



ASSEMBLY INSTRUCTIONS

WIL-RICH 4153 FILED CULTIVATOR AIR SEEDER



WIL-RICH
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Wahpeton, ND 58074
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Fax (701) 642-3372
Parts Fax (701) 642-3819

WARRANTY

WIL-RICH WARRANTY

The only warranty the company gives and the only warranty the dealer is authorized to give is as follows:

We warrant products sold by us to be in accordance with our published specifications or those specifications agreed to by us in writing at time of sale. Our obligation and liability under this warranty is expressly limited to repairing, or replacing, at our option, within 12 months after date of retail delivery, any product not meeting the specifications. **WE MAKE NO OTHER WARRANTY, EXPRESS OR IMPLIED AND MAKE NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE.** Our obligation under this warranty shall not include any transportation charges or costs or installation or any liability for direct, indirect or consequential damage or delay. If requested by us, products or parts for which a warranty claim is made are to be returned transportation prepaid to our factory. Any improper use, operation beyond rated capacity, substitution of parts not approved by us, or any alteration or repair by others in such manner as in our judgment affects the product materially and adversely shall void this warranty. **NO EMPLOYEE OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY.**

Wil-Rich reserves the right to make improvement changes on any of our products without notice.

WHEN WARRANTY LIMITED OR NOT APPLICABLE: Warranty on hoses, cylinders, hubs, spindles, or other trade accessories are limited to the warranties made by the respective manufacturers of these components.

Rubber tires and tubes are warranted directly by the respective tire manufacturer only, and not by Wil-Rich.

Warranty does not apply to any machine or part which has been repaired or altered in any way so as in the company's judgment to affect its reliability, or which has been subject to misuse, negligence or accident.

A DELIVERY REPORT FORM MUST BE FILLED OUT AND RECEIVED BY WIL-RICH, INC. TO INITIATE THE WARRANTY COVERAGE.

WARRANTY CLAIMS PROCEDURE

1. The Warranty Form must be returned to Wil-Rich, Inc. within fifteen (15) working days from the repair date.
2. Parts returned to Wil-Rich without authorization will be refused. The parts must be retained at the dealership for ninety (90) days after the claim has been filed. If the Service Department would like to inspect the parts, the packing slip will be mailed to the dealer. The packing slip must be returned with the parts. The parts must be returned prepaid within thirty (30) days of receiving authorization. After the parts are inspected and warranty is verified, credit for the return freight will be issued to the dealer.
3. Parts that will be scrapped at the dealership will be inspected by Wil-Rich Sales Representatives, District Sales Managers or Service Representatives within the ninety (90) day retaining period.

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2 Manual 1 PTO SKID
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✓ GAS SKID
DIESEL
CP
Pole
1 tank

ENGINE DRIVE (CART MOUNTED)

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GENERAL
OUTLINE
W/HELPFUL
NOTES
TALK TO
SET-UP

4 pages

2 pages

FIELD CULTIVATOR ASSEMBLY

See your field cultivator assembly manual for information on the assembly of the cultivator main frame, wings and extensions. One deviation from the standard Wil-Rich cultivator is the hitch assembly. Information on this revised hitch assembly is shown in this manual on page 4.

The only other deviation would be the addition of a seed injector on each shank. These seed injectors should be mounted at the same time as the shovels. Information on mounting of the seed injectors is on page 5 of this manual.

state which manual

NOTE: WHEN MARKERS ARE USED ON THE 27'5" MODEL THE 14" EXTENSION ON THE RIGHT WING HAS TO BE MOVED TO THE FRONT OF THE WING TO PROVIDE CLEARANCE FOR THE MARKER SECTION (C-7195). SEE 27'5" & 41'5" MARKER ASSEMBLY PAGES 54-56

6. If selected as an option, assemble the auxiliary auger at this time. See auger assembly pages 57-58. Locate anchors (A7343) as specified.
7. Assemble the hydraulics at this time. (See pages 40-45)

AIR-SEEDER ASSEMBLY

1. Refer to applicable tank assembly page 7. Set the frame assembly on the pole or cart approximately as shown and secure in position with the straps shown (17033, 17036).

NOTE: IT IS IMPORTANT THAT THE MOUNTING BOLTS ARE LEFT LOOSE UNTIL THE FRAME ASSEMBLY IS LOOSELY BOLTED IN POSITION.

2. Assemble the catwalk as shown on page 19. The catwalk planks are shipped without mounting holes. Therefore, they should be positioned approximately as shown and mounting holes drilled where required.
3. Assemble the roller drive train as shown on pages 20-22. The ground driven wheel is to be centered over the rear tire on the field cultivator walking tandem.
4. Assemble your blower drive system at this time. (See pages 24-39)
5. If selected as an option, assemble the markers at this time.

NOTE: TORQUE ALL 37° FLARE END FITTINGS AND HOSES 20 TO 40 FOOT POUNDS. DO NOT OVER TIGHTEN; FLARES DO THE SEALING, NOT THREAD DEFORMATION.

also different? type of extension

ext. air w/ 27' 14" extension

lock for 27'

the standard cable diff. walkers

Send:
Standard Manual w/27'
HD Manual w/41'

NOTE: HYDRAULIC PIPE COMPOUND SHOULD BE USED TO PREVENT LEAKAGE ON ALL PIPE THREADS (CYLINDER PORTS, HYDRAULIC MOTOR, 3 POSITION VALVE AND SELECTOR VALVES).

8. Assemble the seed cups and air hoses at this time. Fig 1 shows the correct procedure for the installation of the seed cups. It is important that the seed cups be handled carefully.

After all the seed cups have been installed the air hoses are to be inserted. Fig 2 shows the approximate orientation of each. See pages 46-47 for injector hose placement.

9. If selected as an option, assemble and mount the 3-bar harrow or packer assembly at this time. (See pages 50-53)
10. If selected as an option, mount depth indicators on the front outside corners of the wings and front bar of the main frame. (See Page 49)
11. If selected as an option, install truck gate. (See page 59 for instructions)

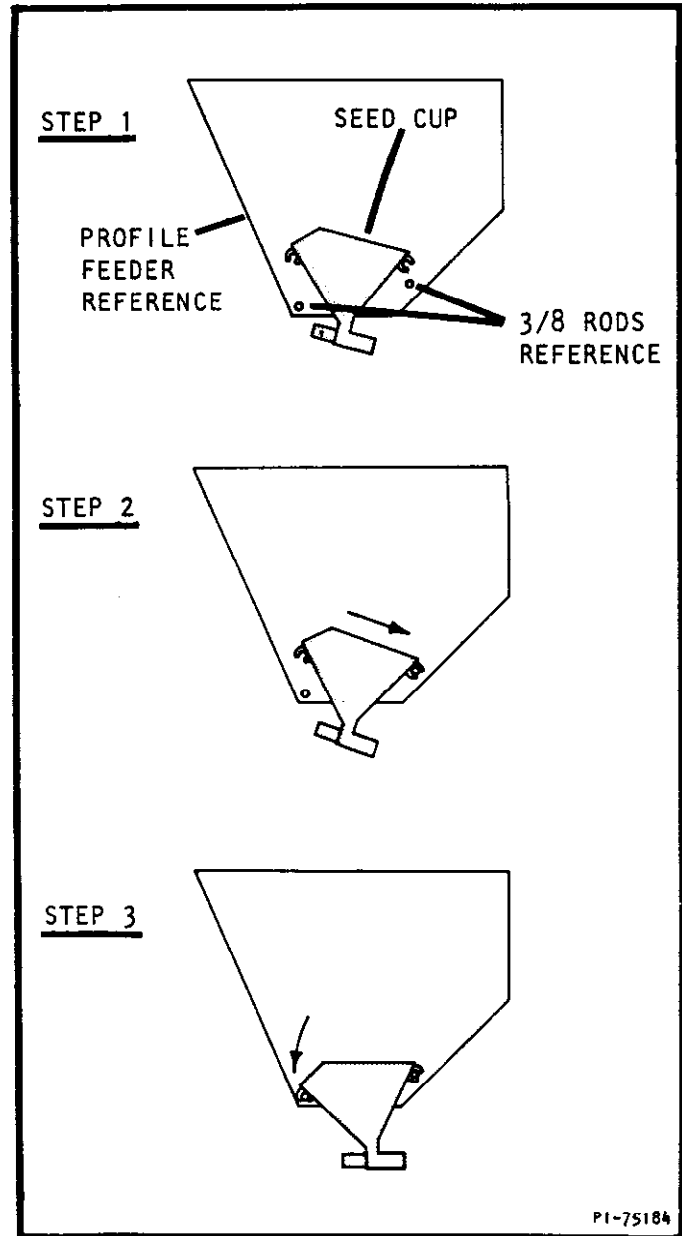


Fig 1 Seed Cup Installation

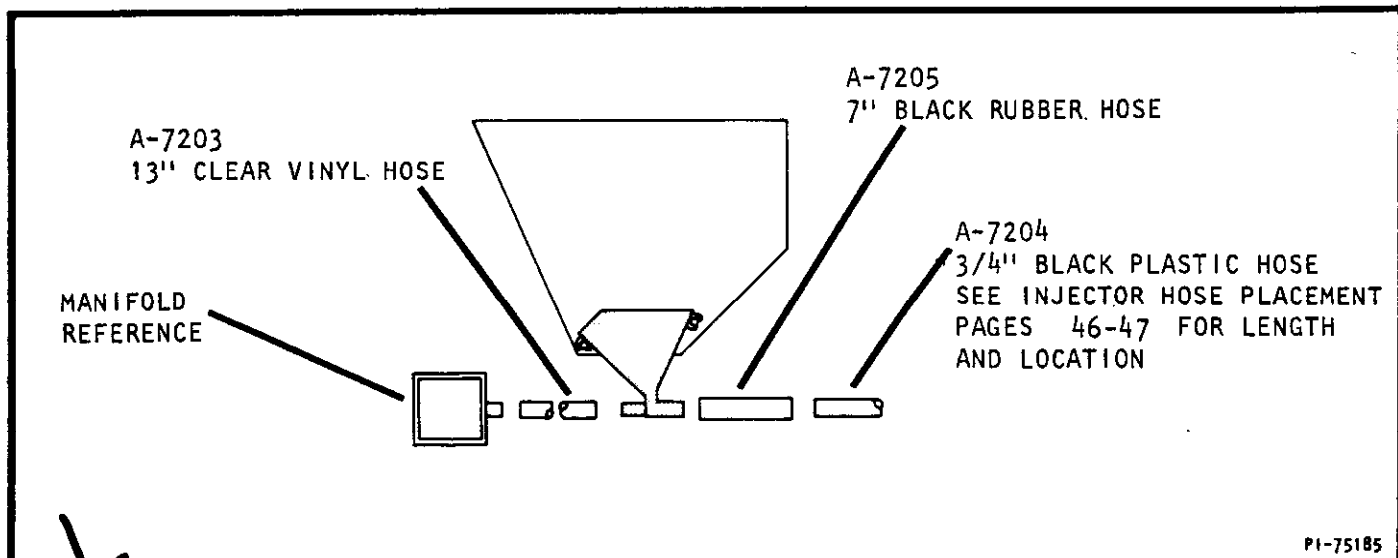
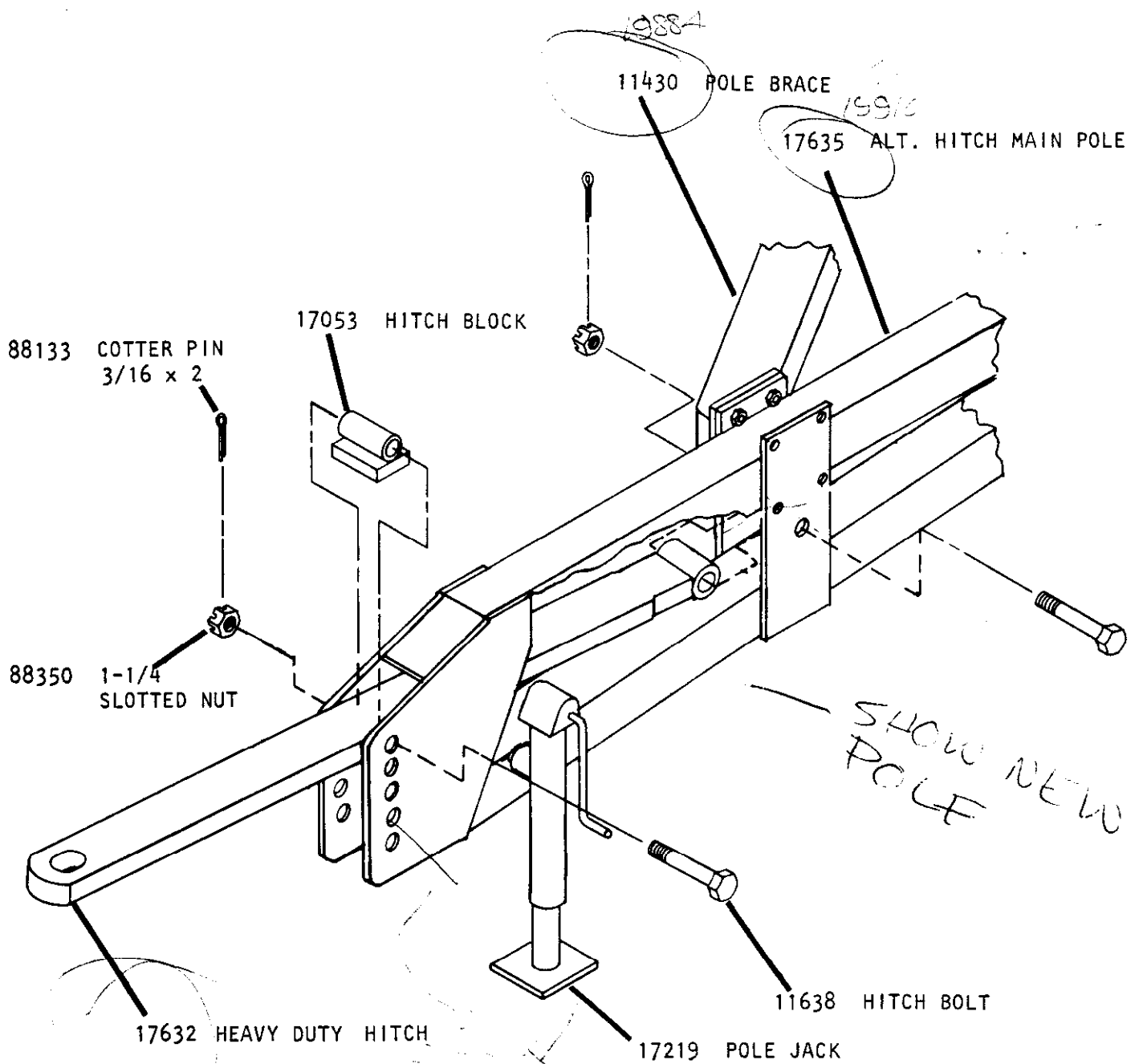


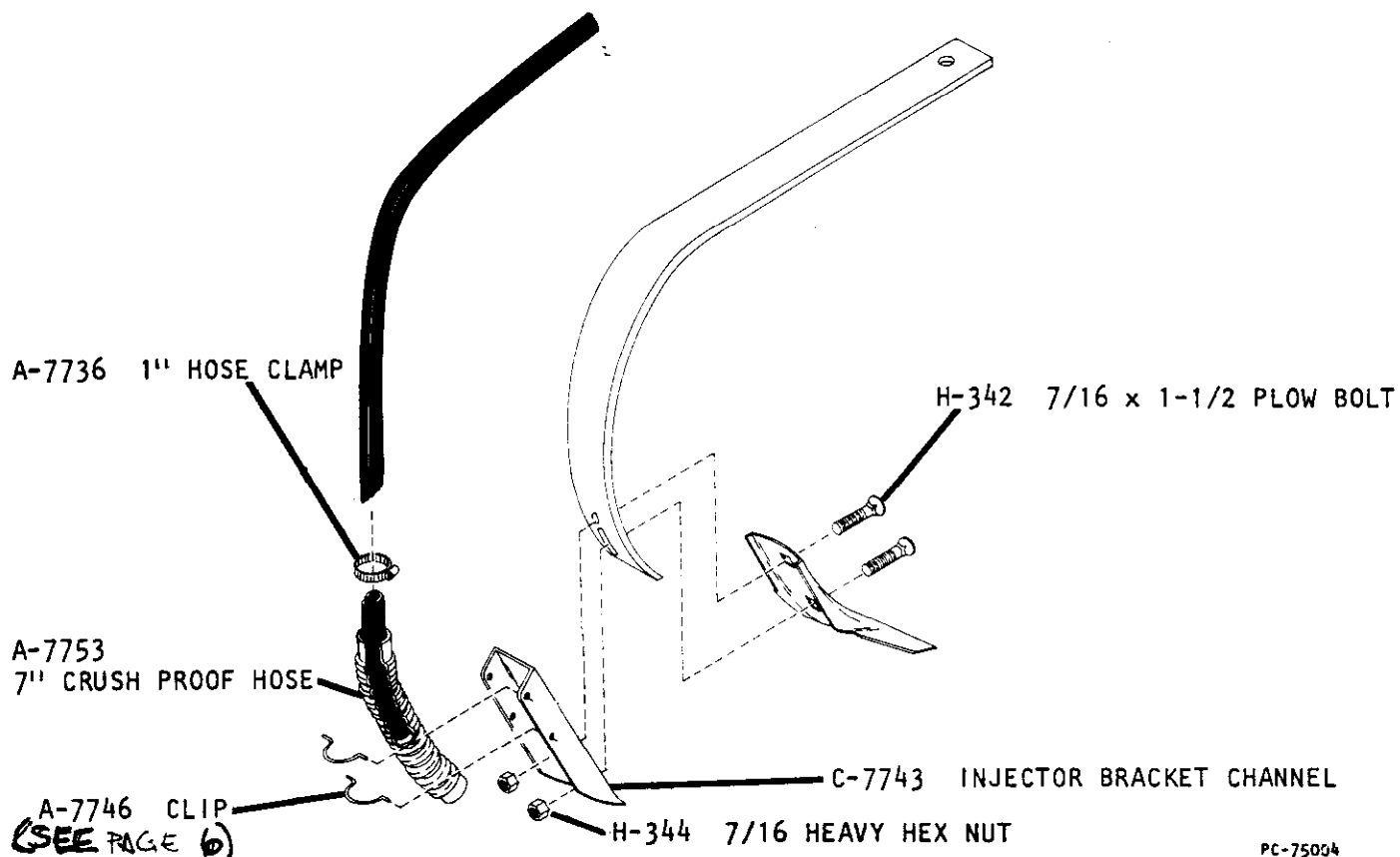
Fig 2 Hose Installation

HITCH

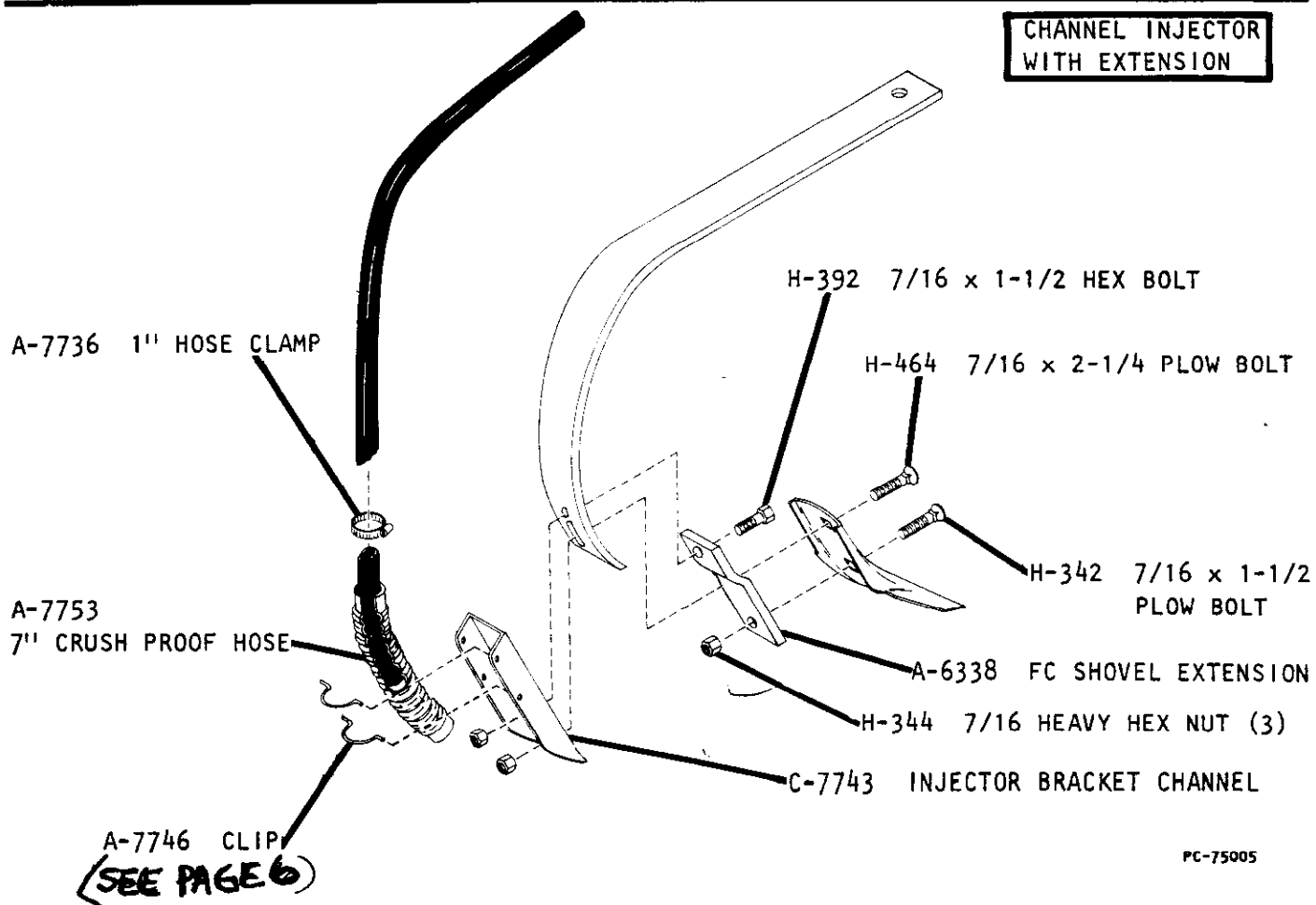


NOTE: AN ADDITIONAL HITCH BOLT IS PROVIDED AS A PRECAUTIONARY MEASURE TO INSERT BELOW THE HEAVY DUTY HITCH, IF THE UNIT IS GOING TO BE BACKED UP. THIS WOULD PREVENT THE POLE FROM LIFTING WHILE BACKING UP.

