

PARTS LIST



FERTILIZER BOX

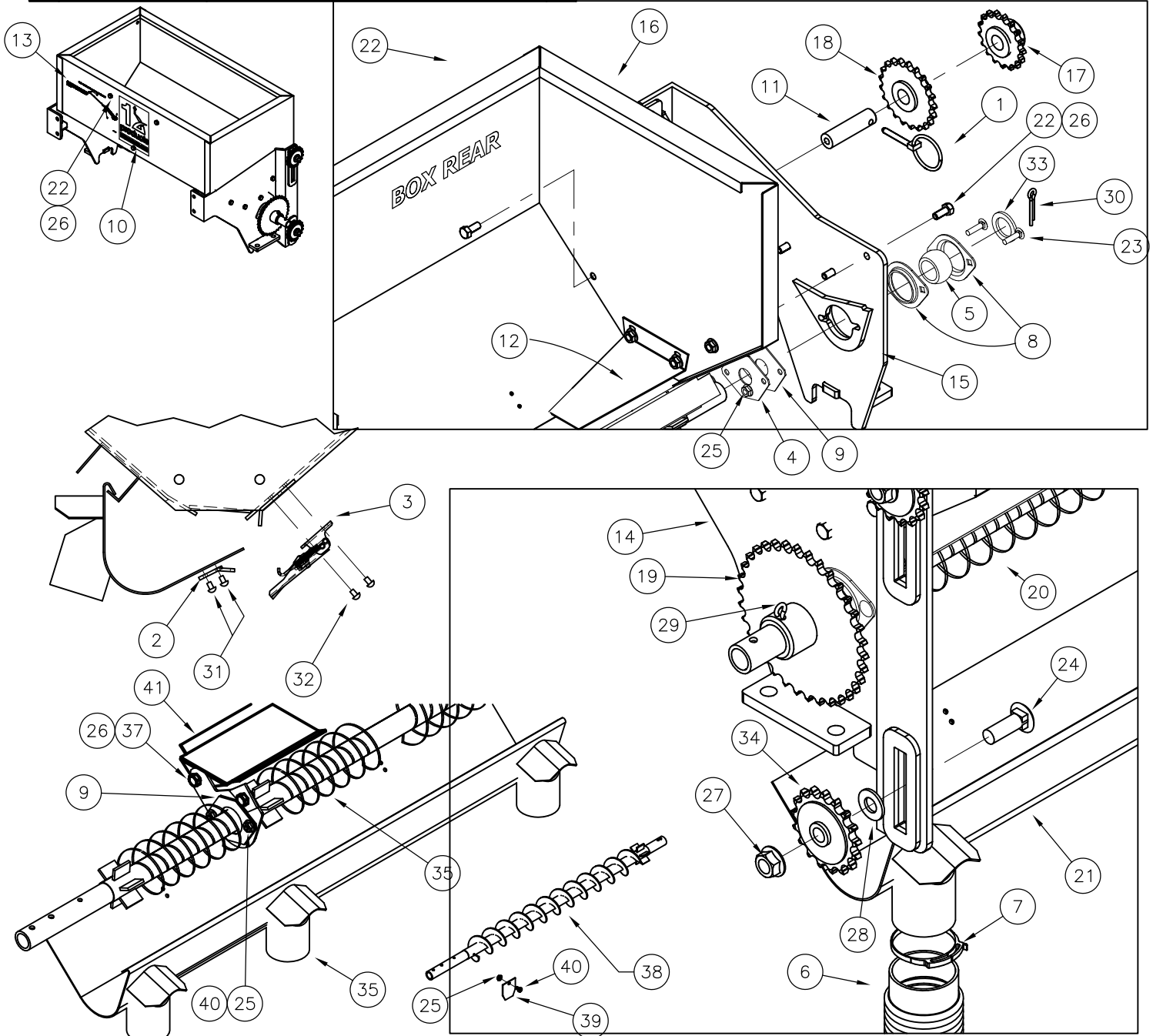
MODEL FE

Serial Number 1335 - ____

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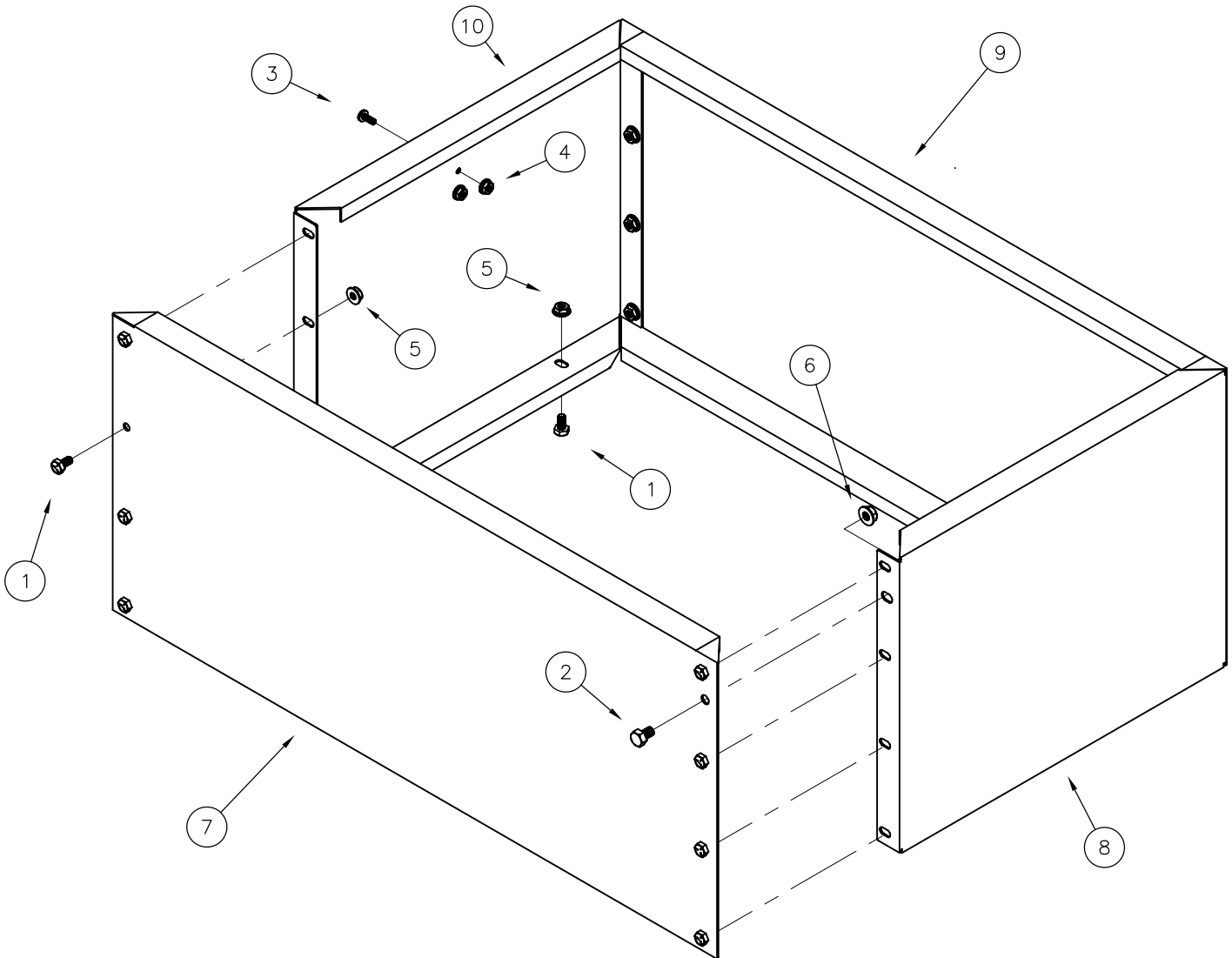
250# FE PARTS LIST BOX ASSEMBLY

ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
1	AE50-149	1/4 LYNCH PIN	1	22	HW01010024SSPLC	5/16 x 3/4 HEX CAPSCREW SS	14
2	FA27-194	HVY. KEEPER - FA	2	23	HW03008032SSPLC	1/4 X 1 SS CARRIAGE BOLT	4
3	FA50-104	LD ADJ. LATCH	2	24	HW03016064G5ZPC	1/2 X 2 CARRIAGE BOLT GD 5	2
4	FB27-009	SEAL PLATE	2	25	HW22008SSPLC	1/4 FLANGE LOCK NUT SS	4
5	FB50-014	AUGER SHAFT BRG.	2	26	HW22010SSPLC	5/16 FLANGE LOCK NUT, SS	15
6	FB50-019	FERTILIZER HOSE	2	27	HW22016G5ZPC	1/2 FLANGE LOCK NUT	2
7	FB50-106	2" PLASTIC HOSE CLAMP	4	28	HW31016TAZP	1/2 SAE FLAT WASHER	2
8	FB50-034	40 MST STAMPING	4	29	HW40008048BR	1/4 x 1 1/2 BR COTTER PIN	1
9	FB50-035	AUGER BRG. SEAL	2	30	HW40008048SS	1/4 x 1 1/2 SS COTTER PIN	2
10	UA50-012	UA BELT COVER DECAL	2	31	HW41005004SS	5/32 SS RIVET (1/16 - 1/8 GRIP)	4
11	FE26-005	STORAGE SHAFT	1	32	HW41005008SS	5/32 SS RIVET (1/8-1/4 GRIP)	6
12	FE27-033	FUNNEL, 250#	2	33	FE27-088	18 GA SS MACH BUSHING	2
13	FE50-009	FE GROUND DRIVE CHART	1	34	SB50-023	#40 CHAIN IDLER	2
14	FE80-033	RIGHT BOX MOUNT	1	35	FE80-037	250# 3 OUTLET AUGER SHAFT	1
15	FE80-034	LEFT BOX MOUNT	1	36	FE80-038	250# 3 OUTLET AUGER THROUGH	1
16	FE80-006	250# FE BOX	1	37	HW01010016SSPLC	5/16 x 1/2 HEX CAPSCREW SS	2
17	FE80-008	17 TOOTH SPROCKET/HUB	1	38	FA80-045	250# ONE OUT AUGER SHAFT	1
18	FE80-009	24 TOOTH SPROCKET/HUB	1	39	FA27-016	OUTLET PLUG	1
19	FE80-011	34 TOOTH SPROCKE/HUB	1	40	HW01005016SSPLC	1/4 X 1/2 SS HEX CAPSCREW	1
20	FE80-014	250# AUGER SHAFT	1	41	FE27-093	FE 3RD OUTLET FUNNEL	1
21	FE81-009	250# RIVETED TROUGH W/ KEEPER	1				



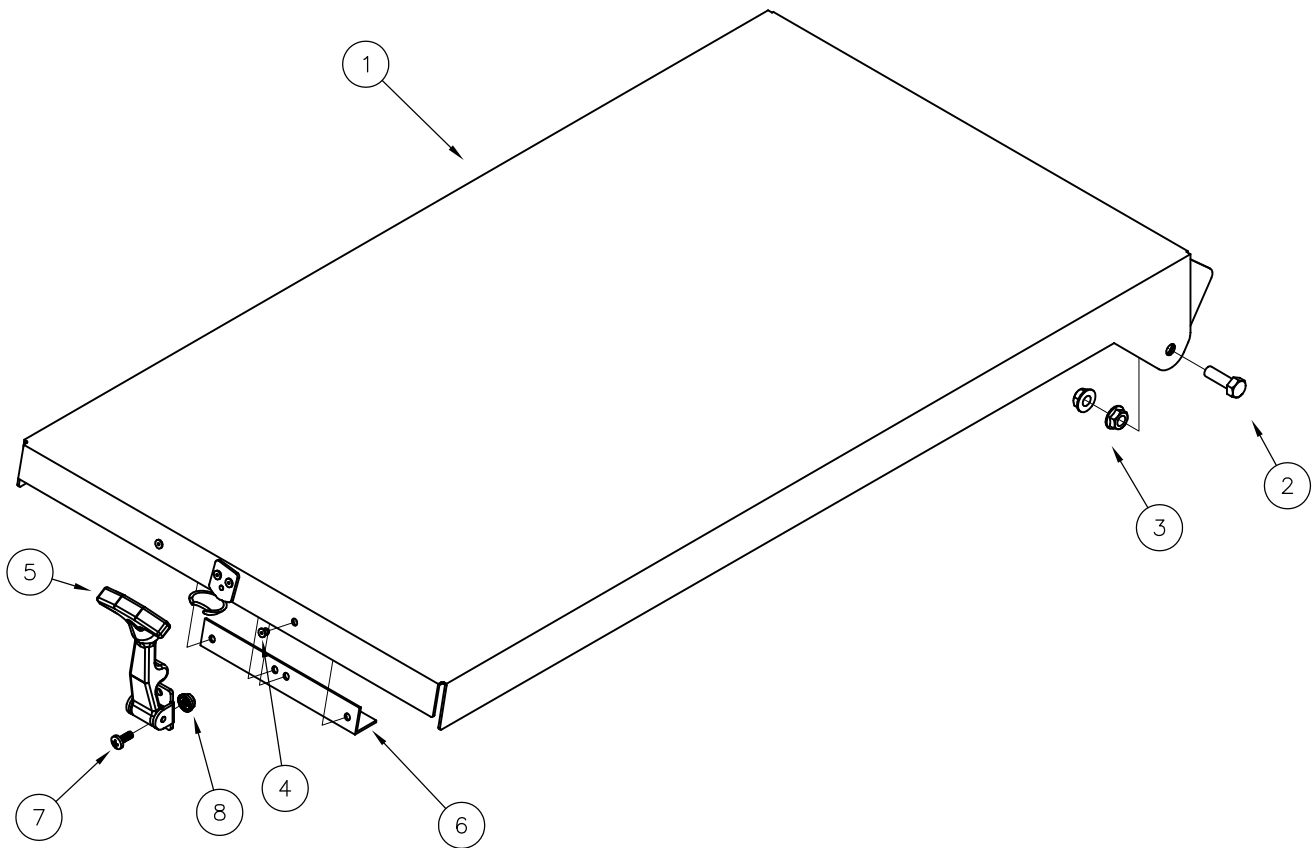
FE 250# BOX EXTENSIONS

ITEM	PART NO	DESCRIPTION	QTY
1	HW01008016SSPLC	1/4 X 1/2 LG HEX HEAD CAPSCREW SS	20
2	HW01010016SSPLC	5/16 X 1/2 LG HEX HEAD CAPSCREW SS	2
3	HW16#10016SSPLC	#10 X 1/2 LG CROSS HEAD SCREW SS	2
4	HW22#10SSPLC	#10 HEX FLANGE LOCK NUT, SS	2
5	HW22008SSPLC	1/4 HEX FLANGE LOCK NUT, SS	20
6	HW22010SSPLC	5/16 HEX FLANGE LOCK NUT, SS	2
7	FE27-065	FE 250# EXTENSION, FRONT	1
8	FE27-066	FE 250# EXTENSION HINGE END	1
9	FE27-086	FE 250# EXTENSION, BACK	1
10	FE27-087	FE 250# EXTENSION LATCH END	1



FE 250# BOX LID

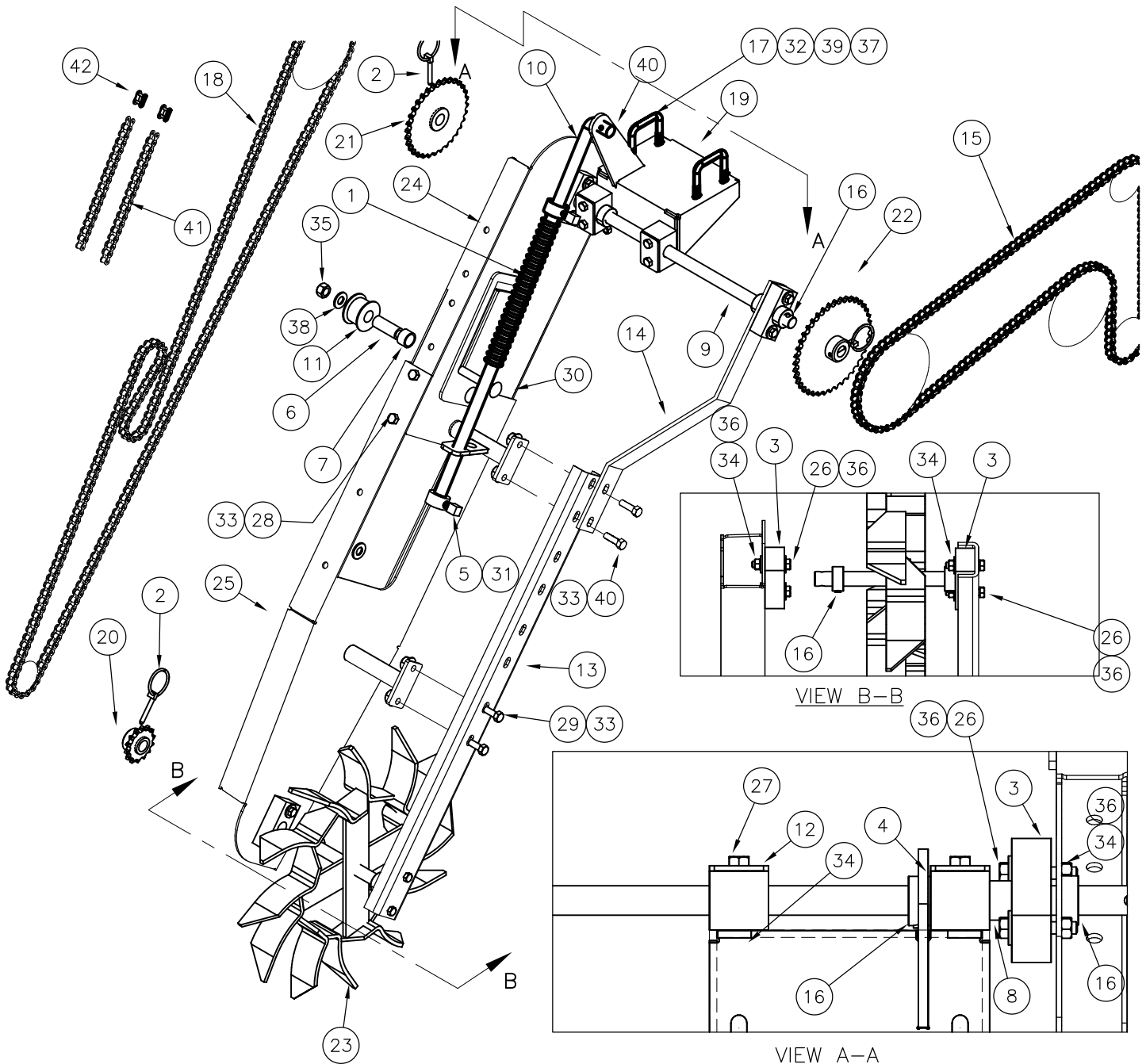
ITEM	PART NO	DESCRIPTION	QTY
1	FE80-030	FE 250# BOX LID W'MNT	1
2	HW01010032SSPLC	5/16 X 1 SS HHCS	2
3	HW22010SSPLC	5/16 HEX FLANGE LOCK NUT, SS	4
4	HW41006004SS	3/16 X 1/16-1/8 SS RIVET	4
5	SB50-053	T-HANDLE DRAW LATCH	1
6	FE27-068	LID STOP	1
7	HW16#10016SSPLC	#10 X 1/2 LG CROSS HEAD SCREW SS	2
8	HW22#10SSPLC	#10 HEX FLANGE LOCK NUT, SS	2



