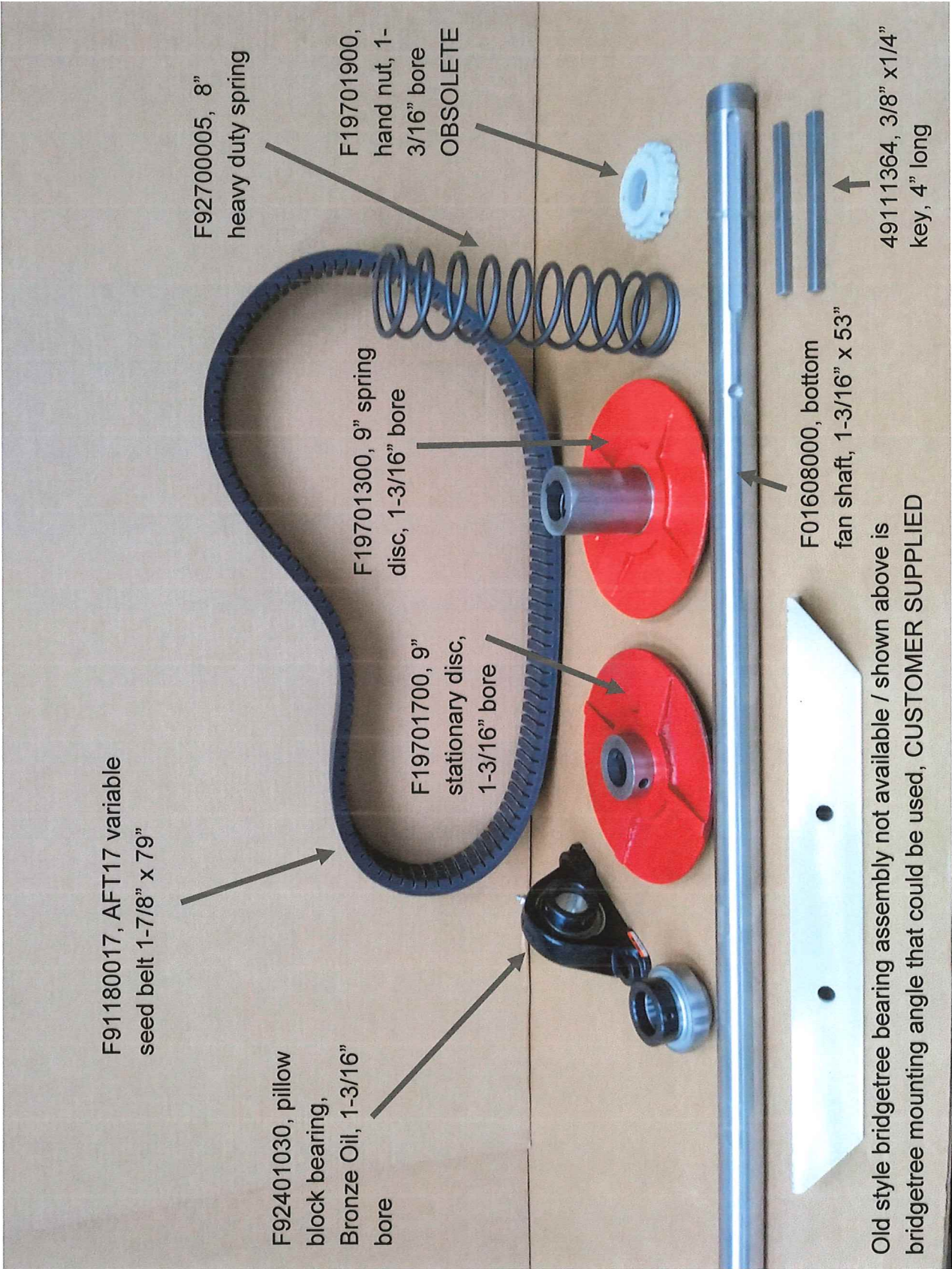
Brush carriage, with accessories, page 10



Bottom fan shaft assembly assembly, page 11



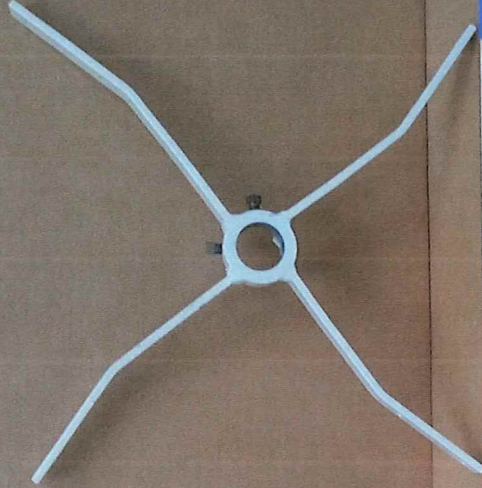
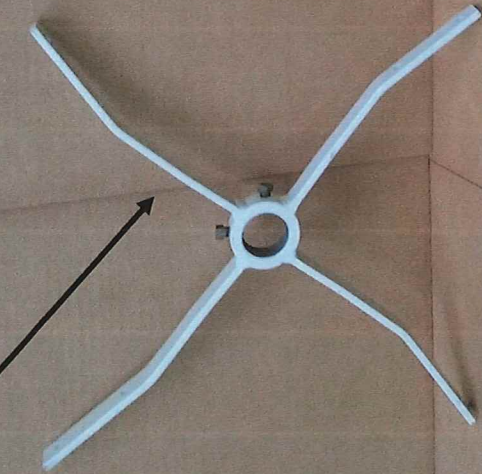
Bottom fan assembly, 1-1/2" shaft, 7 wide, page 12