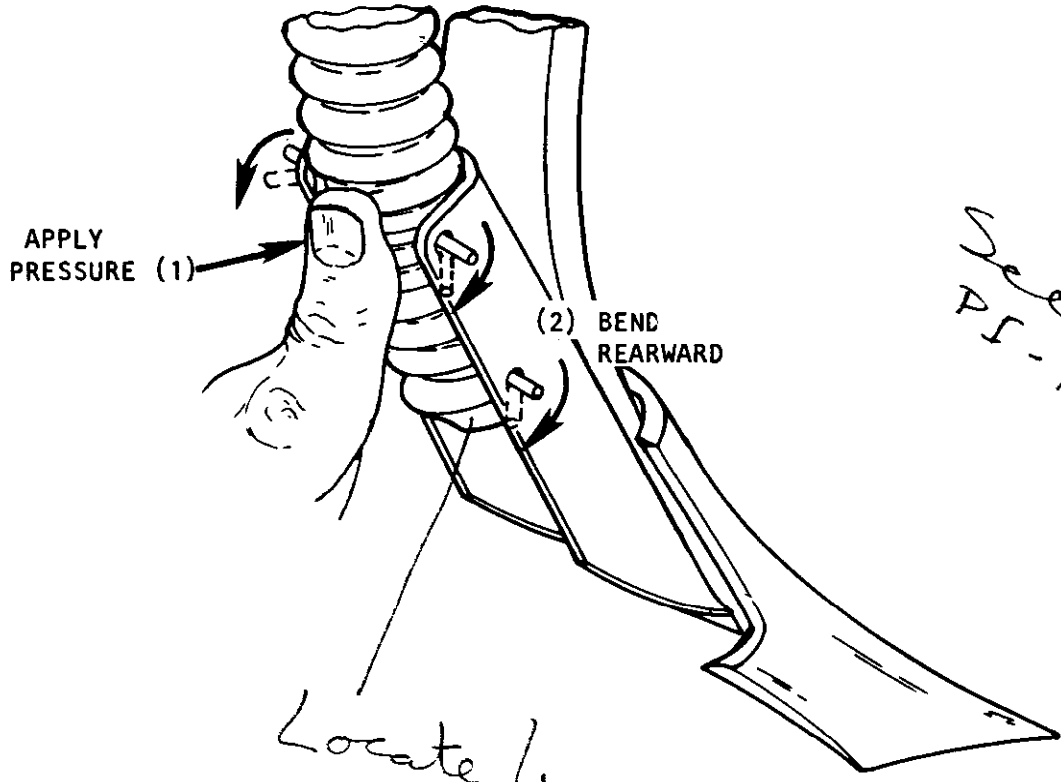
CHANNEL INJECTOR



CHANNEL INJECTOR WITH EXTENSION



CLIP INSTALLATION



See
PI-75679

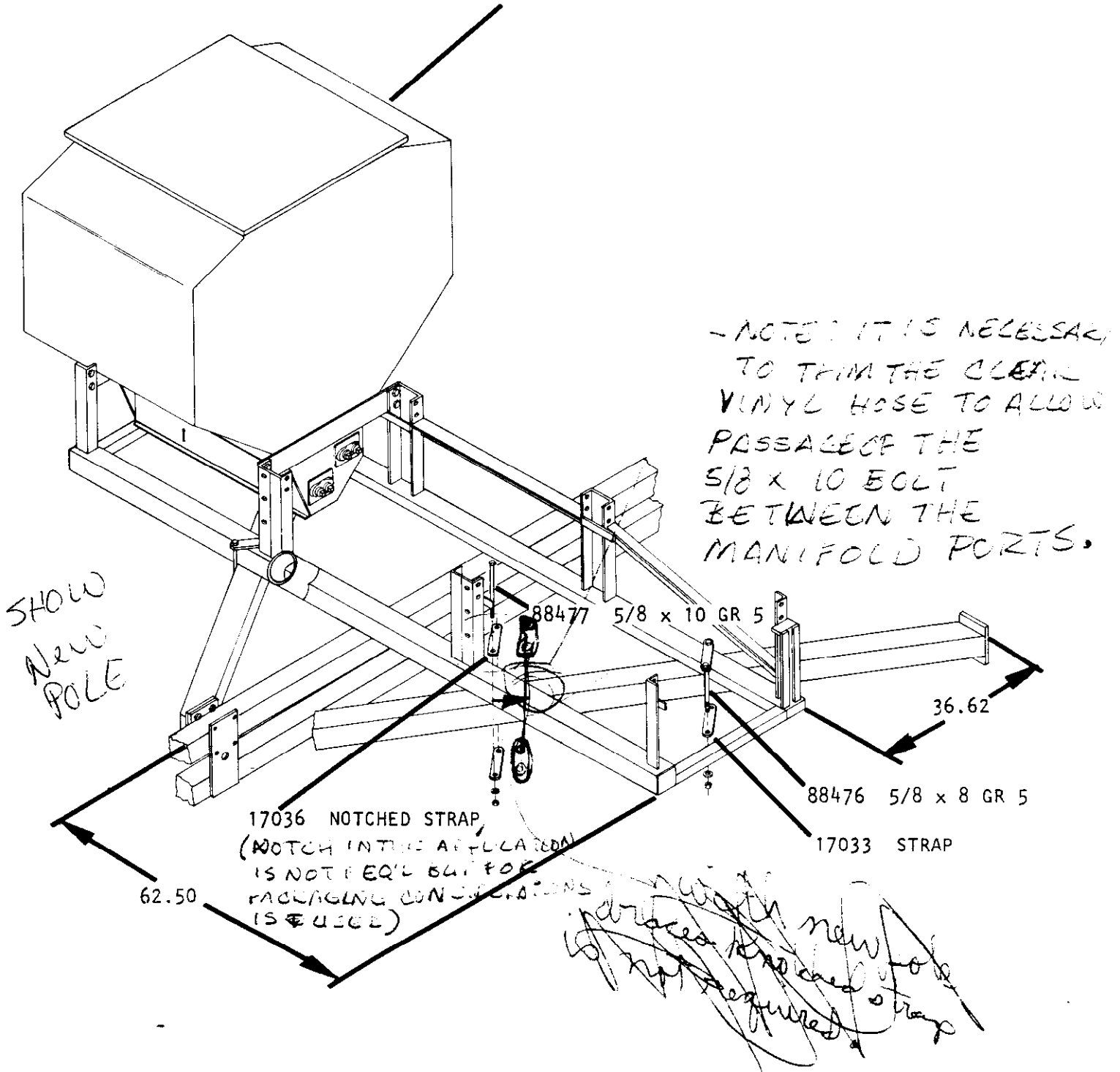
Locate hose
approx halfway
over top shovel bolt

PA-75243

POLE MOUNTED TANK ASSEMBLY

PORTIONS OF THE TANK FRAME ASSEMBLY ARE NOT SHOWN.

TWO TANK FRAME ASSEMBLY (Page 11)
THREE TANK FRAME ASSEMBLY (Page 12)



CART ASSEMBLY

PORTIONS OF THE TANK FRAME ASSEMBLY ARE NOT SHOWN.

TWO TANK FRAME ASSEMBLY (Page 11)
THREE TANK FRAME ASSEMBLY (Page 12)

19486 RIGHT POLE ASSY

88290 3/4 x 2 GR 8

88388 5/8 x 4 x 3-1/4

88311 5/8 x 2-1/2 x 4

88471 5/8 x 10 GR 5

19489 CART POLE BRACE

88145 5/8 x 4 x 5-1/4

19488 DRIVE BRACE

88404 3/4 x 2-1/2

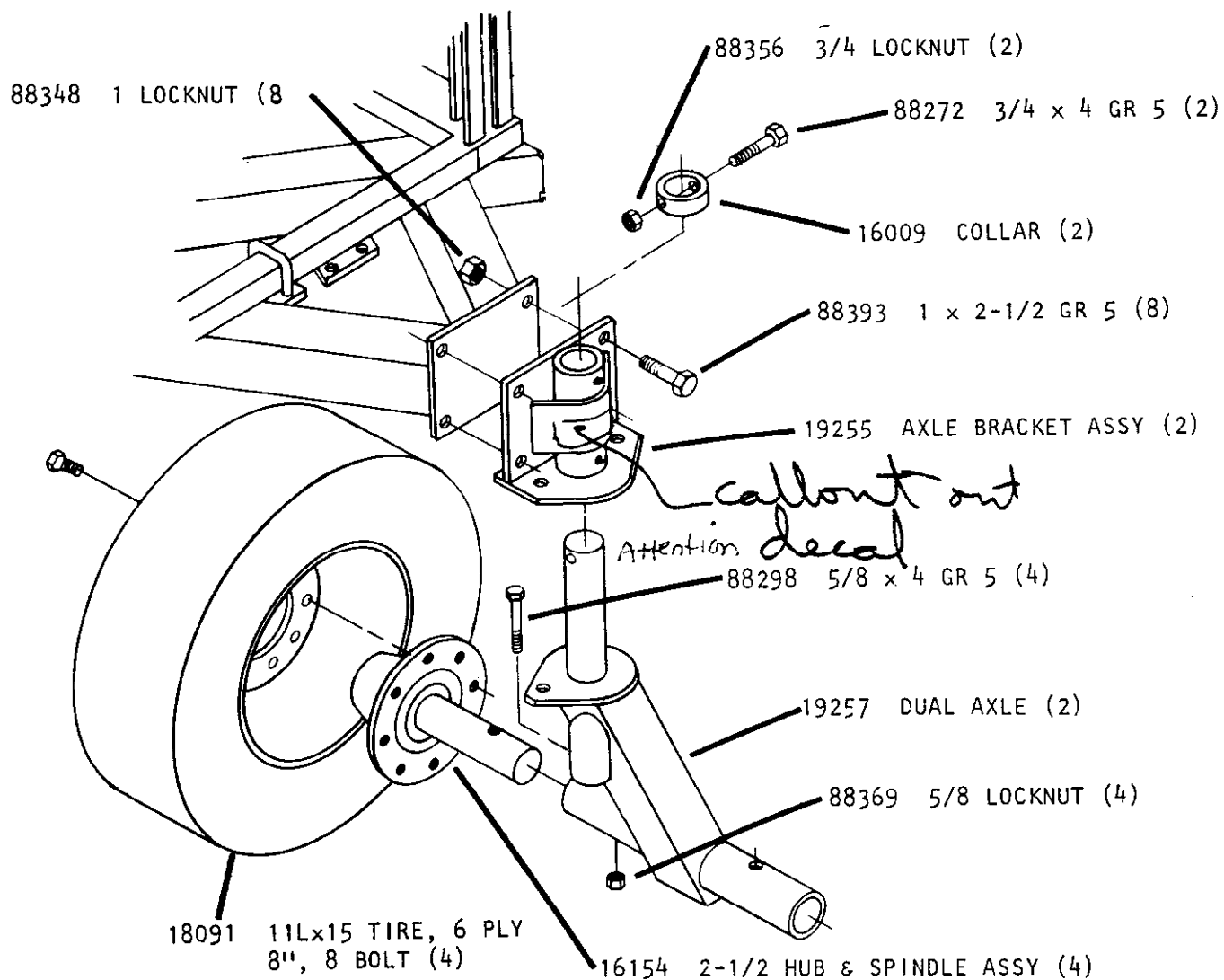
19487 LEFT POLE ASSY

19497 BALL JOINT PLATE

17033 Strap

Need Notched Plate
17036 STRAP
17033 STRAP

DUAL AXLE ASSEMBLY



NOTE: QUANTITIES SHOWN ARE FOR TWO (2)
AXLE ASSEMBLIES

See PI-75853

DRIVE TANK IS NOT SHOWN FOR CLARITY

15853

88312 1 x 5 GR 5

88348 1" LOCK NUT

88388 5/8 x 4 x 3-1/4 (2)

19490 ARM BRACKET

19213 BRACKET

19159 ARM

88145 5/8 x 4 x 5-1/4

88410 1/2 x 2-1/2 GR 5

19302 COLLAR

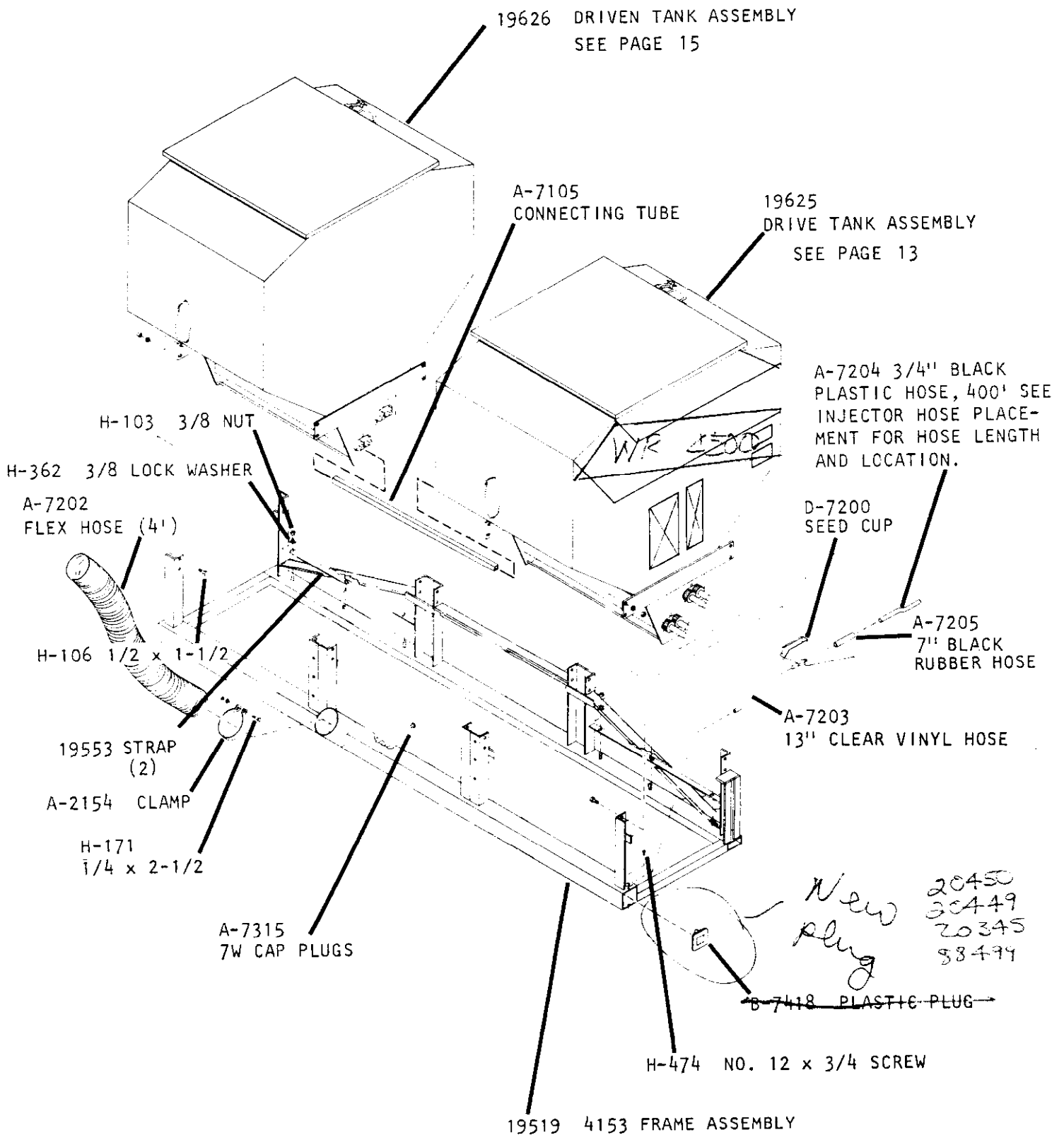
88295 5/8 x 6 GR 5

19367 FC PIN BRACKET

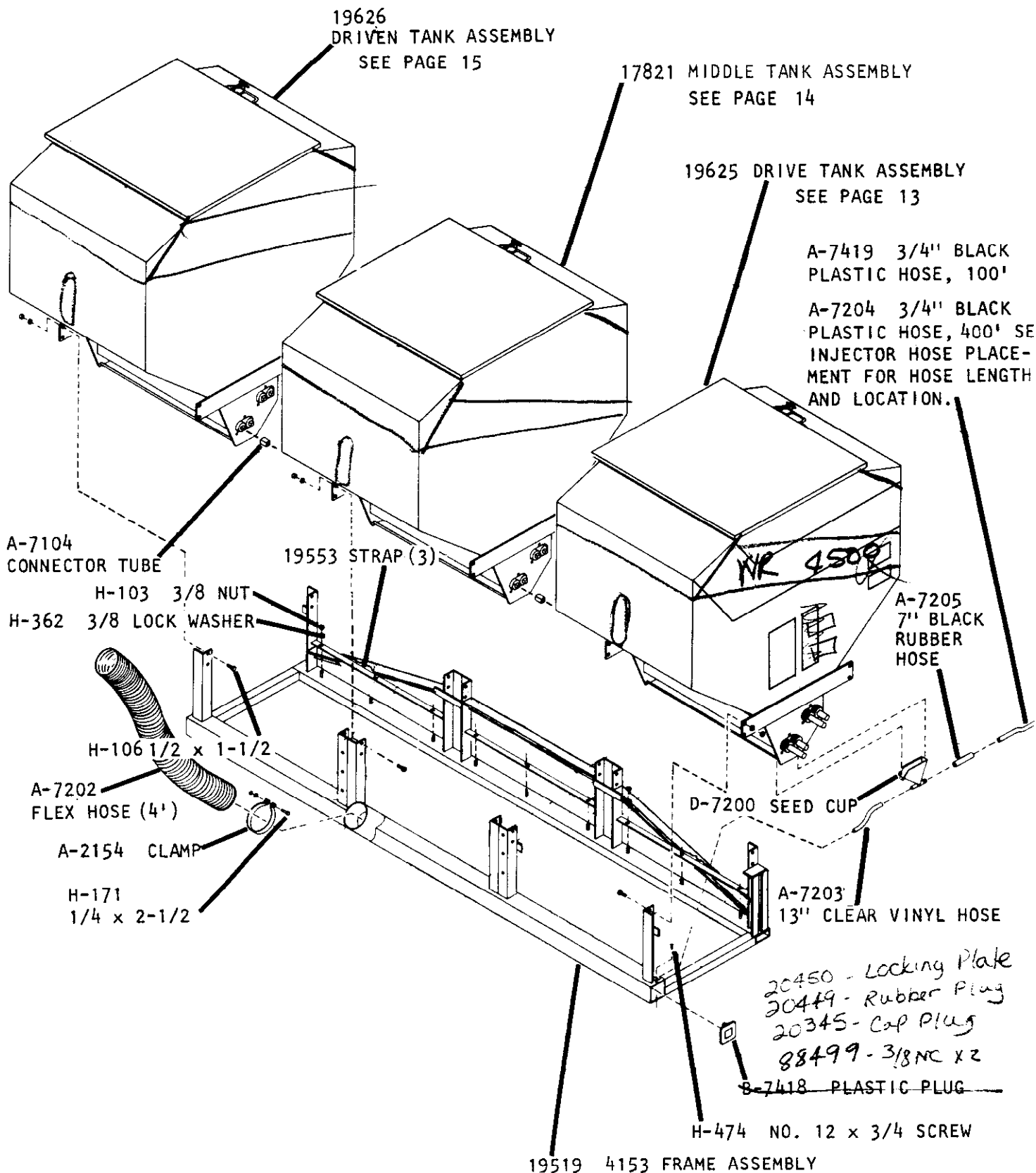
19196 PLATE

SHOW NEW POLE

TWO TANK FRAME ASSEMBLY



THREE TANK FRAME ASSEMBLY



DRIVE TANK

19613 SEEDER 4153 DIE CUT DECAL

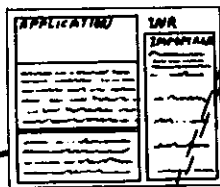
B-7809
WIL-RICH LOGO,
DIE CUT DECAL (2)