250# FE PARTS LIST

GROUND DRIVE ASSEMBLY

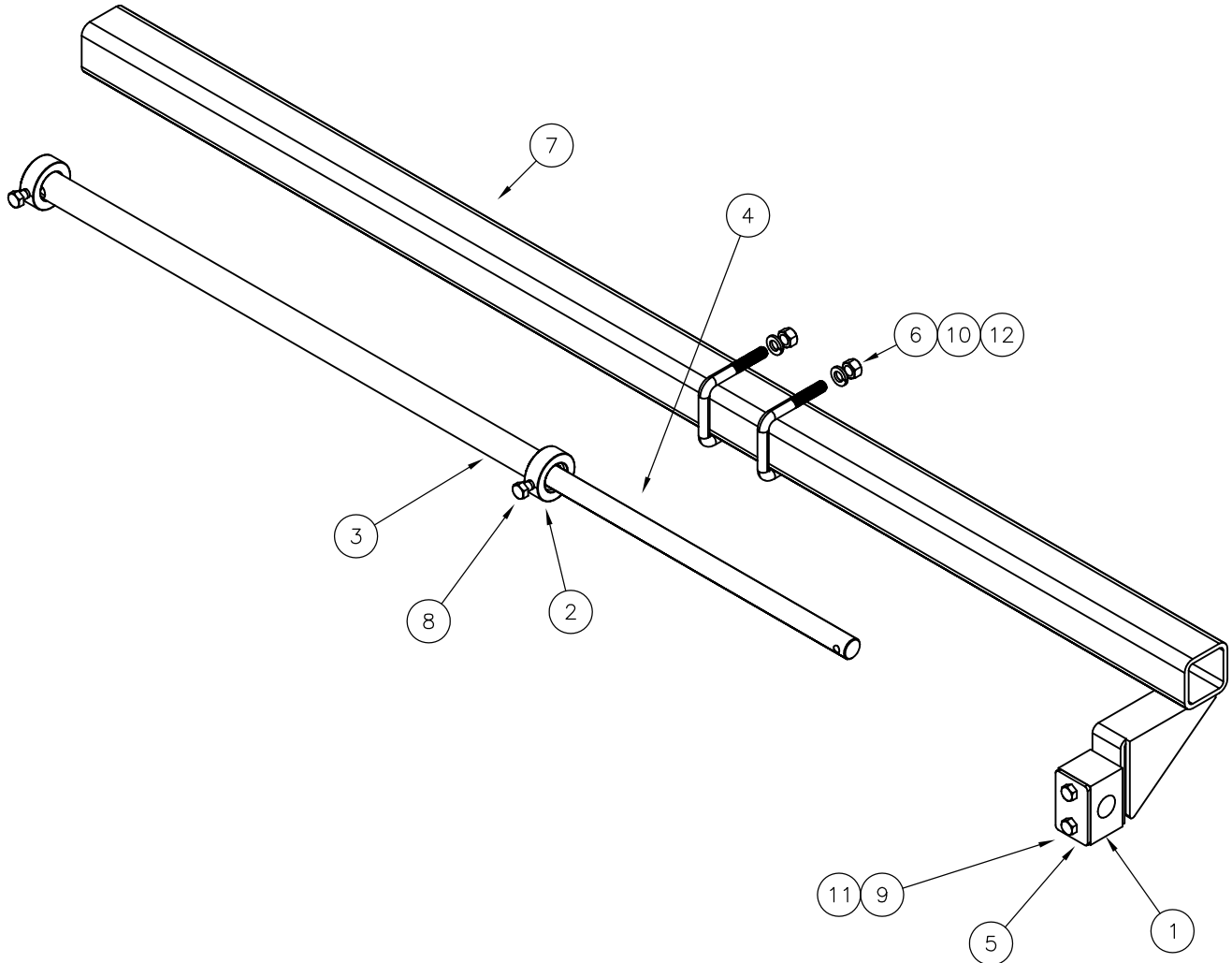
ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
1	AE50-071	ROLLER SPRING	1	22	FE80-012	40 TOOTH SPROCKET/HUB	1
2	AE50-149	1/4 LYNCH PIN	3	23	FE80-016	250# BOX GD WHEEL	1
3	FB26-005	BRG. BLOCK, LONG	4	24	FE80-031	UPPER DRIVE SHEILD	1
4	FB26-006	BEARING BLOCK, SHORT	2	25	FE80-032	LOWER DRIVE SHEILD	1
5	FB50-022	11/16 ADJ COLLAR	2	26	HW01010056G5ZPC	5/16 X 1 3/4 HHCS GD 5	8
6	FE24-008	IDLER TUBE	2	27	HW01010072G5ZPC	5/16 X 2 1/4 HHCS GD 5	4
7	FE24-009	IDLER SPACER	2	28	HW01012024G5ZPC	3/8 X 3/4 HHCS GD 5	4
8	FE24-012	SPACER	1	29	HW01012032G5ZPC	3/8 X 1 HHCS GD 5	2
9	FE26-003	250 # BOX JACK SHAFT	1	30	HW03016096G5ZPC	1/2 X 3 CARRIAGE BOLT GD.5	2
10	FE26-004	SPRING PUSH ROD, 250#	1	31	HW07016020PLC	1/2 X 5/8 SQ HEAD	2
11	FE50-034	CHAIN IDLER	2	32	HW20012G5ZPC	3/8 HEX NUT	4
12	FE27-030	BEARING BOLT PLATE	2	33	HW22012G5ZPC	3/8 FLANGE LOCK NUT	2
13	FE27-070	RIGHT FORK BAR	1	34	HW24010GBZPC	5/16 STOVER LOCK NUT	12
14	FE27-071	RIGHT FORK SUPPORT	0	35	HW24016GBZPC	1/2 STOVER LOCK NUT	2
15	FE50-005	AUGER DRIVE CHAIN	1	36	HW30010TAZP	5/16 FLATWASHER	14
16	FE50-006	SHAFT COLLAR, 3/4"	6	37	HW30012TAZP	3/8 FLATWASHER	4
17	FE50-007	U-BOLT, 3/8 x 2W x 3 LG	2	38	HW30016TAZP	1/2 FLATWASHER	2
18	FE50-015	GROUND DRIVE CHAIN	1	39	HW32012G5ZPC	3/8 LOCK WASHER, G5	4
19	FE80-003	FORK BEARING MOUNT	1	40	HW40006040ZP	3/16 X 1 1/4 COTTER PIN	1
20	FE80-007	14 TOOTH SPROCKET/HUB	1	41	FE50-017	GROUND DRIVE CHAIN 5" EXT	2
21	FE80-010	32 TOOTH SPROCKET/HUB	1	42	FE50-018	#40 1R MASTER LINK	2



250# FE PARTS LIST

GROUND DRIVE BAR ASSEMBLY

ITEM	PART NO	DESCRIPTION	QTY
1	FB26-006	BEARING BLOCK, SHORT	1
2	FB50-054	1 1/16" SET COLLAR	2
3	FE24-011	JACK SHAFT EXSTENION CONNECTOR	1
4	FE26-002	JACK SHAFT EXTENSION	1
5	FE27-030	BEARING BOLT PLATE	1
6	FE50-007	U-BOLT, 3/8 x 2W x 3 LG	2
7	FE80-001	GROUND DRIVE TOOLBAR	1
8	HW01010024G5ZPC	5/16 x 3/4 HEX CAPSCREW	2
9	HW01010080G5ZPC	5/16 X 2 1/2 HHCS GD 5	2
10	HW20012G5ZPC	3/8 HEX NUT	4
11	HW24010GBZPC	5/16 STOVER LOCK NUT	2
12	HW32012G5ZP	3/8 LOCK WASHER	4



250 # FERTILIZER BOX RATE CHART

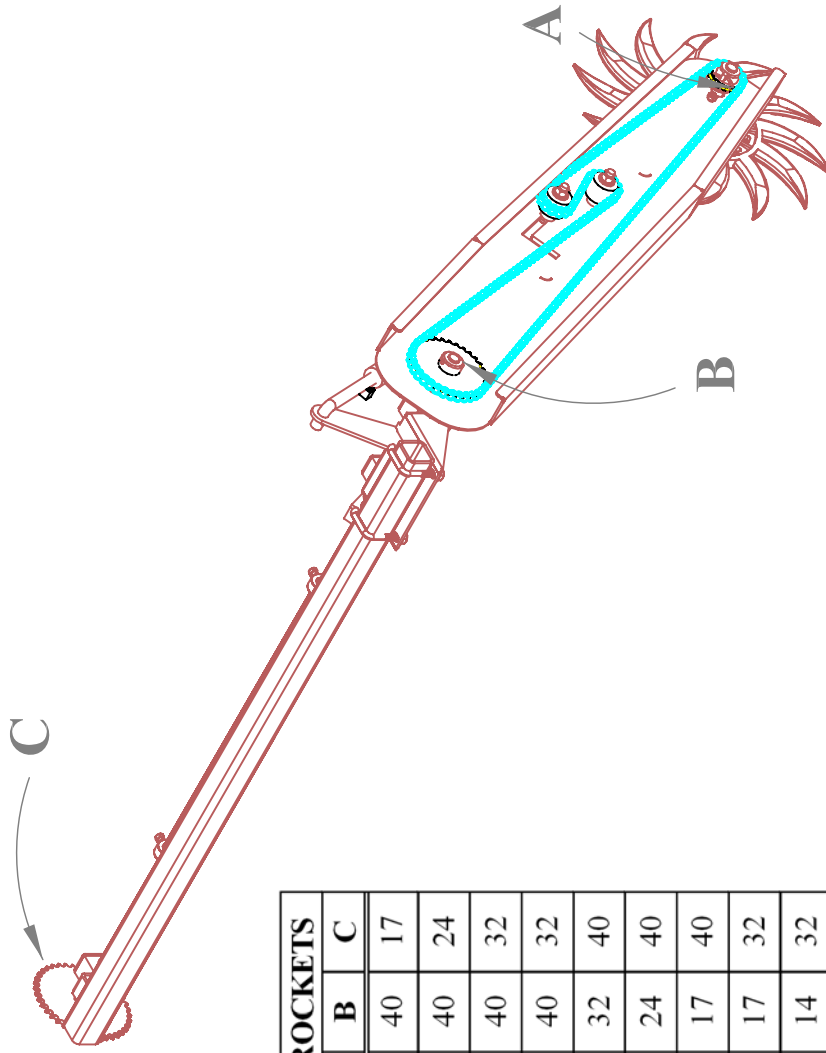


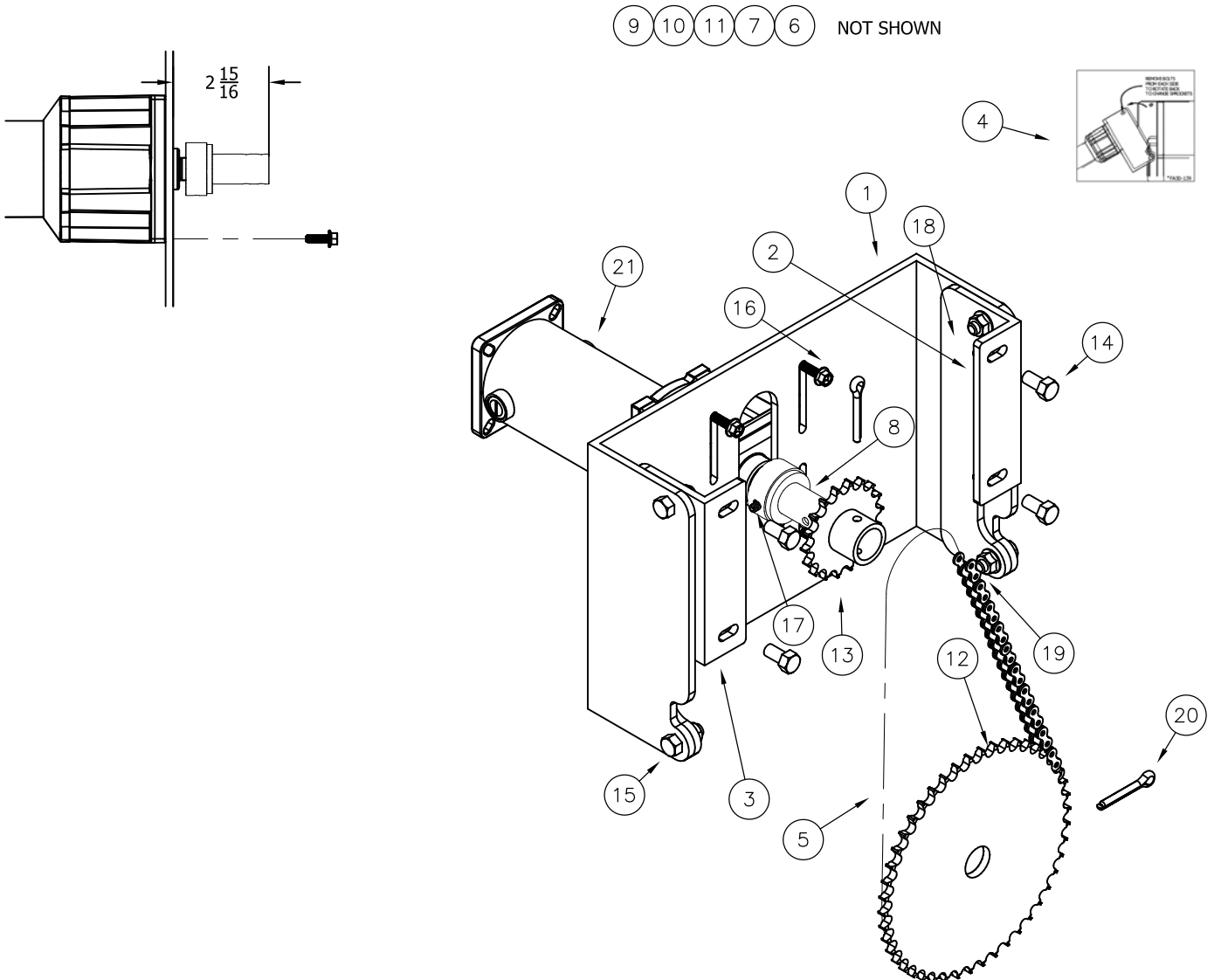
CHART IS BASED ON GRANULAR MATERIAL WEIGHING 70 POUNDS PER CUBIC FOOT. RATES MAY VARY BASED ON ACTUAL FERTILIZER WEIGHTS AND DENSITIES BEING DIFFERENT

	Row Spacing										SPROCKETS		
	30	32	34	36	38	40	44	48	A	B	C		
67	63	60	55	53	53	51	46	42	14	40	17		
95	89	83	80	75	75	71	65	60	14	40	24		
125	118	112	105	100	100	95	86	79	14	40	32		
150	144	135	130	121	121	115	104	96	17	40	32		
200	186	175	170	157	157	149	135	124	14	32	40		
260	243	229	220	205	205	195	177	162	14	24	40		
370	345	324	305	290	290	275	250	229	14	17	40		
500	465	437	405	391	391	371	338	309	24	17	32		
600	562	529	505	473	473	450	409	375	24	14	32		