Bottom fan shaft assembly assembly, 1-3/16" shaft, page 11

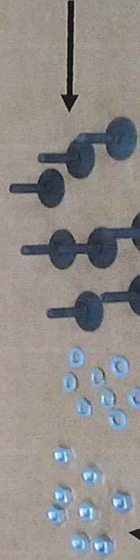
2 pieces, F06001600, bottom fan spider, 1-3/16" bore

F06002677, complete bottom fan assembly



4 pieces, F01701104, bottom fan blade, 35-5/8" long

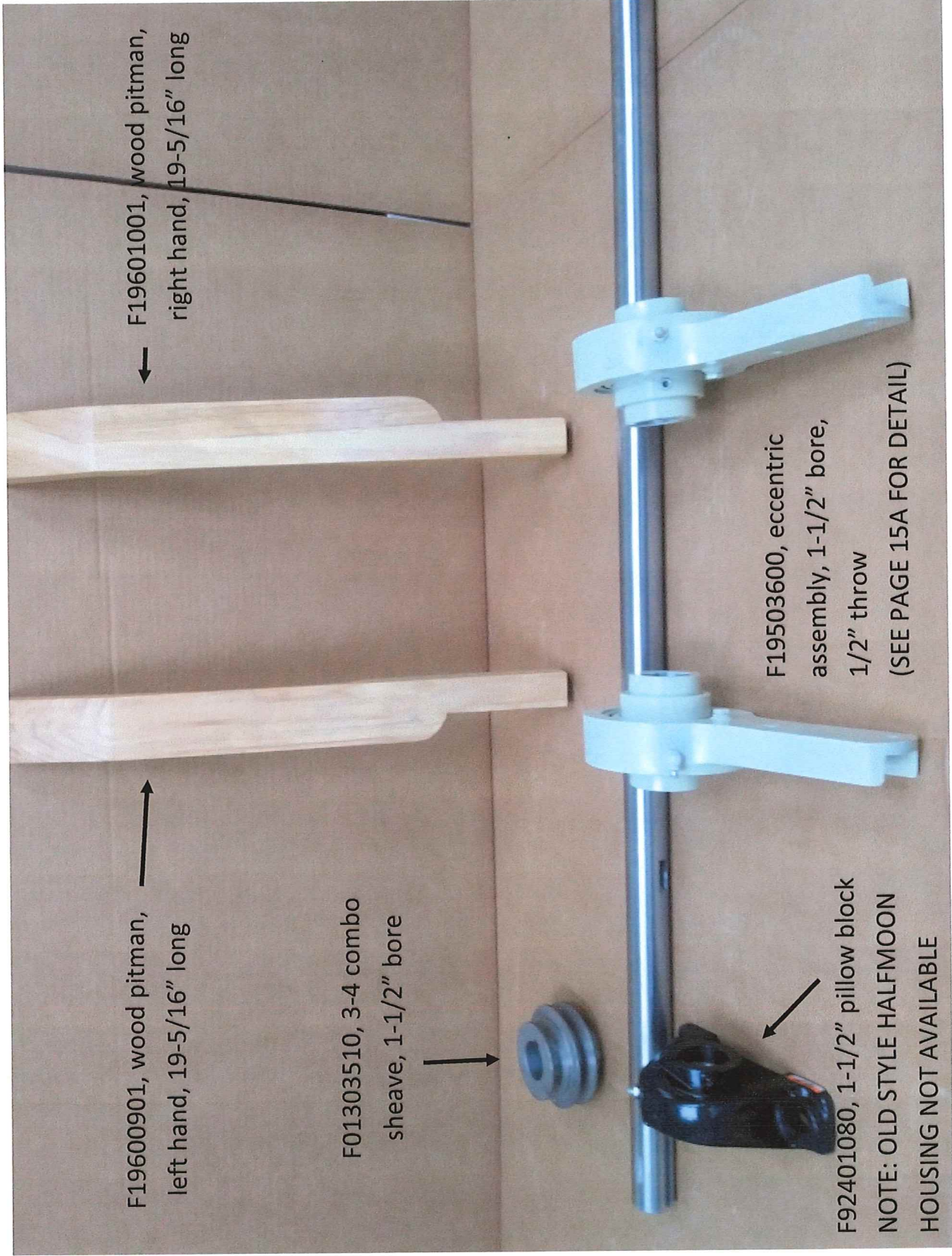
16 pieces, F82021407, elevator bolt, 1/4-20 x 1-1/4"



16 pieces, 66443300, 1/4" lock nut

16 pieces, 66083300, 1/4-20 hex nut

Bottom fan assembly, 1-3/16" shaft, 7 wide, page 12



F19600901, wood pitman,
left hand, 19-5/16" long

F19601001, wood pitman,
right hand, 19-5/16" long

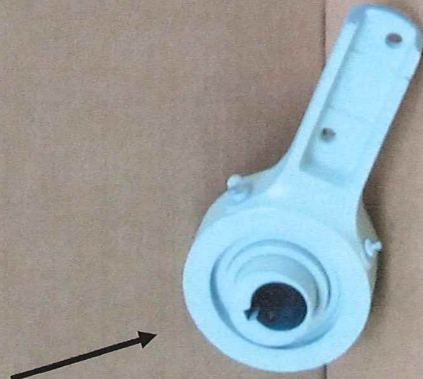
F01303510, 3-4 combo
sheave, 1-1/2" bore

