

**SMITHCO**

Wayne, Pennsylvania 19087

# **PARTS MANUAL**

**E-STAR**

**MODEL # 8430**

**For Customer Service  
Call: (888) 422-5173**

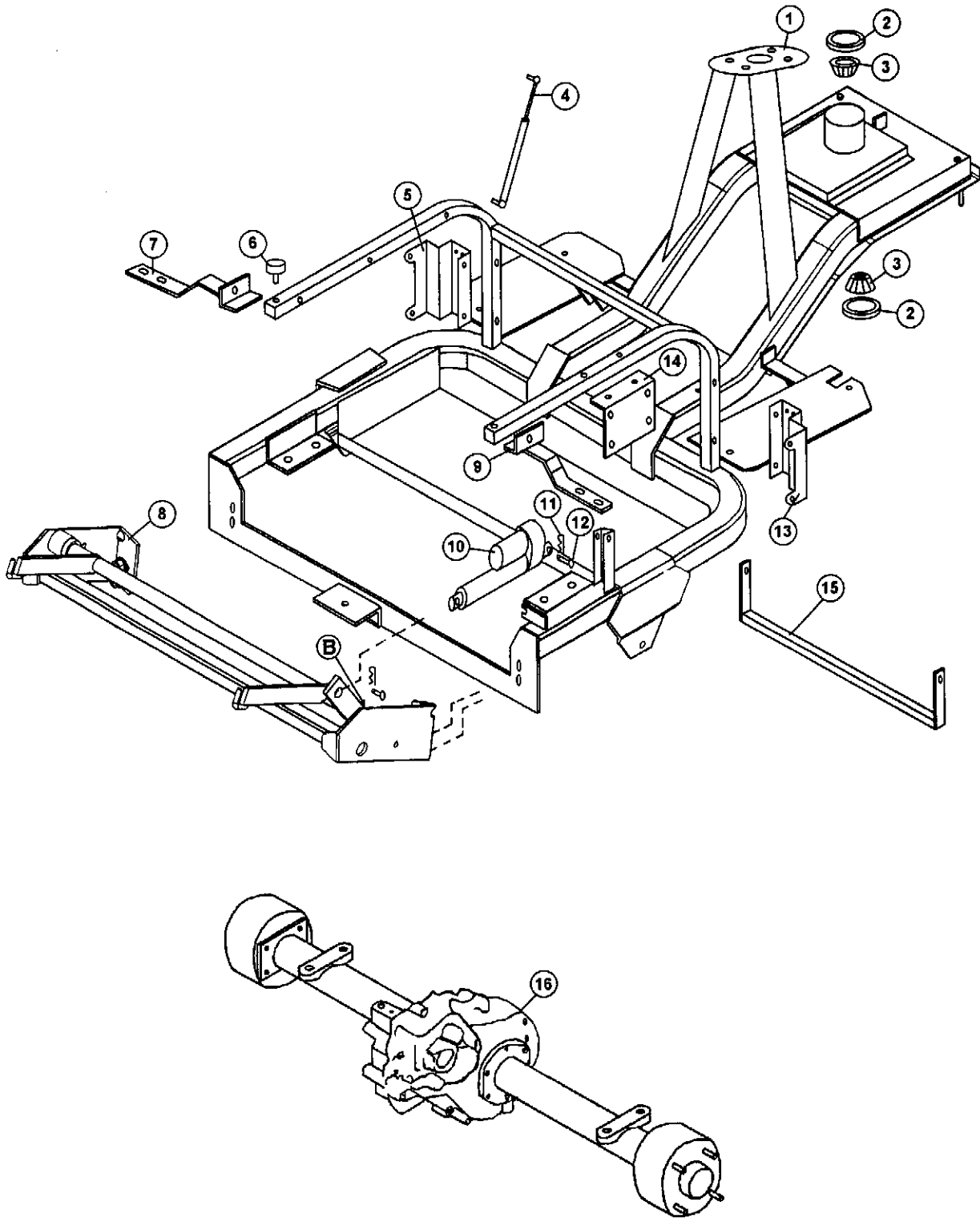
**Starting Serial # EM640**

**July, 2005**

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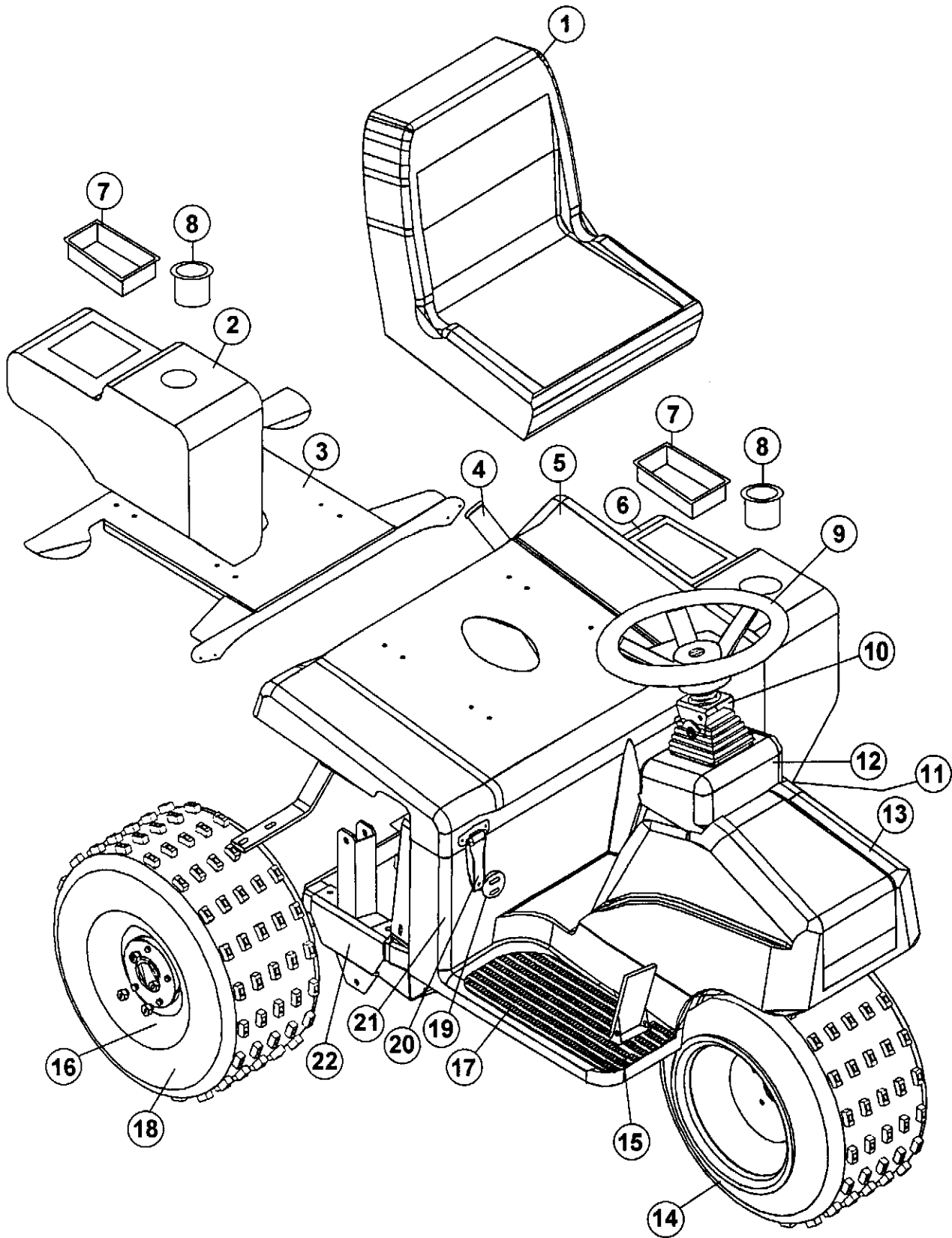
# 8430 MAIN FRAME DRAWING



## 8430 MAIN FRAME PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	843-107	Main Frame	1
2	932-022	Seal	2
3	932-023	Bearing	2
4	41-128	Shock	1
5	943-114	Front Tank Mount Left	1
6	730-038	Rubber Mount	2
7	943-123	Rear Tank Mount Left	1
8	943-140	Rake Lift Assy.	1
9	843-112	Rear Tank Mount Right	1
10	832-001	Actuator	1
11	400-307	Hair Pin	2
12	40-396	1/2" Pin	2
13	943-112	Front Tank Mount Right	1
14	843-109	Controller Plate	1
15	843-111	Battery Hold Down	1
16	843-108	Axle	1