Pounds per Acre

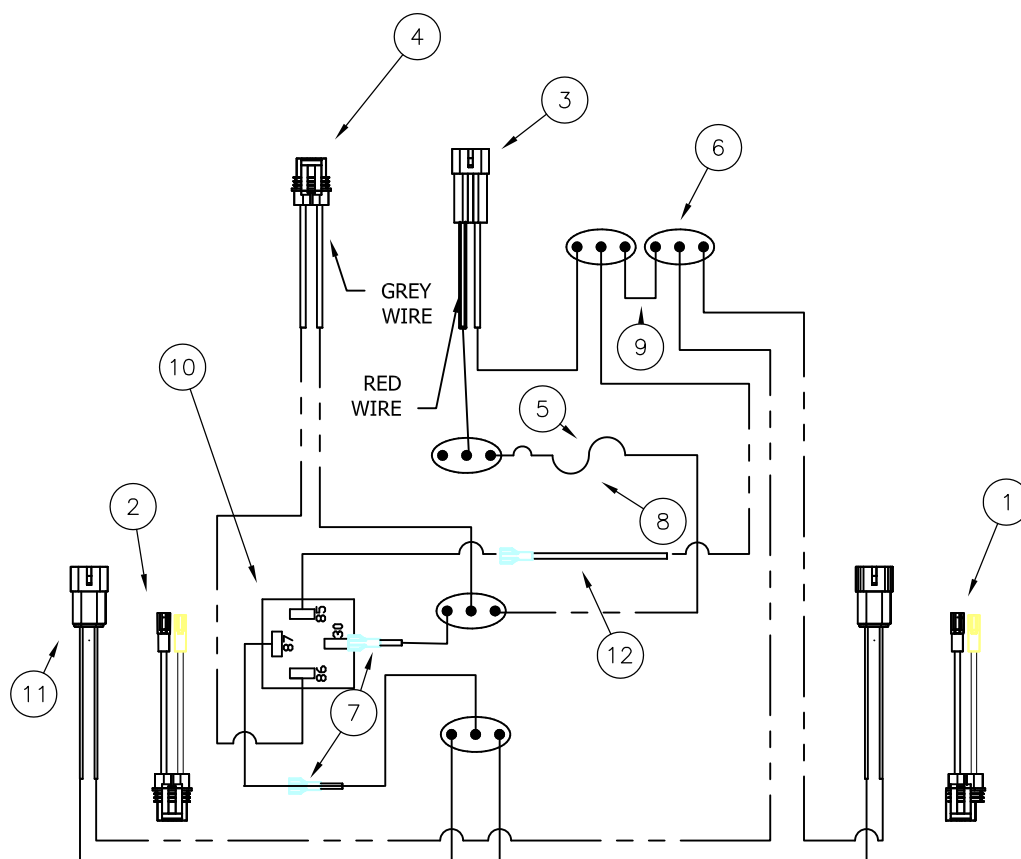
FE ELECTRIC DRIVE

ITEM	PART NO	DESCRIPTION	QTY
1	FA27-221	ELECTRIC MOTOR MOUNT	1
2	FA27-222	ELECTRIC MOTOR MOUNT HINGE, LEFT	1
3	FA27-223	ELECTRIC MOTOR MOUNT HINGE, RIGHT	1
4	FA50-139	SPORCKET CHANGE INSTRUC. DECAL	1
5	FA50-132	ELECTRIC DRIVE AUGER CHAIN	1
6	FA50-134	ELECTRIC DRIVE RATE DECAL,FA	1
7	FA50-135	ELECTRIC DRIVE RATE DECAL,FE	1
8	FA80-131	ELECTRIC MOTOR HUB	1
9	FE50-027	JOHN BLUE POWER CORD HARNESS	1
10	FE50-028	JOHN BLUE MOTOR HARNESS	1
11	FE50-029	ELECTRIC DRIVE POLARITY JUMPER	1
12	FE80-039	#40 X 46T SPROCKET W/ 1" HUB	1
13	FE80-040	#40 X 18T SPROCKET W/ 1" HUB	1
14	HW01010024SSPLC	5/16 X 3/4 "SS HEX CAPSCEW	4
15	HW01012032G5ZPC	3/8 X 1 HEX CAPSCREW	4
16	HW06008024G5ZPF	1/4 X 3/4 HEX LOCKING SCREW	4
17	HW08008010PLC	1/4" X 5/16" LG SOCKET HEAD CUP POINT SET SCREW	2
18	HW22010SSPLC	5/16 SS HEX FLANGE LOCKING NUT	4
19	HW22012G5ZPC	3/8 FLANGE LOCK NUT	4
20	HW40008048BR	1/4 X 1-1/2" BRASS COTTER PIN	1
21	SB50-113	SB40 ELECTRIC MOTOR	1



FE ELECTRIC DRIVE RATE CONTROLLER WIRING

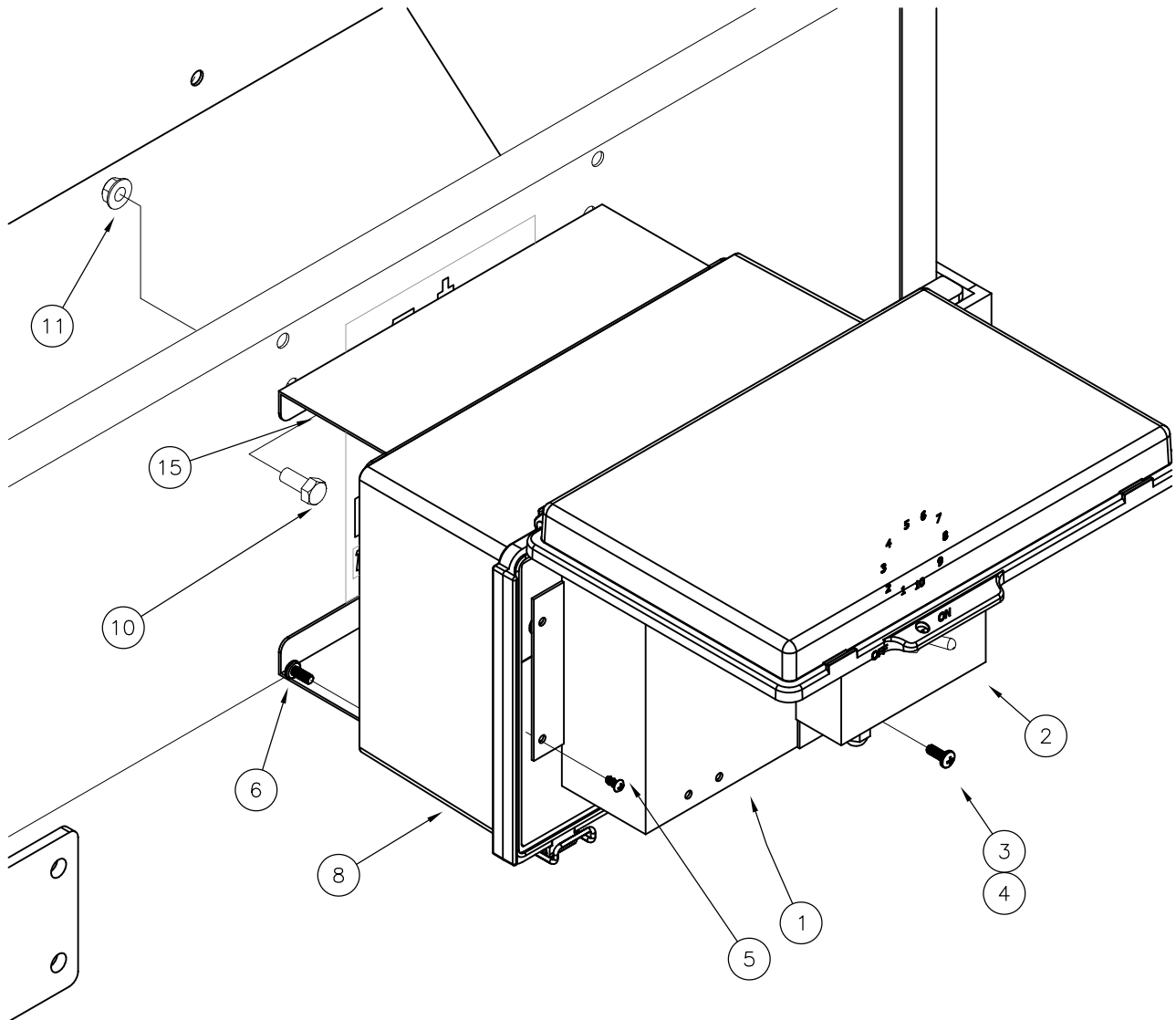
ITEM	PART NO	DESCRIPTION	QTY
1	DS50-009	MOTOR POWER HARNESS, BOX 1	1
2	DS50-014	MOTOR POWER HARNESS, BOX 2	1
3	DS50-016	CONTROL BOX POWER IN HARNESS	1
4	DS50-017	CONTROL BOX SWITH HARNESS	1
5	DS50-023	FUSE LINK	1
6	DS50-029	22-14 GA 3 COND PIGTAIL CONNECTOR	5
7	DS50-052	SYSTEM POWER WIRE	2
8	DS50-066	MINI FUSE, 30 AMP	1
9	DS50-077	GROUND EXTENSION WIRE	1
10	DS50-078	RELAY, 4 PIN	1
11	DS50-079	CONTROLLER POWER HARNESS	2
12	FE50-033	RELAY GROUND WIRE	1
13	FE27-122	FE CONTROL BOX MOUNT	1



ELECTRIC DRIVE RATE CONTROLLER

ITEM	PART NO	DESCRIPTION	QTY
1	DS27-170	VARIABLE SPEED CONTROLLER MOUNT	1
2	DS81-065	25 AMP CONTROLLER	1
3	HW16#10016G5ZPC	#10 X 1/2 CROSS HEAD SCREW	4
4	HW34#10G5ZPC	#10 2-WAY I LOCK NUT	4
5	HW63#08010SSPLC	#8 X 5/16" THREAD FORMING SCREW	4
6	HW16M5012ZPC	M5 X 12 MM LG CROSS HEAD SCREW	4
7	DS50-015	CABLE GLAND	3
8	DS50-075	CONTROL ENCLOSURE	1
9	DS50-076	GLAND NUT	3
10	HW01010024SSPLC	5/16 x 3/4 HEX CAPSCREW SS	3
11	HW22010SSPLC	5/16 FLANGE LOCK NUT SS	3
12	FE50-028	MOTOR HARNESS	1
13	DS50-046	POWER HARNESS W/ TEST CLIPS	1
14	DS81-013	DS SWITCH HARNESS	1
15	FE27-122	FE CONTROL BOX MOUNT	1

ITEMS NOT SHOWN



FE ELECTRIC RATE CHART

LBS/Acre

Low Range Chart

VCR Setting	ROW SPACING							ORCHARD WIDTH			
	30	36	38	40	42	44	48	8 ft	9 ft	10 ft	12 ft
1	40	33	32	30	29	27	25	22	20	17	
2	81	67	64	60	58	55	50	45	40	34	
3	129	107	102	97	92	88	80	72	64	54	
4	180	150	142	135	129	123	113	100	90	75	
5	251	209	198	188	179	171	157	139	125	105	
6	316	263	249	237	225	215	197	175	158	131	
7	373	311	295	280	267	254	253	207	187	156	
8	425	354	336	319	304	290	266	236	213	177	
9	451	376	356	338	322	307	282	250	225	188	
10	467	389	369	350	333	318	292	259	233	195	

Low Range: 18T Sprocket is on Motor and 46T on Auger shaft

The Chart values are Based on 70 #/Cubic Foot of Product and Ground Speed of 1 MPH. For a different Ground Speed. Simply multiply desired rate times ground speed then choose closest rate on chart.

Example: 5 MPH Ground Speed on 38" Rowspacing and wanting 300 LBS/Acre
Looking on High Range Chart a VCR Setting "5-6" and pick 1296-1629

Now check the product output using formula below. Enter the desired values and collect product for one minute and weigh and compare. Adjust the VCR Setting if required to get calculated output.

$$\frac{\text{LBS}}{\text{min}} = \left(\frac{\text{LBS}}{\text{Acre}} \right) \times (\text{Speed (MPH)}) \times (\text{RW (inches)}) \times (\text{Number of Rows Served})$$

5940

Row Crop Applications:

One or two rows can be served. The chart is based on serving two Rows. If serving one row of 8 feet (96 inches) centers, For the above formula, 96 inches will be used in the Row Width of the formula.

Orchard Applications:

If banding fertilizer on one side of Row only, use the full desired rate. For banding on both sides of the Row; output rate should be set and calibrated at half of desired rate. **Example:** If wanting 300 lbs/acre, set the box for putting out 150 lbs/acre due to placing fertilizer on both sides of plant.

FA50-135

High Range Chart

VCR Setting	ROW SPACING							ORCHARD WIDTH			
	30	36	38	40	42	44	48	8 ft	9 ft	10 ft	12 ft
1	262	218	207	196	187	178	164	145	131	109	
2	527	439	416	395	376	359	329	293	264	220	
3	842	701	665	631	601	574	526	468	421	351	
4	1179	983	931	884	842	804	737	655	590	491	
5	1641	1368	1296	1231	1172	1119	1026	912	821	684	
6	2063	1720	1629	1548	1474	1407	1290	1146	1032	860	
7	2440	2034	1927	1830	1743	1664	1525	1356	1220	1017	
8	2779	2316	2194	2085	1985	1895	1737	1544	1390	1158	
9	2948	2456	2327	2211	2105	2010	1842	1638	1474	1228	
10	3052	2544	2410	2289	2180	2081	1908	1696	1526	1272	

High Range: 46T Sprocket is on Motor and 18T on Auger shaft

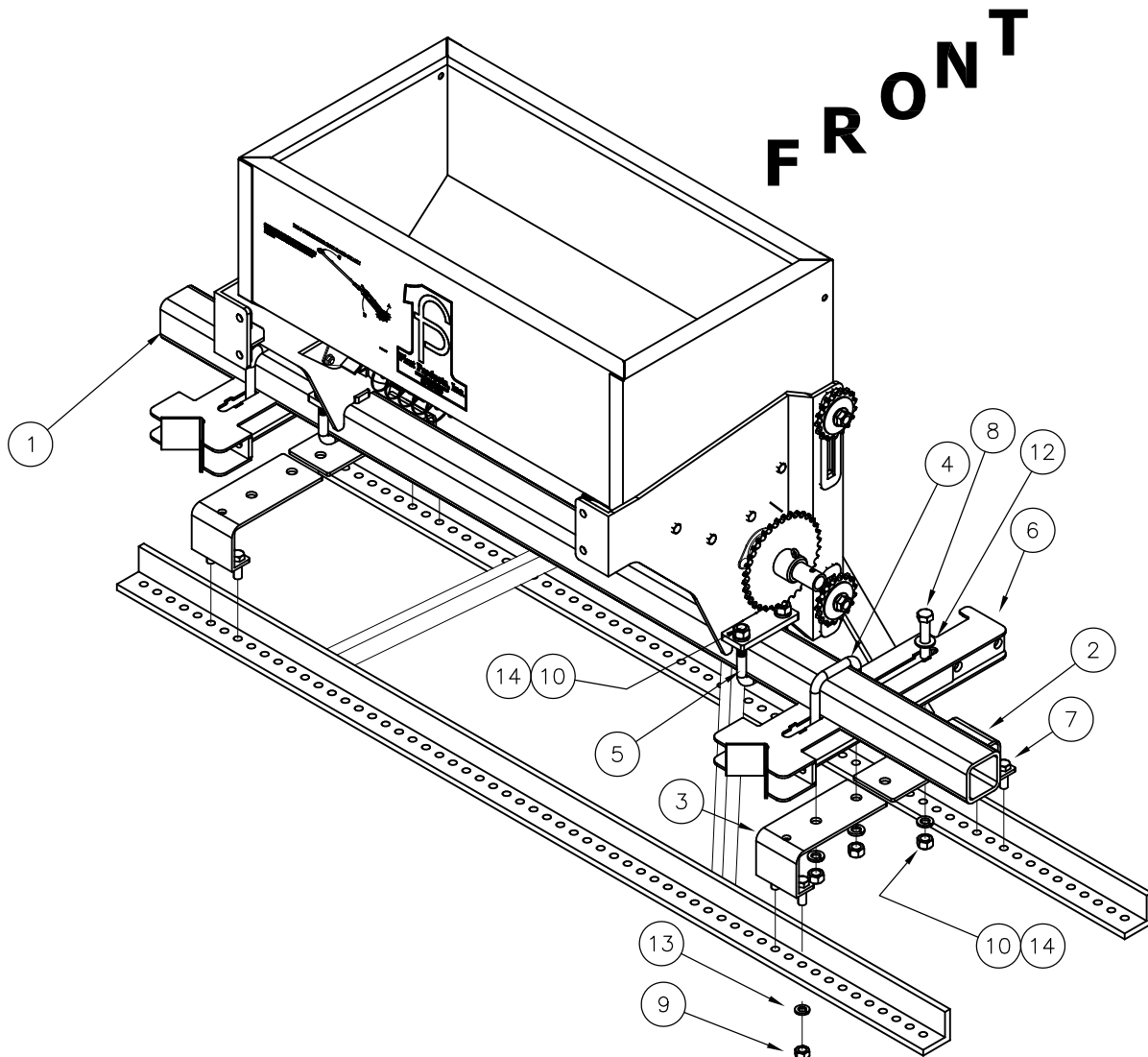
The Chart values are Based on 70 #/Cubic Foot of Product and Ground Speed of 1 MPH. For a different Ground Speed. Simply multiply desired rate times ground speed then choose closest rate on chart.

$$\frac{\text{LBS}}{\text{ACRE}} = 5 \times 300 = 1500$$

Now check the product output using formula below. Enter the desired values and collect product for one minute and weigh and compare. Adjust the VCR Setting if required to get calculated output.