AIR SEEDER 4153

C-8385 AIR
(LEFT FRONT)
DIE CUT DECAL

A-7813
WARNING DECAL

A-7436
DANGER DECAL



19308 APPLICATION DECAL

C-7449
AIR SEEDER TANK ASSEMBLY

H-282 3/8 FLAT WASHER

H-190 1/4 x 1/2

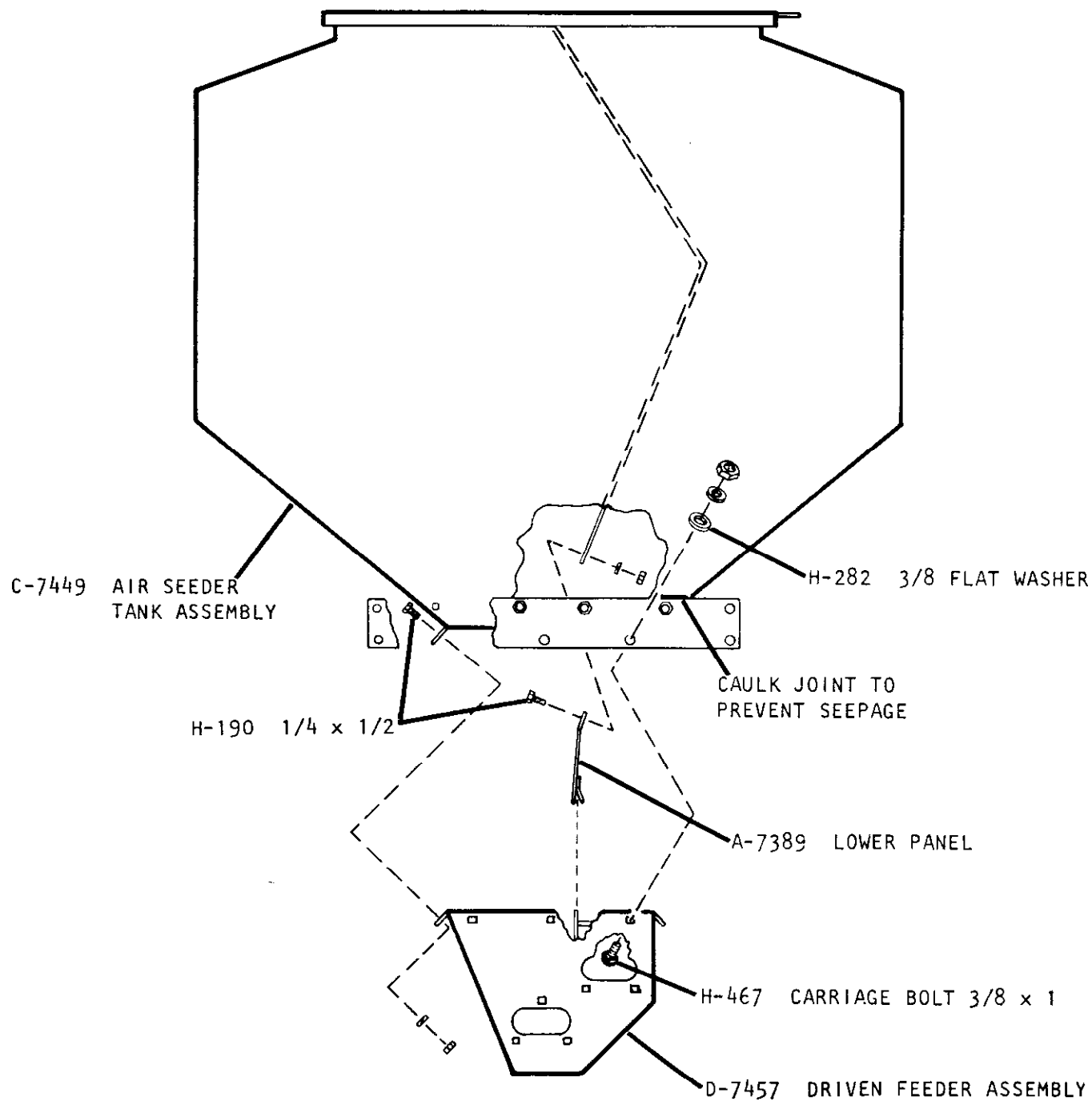
CAULK JOINT
TO PREVENT SEEPAGE

A-7389 LOWER PANEL

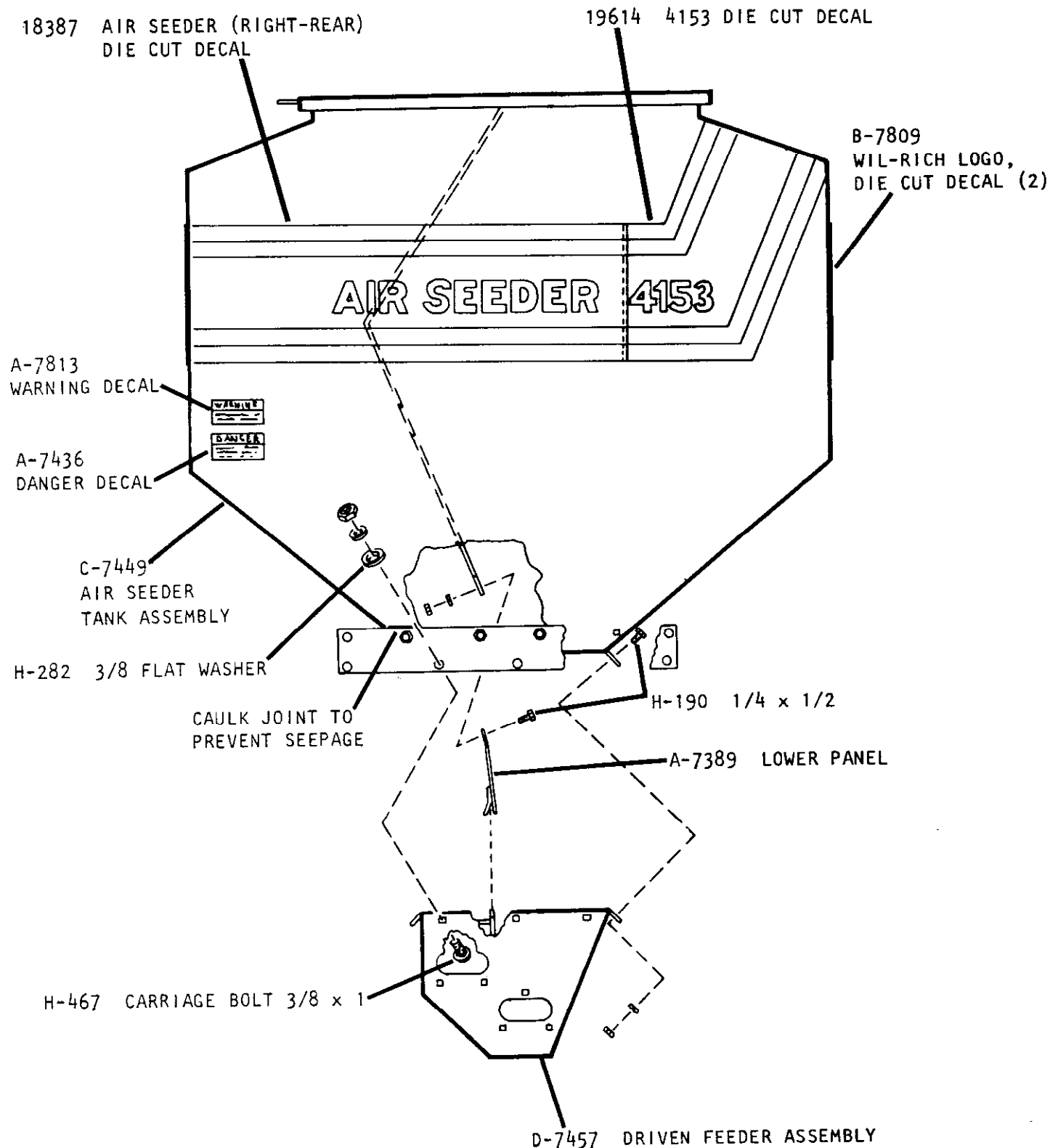
H-467 CARRIAGE BOLT 3/8 x 1

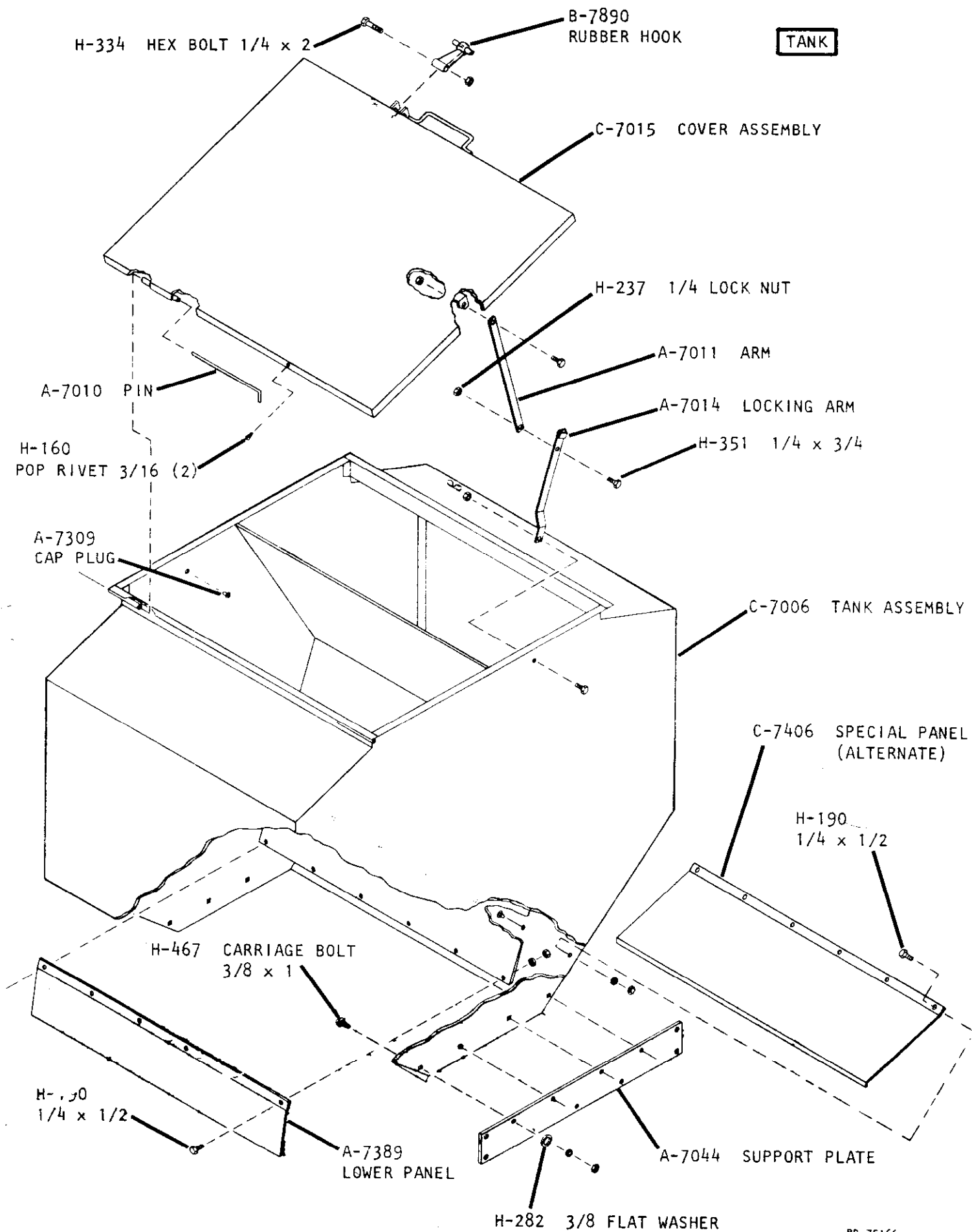
D-7456 DRIVE FEEDER ASSEMBLY

MIDDLE TANK



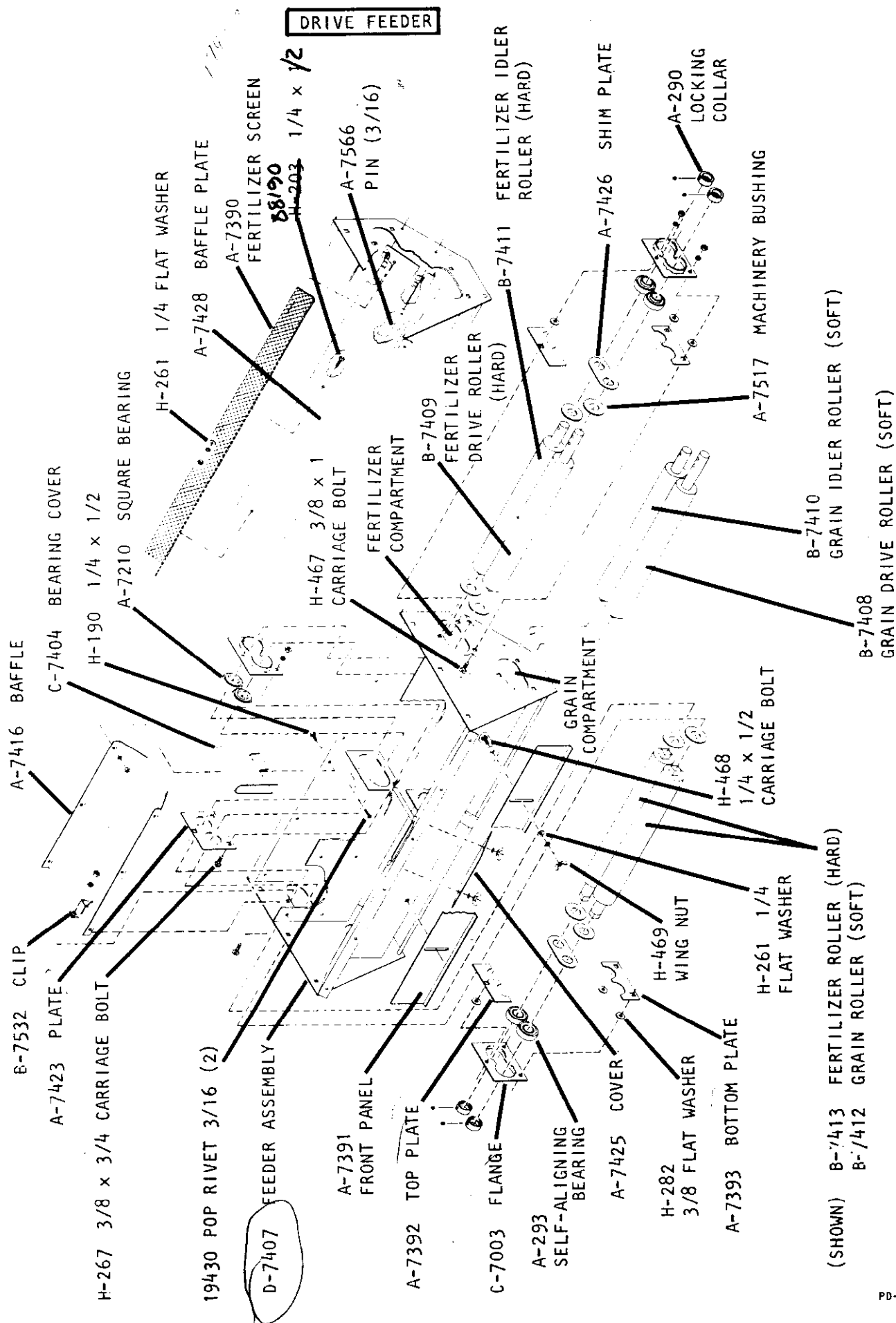
DRIVEN TANK



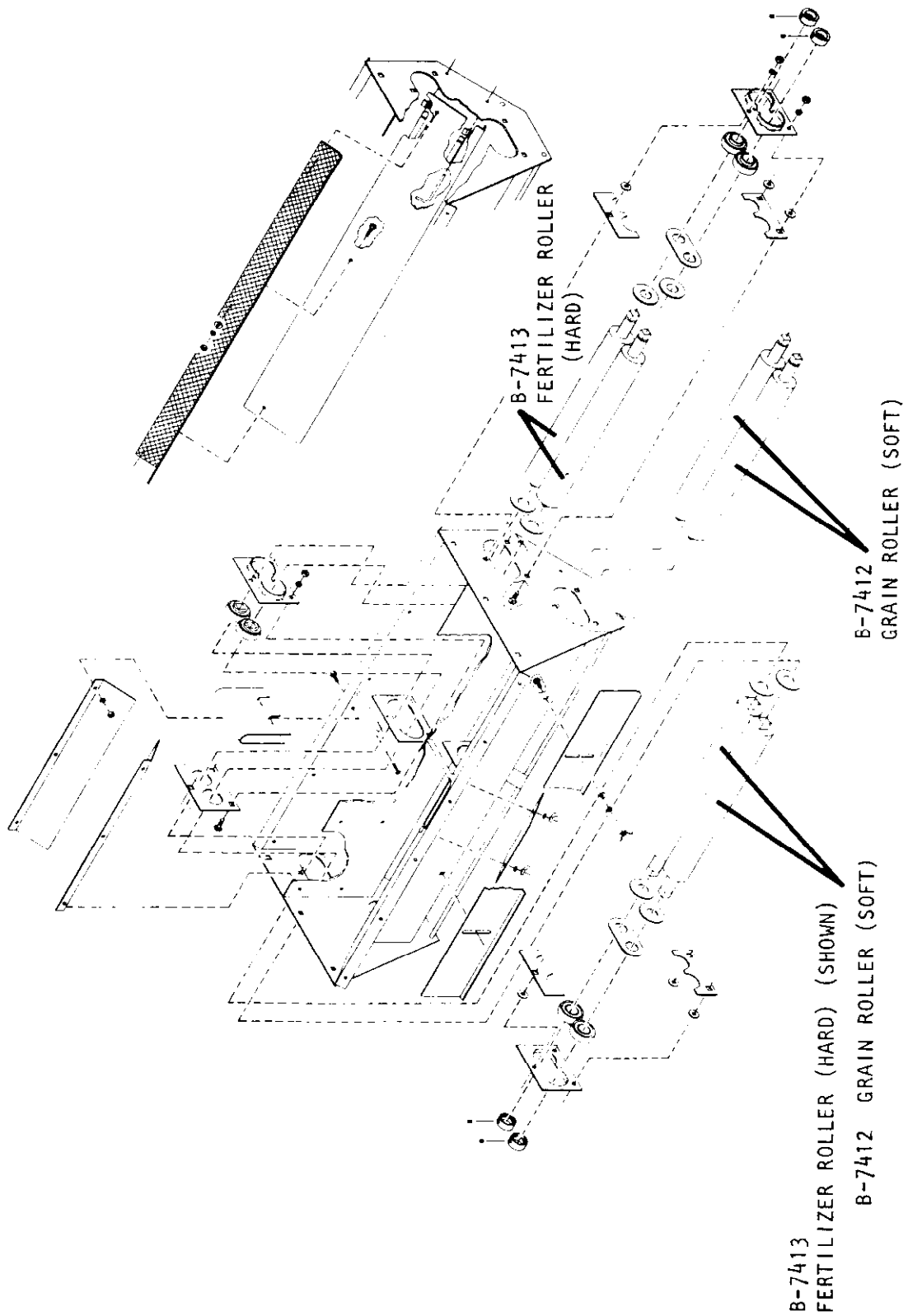


PD-75166

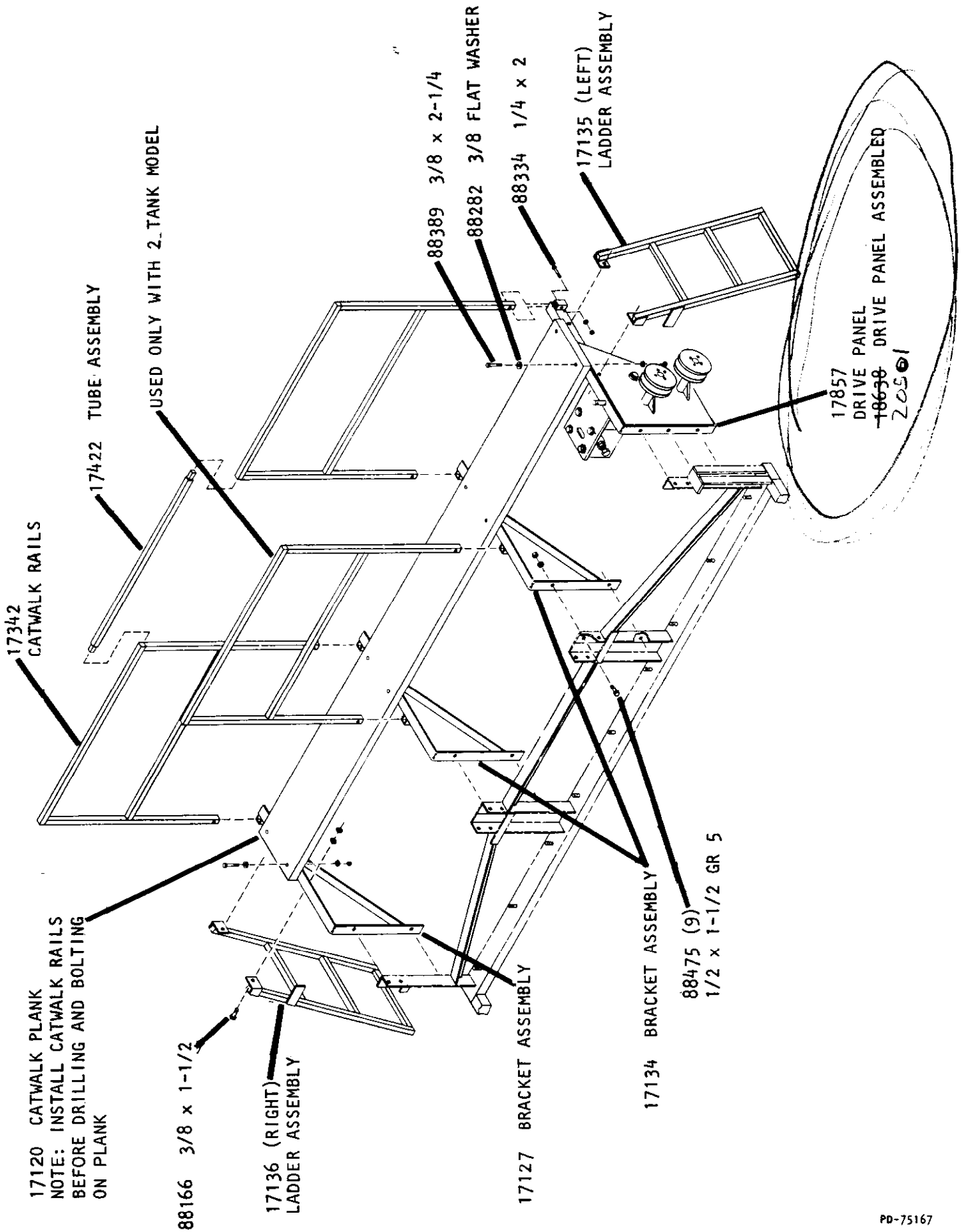
17.07



DRIVEN FEEDER



CATWALK ASSEMBLY



075.91
97.62
228

SPROCKET PIN
(FOR SPARE SPROCKET STORAGE)

SPROCKETS		
PART NO.	TEETH	QTY
A-7147	20	2
A-7148	26	2
A-7149	32	2
A-7150	36	2
A-7151	39	2
A-7152	40	2

SPARE SPROCKETS MAY
BE STORED ON THE
SPROCKET PIN

TANK DRIVE

H-126 5/8 NUT (2)

A-7153 1" ID x 1-1/4 LG
BRASS BUSHING (4) REPLACEABLE

A-7062 UNIVERSAL SPROCKET HUB

A-7184 #40 ROLLER CHAIN (52")

A-7896 HUB (2)

H-489 5/8 x
2-1/2 GR 5

H-488 5/16 x 2-1/4
GR 5 (8)

28073
H-472 5/16 x 1-3/4 ROLL PIN (4)

A-7212 SPUR GEAR

A-7279 1" x 1/2" SPACER

H-473 5/16 x 2-1/2 ROLL PIN (4)

A-7533 GRAIN
SPROCKET HUB

H-277 5/8 FLAT WASHER (6)
(IF REQUIRED)

A-7534
SPROCKET SPACER
(1" x 1-3/4")

A-7211 #40 CHAIN IDLER (2)

H-478 5/16 x 1 LG GR 5 (8)

A-7185 #40 ROLLER CHAIN (60")

A-7209 #40 ROLLER CHAIN (2)
(9-1/2")

A-7186 CONNECTING LINK (2)

A-7187 OFFSET LINK (4)

88290
H-292 5/8 x 3-1/2
---CHK RJ says 40

say 40

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

88290
H-292 5/8 x 3-1/2

20495

FRONT GEARBOX

A-7905
SAME ROTATION
GEARBOX (1")
(DURST)

NOTE:
GEARBOX IS SHIPPED
WITHOUT LUBRICANT.
Lubricate with multi-
purpose gear lubricant
before using.

WITH

88432 5/16 x 2 ROLL PIN

88473 5/16 x 2-1/2 ROLL PIN

~~A-7919 RECTANGULAR DRIVE
SHAFT ASSEMBLY~~

88102

1-1/4

88166 3/8 x 1-1/2 (4)

H-362 3/8 LOCK WASHER (4)

88282 3/8 FLAT WASHER

20046

~~A-7914 U-JOINT TUBE ASSEMBLY~~

20045

A-7913 U-JOINT BAR ASSEMBLY

New chain
+ gear box
go together

18659 50 BS
23 SPROCKET

A-7900 50 BS15 KEYED SPROCKET (2)

A-2273 SQUARE KEY 1/4 x 1" (6) (2)

~~20500 #50 ROLLER CHAIN (21.88")~~

~~A-7910 #50 ROLLER CHAIN (26.38")~~

A-7615 #50 SPROCKET IDLER

A-7911 #50 ROLLER CHAIN (45.62")

14205 AXLE BUSHING (2.50")

A-7894 SHAFT (11.00")

A-7903
50A60 SPROCKET

A-7619
#50 CONNECTING
LINK (2)

A-7631
#50 OFFSET
LINK (2)

H-196 1" FLAT WASHER (2)
(IF REQUIRED)

A-7062
UNIVERSAL SPROCKET HUB

A-7895 SHAFT (8.50")

H-473 ROLL PIN
5/16 x 2-1/2 LG

H-137
SPRING LOCK PIN

H-277
5/8 FLAT WASHER (2)

H-395 5/8 x 5

REAR GEAR BOX

20427

20427

A-2273 SQUARE KEY $1/4 \times 1''$ (4)

A-1225 COUPLER

A-7904

OPPOSITE ROTATION
GEAR BOX (1'')
(CURTIS)

NOTE:

GEARBOX IS SHIPPED
WITHOUT LUBRICANT.
Lubricate with multi-
purpose gear lubricant
before using.

H-161 $1/4 \times 1/4$ SET SCREW (2)

H-137 SPRING PIN

H-207 $3/8 \times 4$

H-294 $5/8 \times 2$ GR 5

A-7923 LOCKOUT BAR

~~A-7924~~ 20040
GEARBOX SHAFT (1'')

A-7912
PILLOW BLOCK (1'')

A-7859 PLATE

B-399
AXLE CAP (2)

H-263 $1/8$ NPT
GREASE FITTING

88495
H-370 $7/8 \times 2 \frac{1}{2}$ (4)

A-7323
VALVE PLATE

H-488 $5/16 \times$
 $2-1/4$ GR 5 (4)

H-311
($5/8 \times 2-1/2 \times 4$)

H-386 U-BOLT
 $3/8 \times 2-1/2 \times 3-1/4$

A-7929 SPRING BRACKET

H-302 $1/2 \times 3-1/4$

H-157 $3/8 \times 1$ (2)

A-7935 BRACKET

D-7889
GEARBOX DRIVE
SUPPORT ASSEMBLY

H-177 $3/8 \times 3/8$ SET SCREW (2)

18621 DRIVE HUB ASSEMBLY

A-7502
TIRE, TUBE & WHEEL
ASSEMBLY (15'' RADIAL)

H-489 $3/8 \times 2-1/2$ GR 8 (4)

88389 $3/8 \times 2-1/4$

A-7366 LOCK PIN

H-369 $5/8$ LOCK NUT

H-315 $1/2 \times 2-1/2$

H-142
WHEEL BOLT (6)

A-176 SPACER (8)

A-924 S-50 SELECTOR VALVE (2)