F19503600, eccentric
assembly, 1-1/2" bore,
1/2" throw
(SEE PAGE 15A FOR DETAIL)

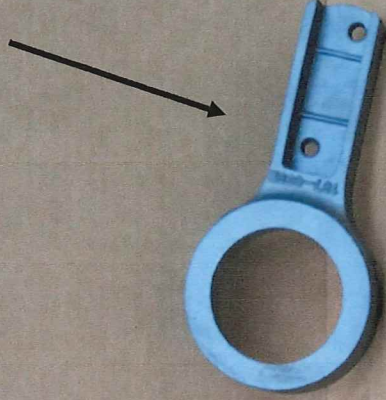
F92401080, 1-1/2" pillow block
NOTE: OLD STYLE HALFMOON
HOUSING NOT AVAILABLE

Eccentric shaft, wood pitmans, page 15

F19503600, Complete eccentric assembly, 1-1/2" bore, 1/2" throw



F19703000, Eccentric housing

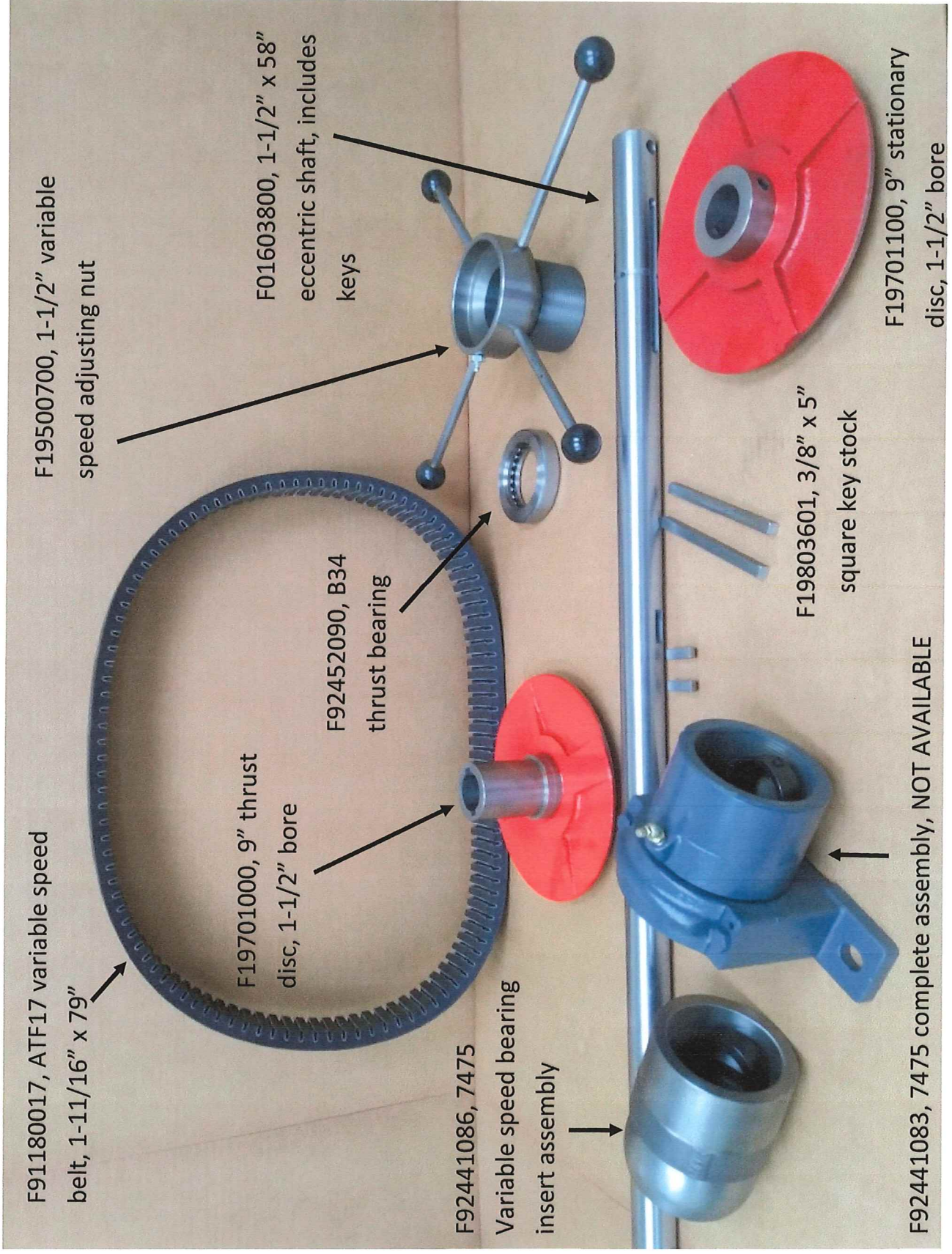


F92400053, Bearing insert



F19804004, Eccentric hub, 1-1/2" bore, 1/2" throw





F91180017, ATF17 variable speed belt, 1-11/16" x 79"