250# FE PARTS LIST PITTSBURGH FRAME

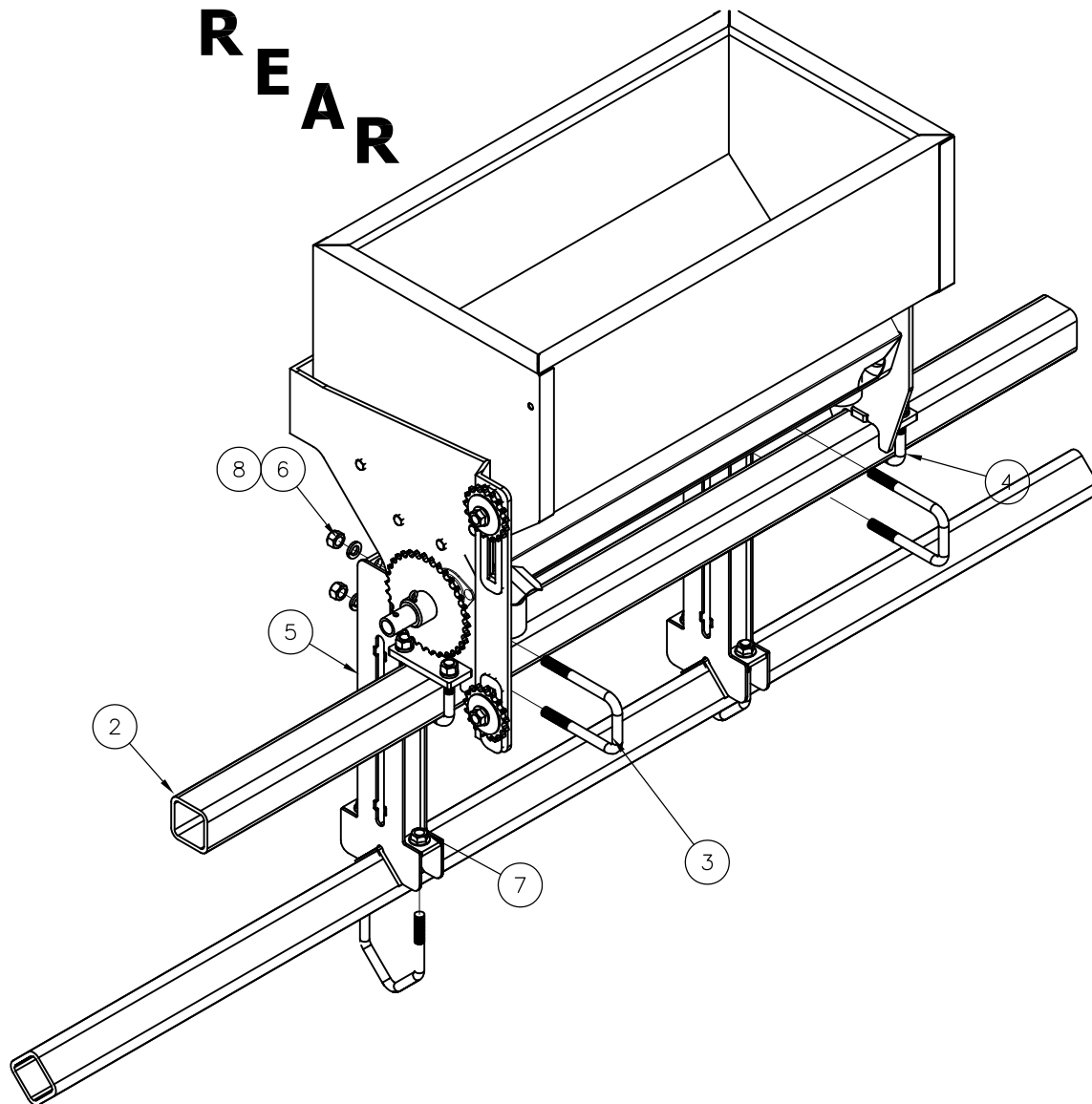
ITEM	PART NO	DESCRIPTION	QTY
1	FE24-032	250# BOX MOUNT TOOLBAR	1
2	FE27-080	PITTSBURGH MOUNT, ECON, FRONT	2
3	FE27-081	PTTSBURGH MOUNT, ECON, REAR	2
4	FE50-014	U-BOLT, 1/2" X 2-1/2 WD X 5" LG"	2
5	FE50-016	U-BOLT, 1/2" X 2-1/2 WD X 3-3/4" LG"	2
6	FE80-035	2-1/2 DIAMOND RISER	2
7	HW01014040G2ZPC	7/16 X 1 1/4 HEX CAPSCREW	8
8	HW01016080G5ZPC	1/2 X 2 1/2 HEX CAPSCREW GD 5	2
9	HW20014G5ZPC	7/16 HEX NUT	8
10	HW20016G5ZPC	1/2 HEX NUT	2
11	HW20016SSPLC	1/2 HEX NUT, SS	8
12	HW31016TAZP	1/2 FLATWASHER SAE	2
13	HW32014G5ZP	7/16 LOCKWASHER	8
14	HW32016G5ZP	1/2 LOCKWASHER	2
15	HW32016SS	1/2 LOCKWASHER, SS	8
26			1



250# FE PARTS LIST

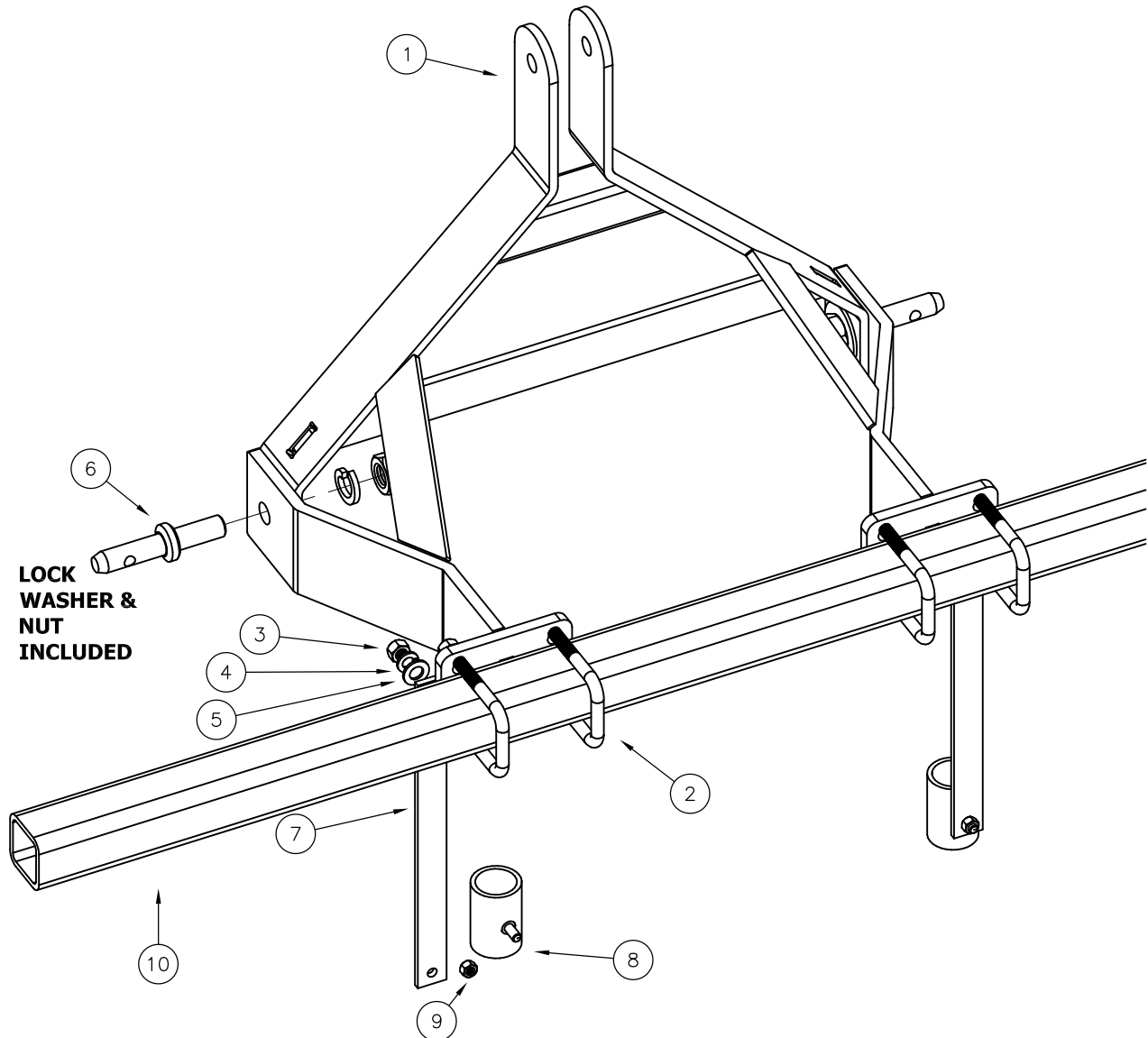
2 $\frac{1}{2}$ DIAMOND TOOLBAR

ITEM	PART NO	DESCRIPTION	QTY
1	FA50-038	1/2 X 3 3/4 X 5 1/8 V BOLT	2
2	FE24-032	250# BOX MOUNT TOOLBAR	1
3	FE50-014	U-BOLT, 1/2" X 2-1/2 WD X 5" LG"	2
4	FE50-016	U-BOLT, 1/2" X 2-1/2 WD X 3-3/4" LG"	2
5	FE80-035	2-1/2 DIAMOND RISER	2
6	HW20016SSPLC	1/2 HEX NUT, SS	8
7	HW22016G5ZPC	1/2 FLANGE LOCK NUT	4
8	HW32016SS	1/2 LOCKWASHER, SS	8



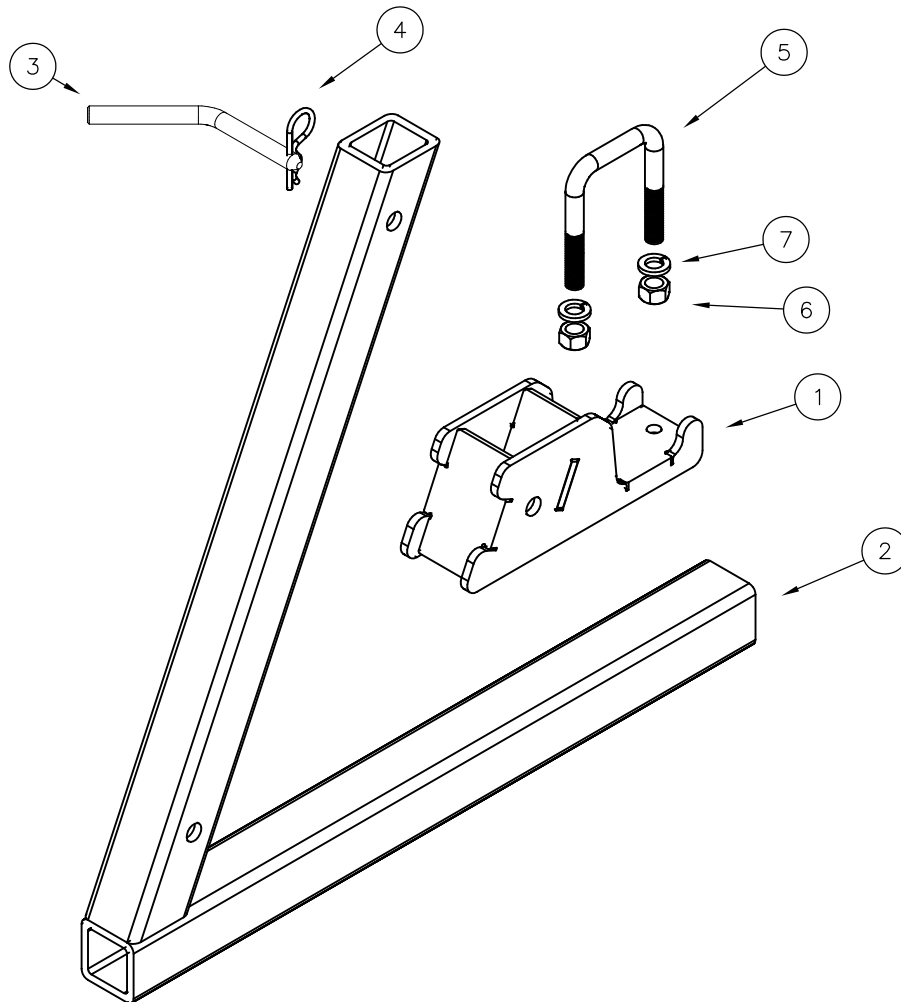
FE HITCH PARTS LIST

ITEM	PART NO	DESCRIPTION	QTY
1	FE80-019	FE HITCH	1
2	FE50-016	U-BOLT 1/2" X 2-1/2 WD X3-3/4" LG	4
3	HW20016SSPLC	1/2" HEX NUT, SS	8
4	HW32016SS	1/2" LOCK WASHER, SS	8
5	HW30016SS	1/2" WASHER, SS	2
6	AE50-023	CAT. 1 HITCH PIN	2
7	FE23-007	FE HITCH HOSE HOLDERS	2
8	FB80-025	GANG HOSE PIPE	2
9	HW22012SSPLC	3/8" HEX FLANGE NUT STAINLESS	2
10	FE24-032	250# BOX MOUNT TOOLBAR	1



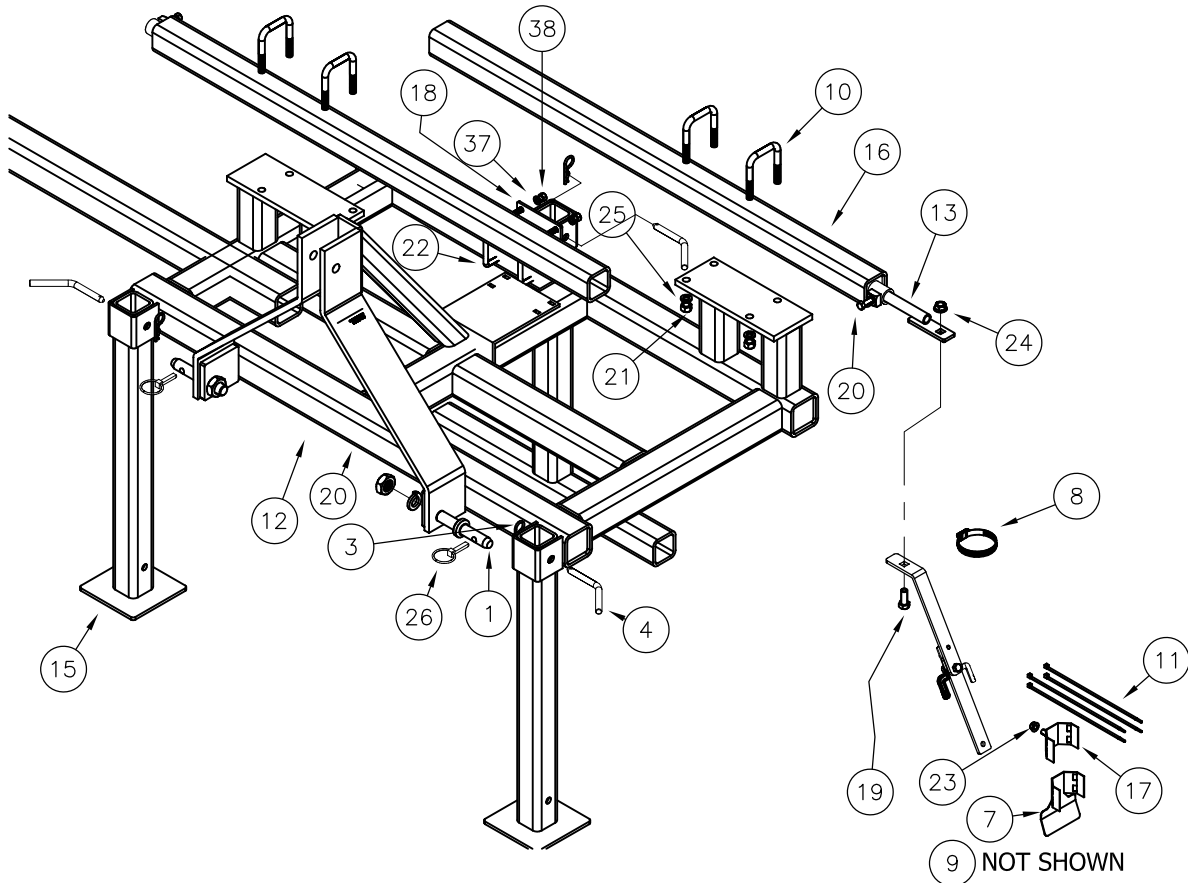
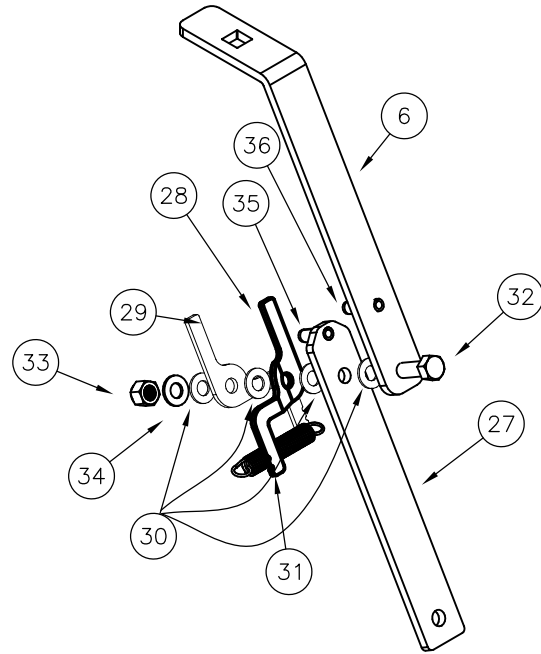
FE HITCH STAND PARTS LIST

ITEM	PART NO	DESCRIPTION	QTY
1	FE80-017	STAND MOUNT	1
2	FE80-018	FE STAND	1
3	AG26-003	STAND PIN	1
4	AE50-156	BRIDGE PIN	1
5	FE50-016	U-BOLT 1/2" X 2-1/2 WD X 3-3/4" LG	1
6	HW20016SSPLC	1/2 HEX NUT, SS	2
7	HW32016SS	1/2 LOCK WASHER, SS	2