A-1540 SPRING & PLUG ASSEMBLY

ACRE MONITOR

New
Acres
Monitor

New
PINS

19460 WHEEL DETECTOR & MAGNET ASSEMBLY

MOUNT ON FRONT
FOUR HOLES

19459 HARDWARE

MOUNT INSIDE
TRACTOR CAB

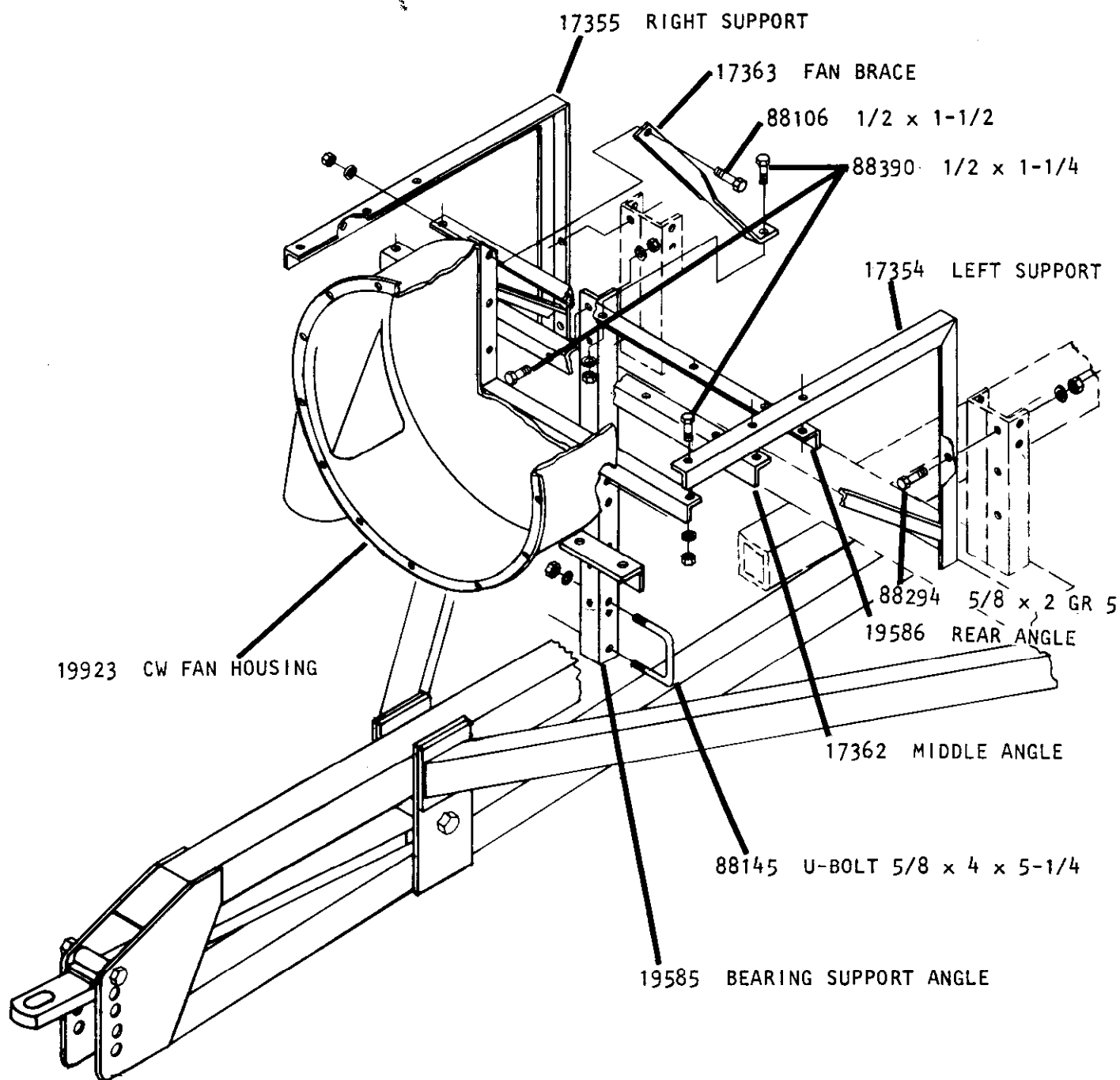
19458 METER & MOUNTING BRACKET

19459 PLUG PAIR WIRE

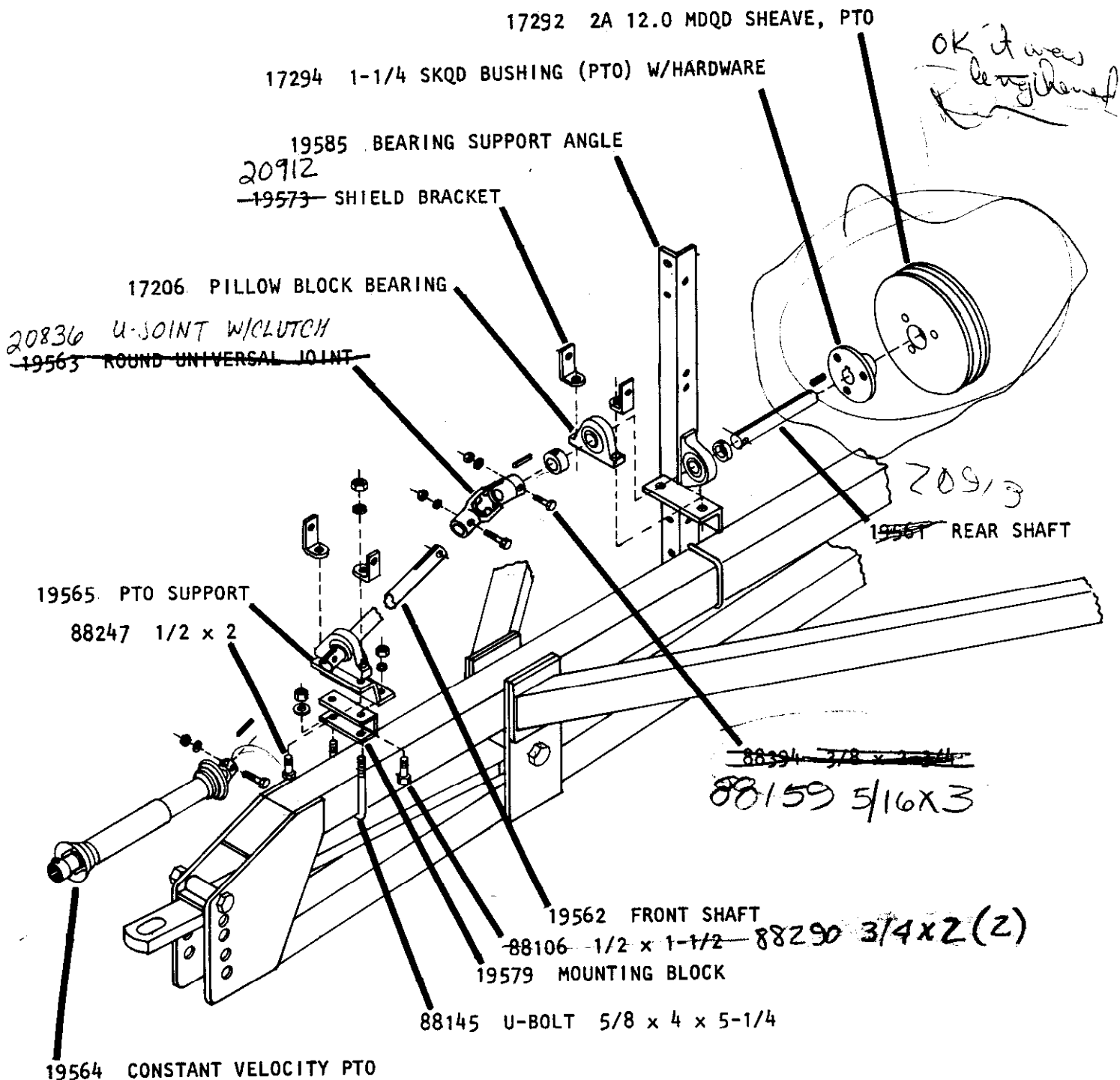
19462 6' RED POWER WIRE WITH FUSE

19463 1' BLACK GROUND WIRE

PTO FRAME ASSEMBLY
(POLE MOUNTED)



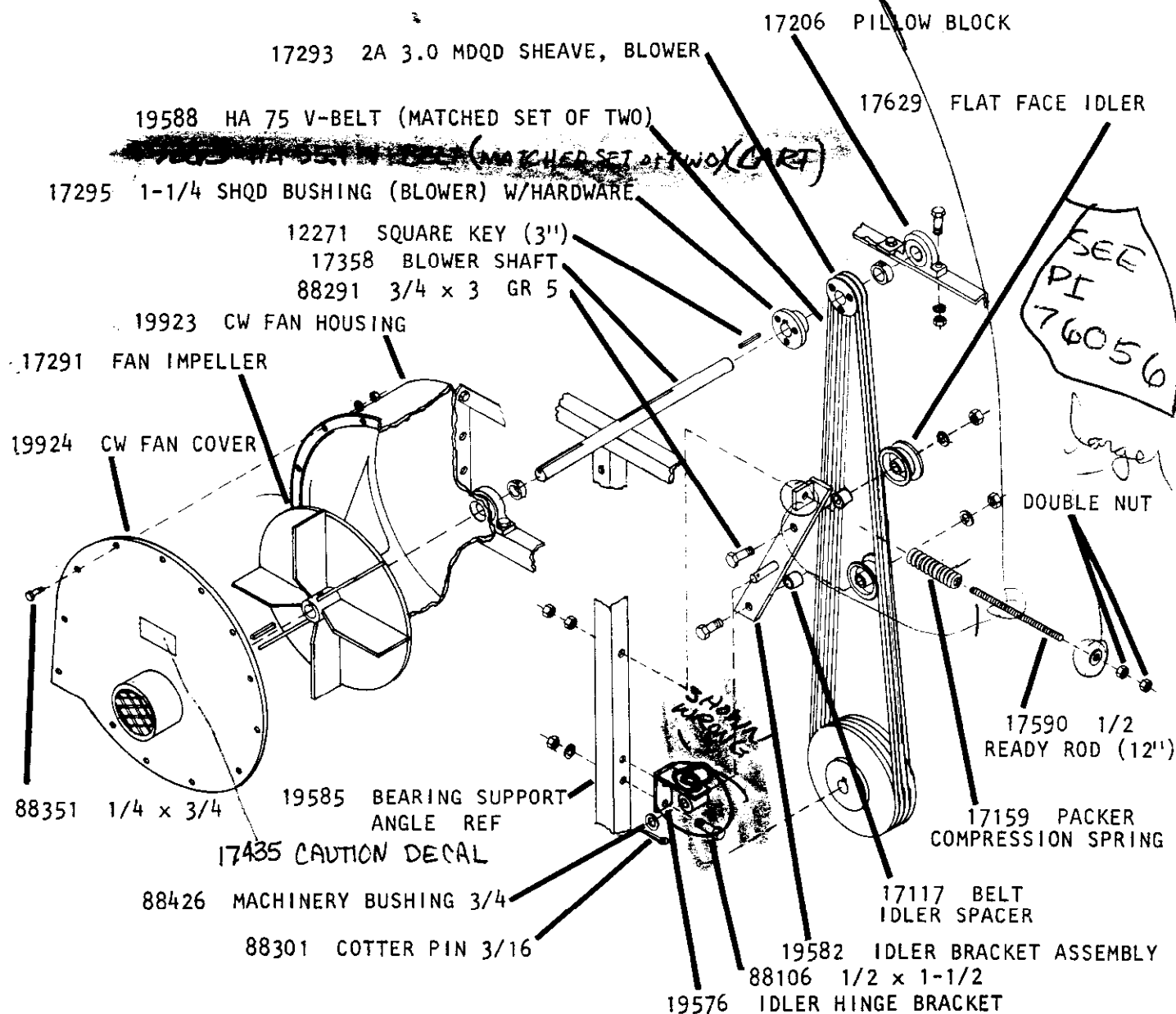
PTO DRIVE (POLE MOUNTED)



ITEMS NOTED IN MARKER
DO NOT HAVE PRELIMINARY
ASSY INSTR

FAN DRIVE

HARD TO GET ROD
THROUGH WHEN CART
IS NOT USED



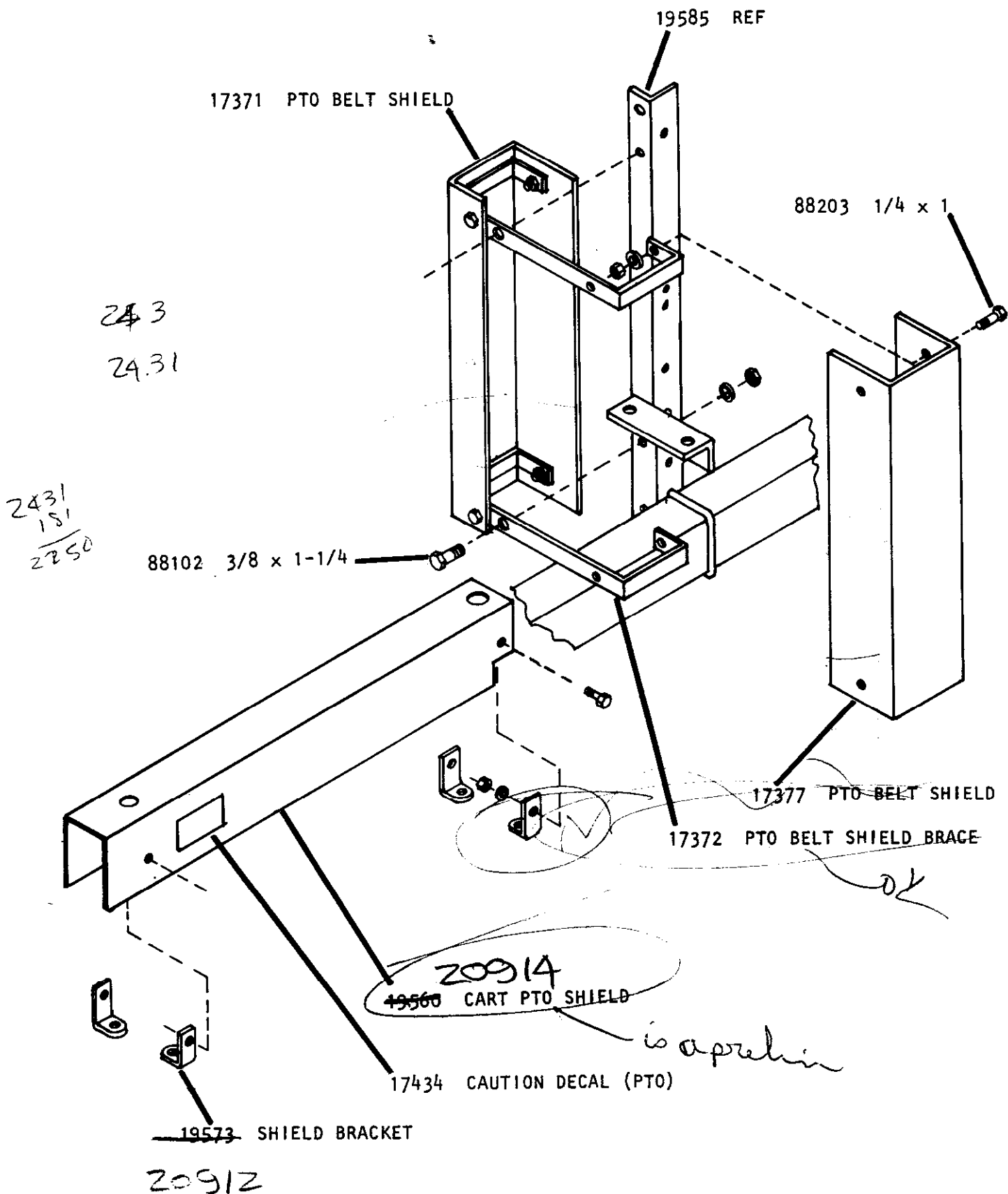
NOTE: APPLY A HIGH QUALITY
GASKET FORMING PASTE BEFORE
MOUNTING COVER.

Handwritten note:
DO NOT
PULL SET
PULLER
SHOULDER
DO NOT
PULL SET
PULLER
SHOULDER

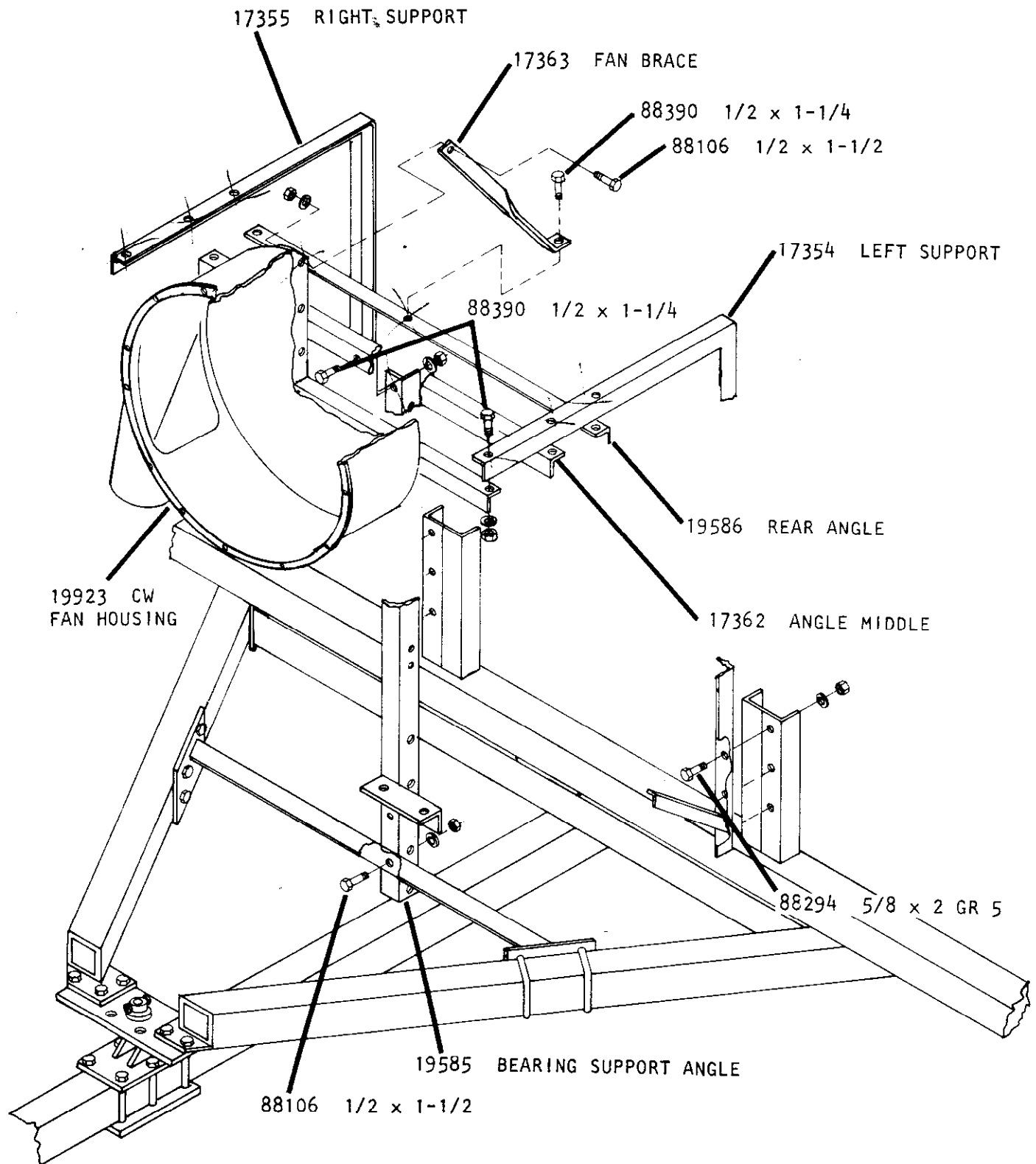


Handwritten note:
No Cant
Belts
tight

SHIELD ASSEMBLY



PTO FRAME ASSEMBLY
(CART MOUNTED)

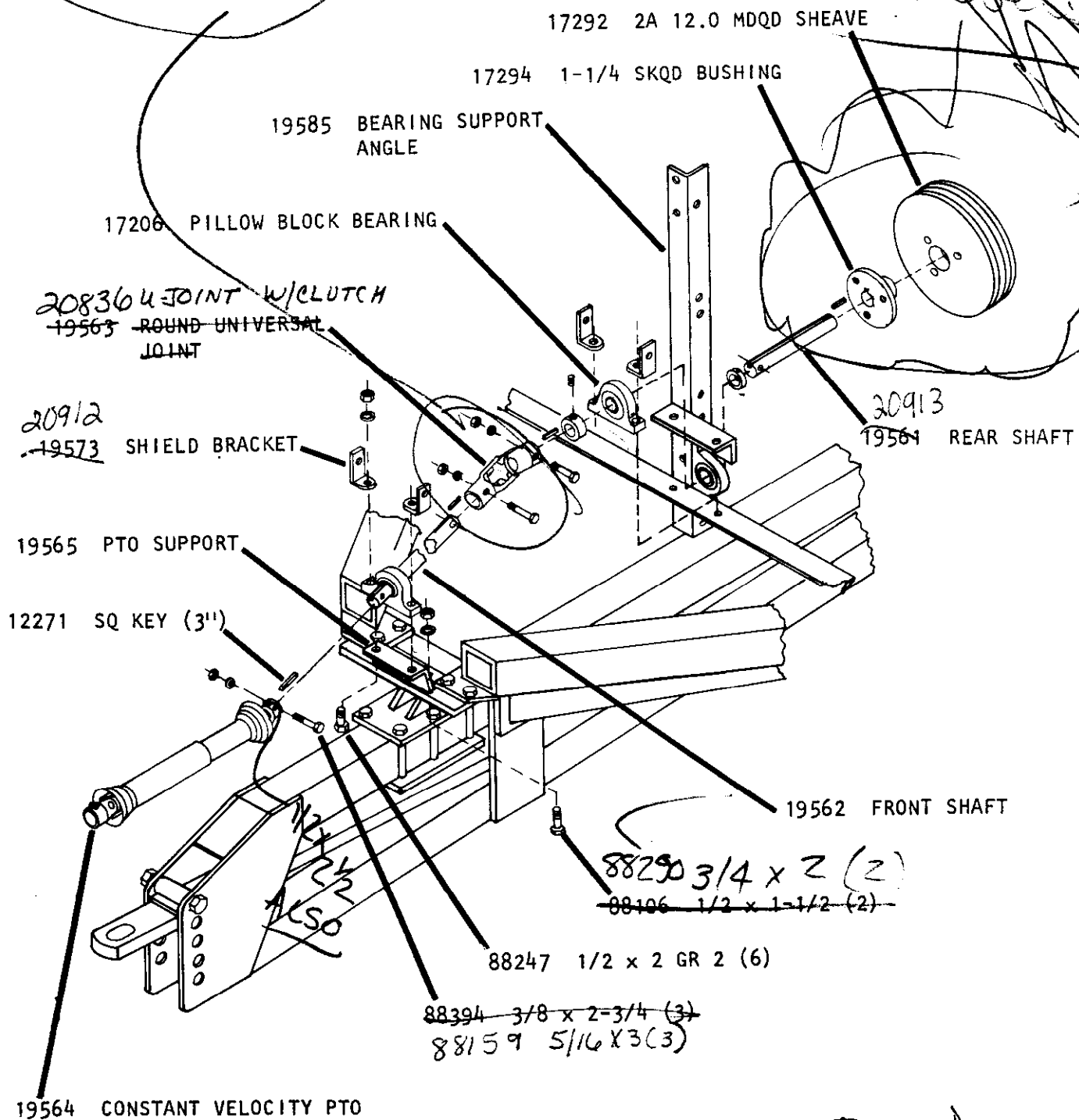


See PI-15829

PTO DRIVE (CART MOUNTED)

New
CLUTCH

ok it was
lengthened



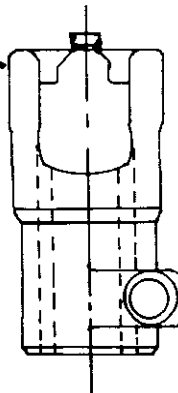
only cart
mounted

18676 1-3/4-20 CV YOKE — 17783

(1-3/4"-20 SPLINE)
OUTBOARD YOKE KIT

19986 OUTBOARD PTO 810MM

19985 INBOARD
CV PTO 810MM



19106 GREASE ZERK 45°
19107 H.H.C.S. 6x30 MM

19108 H.H. NUT 6 MM

19109 SLIDE RING

19110 GUIDE DISK

CONSTANT VELOCITY PTO

19121 BEARING RING

19115 INBOARD YOKE 1G

19116 CROSS A BEARING KIT

19812 SHIELD TUBE - INNER

19811 OUTER PROFILE 1G

19809 INNER PROFILE OVGA

19810 SHIELD TUBE - OUTER

19113 SPRING PIN 10x65 MM

19112 INBOARD YOKE OV

19111 FLANGED YOKE

19105 FLANGE YOKE

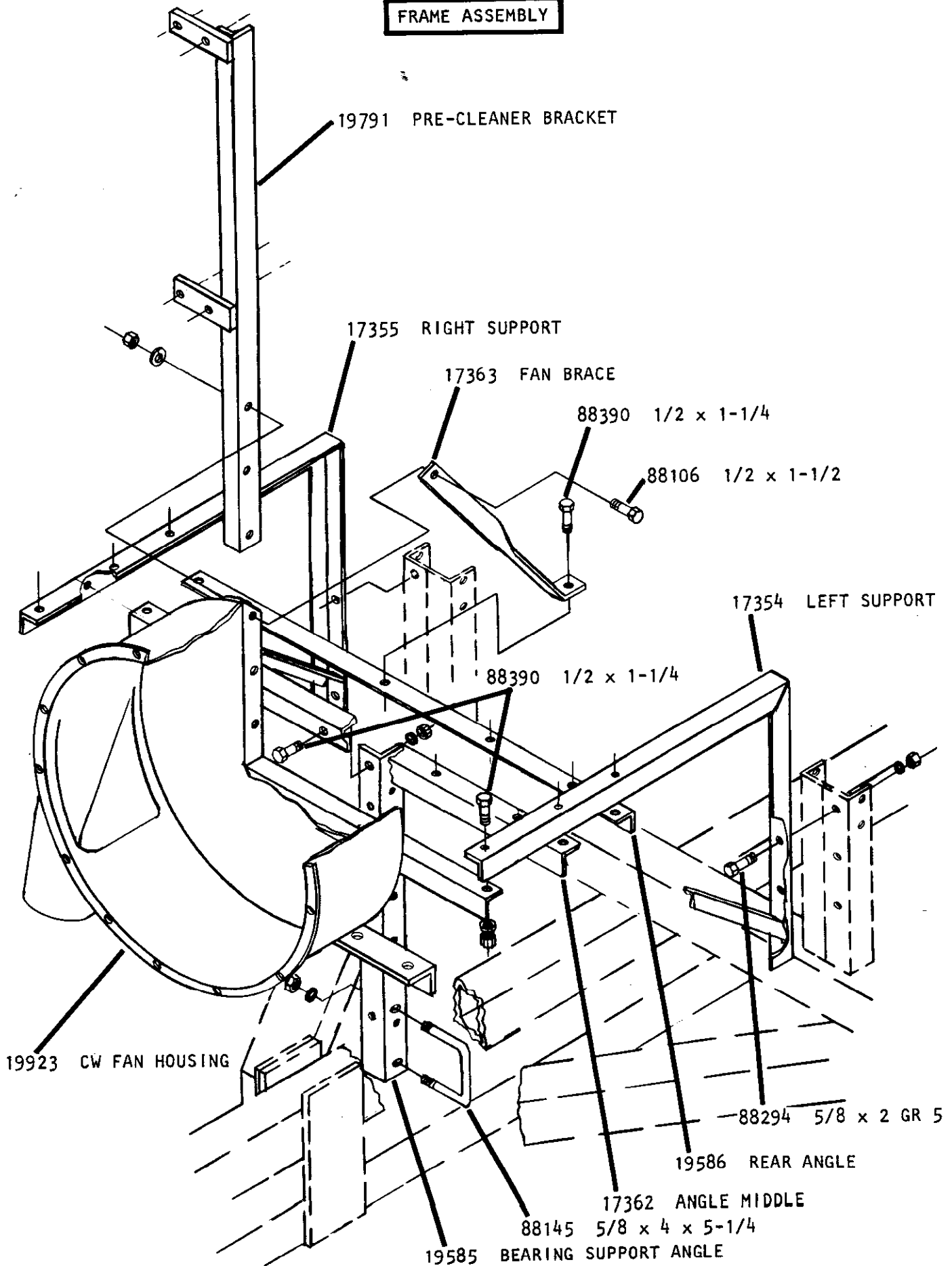
19118 SHIELD CONE

19813 YOKE 1-1/4 RB 1/4 KEY

19122 SHIELD CONE 4 RIB

19123 SAFETY CHAIN

FRAME ASSEMBLY



FAN DRIVE

See PI-75672

NEW PIN

H-334 1/4 x 2 (4)

SEE GAS ENGINE
ASSEMBLY PAGE (33).