F19500700, 1-1/2" variable speed adjusting nut

F19701000, 9" thrust disc, 1-1/2" bore

F01603800, 1-1/2" x 58" eccentric shaft, includes keys

F92452090, B34 thrust bearing

F92441086, 7475 Variable speed bearing insert assembly

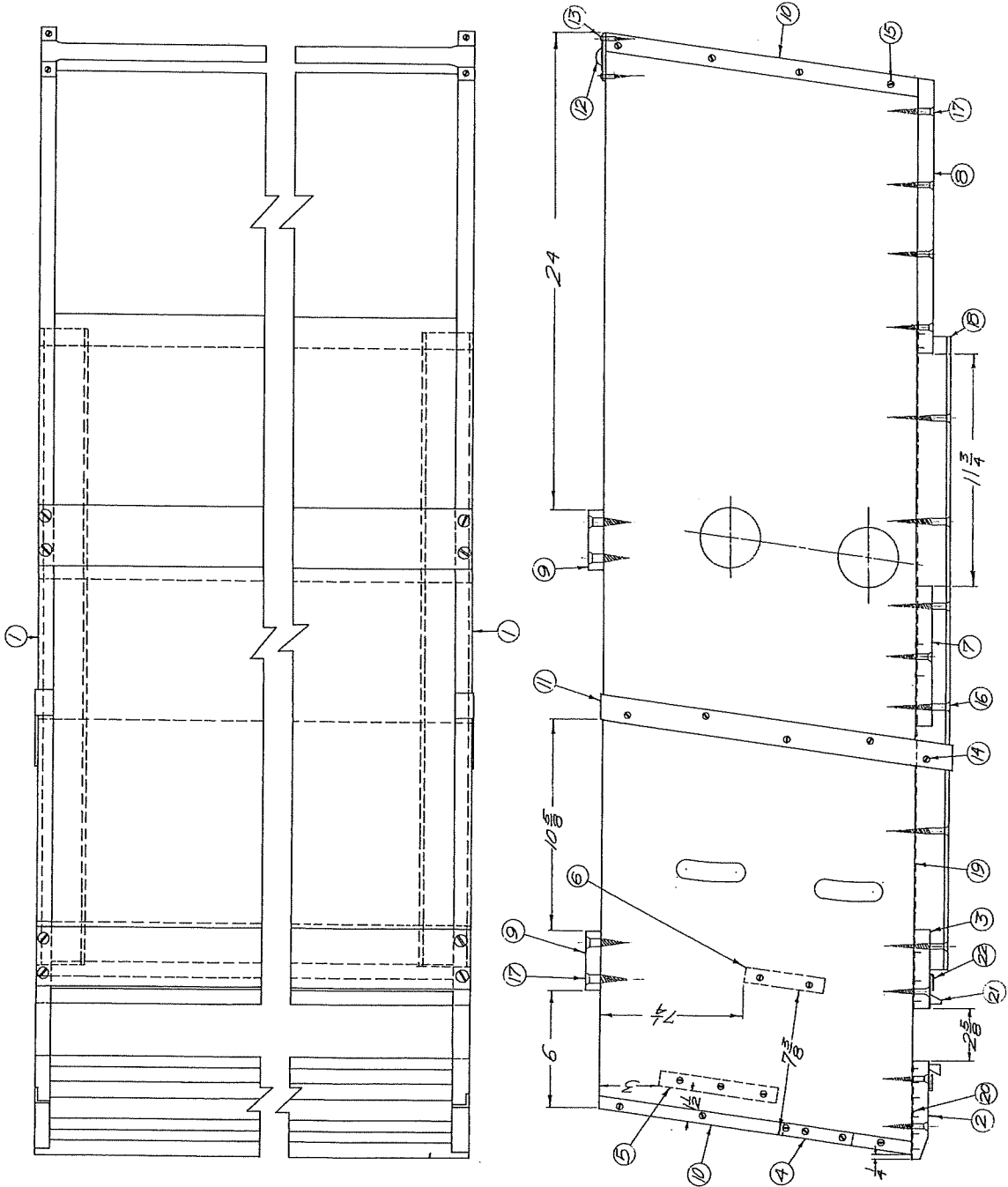
F19803601, 3/8" x 5" square key stock

F19701100, 9" stationary disc, 1-1/2" bore

F92441083, 7475 complete assembly, NOT AVAILABLE

Eccentric shaft assembly, Super 47, page 16

NOTE
USE STD. AND TELETYPE APPROPRIATE
FOR SIDE AND COVER ASSEMBLY IN SUBST.
TWO AND SUPPLY LIST



22	31-107	2	SCOUT GUIDE	STL
21	31-116	2	SCOUT RING	STL
20	31-125	1	NOSE BOARD LAMP	STL
19	31-124	1	BOTTOM PLATE	STL
18	31-128	2	SHOE RING	STL
17	31-129	2	SHOE RING	STL
16	31-130	2	SHOE RING	STL
15	31-131	2	SHOE RING	STL
14	31-132	2	SHOE RING	STL
13	31-133	2	SHOE RING	STL
12	31-134	2	SHOE RING	STL
11	31-135	2	SHOE RING	STL
10	31-136	2	SHOE RING	STL
9	31-137	2	SHOE RING	STL
8	31-138	2	SHOE RING	STL
7	31-139	2	SHOE RING	STL
6	31-140	2	SHOE RING	STL
5	31-141	2	SHOE RING	STL
4	31-142	2	SHOE RING	STL
3	31-143	2	SHOE RING	STL
2	31-144	2	SHOE RING	STL
1	31-145	2	SHOE RING	STL