ORCHARD FRAME

ITEM	PART NO	DESCRIPTION	QTY
1	AE50-023	LIFT ARM PIN (CAT 1)	2
2	AE50-059	SMAL F.P. DECAL	2
3	AE50-156	BRIDGE PIN	3
4	AG26-003	STAND PIN	3
5	FE27-061	2-1/2 BACK PLATE	1
6	FE27-063	GANG HOSE MOUNT	4
7	FE27-091	HOSE SPLATTER PAD	2
8	FE50-012	HOSE CLAMP, WORM DRIVE	12
9	FE50-013	HOSE, 2" ID X 2-3/8" OD CLEAR PVC X 5 FT LG	2
10	FE50-016	U-BOLT 1/2" X 2-1/2 WD X3-3/4" LG	4
11	FE50-019	NYLON TIES, 11" LG X 3/16" WIDE	8
12	FE80-048	ORCHARD FRAME	1
13	FE80-044	HOSE EXTENDER	2
14	FE80-023	REAR ORCHARD STAND	1
15	FE80-024	FRONT STAND	2
16	FE80-046	BOSE TUBE	2
17	FE80-036	HOSE HOLDER, 2-1/2" OD	2
18	FE80-047	PARKING STAND HOLDER	1
19	HW01016040G5ZPC	1/2 X 1-1/4 HEX CAPSCREW	4
20	HW01020032G5ZPC	5/8 X 1 HEX HEAD CAPSCREW	2
21	HW20016SSPLC	1/2" HEX NUT, SS	8
22	FE50-032	3" WIDE X 3-3/4 LG U-BOLT	2
23	HW22012SSPLC	3/8 HEX SS FLANGE NUT	4
24	HW22016G5ZPC	1/2 HEX FLANGE NUT	4
25	HW32016SS	1/2" LOCK WASHER, SS	8
26	SE50-035	HITCH PIN	2
27	FE27-094	HOSE PIVOT BAR	4
28	FE27-095	RIGHT CENTER ARM	4
29	FE27-096	LEFT CENTER ARM	4
30	FE50-024	BEARING WASHER	16
31	FE50-025	CENTERING SPRING	4
32	HW01012048G5ZPC	3/8 X 1-1/2 HEX HEAD CAPSCREW	4
33	HW24012GBZPC	3/8 STOVER LOCK NUT	4
34	HW30012ZP	3/8 FLAT WASHER	4
35	HW42010032SS	5/16 X 1 SS SPRING PIN	4
36	HW42010040SS	5/16 X 1-1/4 SS SPRING PIN	4
37	HW32012ZP	3/8 LOCK WASHER	2
38	HW20012ZPC	3/8 HEX NUT	2



Verification of Box Output Formulas

Formulas are Based on Serving Two Rows per box

Catch fertilizer out of all outlets on one BOX and weigh with a digital scale to determine accurate rates

Formula's works for both 2 & 4 outlet boxes

Hydraulic Drive Calibration Formula

$$\frac{\text{lbs}}{\text{Min}} = \frac{\left(\frac{\text{lbs}}{\text{Acre}}\right) \times \left(\frac{\text{Miles}}{\text{Hr}}\right) \times (\text{Row Width})}{2970}$$

Use example below:

Row Spacing	30	in
Desired Speed	5	mph
Desired LBs/Acre	500	Lbs

Amount to be caught in 1 Min 25.25 per Box

Ground Drive Calibration Formula

Travel a minimum of 100 ft.: The longer the distance the more accurate the rate

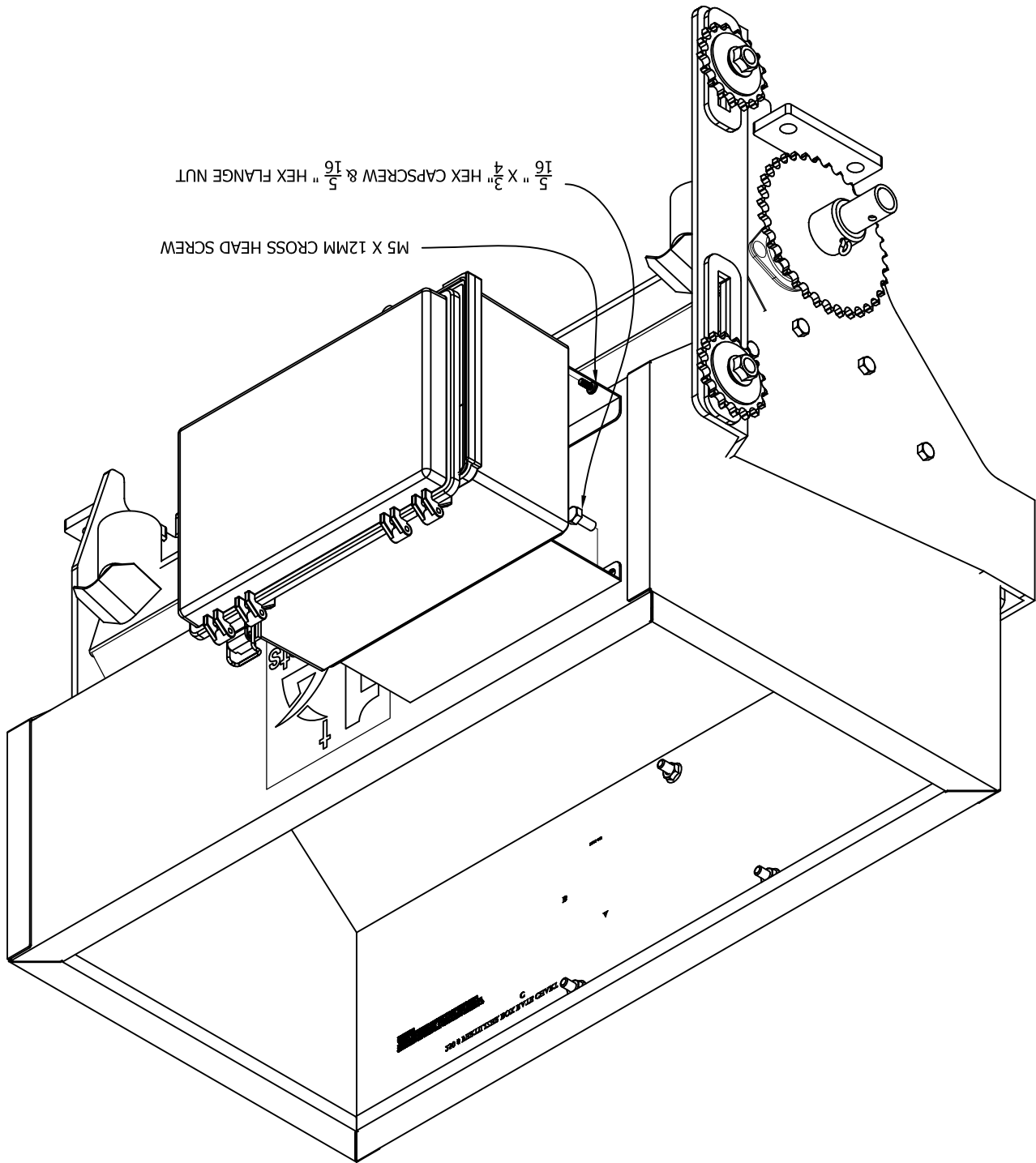
$$\frac{\text{lbs}}{\text{Acre}} = \frac{(\text{Lbs Collected}) \times (261360)}{(\text{Row Width}) \times (\text{Distance Traveled})}$$

Use example below:

Row Spacing	48	in
Distance Traveled for collecting from Box	100	ft
Amount Collected per Distance	19.75	lbs
Actual Output of Box	1075.39	lbs/Acre

ELECTRIC DRIVE ENCLOSURE MOUNT

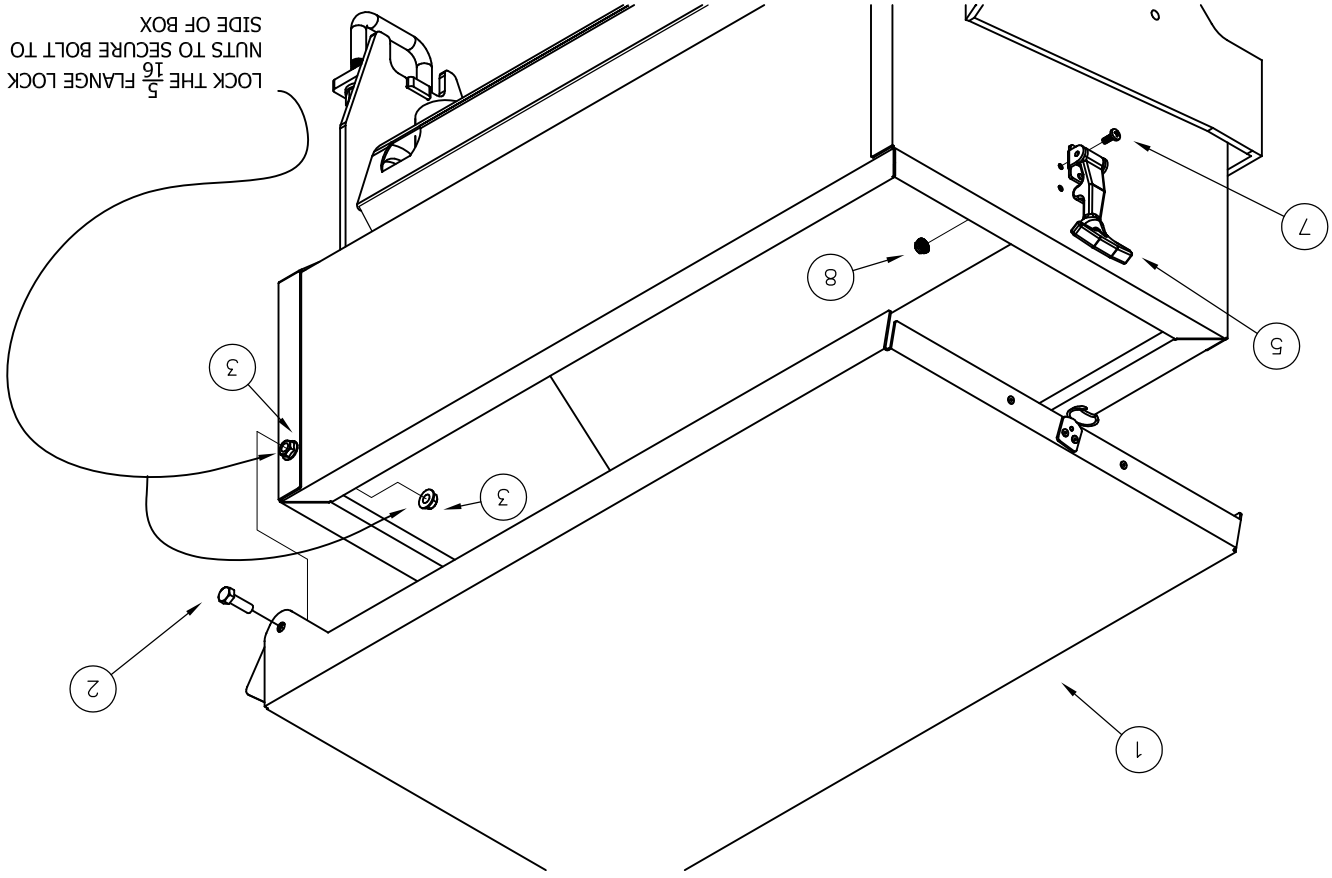
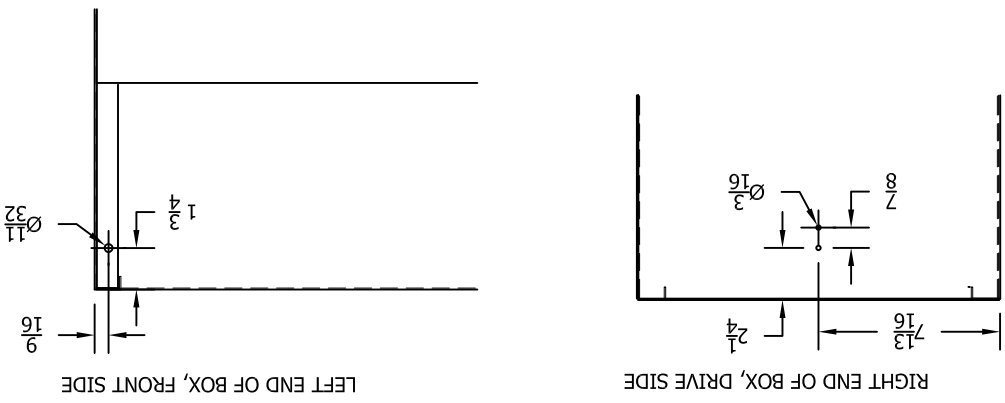
- 1) IF HOLES ARE ALREADY IN THE BOX, THE ENCLOSURE MOUNT CAN BE MOUNTED ON THE FRONT RIGHT OF THE BOX OR THE BACK CENTER. IF THE BOX DOES NOT HAVE HOLES IN IT, USE TEMPLATE PROVIDED FOR PLACEMENT OF HOLES.
- 2) USE THE EXISTING HARDWARE IN THE BOX AND MOUNT ENCLOSURE MOUNT, IF NO HOLES BOX, THE KIT HAS EXTRA $\frac{16}{5}$ " X $\frac{4}{3}$ " SS HEX CAPSCREWS AND $\frac{16}{5}$ " SS HEX FLANGE LOCK NUT.
- 3) ONCE THE MOUNT IS MOUNTED, REMOVE THE SCREWS FROM THE BACK OF THE ENCLOSURE AND ATTACH TO MOUNT.
- 4) PLUG THE MOTOR HARNESS TO BLUE HARNESS. THE OTHER YELLOW PLUG IS USED WHEN CONTROLLING TWO DIFFERENT BOXES WITH ANOTHER CONTROLLER.



FE 250# BOX LID MOUNTING INSTRUCTIONS

ITEM	PART NO	DESCRIPTION	QTY
1	FE 250# BOX LID		1
2	HW01010032SSPLC	5/16 X 1 SS HHCS	2
3	HW22010SSPLC	5/16 HEX FLANGE LOCK NUT, SS	4
5	SB50-053	T-HANDLE DRAW LATCH	1
7	HW16#10016SSPLC	#10 X 1/2 LG CROSS HEAD SCREW SS	2
8	HW22#10SSPLC	#10 HEX FLANGE LOCK NUT, SS	2

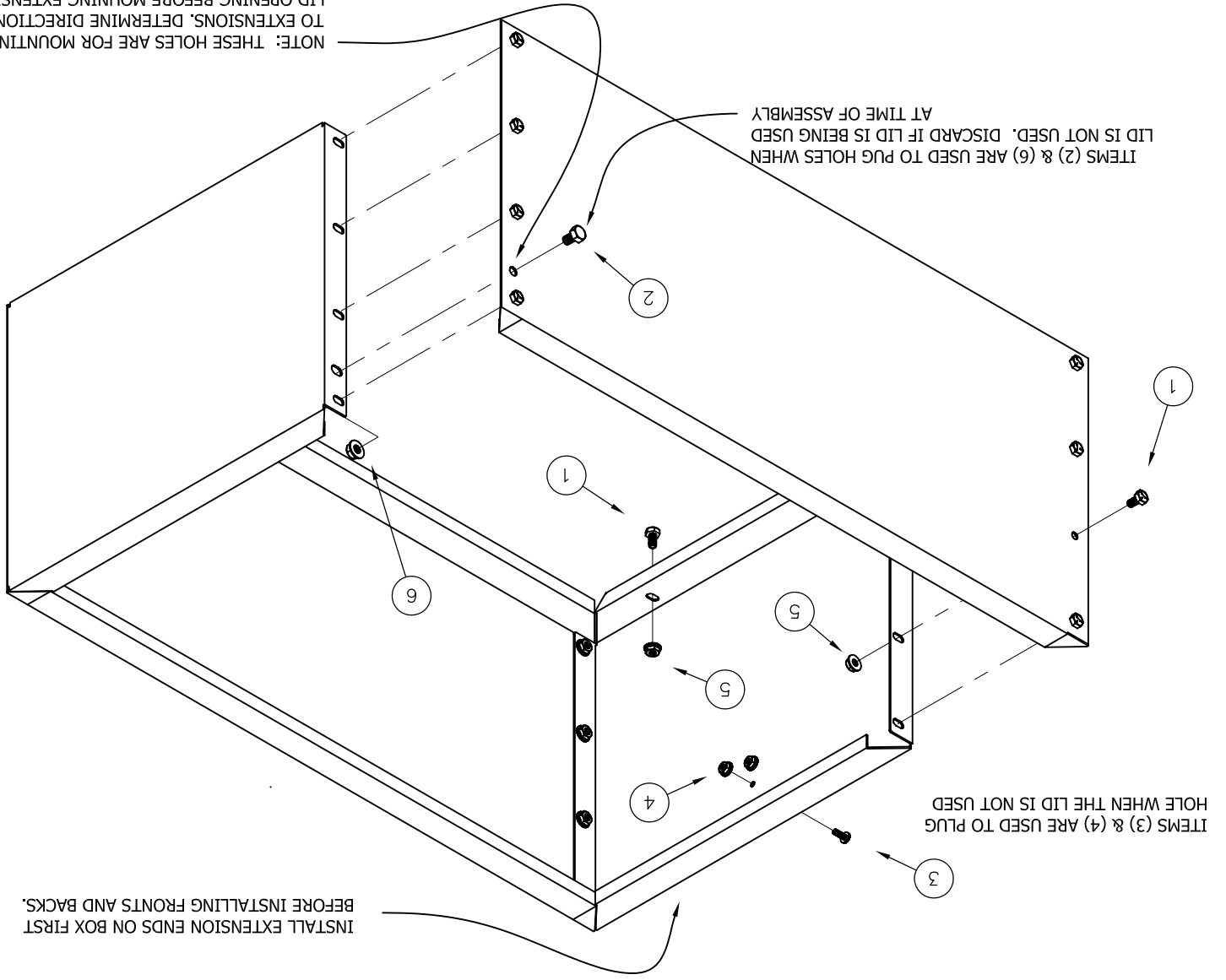
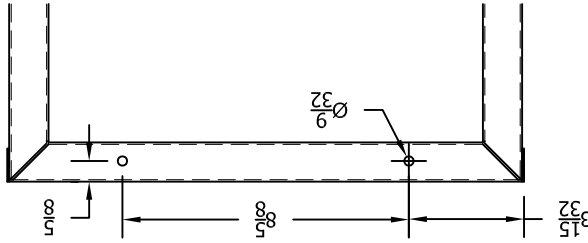
IF BOX HAS NO MOUNTING HOLES FOR THE LID & LATCH, PLEASE VIEW ILLUSTRATION BELOW. IF MOUNTING LID TO A BOX WITH AN ELECTRIC DRIVE INSTALLED, THE HINGE END MUST BE ON THE LEFT END OF BOX (OPPOSITE OF DRIVE END)



FE 250 # BOX EXTENSIONS MOUNTING INSTRUCTIONS

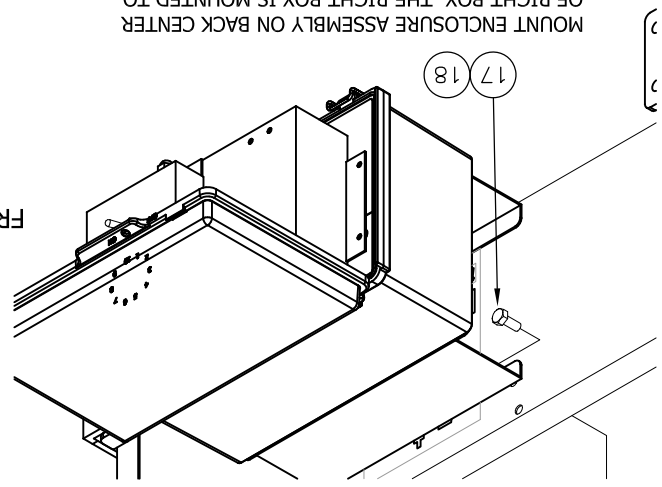
ITEM	PART NO	DESCRIPTION	QTY
1	HW01008016SSPLC	1/4 X 1/2 LG HEX HEAD CAPSCREW SS	20
2	HW01010016SSPLC	5/16 X 1/2 LG HEX HEAD CAPSCREW SS	2
3	HW16#10016SSPLC	#10 X 1/2 LG CROSS HEAD SCREW SS	2
4	HW22#10SSPLC	#10 HEX FLANGE LOCK NUT, SS	2
5	HW22008SSPLC	1/4 HEX FLANGE LOCK NUT, SS	20
6	HW22010SSPLC	5/16 HEX FLANGE LOCK NUT, SS	2
7	FE27-065	FE 250# EXTENSION, FRONT	1
8	FE27-066	FE 250# EXTENSION HINGE END	1
9	FE27-086	FE 250# EXTENSION, BACK	1
10	FE27-087	FE 250# EXTENSION LATCH END	1

IF BOX HAS NO MOUNTING HOLES, REFER TO ILLUSTRATION BELOW FOR HOLE PLACEMENT.