A-7554 MOUNTING BRACKET

A-7331 1/4 ID GAS LINE

A-7519 HOSE CLAMP (1/4)

17649 1-1/8" SDS BUSHING

A-7299 1" SDS BUSHING

A-2273

KEY SQUARE (1")

A-7301 HA SECTION
x 48.1 EL BELT

A-7045 MOTOR PLATE

H-166 HEX BOLT, 3/8 x 1-1/2

A-7357 TIGHTENER ASSEMBLY

A-7356 SLIDE MOUNT

H-157 HEX BOLT, 3/8 x 1

A-7327 CRANK ASSEMBLY

H-347 FLAT WASHER, 1/2 ID

A-7208 BATTERY CABLE (-)

(Connect to frame to ground)

A-7224 BATTERY CABLE

(Connect to open (+)
side of push button switch)

A-7328 1/4 READY ROD

A-7320 BATTERY HOLDER

A-7325 PLATE

~~22894~~
~~A-7312~~ GAS TANK & CAP ASSEMBLY

A-7597 BAND

88512
1/8 NPT PLUG

A-7599 WEBBING

A-7308
FUEL FILTER

A-7297 1A-6.4 MDQD SHEAVE

A-7307 ELBOW FITTING

B-7598 BRACKET ASSEMBLY

H-102 3/8 x 1-1/4

LOCKING COLLAR

A-7300 1-1/4" SDS QD BUSHIN

A-7298 1A-4.8 MDQD SHEAVE

B-7358 BLOWER SHAFT

H-247 HEX BOLT, 1/2 x 2 LG

A-7206 PILLOW BLOCK BEARING

20187 PLATE 3/8x1-1/2x12-1/2

A-7345 PLATE 1/4x1-1/2x12-1/2

A-7346 PLATE 1/4x2x12-1/2

88351 1/4 x 3/4 (13)

C-7291 CLOCKWISE FAN IMPELLER

A-2271 KEY SQUARE (3")

19924

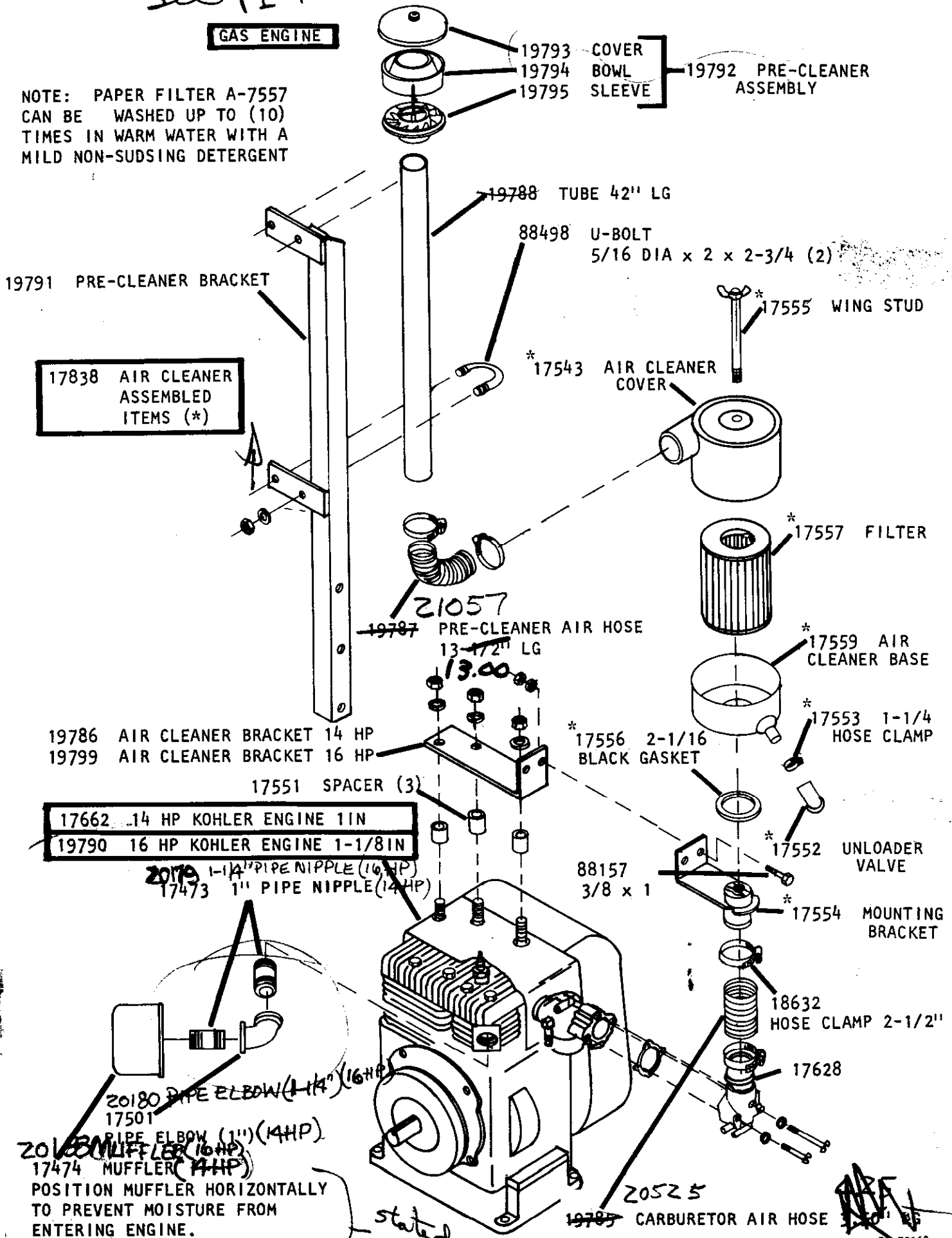
A-7435 CAUTION DECAL

NOTE: APPLY A HIGH QUALITY
GASKET FORMING PASTE BEFORE
MOUNTING COVER.

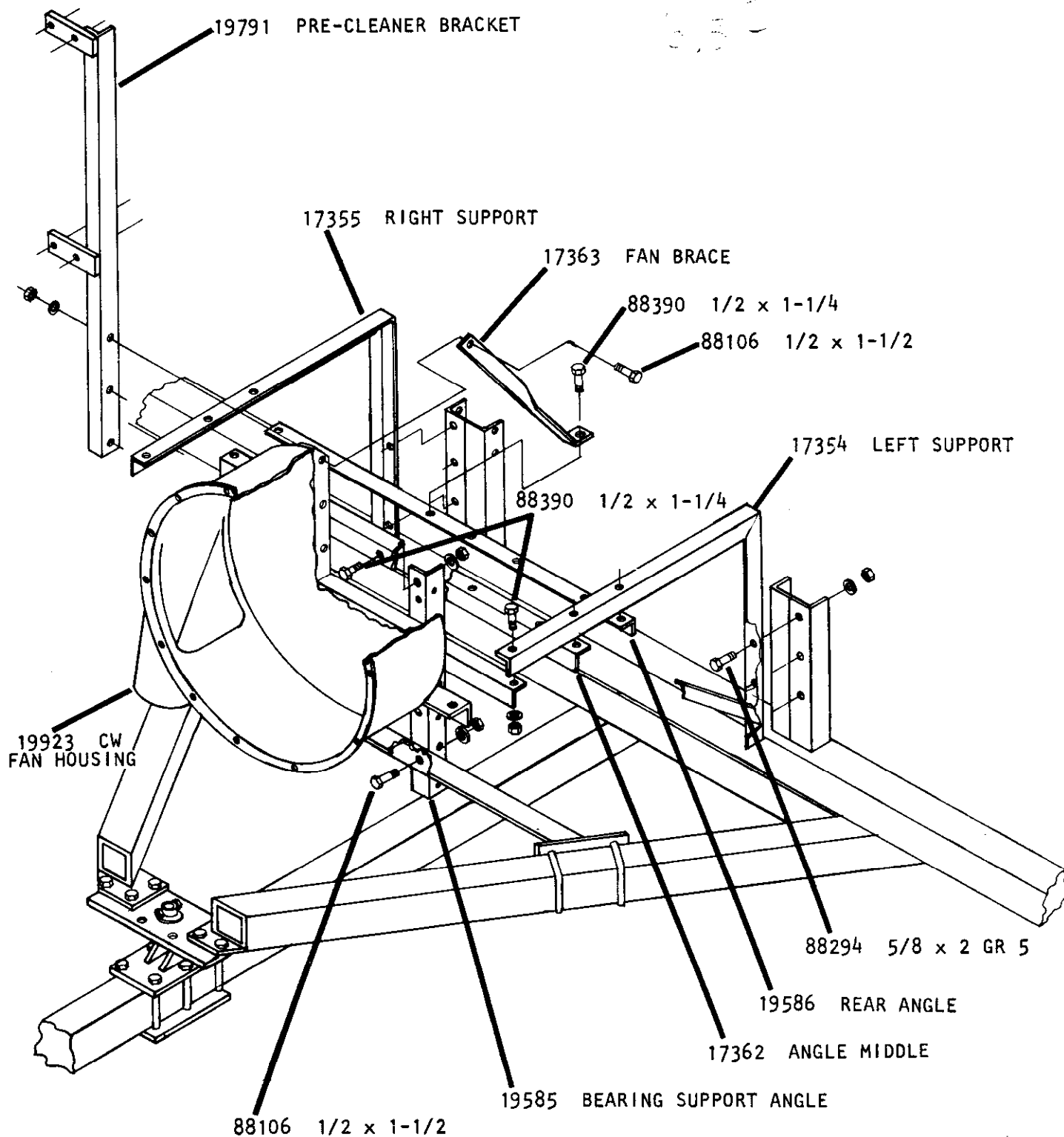
See PI-75672

GAS ENGINE

NOTE: PAPER FILTER A-7557
CAN BE WASHED UP TO (10)
TIMES IN WARM WATER WITH A
MILD NON-SUDSING DETERGENT



FRAME ASSEMBLY



FRONT MOUNTED BLOWER

Locate the front mounting bracket to the side of the tractor frame, approximately 2" ~~behind the~~ centerline of the tractor pulley that is to be used. (See Fig 3)

AHEAD OF THE

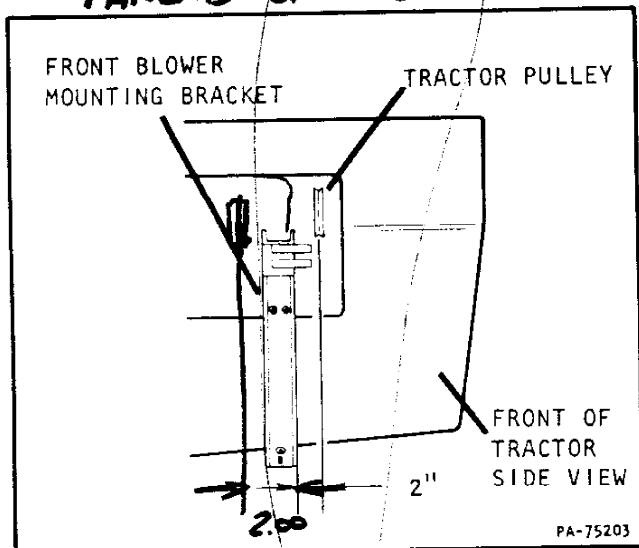


Fig 3 Front Blower Bracket Location

Before assembling the remainder of the blower system a pulley and v-belt must be selected. To select the fan pulley you must know the tractor operating RPM and tractor pulley size to be used. The fan pulley selected must set the blower RPM between 3700-4000. Under no circumstances should the blower RPM ever exceed 4250. See Fig 4 for fan pulley sizing formula

$$\frac{\text{TRACTOR PULLEY OUTSIDE DIAMETER} \times \text{TRACTOR OPERATING RPM}}{3750 \text{ RPM MID RANGE IN BLOWER RPM}} = \text{FAN PULLEY OUTSIDE DIA.}$$

Fig 4 Fan Pulley Formula

After the fan pulley has been determined the v-belt length can be determined by measuring the distance between the center lines of the fan and tractor pulley. With this center to center distance and both pulley sizes known the belt size can be determined from a v-belt catalog. The v-belt selected should be heavy duty and very good quality.

REAR MOUNTED BLOWER

Assemble base assemblies and arms to the tractor drawbar approximately as shown. (See pages 38 and 39) Now assemble sheaves and belts making sure frame and belts are perpendicular to PTO shaft. Tighten spring loaded idler. Attach flex hose 10' to manifold of air seeder.

NOTE: FAN OPERATING RPM IS BETWEEN 3700 MINIMUM AND 4000 MAXIMUM RPM FOR SEEDING. UNDER NO CIRCUMSTANCES SHOULD THE FAN RPM EVER EXCEED 4250.

NOTE: ALWAYS MOUNT REAR BLOWER BASE ASSEMBLIES IN FRONT OF IMPLEMENT HITCH PIN. INTERFERENCE WILL RESULT ON SHARP TURNS IF NOT MOUNTED IN FRONT OF PIN. (SEE FIG 5)

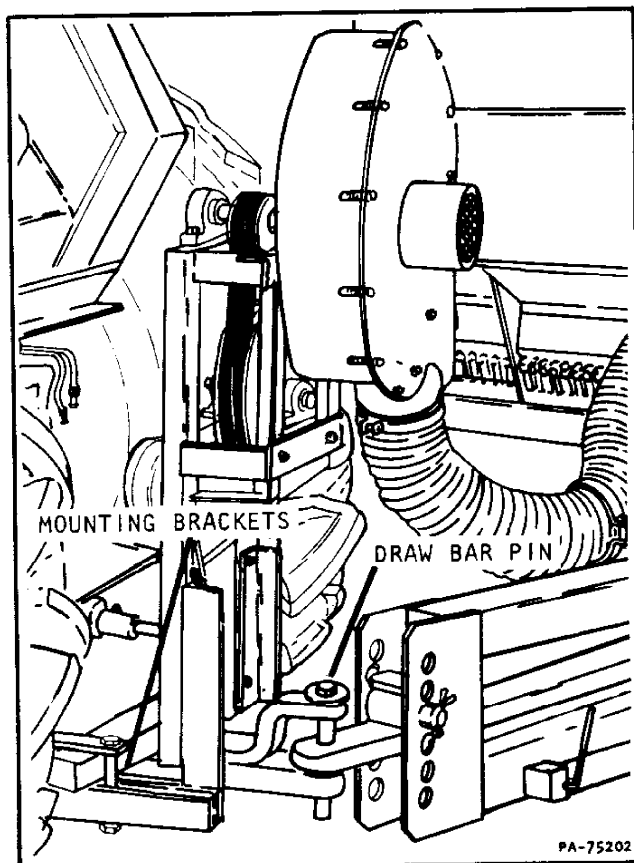
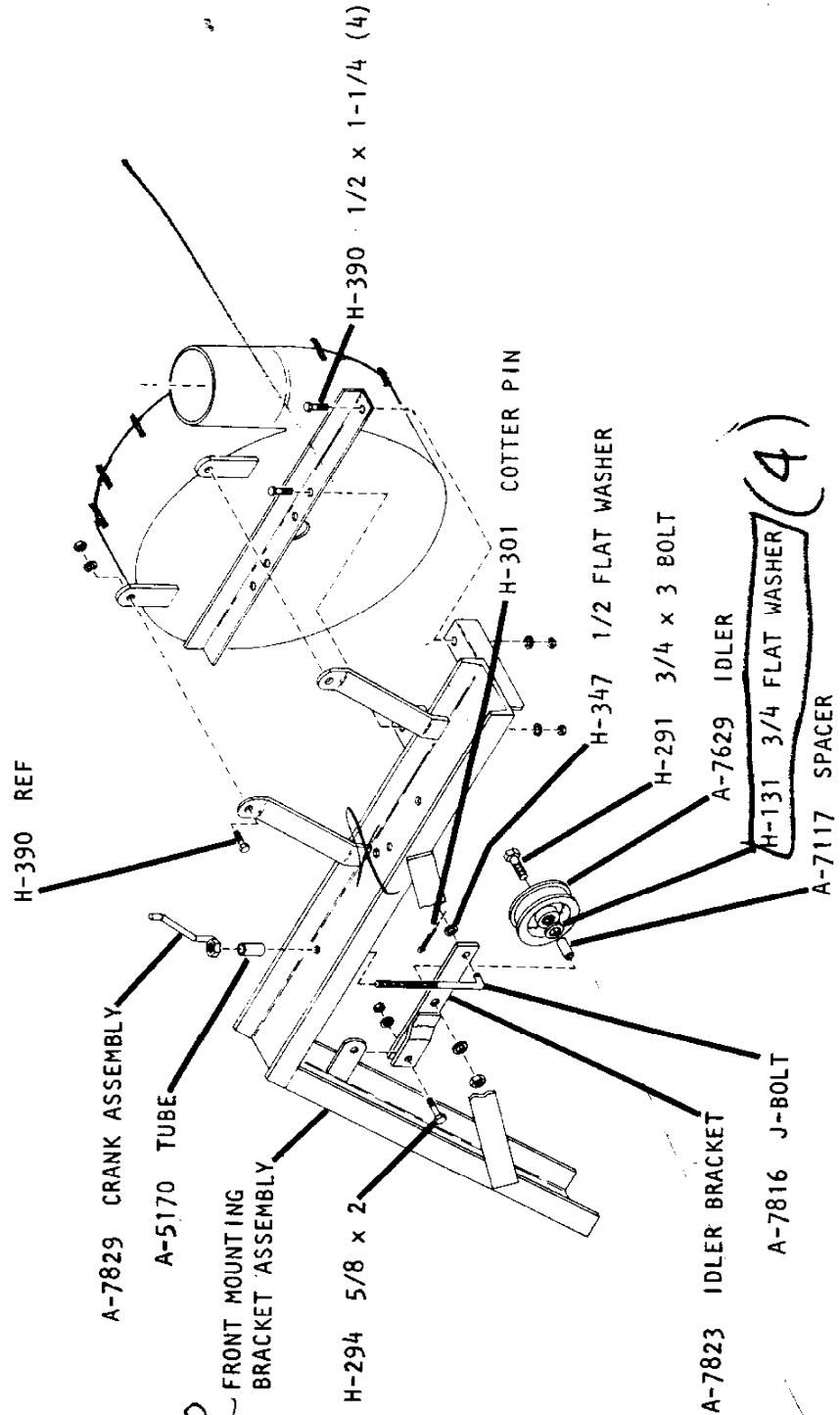


Fig 5 Rear Mounted Blower Location

SEE 75588

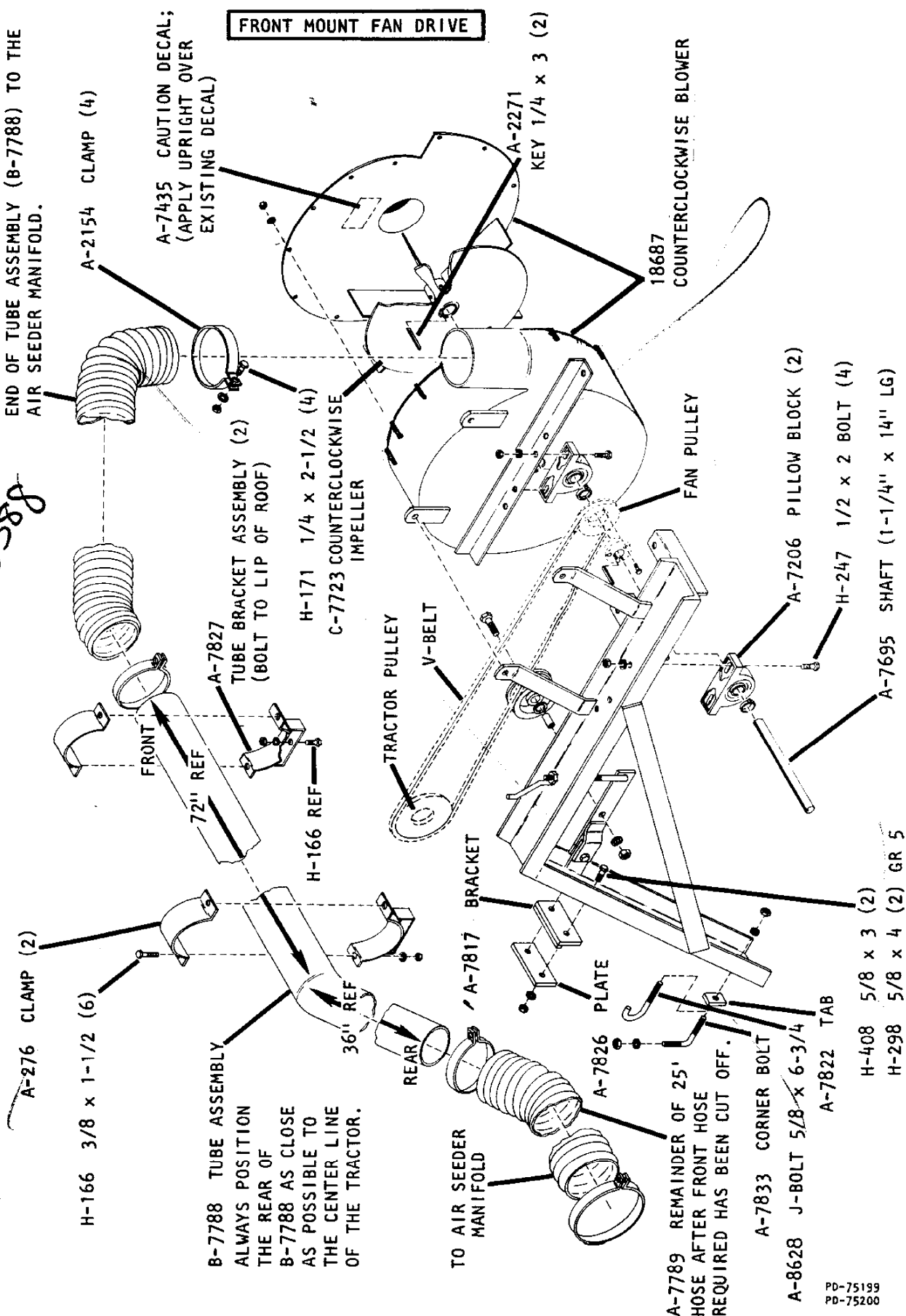
FRONT MOUNT FAN DRIVE FRAME



See P1-7558g

A-7789 FLEX HOSE; CUT 25' HOSE TO
REQUIRED LENGTH AFTER THE FAN
HOUSING IS IN POSITION. THE REMAINING
HOSE IS TO BE USED TO CONNECT THE REAR
END OF TUBE ASSEMBLY (B-7788) TO THE
AIR SEEDER MANIFOLD.