8430 BODY ASSEMBLY DRAWING

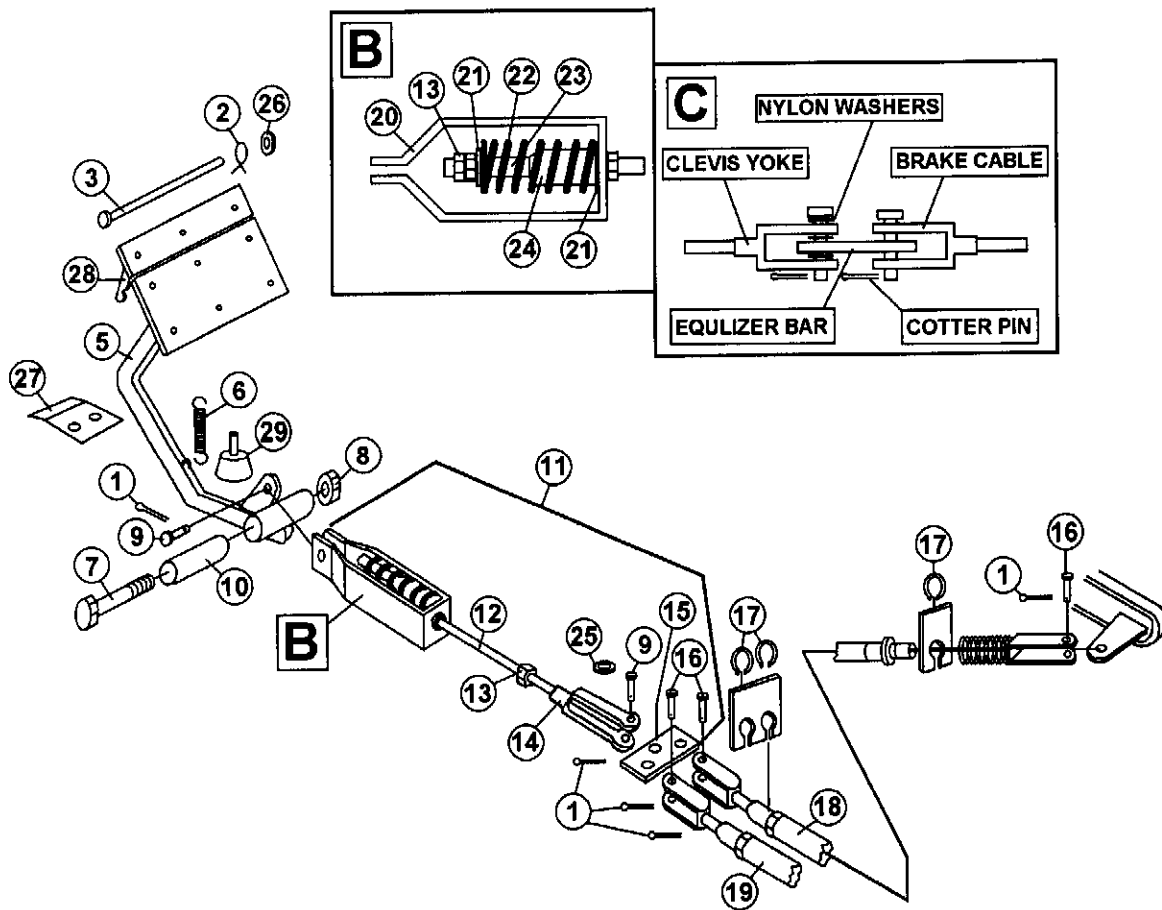


## 8430 BODY ASSEMBLY PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	832-123	Low-Back "SMITHCO" Seat	1
2	943-110-1	Gas Tank	1
3	943-105	Seat Plate	1
4	943-132	Rake Holder	1
5	843-009	Rear Cover	1
6	943-111	Tool Box	1
7	943-117	Tray	1
8	943-116	Cup Holder	1
9	730-046	Steering Wheel	1
10	832-028	Tilt Steering & Boot	1
11	943-129	Left Floor Mat	1
12	943-108	Console	1
13	943-107	Nose Cone	1
14	932-020	Wheel & Tire	3
15	730-022	Foot Pedal Assembly	1
16	2026	Wheel	3
17	943-128	Right Floor Mat	1
18	932-020-1	Tire	3
19	732-017	Charger Receptacle	1
20	730-058	Hinge	2
21	943-106	Floorboard	1
22	843-107	Frame	1