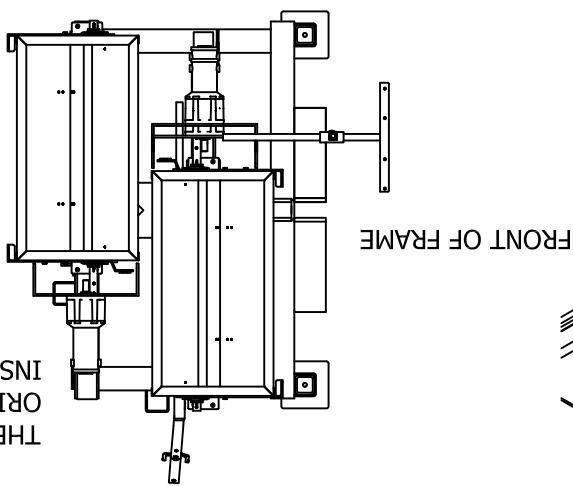


ORCHARD FRAME MOUNTING INSTRUCTIONS

ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
1	FE80-046	BOX TUBE	2	11	HW22012SSPLC	3/8 HEXX SS FLANGE NUT	2
2	FE81-020	SWING ARM ASSEMBLY	2	12	HW22016G5ZPC	1/2 HEX FLANGE NUT	2
3	FE27-091	HOSE SPLATTER PAD	1	13	HW32016SS	1/2" LOCK WASHER, SS	4
4	FE50-012	HOSE CLAMP, WORM DRIVE	2	14	HW22008G5ZPC	1/4" FLANGE HEX NUT	2
5	FE50-013	HOSE, 2" ID X 2-3/8" OD HOSE X 5 FT LG	1	15	HW01008016G5ZPC	1/4" X 1/2" HEX CAPSCREW	2
6	FE50-016	U-BOLT 1/2" X 2-1/2 WD X 3-3/4" LG	4	16	HW03016032G5ZPC	1/2" X 1" CARRIAGE BOLT	2
7	FE50-019	NYLON TIES, 11" LG X 3/16" WIDE	8	17	HW01010024SSPLC	5/16 X 3/4 HEX CAPSCREW SS	3
8	FE80-036	HOSE HOLDER, 2-1/2" OD	2	18	HW22010SSPLC	5/16 FLANGE LOCK NUT SS	3
9	HW01020032G5ZPC	5/8 X 1 HEX HEAD CAPSCREW	2				
10	HW20016SSPLC	1/2" HEX NUT, SS	4				

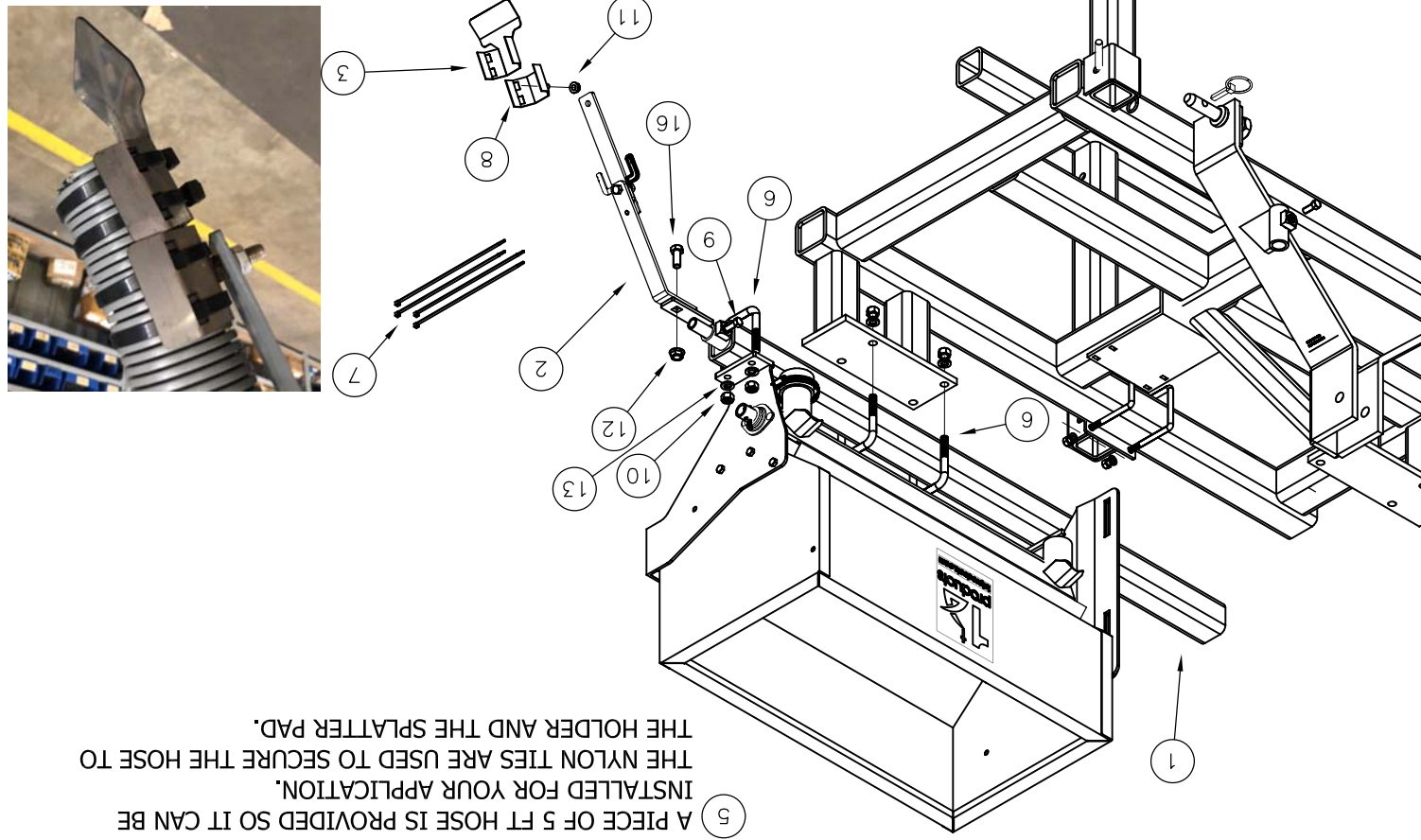


MOUNT ENCLOSURE ASSEMBLY ON BACK CENTER OF RIGHT BOX. THE RIGHT BOX IS MOUNTED TO WHERE REAR OF BOX FACES TO FRONT OF FRAME



THE BOXES SHOULD BE ORIENTED AS SHOWN WHEN INSTALLED

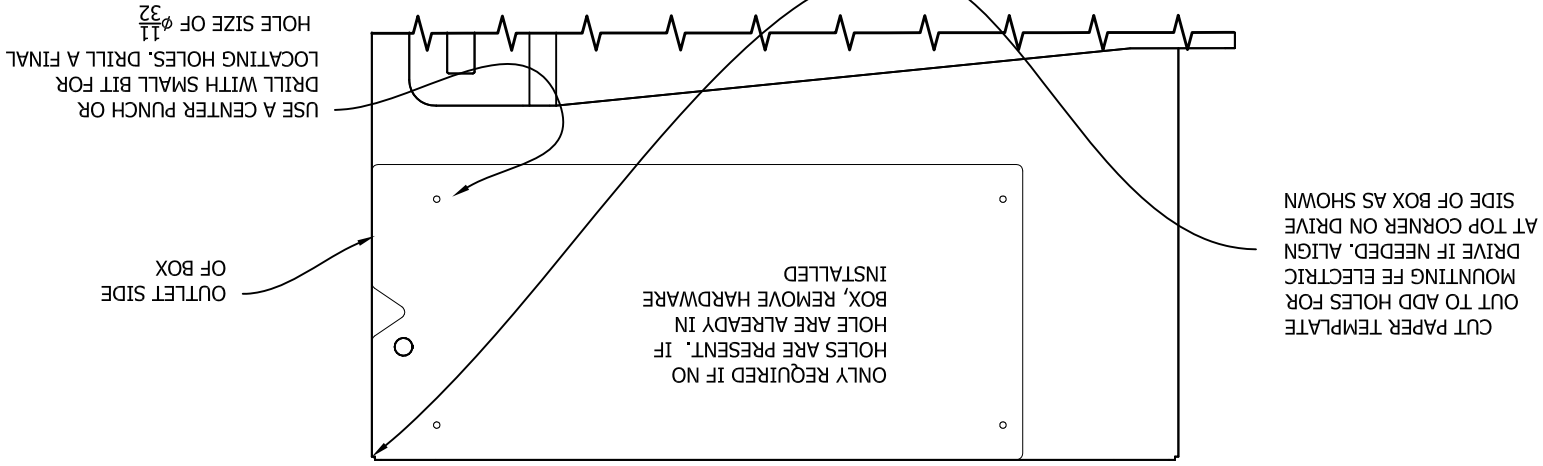
5 A PIECE OF 5 FT HOSE IS PROVIDED SO IT CAN BE INSTALLED FOR YOUR APPLICATION. THE NYLON TIES ARE USED TO SECURE THE HOSE TO THE HOLDER AND THE SPLATTER PAD.



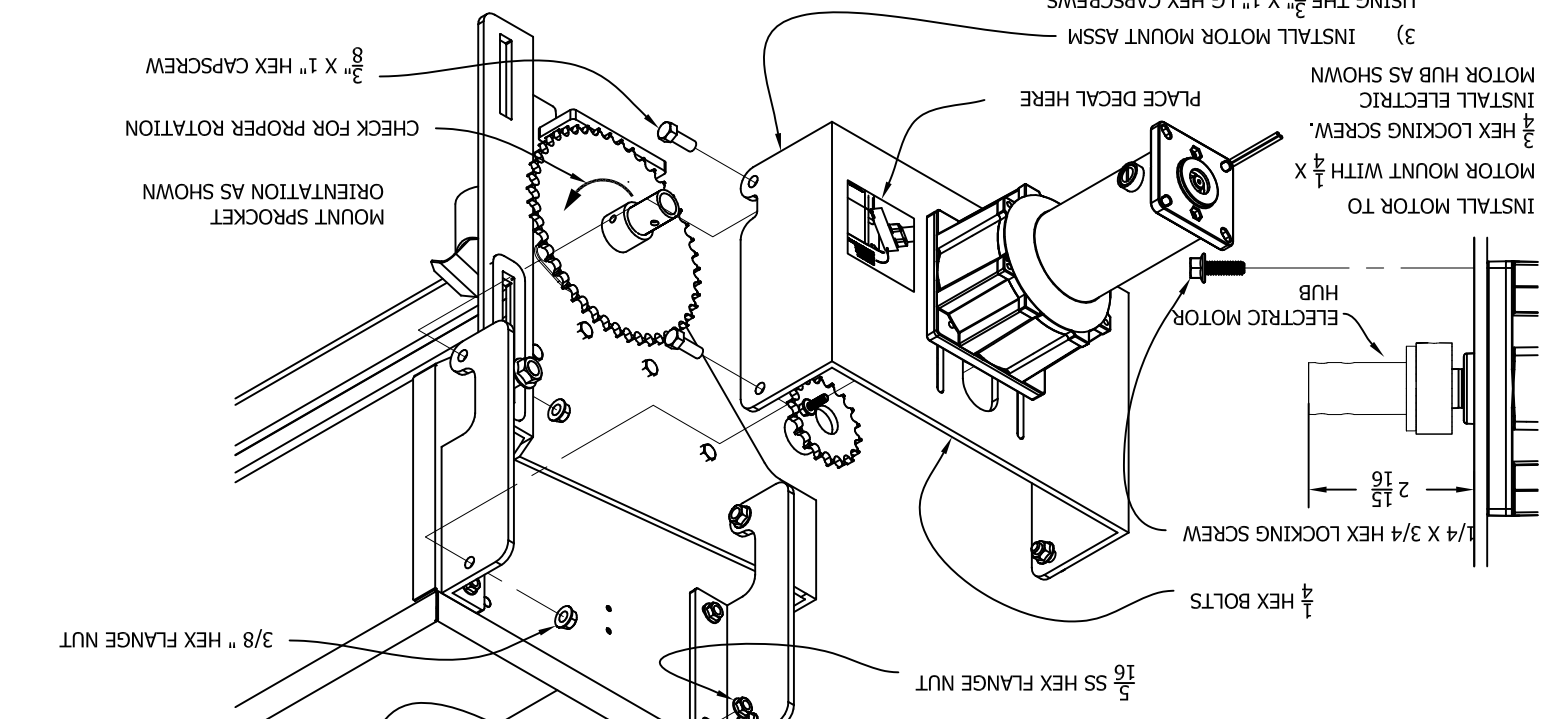
FE ELECTRIC DRIVE MOUNTING INSTRUCTIONS

(250 LB BOX MEASURES 15 5/8" X 28 8/8" ACROSS TOP)

NOTE: IF CONVERTING FROM A GROUND DIVE SYSTEM, REMOVE CHAIN, IDLERS, HARDWARE & AUGER SPROCKETS AND STORE WITH GROUND DRIVE.

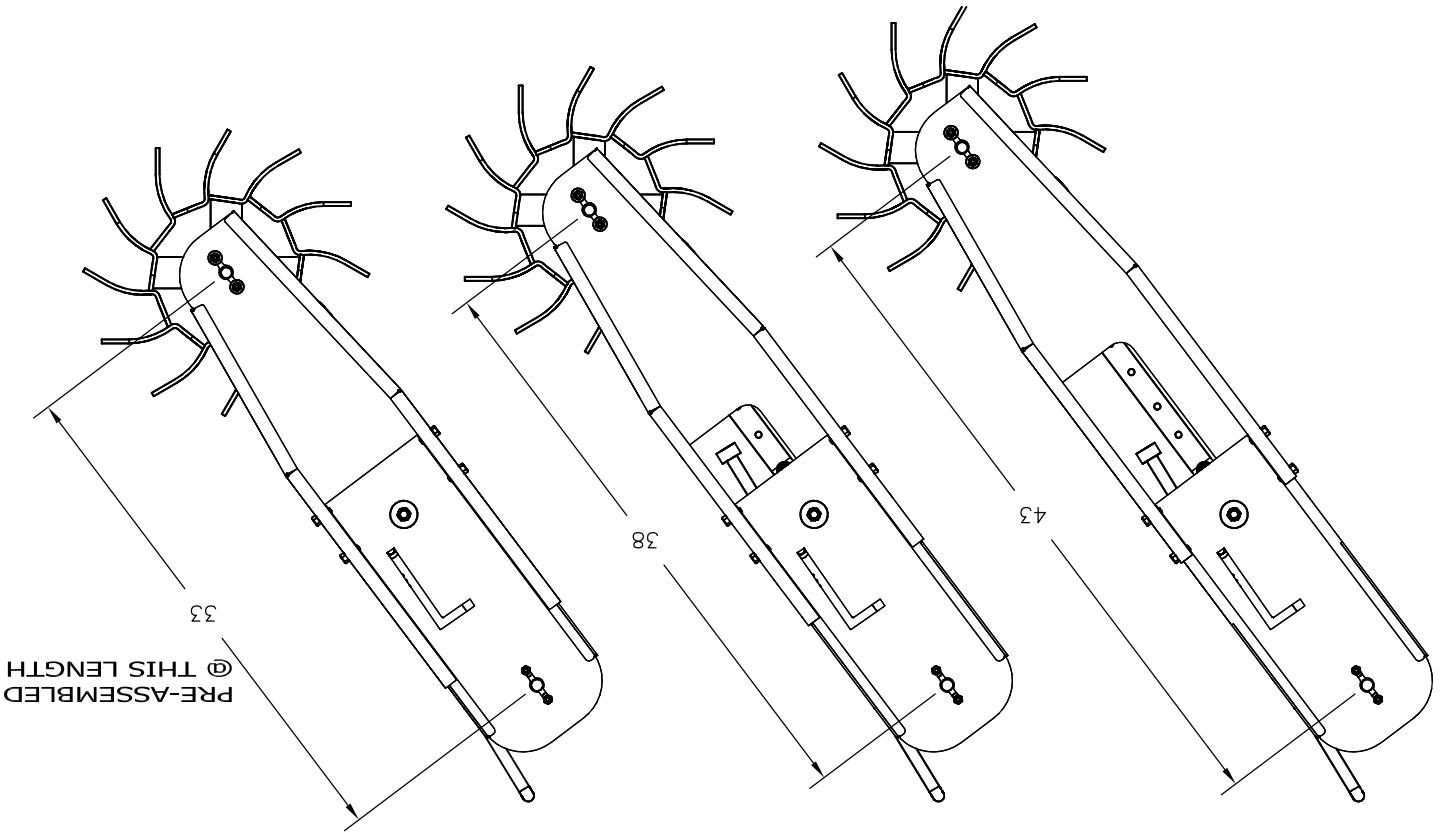


- 1) INSTALL MOTOR MOUNT HINGES AS SHOWN
USING THE $1/5$ " X $3/4$ " LG SS HEX CAPSCREWS
AND $1/5$ " HEX FLANGE NUTS.
DO NOT TIGHTEN.