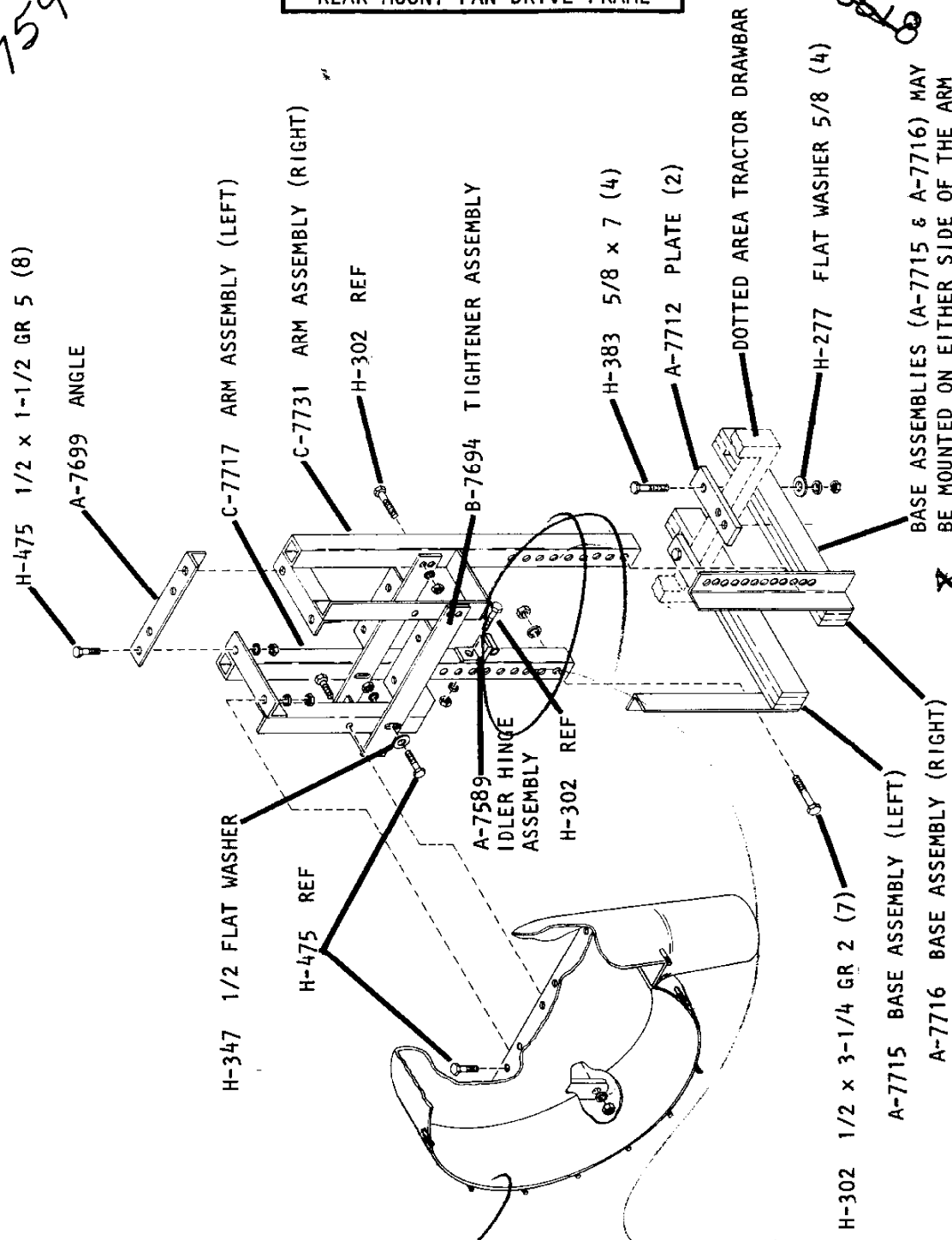
FRONT MOUNT FAN DRIVE



- H-408 5/8 x 3 (2)
- H-298 5/8 x 4 (2) GR 5

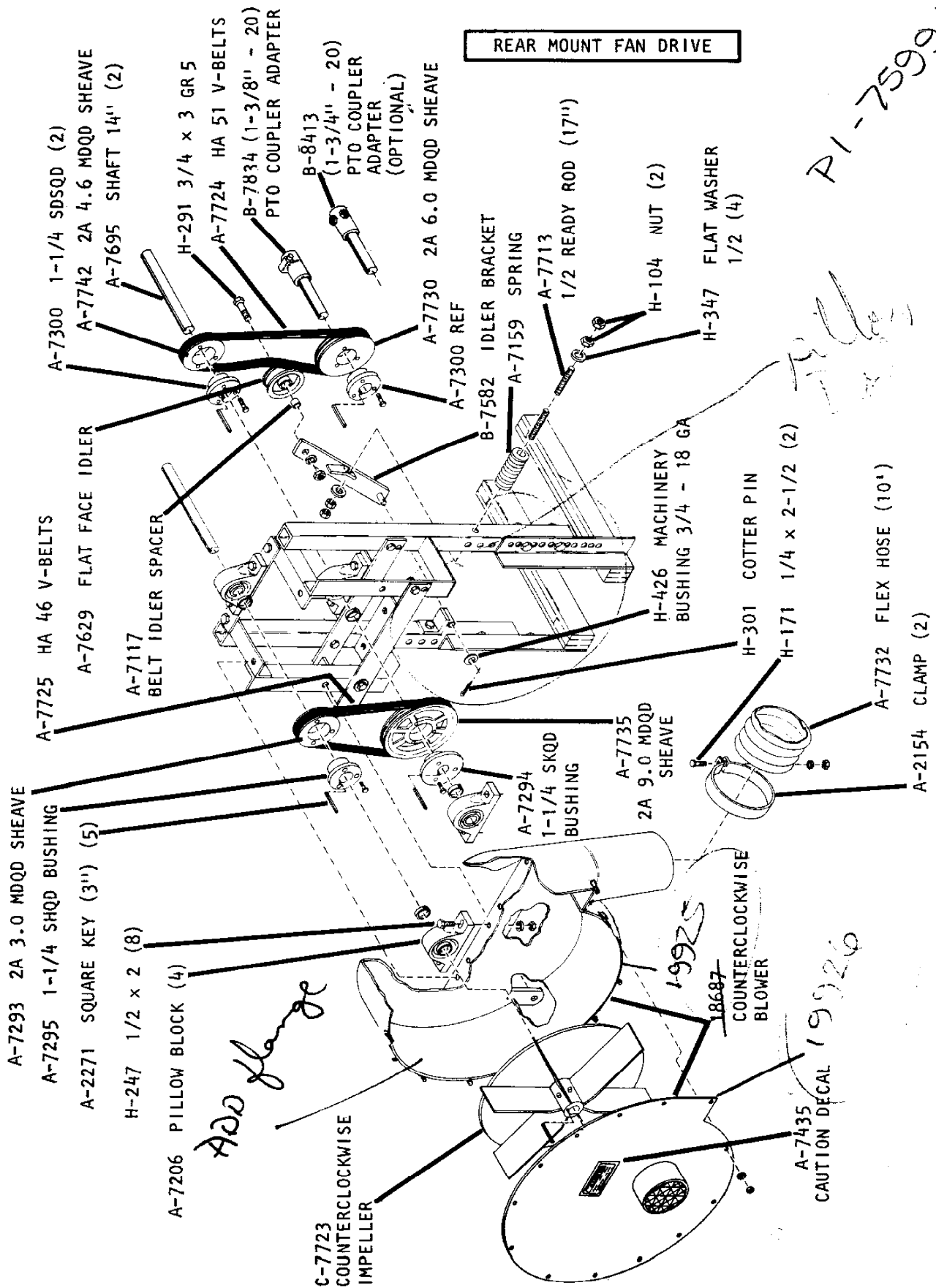
SEE 75991

REAR MOUNT FAN DRIVE FRAME



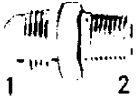
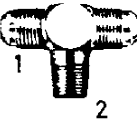
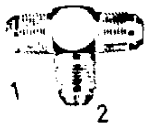
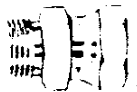
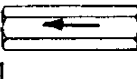
BASE ASSEMBLIES (A-7715 & A-7716) MAY BE MOUNTED ON EITHER SIDE OF THE ARM ASSEMBLIES (C-7717 & C-7731). THE ONLY CONSIDERATION IS THAT THEY BE MOUNTED AS FAR APART AS POSSIBLE.

add flange

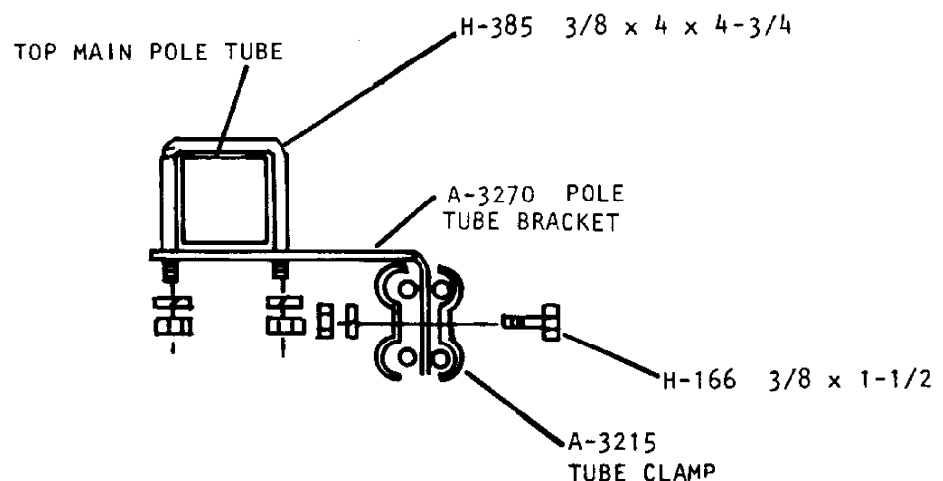


A1-75991

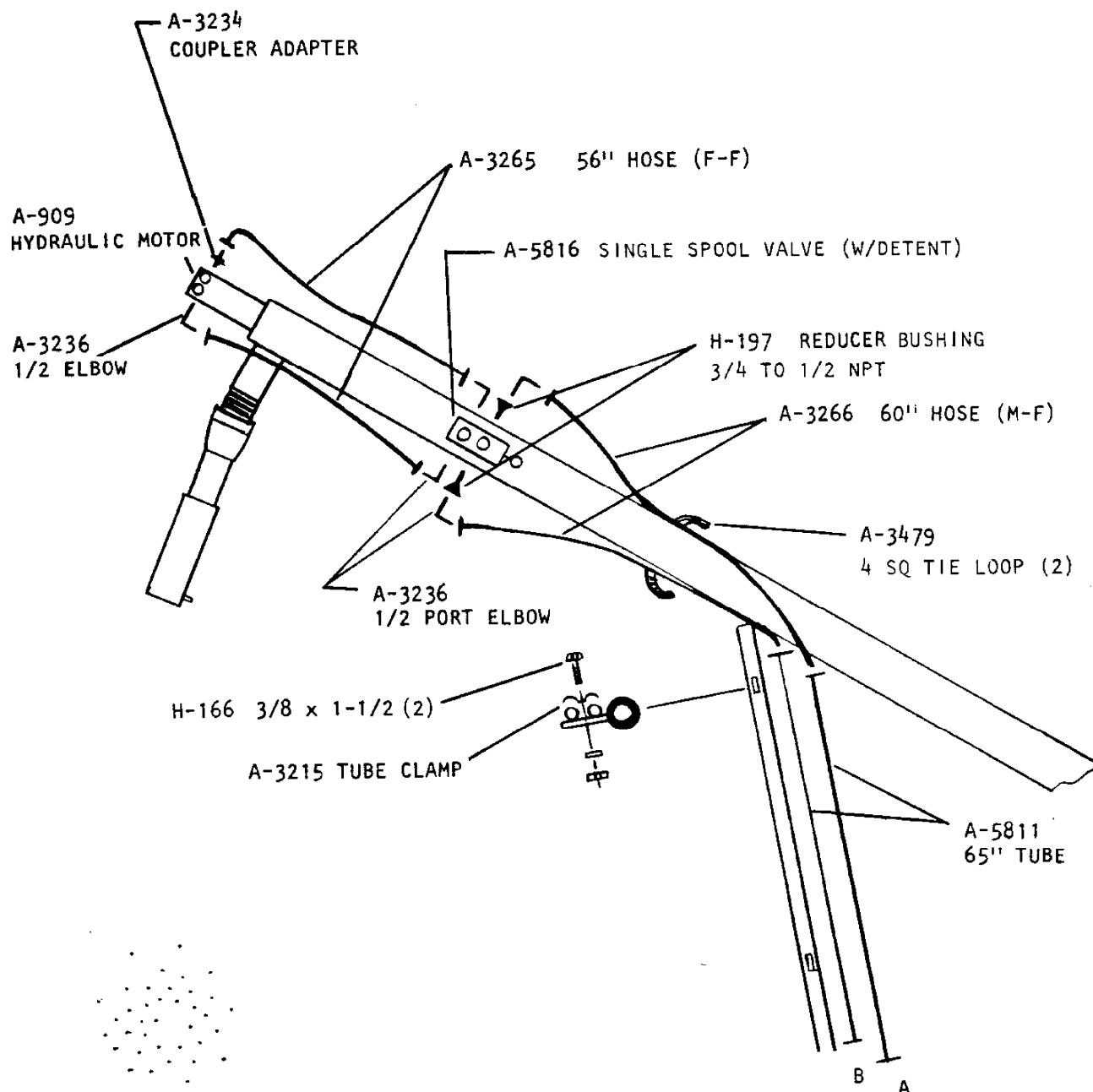
HYDRAULIC FITTINGS

P/N	SYMBOL	DESCRIPTION	P/N	SYMBOL	DESCRIPTION
A-3234	+	 COUPLER ADAPTER 1. 3/4 JIC 2. 1/2 NPT	A-3235	└	 PORT ELBOW 1. 3/4 JIC 2. 3/8 NPT
A-7684			A-3236		
A-3237	T	 CYLINDER TEE 1. 3/4 JIC 2. 3/8 NPT 3. 3/4 JIC	A-3238	T	 TUBE TEE 1-3. 3/4 JIC
A-3239	—	 UNION 1-2. 3/4 JIC	A-5910	+	 TUBE CROSS 1-4. 3/4 JIC
A-5208	↑	 PORT BREATHER 1. 1/2 NPT	1/32" A-7237	←	 RESTRICTOR 1. 3/8 NPT 2. 3/8 NPT
			1/16" A-4267		
A-7643		 CHECK VALVE 1-2. 3/8 NPT	H-146	◄	 REDUCING BUSHING 1. 1/2 NPT 2. 3/8 NPT
			H-197		
HOSES ARE 3/8 WIRE AT LENGTHS SPECIFIED WITH FEMALE (F) AND OR MALE (M) 3/4 JIC FITTINGS					
ALL TUBES ARE 3/8 DIAMETER WITH FEMALE (F) 3/4 JIC FITTINGS					

MAIN POLE TUBE BRACKETS



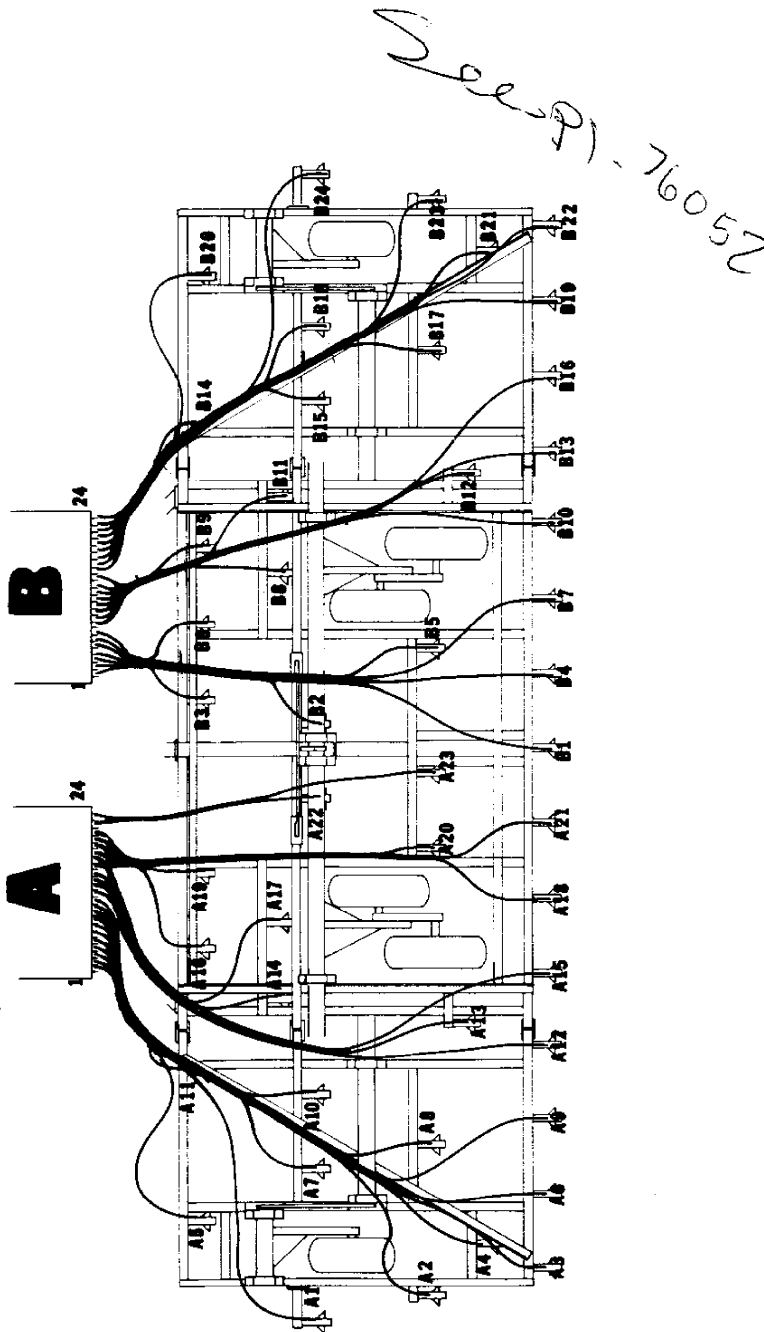
AUXILIARY AUGER HYDRAULICS



PB-75170

27'5" AIR-SEEDER INJECTOR HOSE PLACEMENT

SHOWN BELOW ARE HOSE LENGTHS, THEIR APPROXIMATE ROUTING,
AND RECOMMENDED GROUPINGS.



HOSE NO.	LENGTH	HOSE NO.	LENGTH
A1	18'6"	B1	15'8"
A2	17'5"	B2	11'1"
A3	18'7"	B3	8'4"
A4	17'1"	B4	15'9"
A5	14'	B5	13'6"
A6	17'1"	B6	8'
A7	13'	B7	15'10"
A8	14'6"	B8	9'2"
A9	16'3"	B9	7'11"
A10	12'	B10	16'9"
A11	10'	B11	9'9"
A12	16'1"	B12	13'10"
A13	13'10"	B13	16'1"
A14	9'9"	B14	9'10"
A15	16'9"	B15	11'10"
A16	7'11"	B16	16'3"
A17	9'2"	B17	14'4"
A18	13'10"	B18	12'
A19	8'	B19	17'1"
A20	13'6"	B20	13'8"
A21	15'9"	B21	17'1"
A22	11'1"	B22	18'7"
A23	13'2"	B23	17'5"
A24	Covered	B24	18'6"

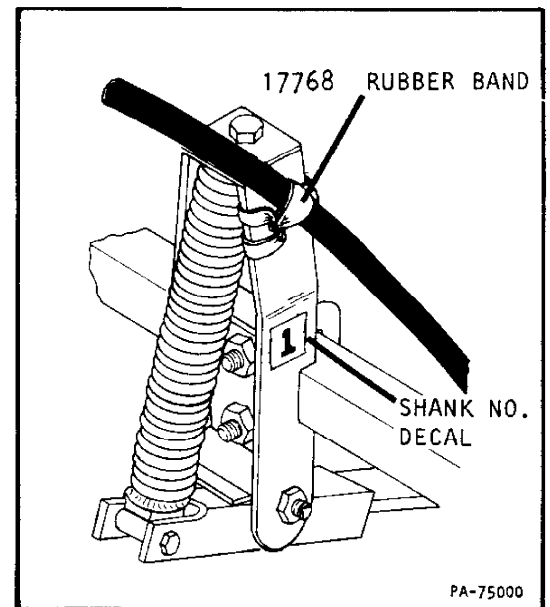
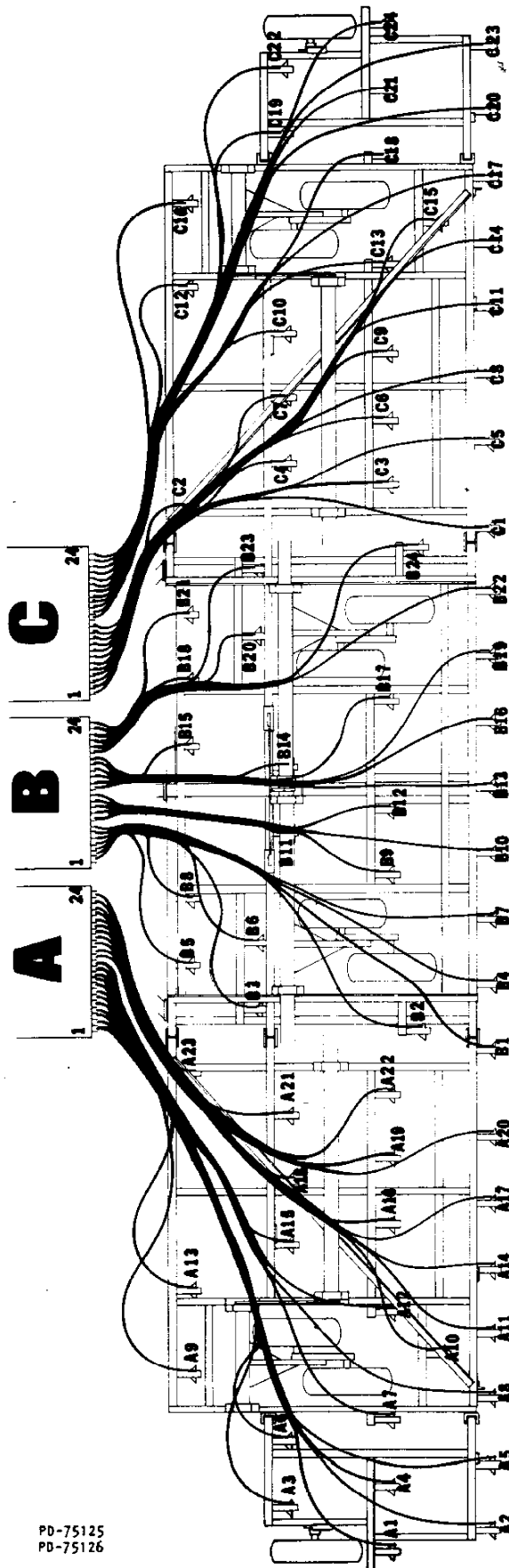


Fig 23 Rubber Band & Decal Location

PC-75127
PC-75128

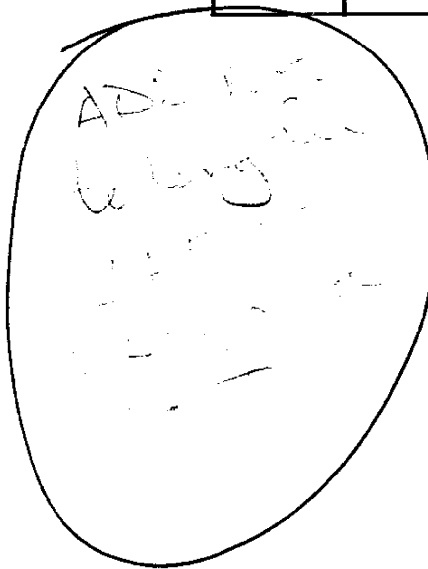
41'5" AIR-SEEDER
INJECTOR HOSE PLACEMENT