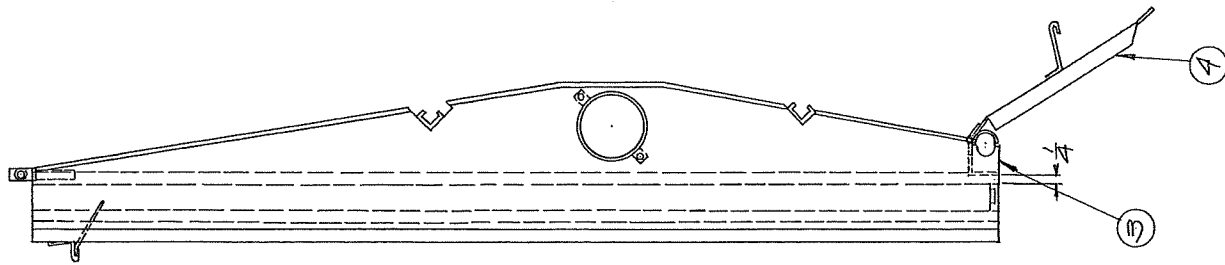
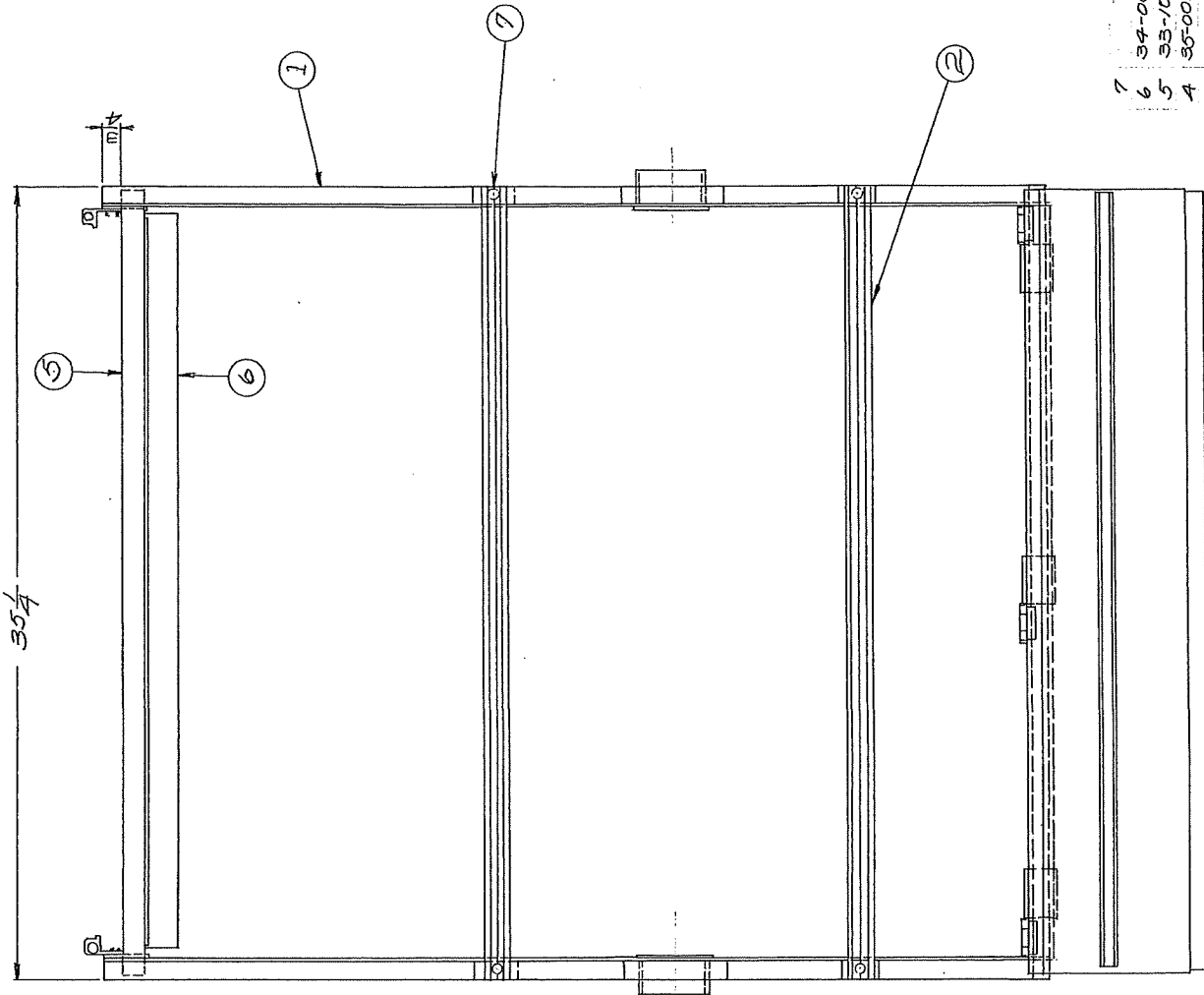
MICROFILMED
DATE: _____
BY: _____