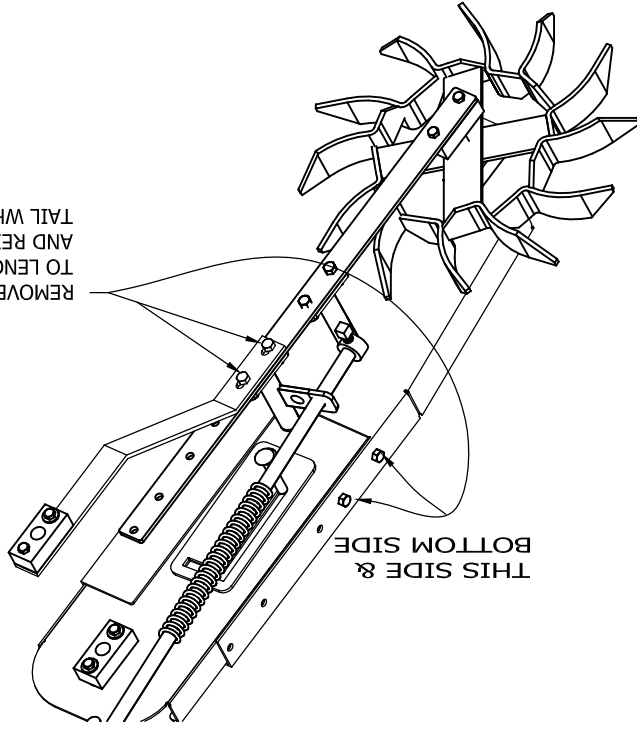
250# FE MOUNTING INSTRUCTIONS GROUND ADJUSTABLE DRIVE

THE GROUND DRIVE SHIELD ASSEMBLY IS MADE TO WHERE THE LENGTH OF THE TAIL WHEEL CAN BE LENGTHEN EITHER 5" & 10" LONGER IF NEEDED.



THE COMPONENT BOX HAS TWO PIECES OF EXTRA CHAIN & TWO EXTRA MASTER LINKS. WHEN EXTENDED THE FIRST 5" ADD ONE PIECE OF CHAIN AND ONE MASTER LINK. WHEN FULLY EXTENDED, ADD OTHER CHAIN AND MASTER LINK.

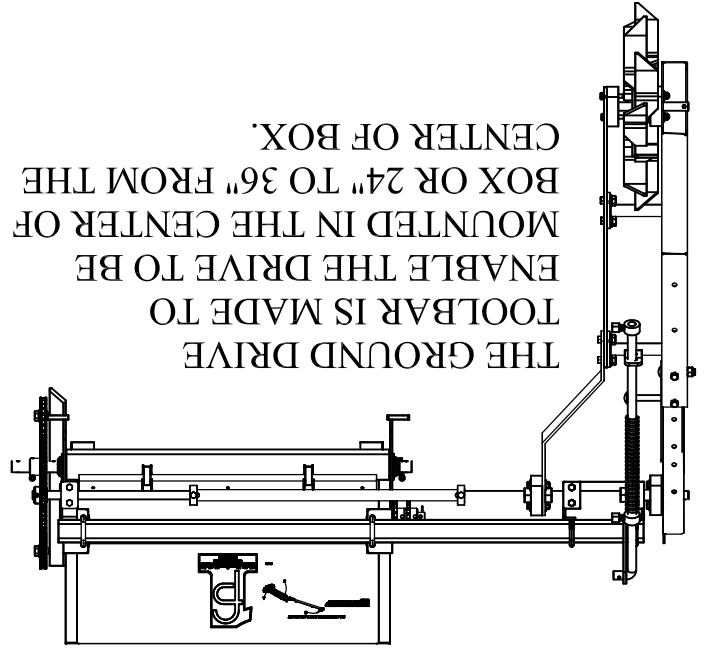
REMOVE THESE BOLTS TO LENGTHEN THE ASSEMBLY AND REINSTALL IN DESIRED TAIL WHEEL LENGTH



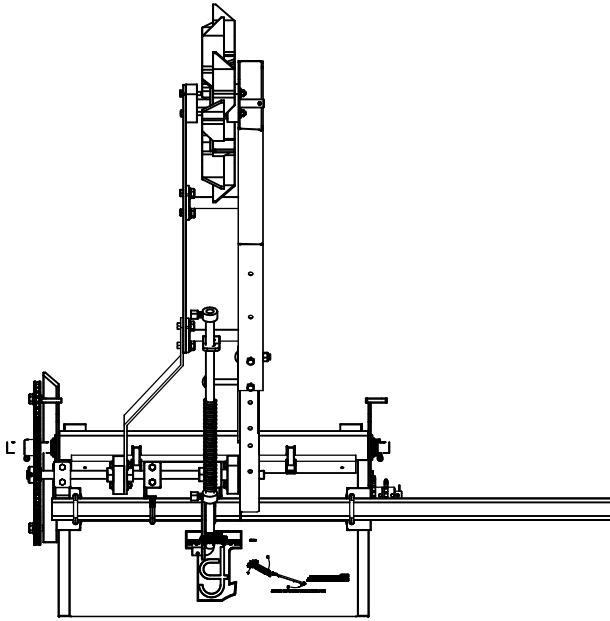
THIS SIDE & BOTTOM SIDE

250# FE MOUNTING INSTRUCTIONS GROUND DRIVE

OFFSET DRIVE MOUNT



CENTER DRIVE MOUNT

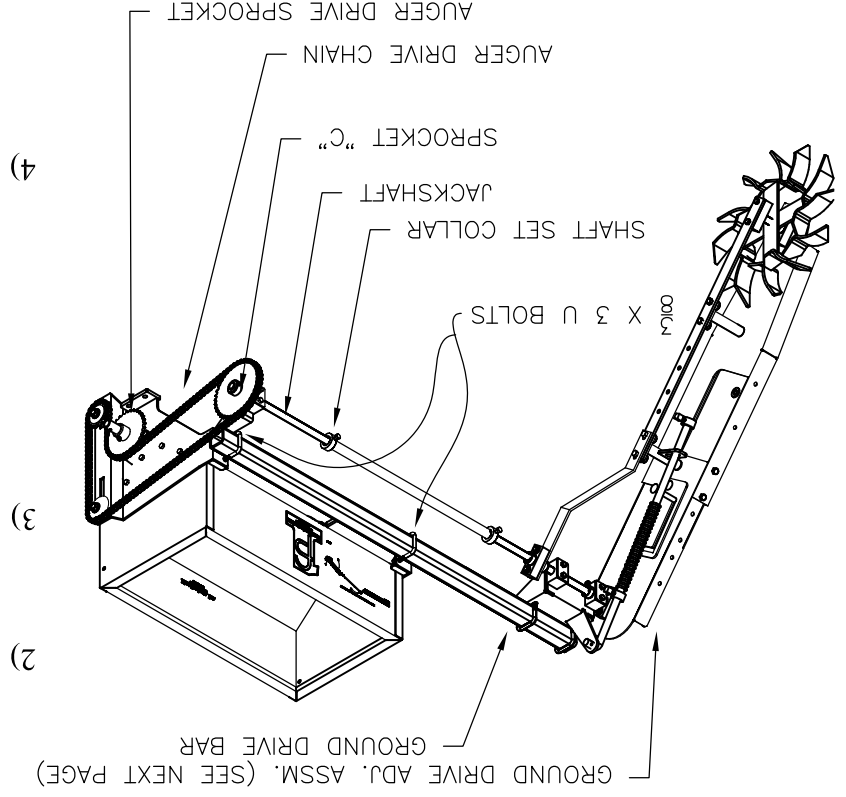


1) SELECT LOCATION OF WHEEL. IF DRIVE WHEEL IS MOUNTED IN THE CENTER, THE JACK SHAFT EXTENSION ASSEMBLY (20) WILL NOT BE REQUIRED.

2) MOUNT GROUND DRIVE TOOLBAR TO BACK OF BOX WITH U-BOLTS AND HARDWARE SUPPLIED.

3) MOUNT GROUND DRIVE ASSEMBLY IN DESIRED LOCATION USING U-BOLTS AND HARDWARE SUPPLIED. LEAVE U-BOLTS LOOSE IF MOUNTING WHEEL IN THE CENTER. THIS ALLOWS SPROCKET "C" TO BE ALIGNED WITH AUGER DRIVE SPROCKET. THERE ARE SLOTS IN THE GROUND DRIVE MOUNT ASSEMBLY TO ALIGN SHAFT IN BEARING ON THE GROUND DRIVE TOOLBAR.

4) INSTALL DESIRED SPROCKET ON JACKSHAFT, ALIGN SPROCKET "C" WITH AUGER DRIVE SPROCKET. TIGHTEN U-BOLTS LEFT LOOSE IN PREVIOUS STEP IF MOUNTING DRIVE IN CENTER. IF MOUNTING OFFSET, THE SPROCKETS CAN BE ALIGNED WITH THE JACK SHAFT EXTENSION ASSEMBLY BY LOOSENING THE SHAFT SET COLLAR. INSTALL AUGER DRIVE CHAIN AS SHOWN.

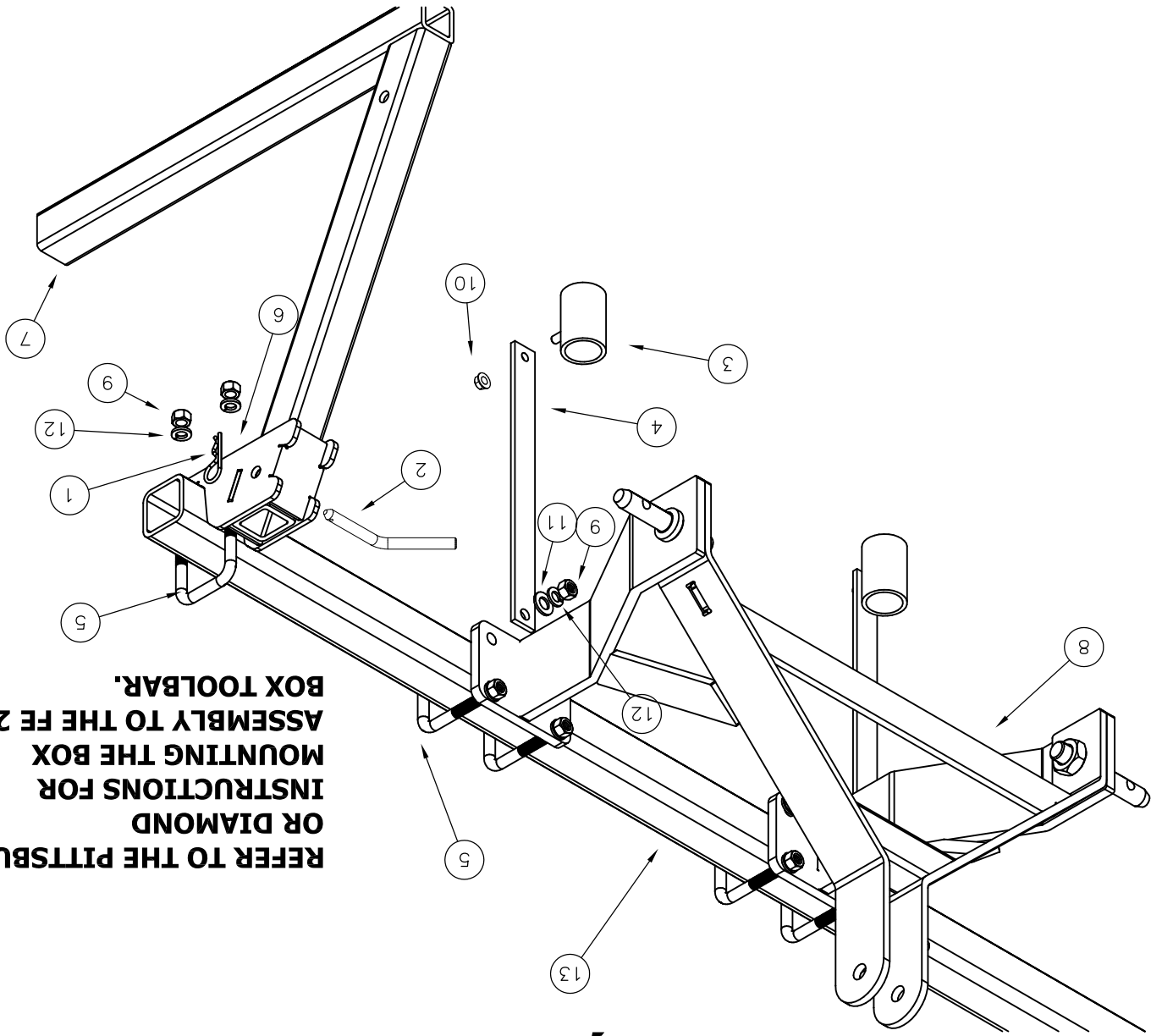


FE HITCH AND STAND ASSEMBLY

ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
1	AE50-156	BRIDGE PIN	2	8	FE80-019	FE HITCH	1
2	AG26-003	STAND PIN	2	9	HW20016SSPLC	1/2 HEX NUT, SS	12
3	FB80-025	GANG HOSE PIPE	2	10	HW22012SSPLC	3/8" HEX FLANGE NUT STAINLESS	2
4	FE23-007	FE HITCH HOSE HOLDERS	2	11	HW30016SS	1/2" WASHER, SS	2
5	FE50-016	U-BOLT 1/2" X 2-1/2 WD X3-3/4" LG	6	12	HW32016SS	1/2 LOCK WASHER, SS	12
6	FE80-017	STAND MOUNT	2	13	FE24-032	250# BOX TOOLBAR MOUNT	1
7	FE80-018	FE STAND	2				

- 1) ASSEMBLE THE STAND MOUNT (6) ON EACH OF THE FE 250# BOX TOOLBAR USING THE $\frac{1}{2}$ X $3\frac{3}{4}$ LONG SQ U BOLTS (5) AND THE $\frac{1}{2}$ " STAINLESS STEEL LOCK WASHERS (12) AND NUTS(9).
- 2) INSTALL THE FE STANDS (7) INTO THE STAND MOUNTS (6) AND SECURE WITH STAND PIN (2) AND BRIDGE PIN (1).
- 3) ATTACH THE HITCH (8) AS SHOWN TO THE 250# BOX TOOLBAR USING THE $\frac{1}{2}$ / x $3\frac{3}{4}$ SQ U BOLTS (5) AND $\frac{1}{2}$ STAINLESS STEEL NUTS (9) AND LOCK WASHERS (12). ALSO SECURE THE FE HITCH HOSE HOLDER(4) ON THE U-BOLT AS SHOWN USING THE $\frac{1}{2}$ " STAINLESS STEEL FLAT WASHER (11).

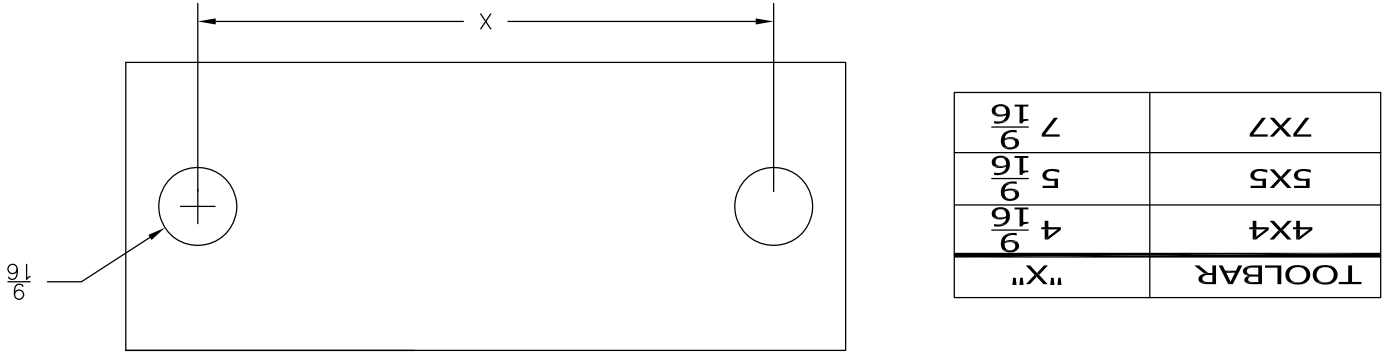
REFER TO THE PITTSBURGH OR DIAMOND INSTRUCTIONS FOR MOUNTING THE BOX ASSEMBLY TO THE FE 250# BOX TOOLBAR.