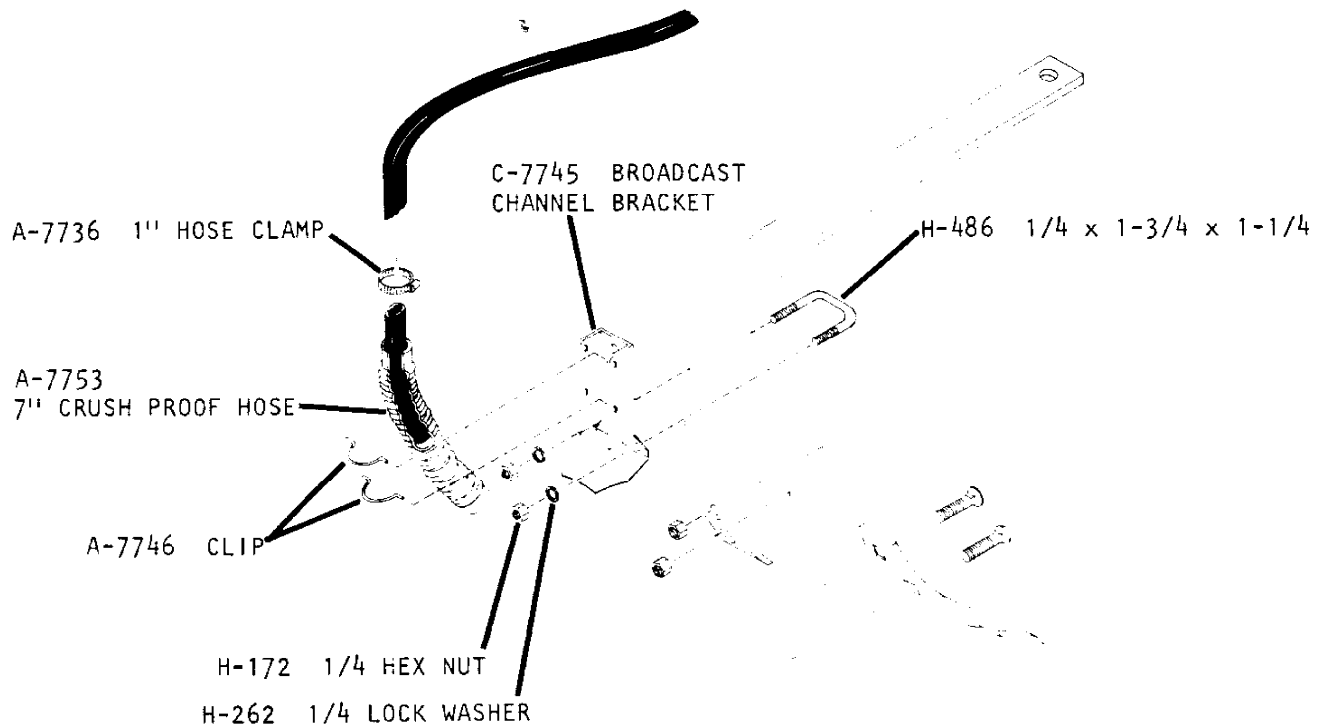
See
PI-76053

HOSE NO.	LENGTH	HOSE NO.	LENGTH
A1	25'	B1	18'
A2	26'	B2	16'
A3	21'	B3	11'
A4	24'	B4	17'
A5	26'	B5	9'
A6	19'	B6	10'
A7	20'	B7	16'
A8	21'	B8	9'
A9	17'	B9	14'
A10	20'	B10	16'
A11	20'	B11	11'
A12	18'	B12	14'
A13	15'	B13	16'
A14	20'	B14	11'
A15	16'	B15	8'
A16	16'	B16	16'
A17	18'	B17	14'
A18	14'	B18	10'
A19	16'	B19	16'
A20	18'	B20	10'
A21	15'	B21	9'
A22	16'	B22	17'
A23	11'	B23	11'
A24	Covered	B24	16'

C1	18'
C2	11'
C3	16'
C4	16'
C5	18'
C6	16'
C7	14'
C8	18'
C9	16'
C10	16'
C11	20'
C12	15'
C13	19'
C14	20'
C15	20'
C16	17'
C17	21'
C18	20'
C19	19'
C20	26'
C21	24'
C22	21'
C23	26'
C24	25'

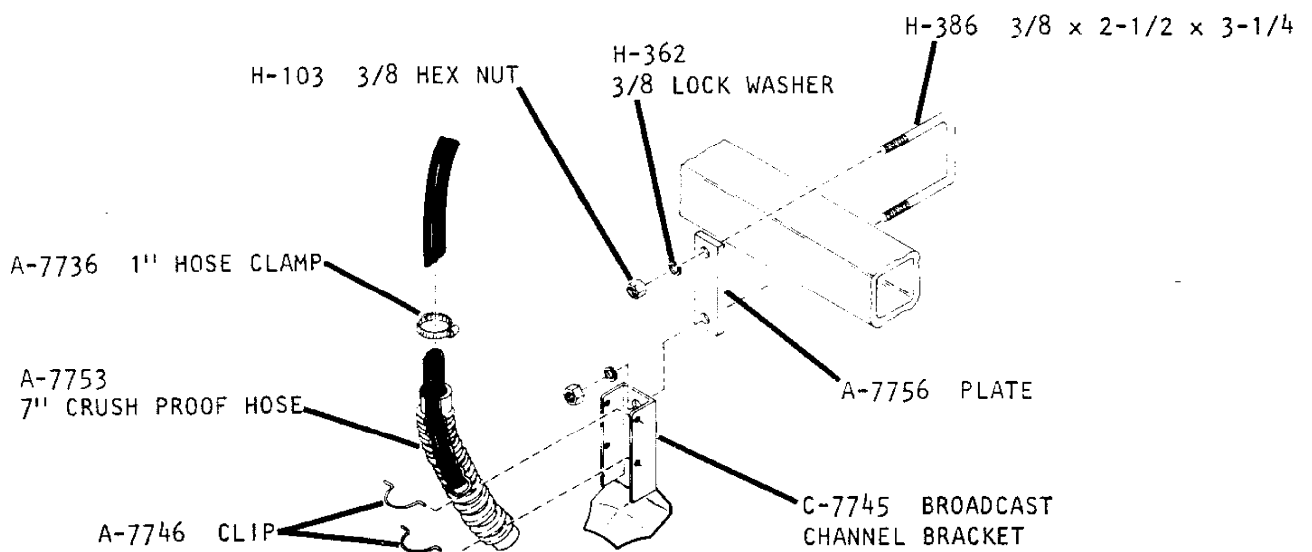


SHANK MOUNTED
BROADCAST BRACKET



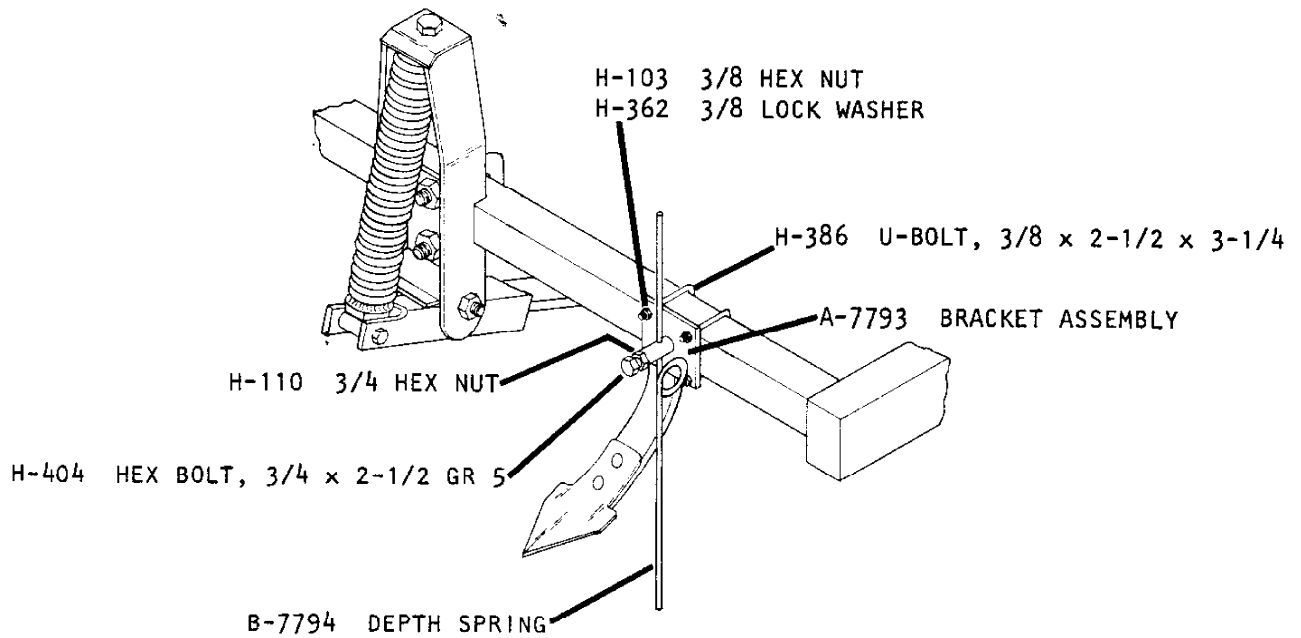
PC-75002

FRAME MOUNTED
BROADCAST BRACKET



PB-75001

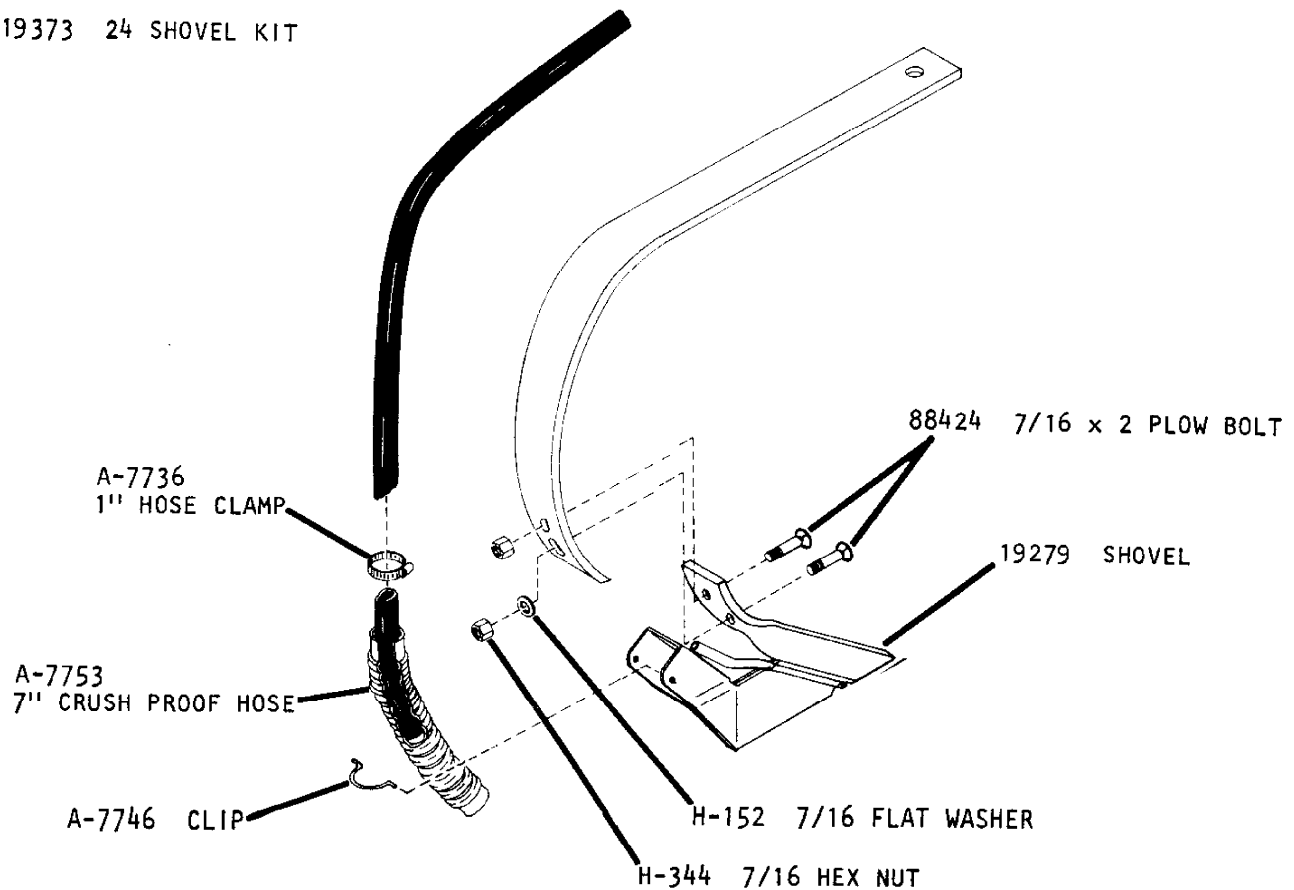
SPRING ROD DEPTH INDICATOR



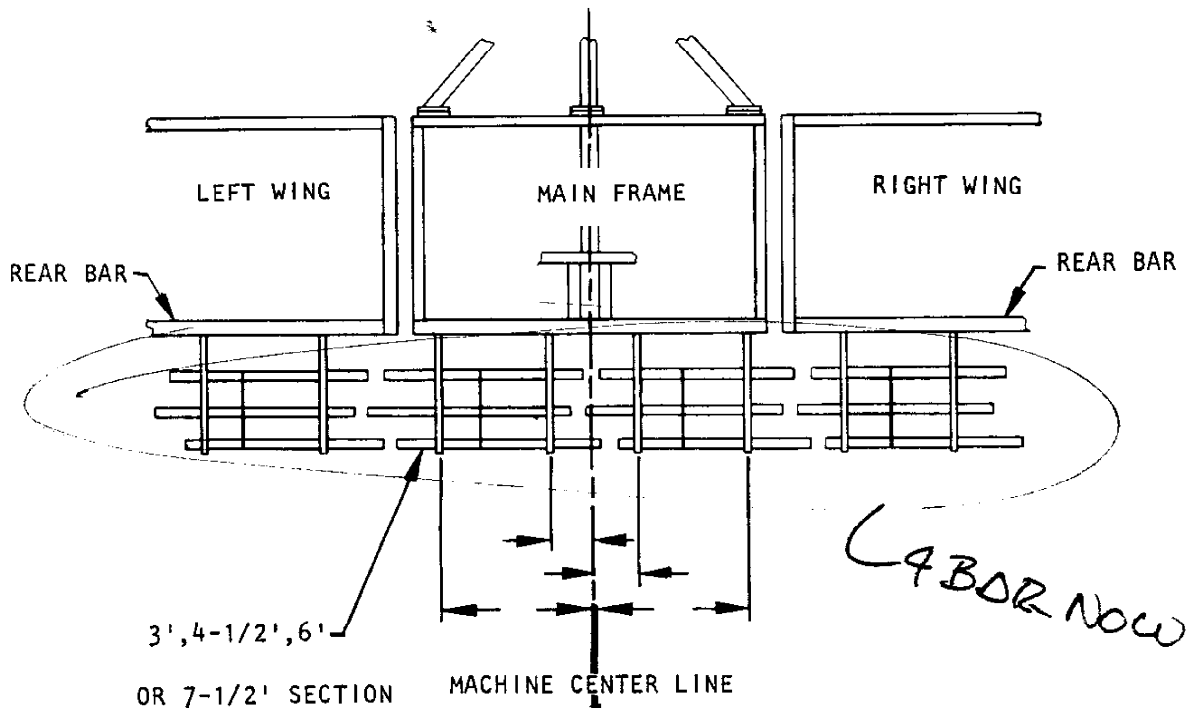
PC-75129

NO TILL INJECTOR

19373 24 SHOVEL KIT



PACKER & HARROW SECTION MOUNTING CHART



HARROW SECTION MOUNTING

THE DIAGRAM LOCATED BELOW REFERENCES THE HARROW SECTIONS USED FOR EACH MODEL AND THE APPROXIMATE DISTANCE THE MOUNTING ARMS ARE LOCATED FROM THE CENTER OF THE MACHINE. WHEN SHANK LOCATIONS MATCH HARROW ARM LOCATIONS, USE BOLTS SUPPLIED IN HARDWARE KIT OF 41' AIR SEEDER TO HOLD BOTH THE SHANK AND THE HARROW ARM AT THE SAME LOCATION. FURTHER INFORMATION, IN REGARDS TO ASSEMBLY, IS PROVIDED IN YOUR COPY OF THE WIL-RICH HARROW OWNER'S AND ASSEMBLY MANUAL.

13 FCW 26-27			7-1/2 147/96	6 65/26	7-1/2 7/65	7-1/2 96/147		
13 FCW 34-41	4-1/2 238/212	6 182/140	4-1/2 104/86	6 51/16	6 16/51	6 88/127	4-1/2 162/185	4-1/2 220/235

PACKER SECTION MOUNTING

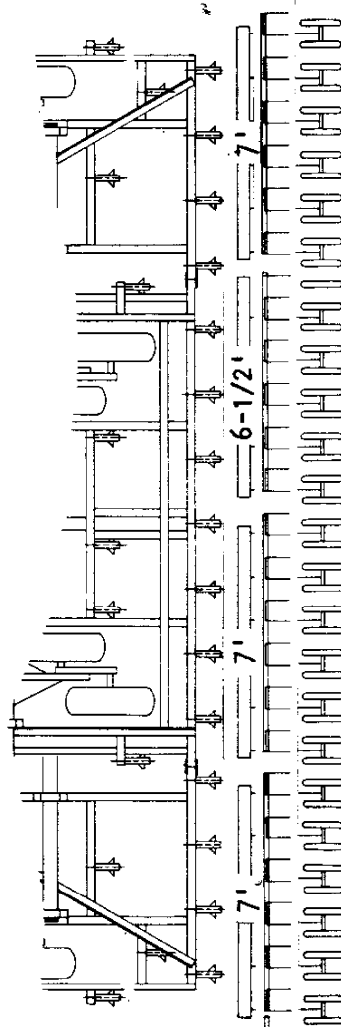
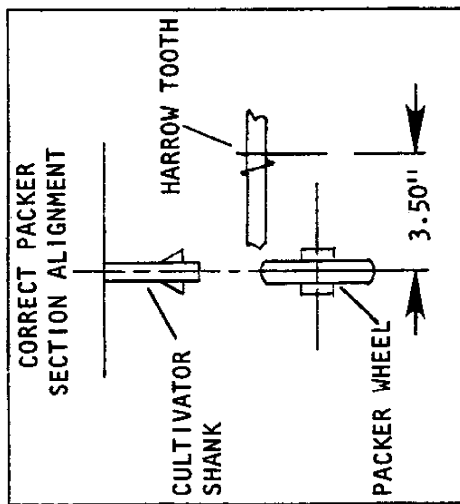
SECTION SIZES (FT)
MOUNTING PT'S TO CENTER (IN)

THE DIAGRAM LOCATED BELOW REFERENCES THE PACKER SECTIONS USED FOR EACH MODEL AND THE APPROXIMATE DISTANCE THE MOUNTING ARMS ARE LOCATED FROM THE CENTER OF THE MACHINE. WHEN SHANK LOCATIONS MATCH HARROW ARM LOCATIONS, USE BOLTS SUPPLIED IN HARDWARE KIT OF 3-1/2' PACKER TO HOLD BOTH THE SHANK AND HARROW ARM AT THE SAME LOCATION.

13 FCW 34-41	13 FCW 26-27	7 147/122/92	7 69/38/6	6-1/2 16/46/70	7 92/122/147		
2 2	3-1/2 186/173	7 144/122/92	7 69/38/6	6-1/2 16/46/70	3-1/2 95/112	7 135/168/188	3-1/2 222/238

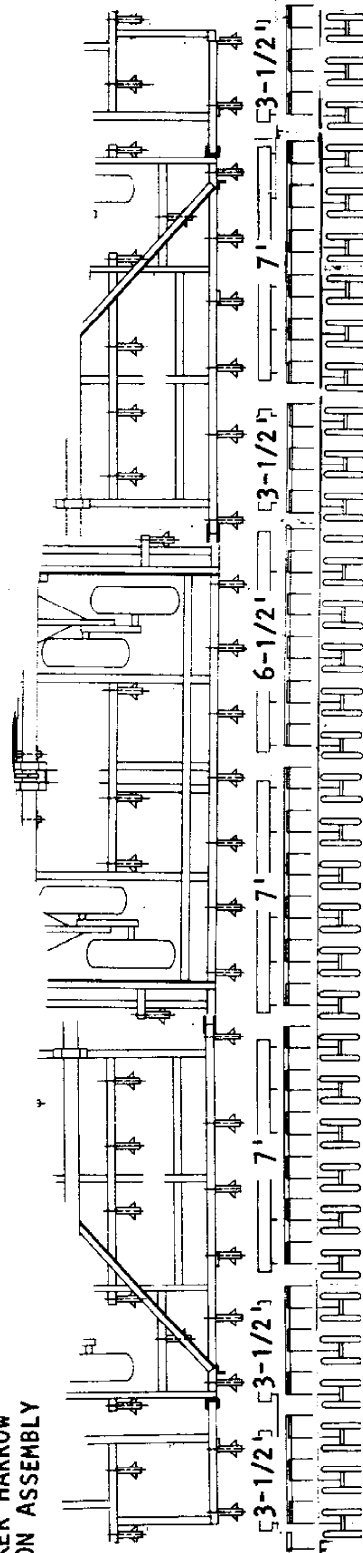
PACKER SECTION LAYOUT

ALL PACKER WHEELS ARE TO BE IN-LINE WITH THE CULTIVATOR SHANKS, WITH THE HARROW TEETH CENTERED BETWEEN EACH AT 3.50". THE NUMBERS 3-1/2', 6-1/2' & 7' REFERENCE THE PACKER SECTION WHICH IS TO BE PLACED IN THAT POSITION.