30-06-5-1	AS SHOWN	L.H.	17-0
30-06-5-1	AS SHOWN	R.H.	17-0
30-06-5-1	AS SHOWN	R.H.	17-0
30-06-5-1	AS SHOWN	R.H.	17-0

ASSSEMBLED
PARTS: _____
DATE: _____
BY: _____

A. T. FERRELL & CO.
177-D
SHEET NO. 30-064

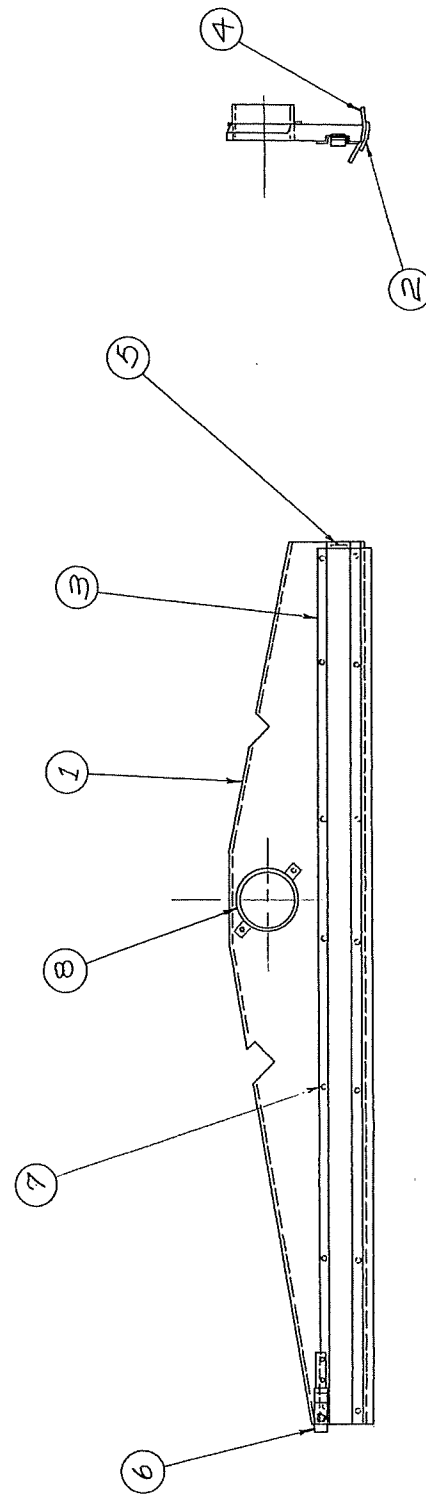
14



7	34-004	WOODSCREW	STD. 3/4" 8 F.H.
6	33-100	STRIPING-GRAIN STOP RUBBER	
5	35-009	GRAIN STOP	SH.ST.
4	35-007	APRON ASSY	
3	38-000	ADJUSTING GIRT ASSY.	
2	35-011	BOTTOM BRACE	SH.ST.
1		ROCKER ARM ASSY.	L.H. & R.H.

ITEM PART NO. REV. PART NAME. MATL. REMARKS
 BOTTOM ROCKER ASSEMBLY
 DIVN. BY: A. T. FERRELL
 DATE 8-5-57 SCALE 3/4" = 1'-0"
 A. T. FERRELL & CO. 2400 W. WABASH AVE. EAGANAW, MICH.
 SHEET NO. 35-012

MICROFILMED
 DATE FEB 4 1961



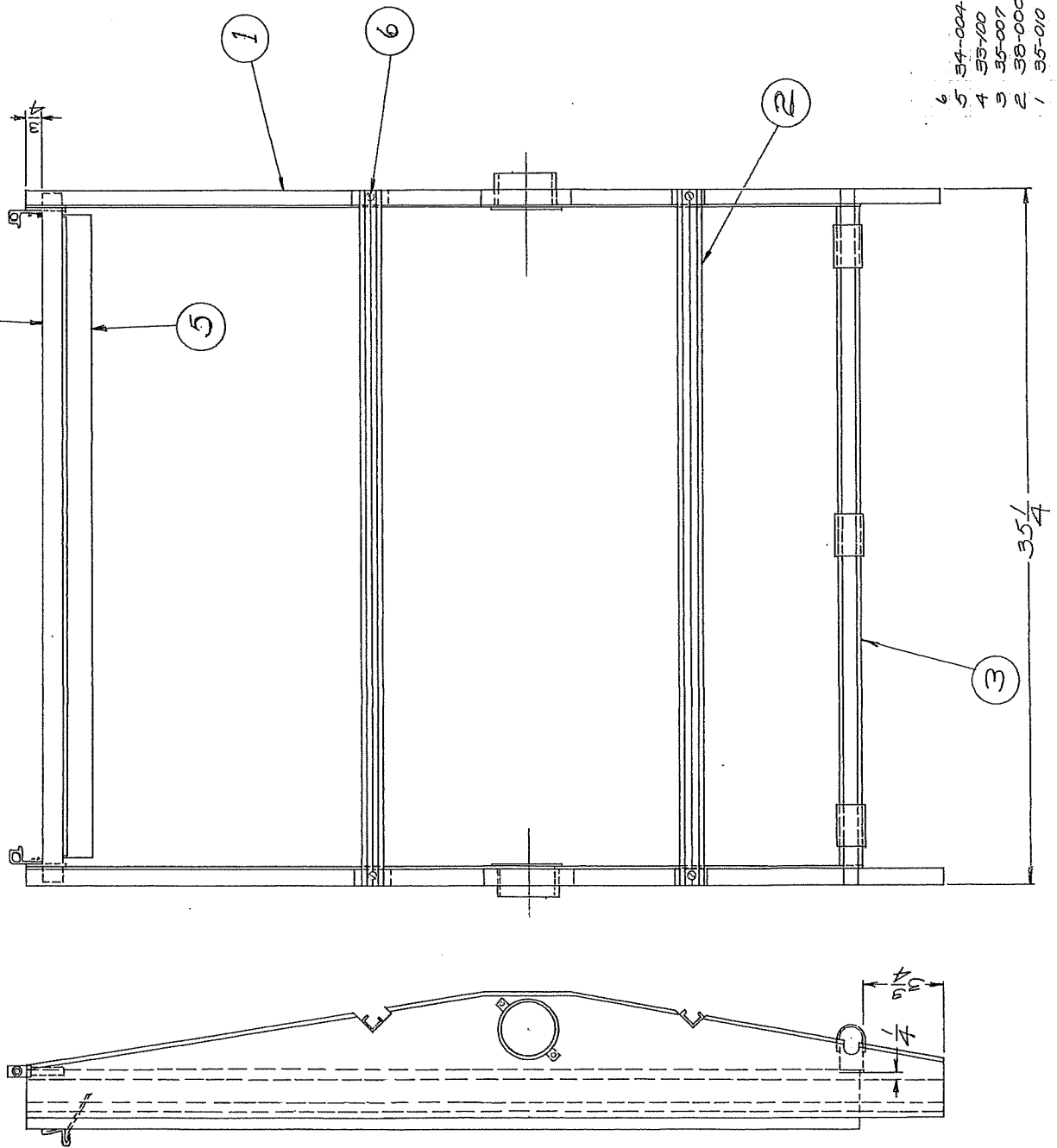
- ① 8 FO35C5900 / CUP ASSEMBLY R.H.
- 7 1/8" 1/4 WOODSCREW
- 6 35-008 1 SCREEN HOOK
- 5 38-010 1 STOP-SCREEN SH. ST.
- 4 38-002 1 STRIPING-RUBBER RIBBER
- 3 38-021 1 SCREENWAY SH. ST.
- 2 38-020 1 STOP-RUBBER HOLDING SH. ST.
- 1 38-009 1 ARM-BOTTOM ROCKER PIPE L.H. R.H.