250# FE MOUNTING INSTRUCTIONS FLAT TOOLBAR, 4x4, 5x5, AND 7x7

ADDITIONAL HARDWARE REQUIRED:
 (4) $\frac{1}{2}$ HEX NUTS
 (4) $\frac{1}{2}$ LOCK WASHERS
 (4) $\frac{1}{2}$ FLAT WASHERS

BACKING PLATE HOLE SPACING (BACKING PLATE NOT PROVIDED)



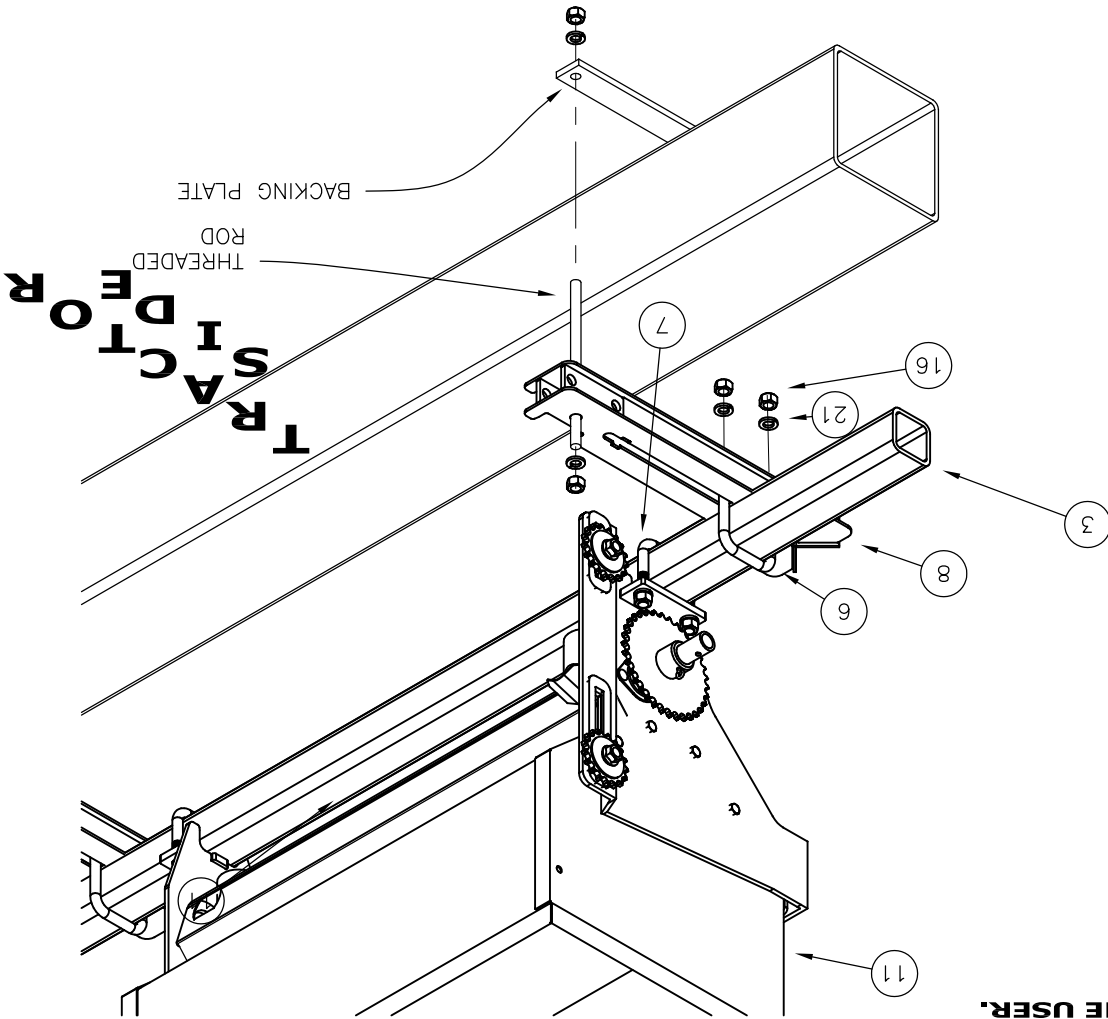
THREADED ROD LENGTHS ($\frac{1}{2}$ " THREADED RODS ARE NOT PROVIDED)

TOOLBAR	"TR LENGTH"
4X4	BP + 7
5X5	BP + 8
7X7	BP + 10

"BP" IS BACKING PLATE THICKNESS

250# FE MOUNTING INSTRUCTIONS FLAT TOOLBAR, 4x4, 5x5, AND 7x7

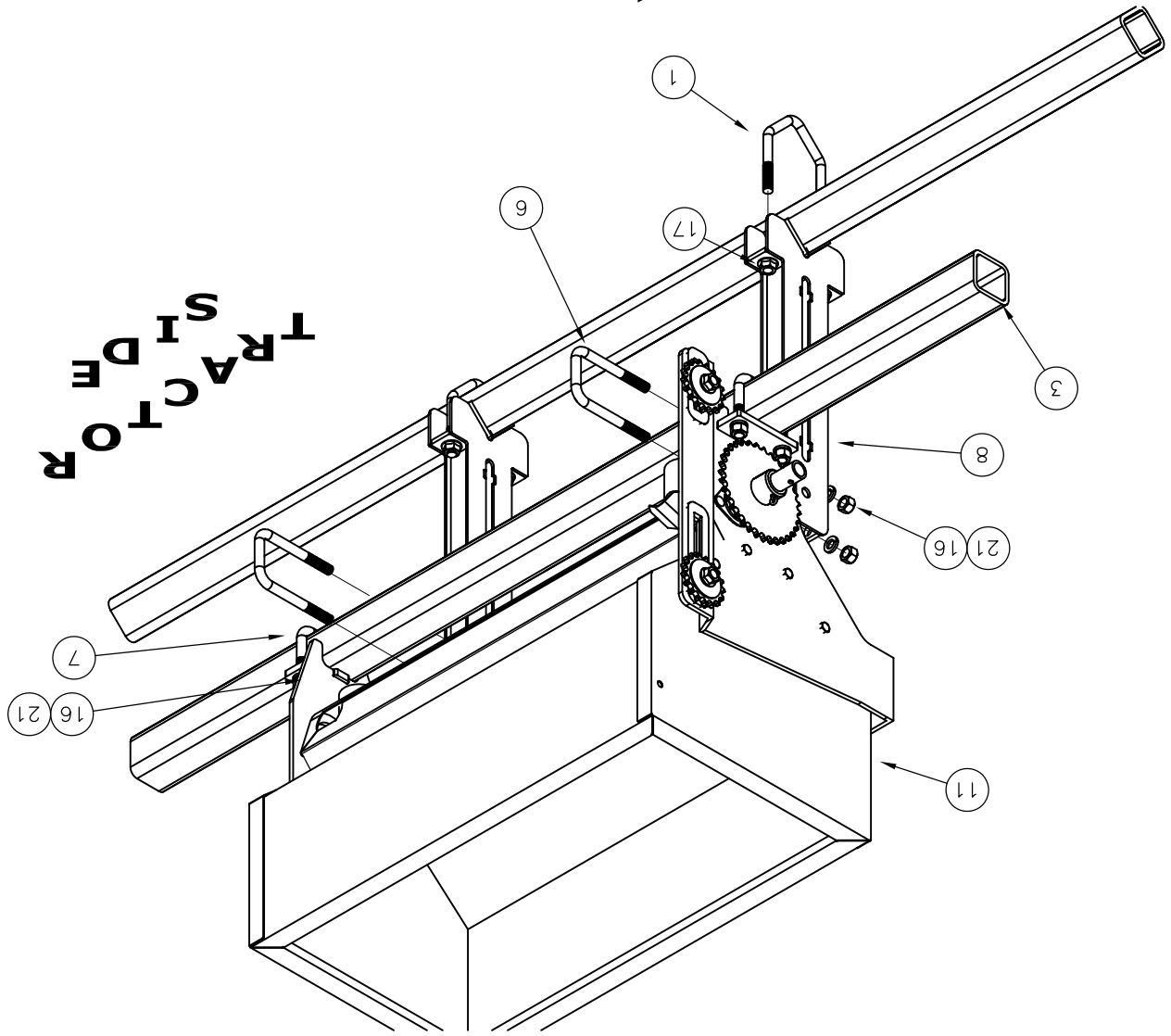
NOTE: KIT NOT DESIGNED FOR FLAT TOOLBAR MOUNTING. IT CAN BE MOUNTED ON A TOOLBAR, BUT THE BACKING PLATE, THREADED RODS, AND SOME HARDWARE WILL HAVE TO BE PROVIDED BY THE USER.



- 1) MOUNT THE DIAMOND RISER (8) TO THE TOOLBAR AS SHOWN. VIEW NEXT PAGE FOR BACKING PLATE AND HARDWARE REQUIREMENTS FOR FLAT TOOLBAR MOUNTING.
- 2) PLACE AND CENTER 250# BOX TOOLBAR (3) AND SECURE WITH THE $\frac{7}{8}$ " x 5" LONG SQ U BOLTS (6) AND $\frac{7}{8}$ " STAINLESS STEEL LOCK WASHER (21) AND (16) NUT.
- 3) PLACE AND CENTER THE 250# BOX ASSEMBLY (11) AND SECURE WITH THE $\frac{7}{8}$ " x $3\frac{1}{4}$ " LONG SQ U BOLT (7) AND $\frac{7}{8}$ " STAINLESS STEEL LOCK WASHER (21) AND NUT (16).

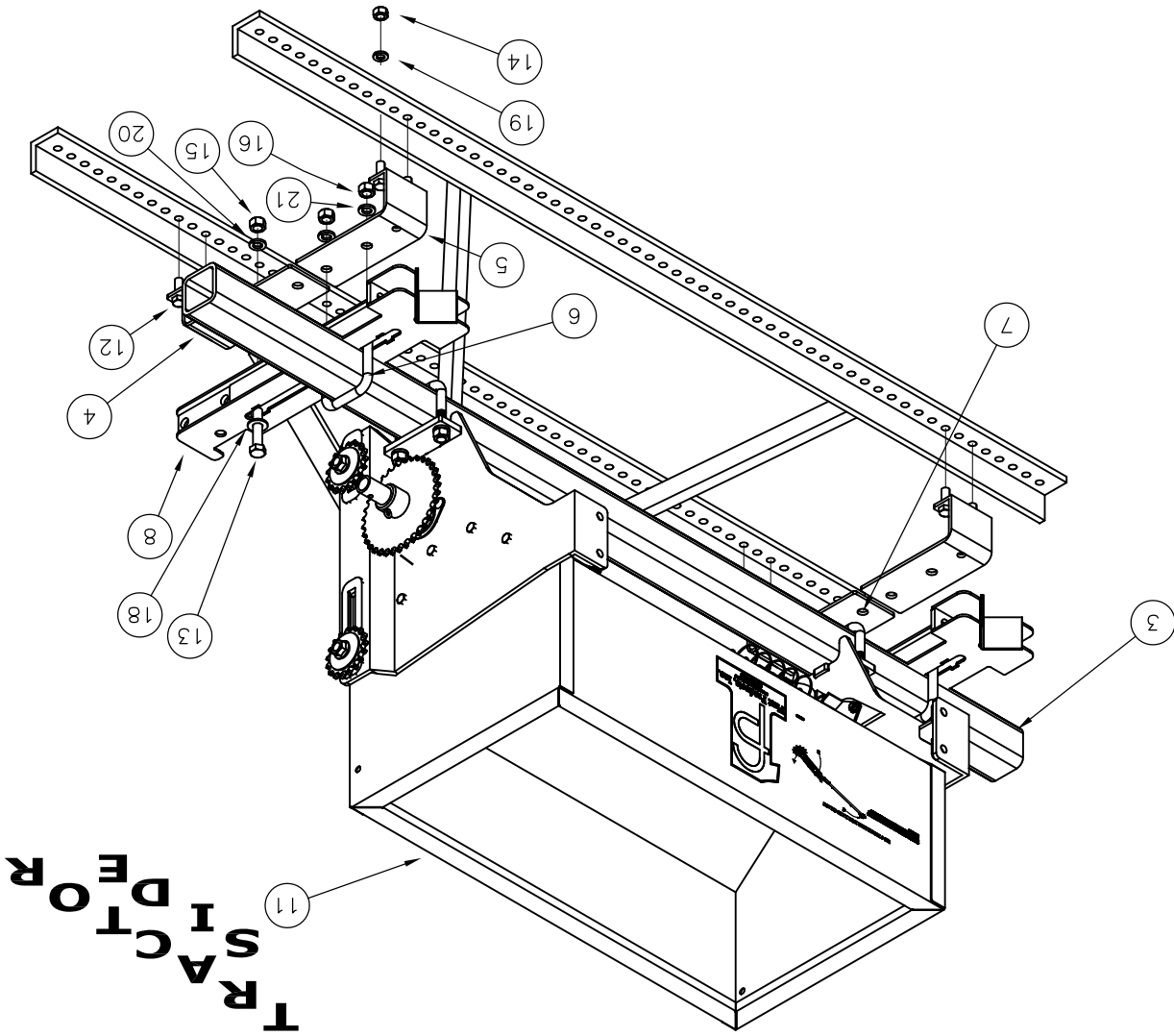
250# FE MOUNTING INSTRUCTIONS

2 1/2" DIAMOND TOOLBAR



- 1) LOCATE & FASTEN THE TWO 2 1/2" DIAMOND RISER (8) TO TOOLBAR WITH THE V-BOLTS (1) AND 1/2" FLANGE LOCK NUTS (17) . THE RISERS CAN BE LOCATED IN VARIOUS LOCATIONS TO CLEAR EXISTING PIECES ON THE TOOLBAR. THEY ARE SHOWN BEING MOUNTED UNDERNEATH BOX.
- 2) POSITION AND CENTER THE 250# BOX MOUNT TOOLBAR (3) INTO 2 1/2" DIAMOND RISERS USING THE 5 LONG U BOLTS (7) AND 1/2" STAINLESS STEEL HEX NUTS (16)AND 1/2" STAINLESS STEEL LOCK WASHERS (21).
- 3) MOUNT AND CENTER THE 250# BOX ASSEMBLY(11) ONTO THE 250# BOX MOUNT TOOLBAR (3). SECURE WITH 1/2" x 3 3/4" LONG U-BOLTS (6) 1/2" STAINLESS STEEL HEX NUTS (16)AND 1/2" STAINLESS STEEL LOCK WASHERS (21).

250# FE MOUNTING INSTRUCTIONS PITTSBURGH FRAME



1) LOCATE & FASTEN THE FRONT (4) & REAR (5) PITTSBURGH MOUNTS TO FRAME WITH $\frac{1}{16}$ X $1 \frac{1}{4}$ HEX CAPSCREW (12), $\frac{1}{16}$ LOCK WASHER (19), AND $\frac{1}{16}$ HEX NUT (14). THE MOUNTS CAN BE LOCATED IN VARIOUS LOCATIONS TO CLEAR EXISTING PIECES ON FRAME.

2) POSITION 2-1/2 DIAMOND RISER (9) ON PITTSBURGH MOUNTS AS SHOWN. INSERT THE $\frac{1}{2}$ X $2 \frac{1}{2}$ HEX CAPSCREW (13) AND $\frac{1}{2}$ FLAT WASHER (18) THRU THE 2-1/2 DIAMOND RISER AND FRONT PITTSBURGH MOUNT AND SECURE WITH $\frac{1}{2}$ HEX NUT (15) & $\frac{1}{2}$ LOCK WASHER (20). (DO NOT TIGHTEN). PLACE AND CENTER THE 250# BOX MOUNT TOOLBAR (3) ONTO RISER SECURING WITH THE $\frac{1}{2}$ X 5 LONG BOLTS (6) AND $\frac{1}{2}$ STAINLESS STEEL HEX NUT (16) & $\frac{1}{2}$ STAINLESS STEEL LOCK WASHER (21). TIGHTEN HARDWARE.

3) MOUNT AND CENTER THE 250# BOX ASSEMBLY (11) ONTO THE 250# BOX MOUNT TOOLBAR (3). SECURE WITH $\frac{1}{2}$ X $3 \frac{3}{4}$ LONG U-BOLTS (6) AND $\frac{1}{2}$ STAINLESS STEEL HEX NUT (16) & $\frac{1}{2}$ STAINLESS STEEL LOCK WASHER (21).

250# FE MOUNTING INSTRUCTIONS INVENTORY CHECK LIST

ITEM	PART NO	DESCRIPTION	QTY
1	FA50-038	1/2 X 3 3/4 X 5 1/8 V BOLT	2
2	FA82-013	HOSE BUNDLE (PAIR)	1
3	FE24-032	250# BOX MOUNT TOOLBAR	1
4	FE27-080	PITTSBURGH MOUNT, ECON, FRONT	2
5	FE27-081	PITTSBURGH MOUNT, ECON, REAR	2
6	FE50-014	U-BOLT 1/2" X 2-1/2 WD X 5" LG	2
7	FE50-016	U-BOLT 1/2" X 2-1/2 WD X 3-3/4" LG	2
8	FE80-035	2-1/2 DIAMOND RISER	2
9	FE81-004	GROUND DRIVE BAR ASSEMBLY	1
10	FE81-012	GROUND DRIVE ADJ. ASSM.	1
11	FE81-013	250# BOX ASSEMBLY	1
12	HW01014040G2ZPC	7/16 X 1 1/4 HEX CAPSCREW	8
13	HW01016080G5ZPC	1/2 X 2 1/2 HEX CAPSCREW GD 5	2
14	HW20014G5ZPC	7/16 HEX NUT	8
15	HW20016G5ZPC	1/2 HEX NUT	2
16	HW20016SSPLC	1/2 HEX NUT, SS	8
17	HW22016G5ZPC	1/2 FLANGE LOCK NUT	4
18	HW31016TVAZP	1/2 PLATWASHER SAE	2
19	HW32014G5ZP	7/16 LOCKWASHER	8
20	HW32016G5ZP	1/2 LOCK WASHER	2
21	HW32016SS	1/2 LOCK WASHER, SS	8
22	FE50-005	AUGER DRIVE CHAIN	2
23	FE81-008	JACKSHAFT EXTENSION	1
24	FE50-017	GROUND DRIVE CHAIN, 5" EXT	2
25	FE50-018	#40 IR MASTER LINK	2

NOTE: THERE WILL BE SOME PARTS & HARDWARE LEFT OVER FOR OTHER MOUNTING OPTIONS.

MOUNTING INSTRUCTIONS



FERTILIZER BOX MODEL FE

Serial Number 1335 - _____

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