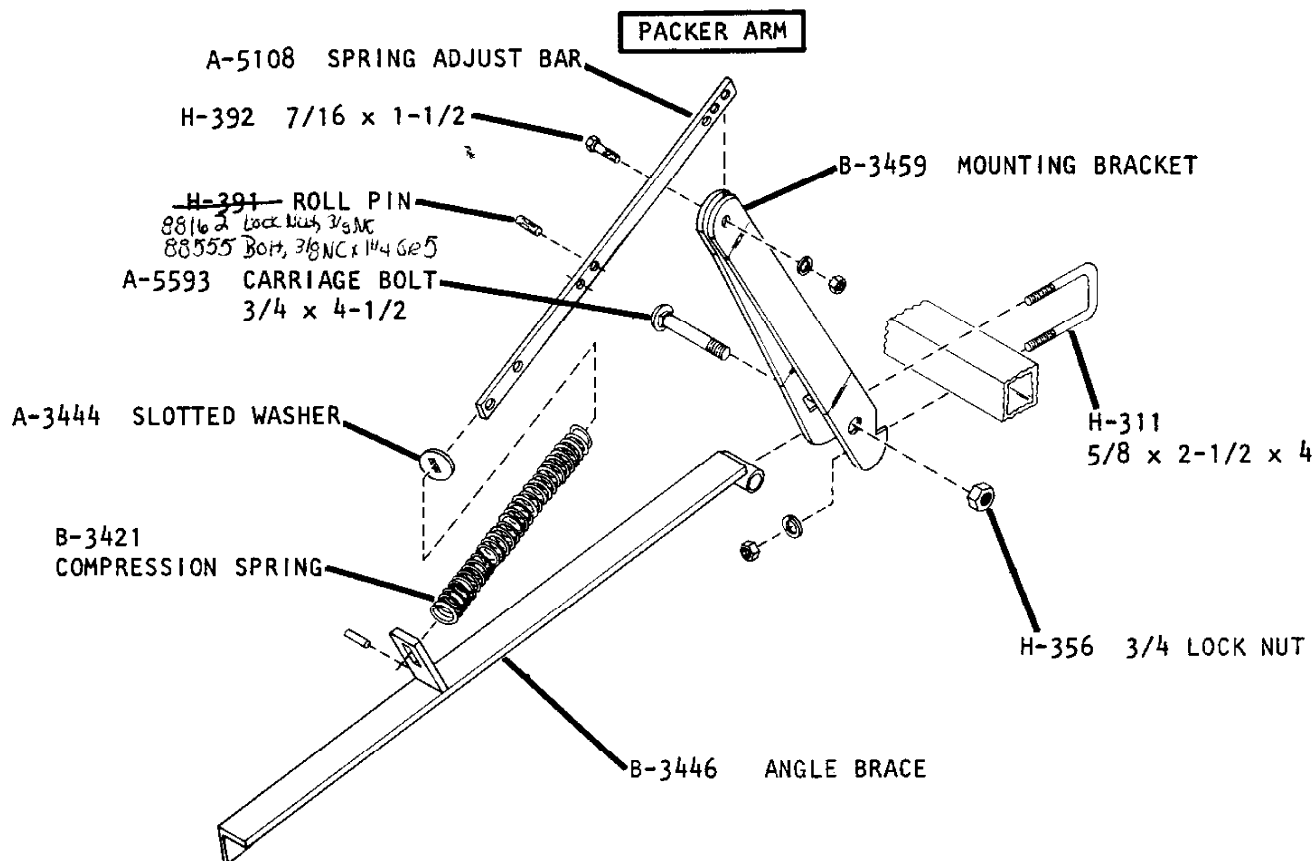
27' 5" AIR-SEEDER

SEE PACKER HARROW EXTENSION ASSEMBLY



41' 5" AIR-SEEDER

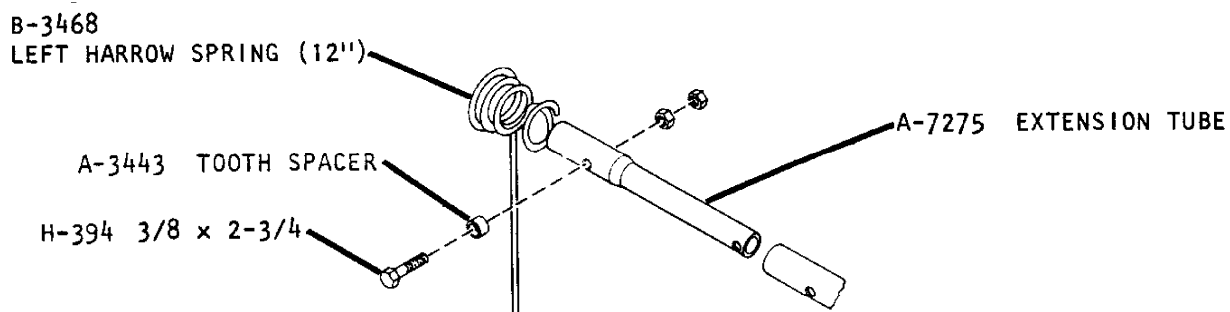
SEE PACKER HARROW EXTENSION ASSEMBLY



THE 3-1/2' PACKER SECTION HAS TWO ARM ASSEMBLIES, THE 6-1/2' AND 7' HAVE THREE. THESE ARMS ARE MOUNTED TO THE PACKER SECTIONS AS SHOWN ON THE PACKER SECTION ASSEMBLY ILLUSTRATION AND ARE SPACED EQUALLY ALONG THE PACKER FRAME.

PC-75178

PACKER HARROW EXTENSION



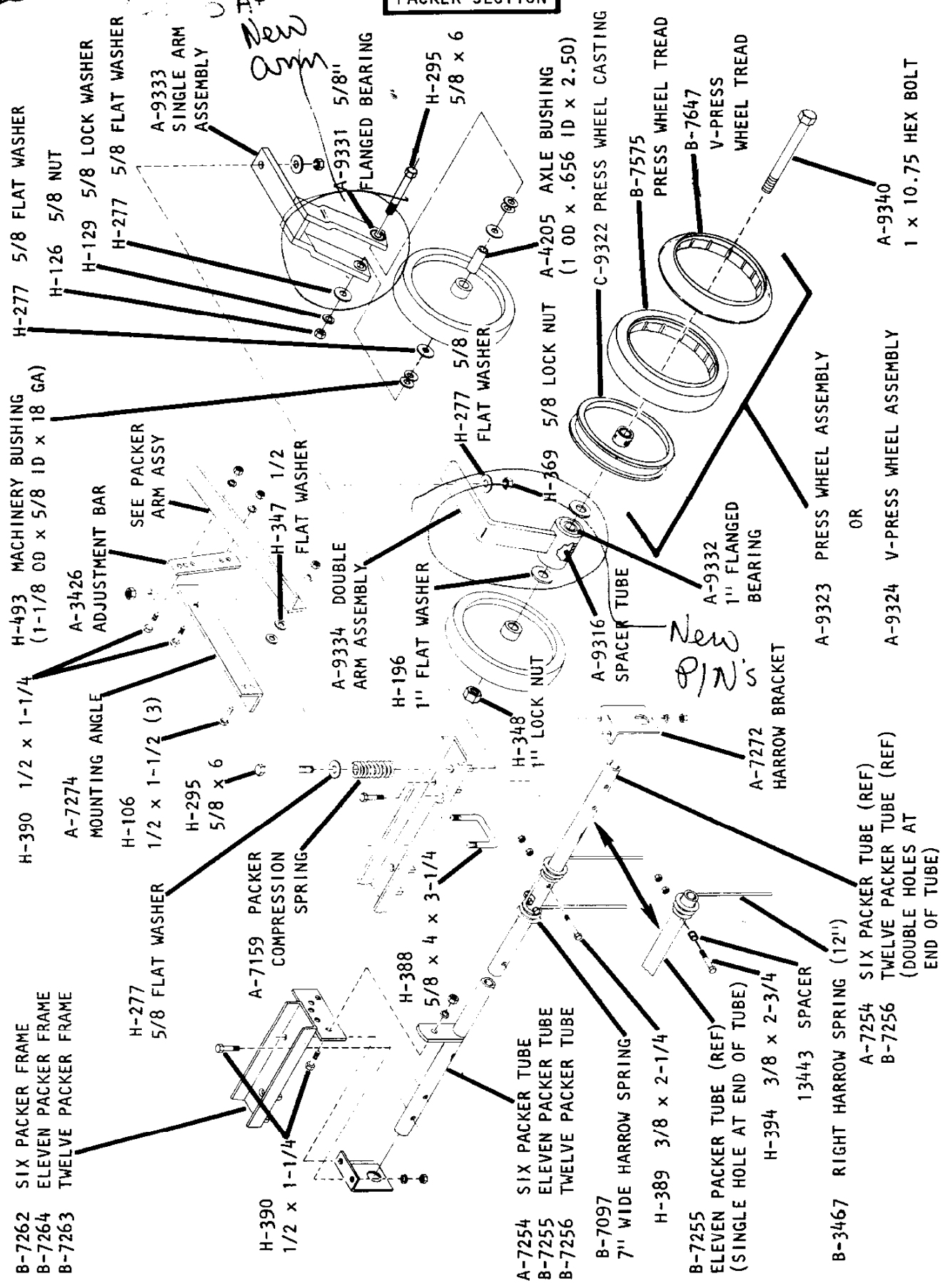
NOTE: SEE PACKER PLACEMENT ILLUSTRATION FOR EXTENSION LOCATION.

PA-75179

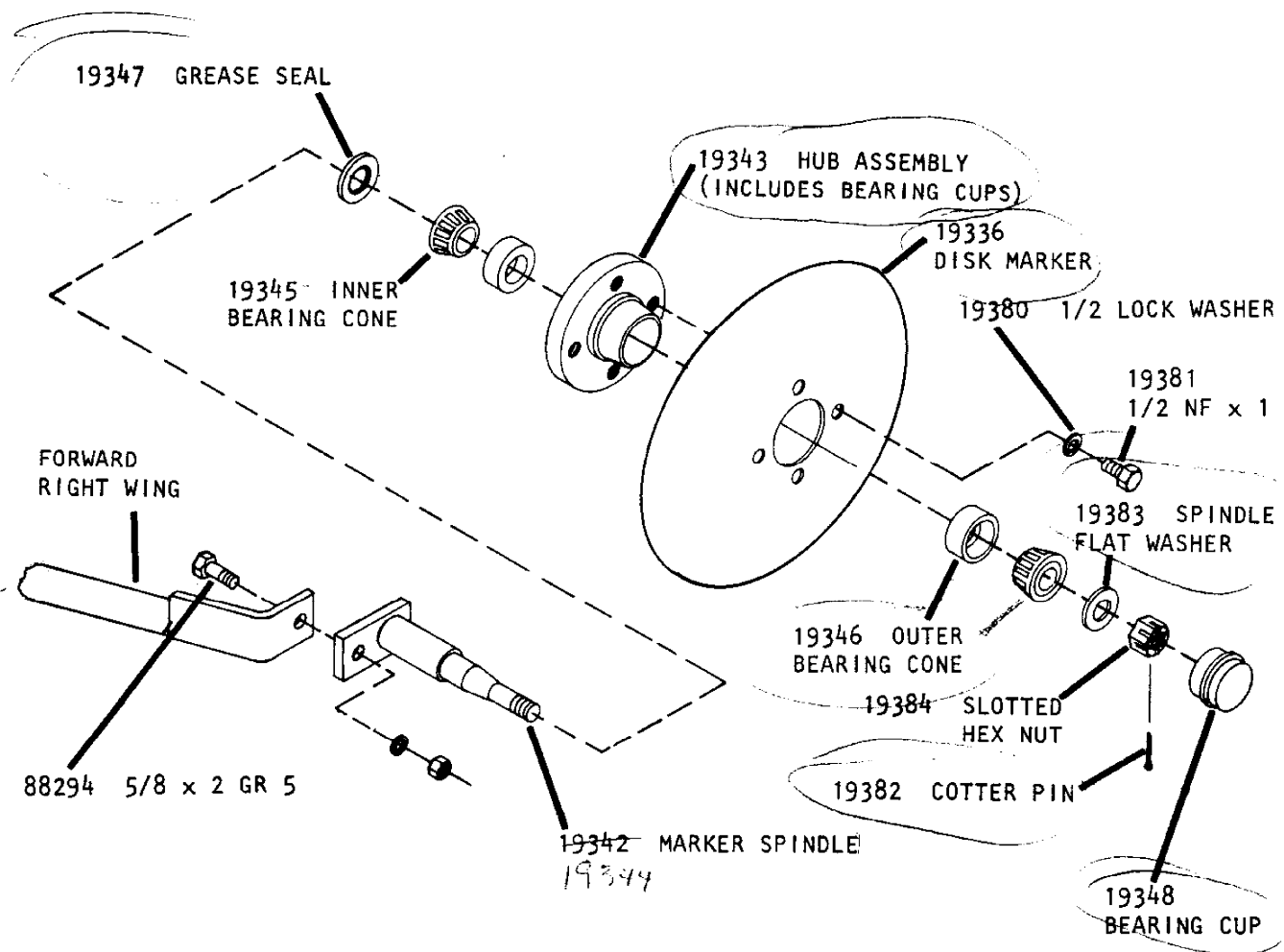
See PI 75806

ADD
New
Arm

PACKER SECTION

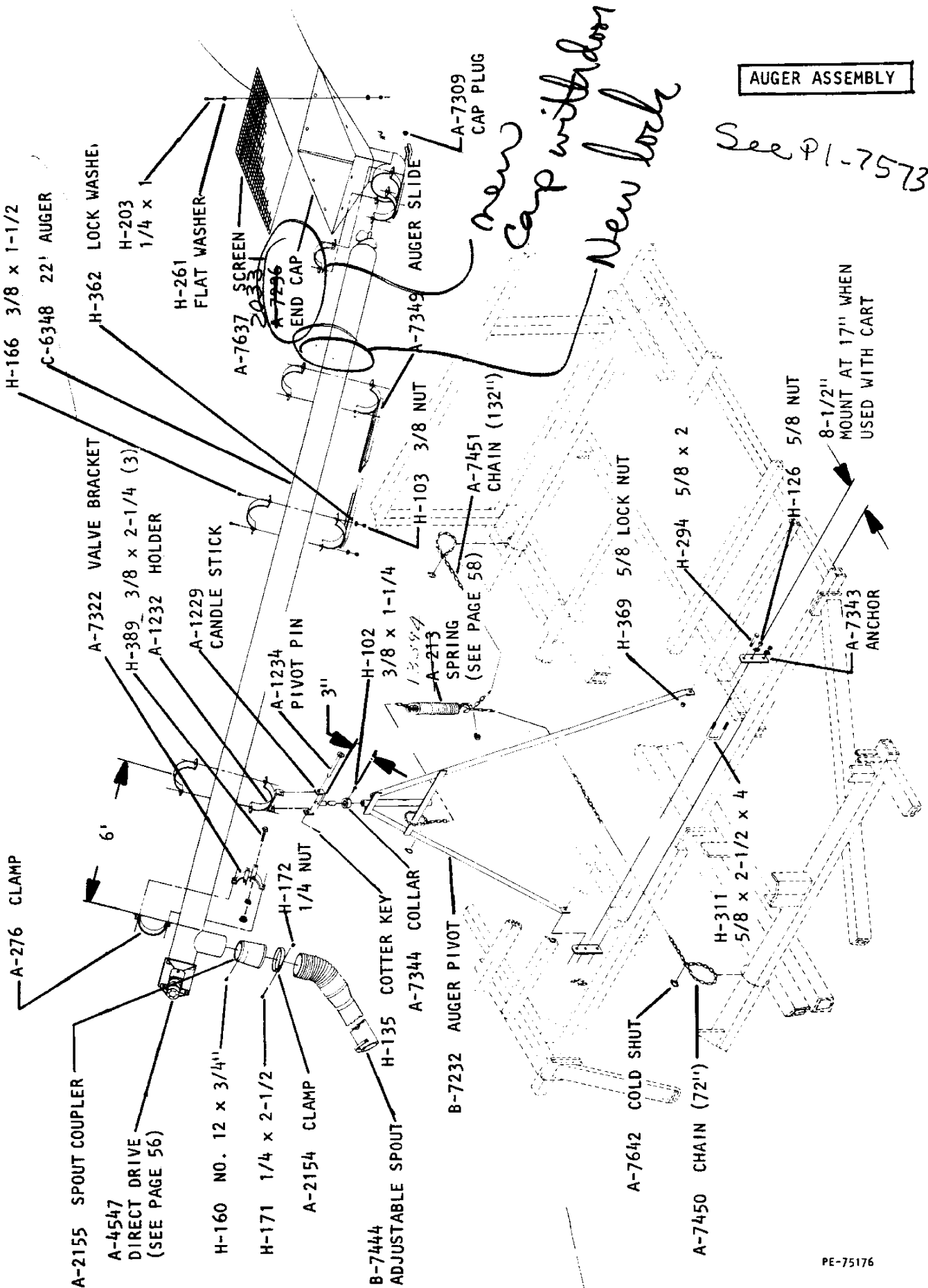


MARKER DISK ASSEMBLY

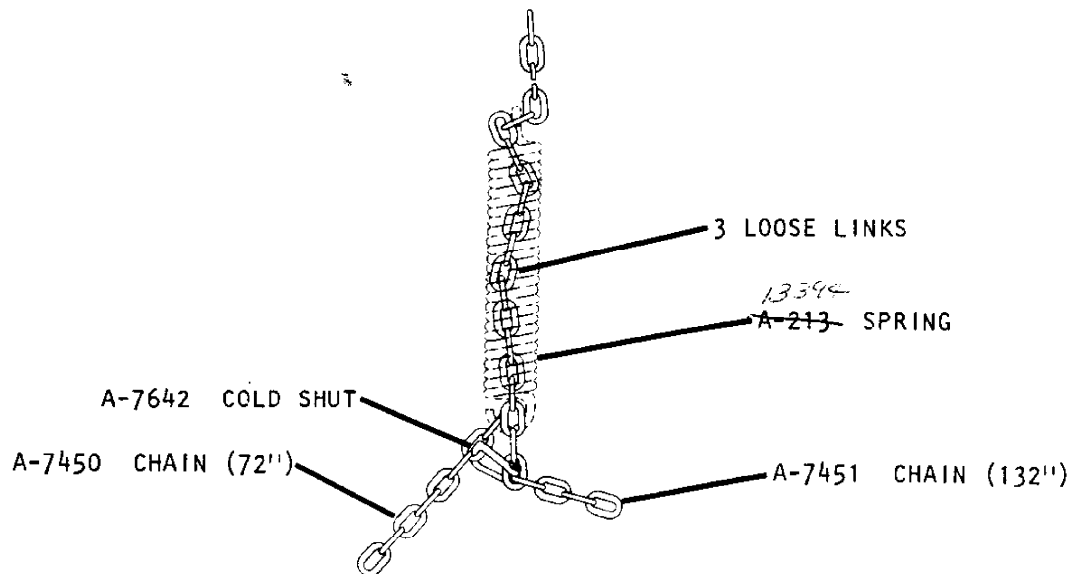


AUGER ASSEMBLY

See P1-75737



SPRING LOADED AUGER SUPPORT

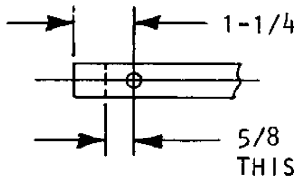


PB-75177

MAY HAVE TO

A-4547 DIRECT DRIVE

BECAUSE OF THE APPLICATION, THE AUGER SHAFT ~~MAY~~ BE CUT OFF TO ADAPT TO THE DIRECT DRIVE



80175

H-175 WOODRUFF KEY NO. 808

A-1225 COUPLER

H-157 3/8 x 1

*Re-work
USE
PC-75906
PI-75907*

H-103 3/8 NUT

H-161 1/4 x 1/4 SET SCREW

H-268 3/8 x 3/4

A-1223 MOTOR MOUNT

H-347 1/2 WASHER

H-104 1/2 NUT

B-1224 MOTOR MOUNT SUPPORT (2)

A-1226 ALIGNING BUSHING

H-101 1/4 COTTER PIN

H-106 1/2 x 1-1/2

A-909 M-203 HYDRAULIC MOTOR

PC-75180

TRUCK GATE ASSEMBLY

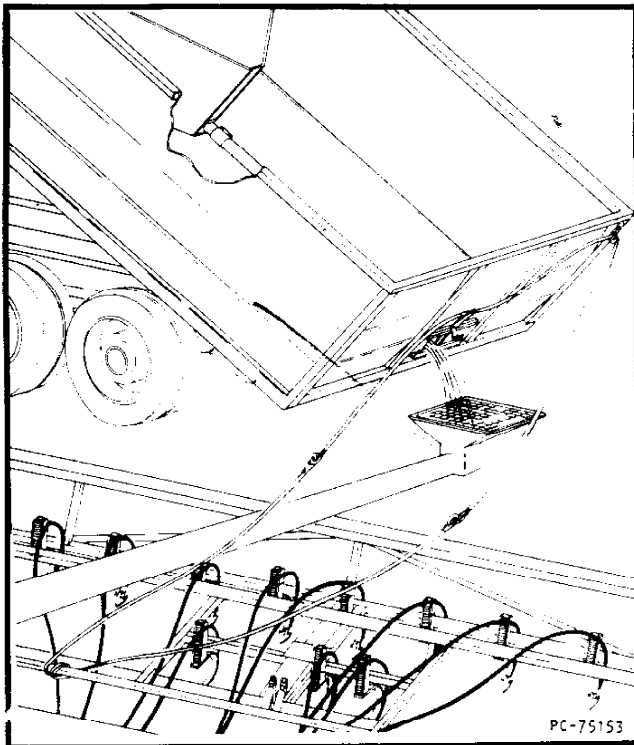


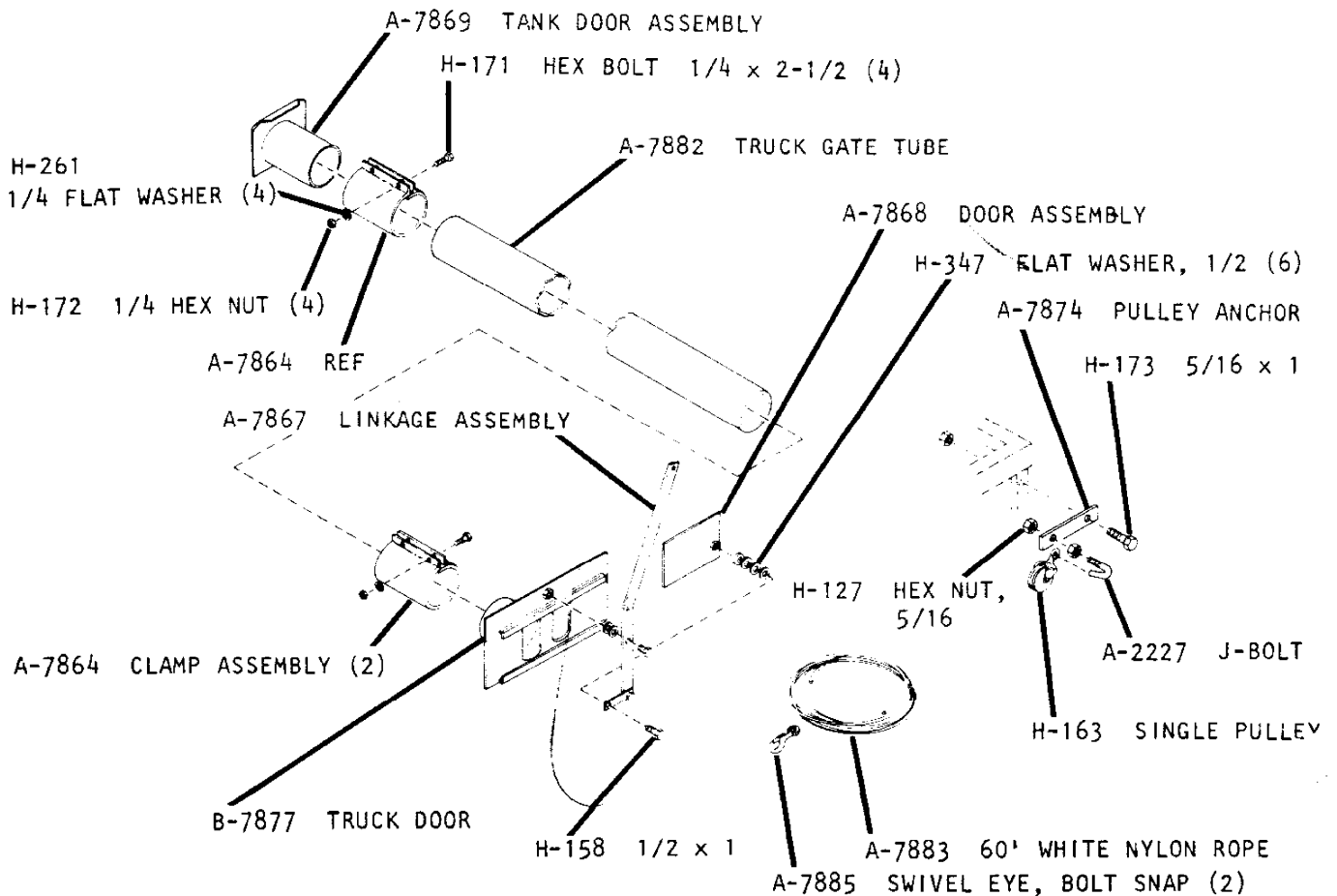
Fig 24 Truck Gate

TRUCK GATE

1. Position sliding gate as shown and install bolts. Installation of flat washers is important, as proper clearance must be maintained.

NOTE: REMOVING THE PAINT IN THE TRACK AREA AND APPLYING A LIGHT FILM OF OIL WILL EASE OPERATION OF THE SLIDING DOOR.

2. Install gate and pulley on truck box. (Position of the pulley will determine which side filling is done from.)
3. Cut rope and install clips so that connection point of ropes is about 2 feet behind cultivator wing lock.
4. Optional tube kit is available to adapt to a new or existing drill fill system. Install as shown below.



ROW CROP PAN INSTALLATION

FOR (28") ROWS USE PART NO. D-8365 WHICH IS A 14" ROW CROP PAN. POSITION PAN AS SHOWN FOR TANK -A-. FOR TANKS -B- AND -C- TURN PANS END FOR END. SEE PAGES 3 & 6 FOR TAPING LOCATIONS.

FOR (21") ROWS USE PART NO. D-8403 WHICH IS A 21" ROW CROP PAN. POSITION PAN AS SHOWN FOR TANK -A-. FOR TANKS -B- AND -C- TURN PANS END FOR END. SEE PAGES 2 & 5.

FOR (14") ROWS USE PART NO. D-8365 WHICH IS A 14" ROW CROP PAN. POSITION AS SHOWN FOR TANK -A-. FOR TANKS -B- AND -C- TURN PANS END FOR END. SEE PAGES 1 & 4.

THE DIAGRAMS ON PAGES 1 THRU 6 SHOW THE PLACEMENT OF THE ROW CROP PANS IN THE GRAIN COMPARTMENT OF THE FEEDER ASSEMBLY.