ROCKER ARM ASSEMBLY - BOTTOM
 2 REQD

PH 03501101 - 1 REQD AS SHOWN R.H.
 PH 03501102 - 1 L.H. REQD

ITEM	PART NO.	REQD	NAME	MATL	REMARKS
ROCKER ARM-BOTTOM ASSEMBLY					
OWN. BY	TRD. BY	CRD. BY			
DATE	SCALE				
A. T. FERRELL & CO. ENGINEERS, INC.					
SHEET NO. 35-011					

MICROFILMED
 DATE FEB 4 1981

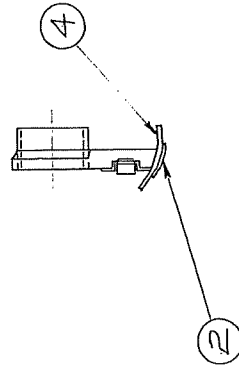
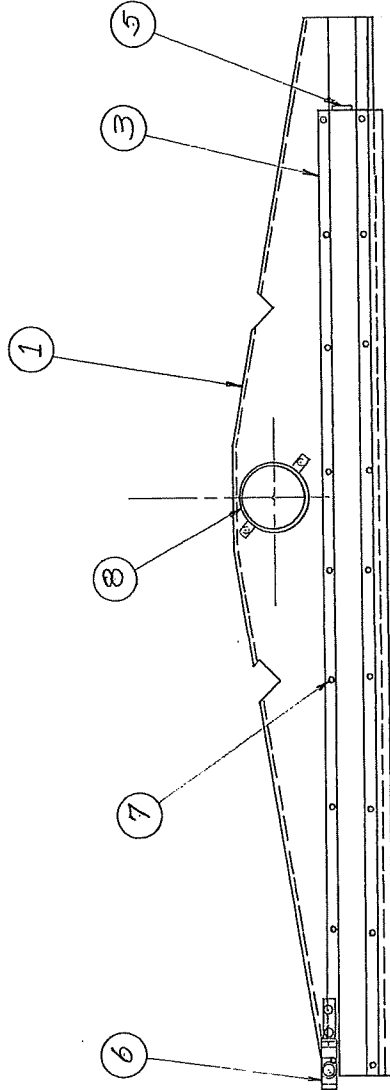


ITEM	PART NO	RECD	PART NAME	MATL	REMARKS
6	34-004		WOODSCREW	572 3/4" 8	R.H.
5	35-000		STRIPING-GRAIN STOP	RUBBER	
4	35-000		GRAIN STOP	SH. ST.	
3	35-007		ADJUSTING GIRT	ASH	
2	38-000		BOTTOM BEACE		
1	35-010		ROCKER ARM ASSY		L.H. & R.H.

TOP ROCKER
ASSEMBLY

DRWN BY: J.A.	TRD BY:	CHKD BY: J.L.
DATE: 8-2-57	SCALE: 3/4" = 1"	
A. T. FERRELL & CO. SAGINAW, MICH.		
SHEET NO. 35-015		

MICROFILMED
DATE: FEB 4 1971



ROCKER ARM ASSEMBLY - TOP
2 RECD

PA 03501001 - 1 RECD AS SHOWN R.H.
 PA 03501002 - 1 L.H. RECD.

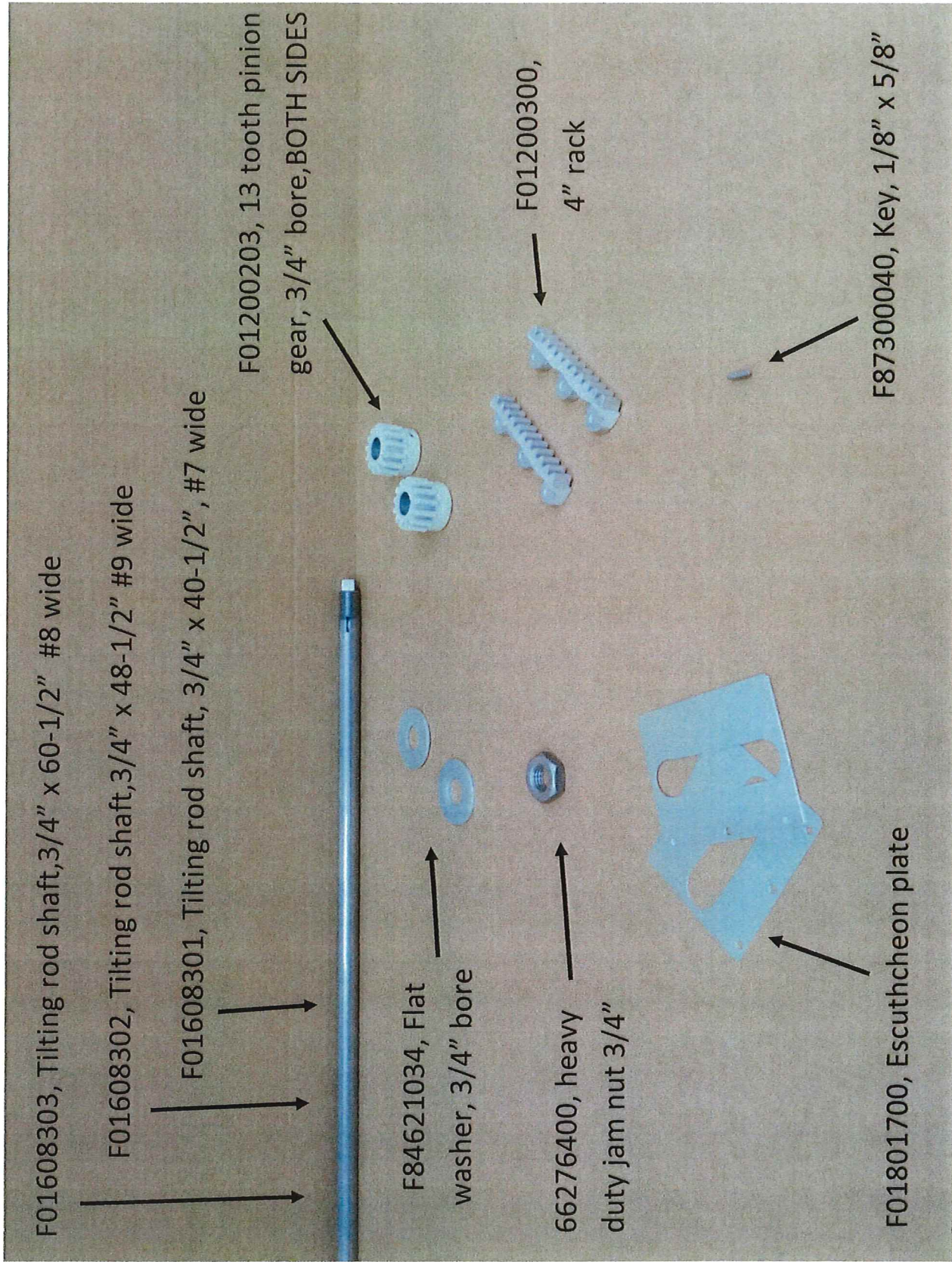
ITEM	PART N°	QTY	RECD	PART NAME	MATL	REMARKS
1	36-008	1		ARM-TOP	ROCKER ARM	L.H. & R.H.
2	38-020	1		STRIP-RUBBER	HOLDING SHIRT	
3	38-021	1		SCREENWAY		
4	39-002	1		STRIPING-RUBBER	ARM	
5	38-010	1		STOP-SCREEN		SHIRT
6	35-008	1		SCREEN HOOK		
7	18	1/2"		WOODSCREEN		R.H.
8	FO3505100	1		CUP ASSEMBLY		

MICROFILMED

DATE FEB 1 1962

DWN. BY: J.A. LTD. BY: ...
 DATE 7-31-57 SCALE 3/16
 A. T. FERRELL & CO.
 SAGINAW, MICH.
 PPA 4728
 PPA 4728

SHEET NO. 35-070
 FO35051001-02



F01608303, Tilting rod shaft, 3/4" x 60-1/2" #8 wide

F01608302, Tilting rod shaft, 3/4" x 48-1/2" #9 wide

F01608301, Tilting rod shaft, 3/4" x 40-1/2" #7 wide

F01200203, 13 tooth pinion gear, 3/4" bore, BOTH SIDES

F84621034, Flat washer, 3/4" bore

66276400, heavy duty jam nut 3/4"

F01200300, 4" rack

F87300040, Key, 1/8" x 5/8"

F01801700, Escutcheon plate

Screen rocker adjusting assembly