# 8430 BRAKE LINKAGE DRAWING

## BRAKE LINKAGE

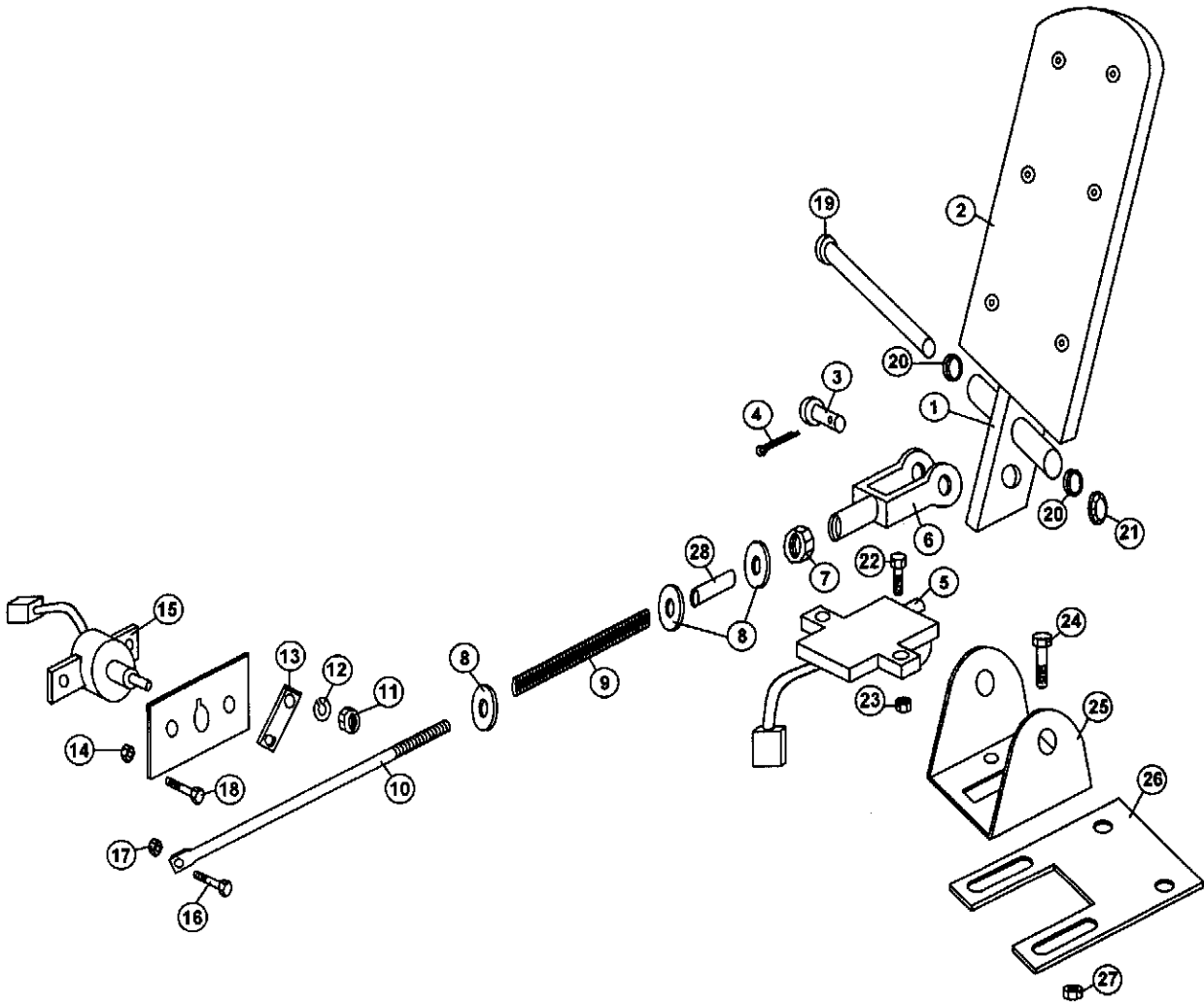


## 8430 BRAKE LINKAGE PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	720-079	Cotter Pin 3/32" x 3/4"	5
2	732-019	Hill Brake Spring	2
3	732-021	Pin	1
4	732-024	Brake Pad Set	1
5	932-037	Lower Brake Pad	1
6	40-199	Idler Spring	1
7	400-029	1/2" - 13 x 3 " Bolt	1
8	400-112	1/2" - 13 Locknut 2-Way	1
9	720-078	Clevis Pin 5/16" x 1"	2
10	720-009	Bronze Bushing 1/2" ID x 11/16 OD x 2	1
11	732-020	Compensating Link Assembly	1
12	732-047	Adjusting Rod	1
13	400-118	5/16" Hex Nut x 24 Thread	3
14	11-101-1	Linkage Yoke 24 Thread	1
15	732-052	Equalizer Bar	1
16	720-087	Clevis Pin 5/16" x 3/4"	3
17	730-240	Brake Cable Retaining Clip 1/2"	4
18	843-120	Brake Cable Right (Long)	1
19	730-029	Brake Cable Left (Short)	1
20	732-048	Brake Yoke Housing	1
21	400-202	5/16" Flat Washer	2
22	732-050	Compression Spring	1
23	732-049	Brake Tube	1
24	732-051	Nylon Bushing	1
25	732-053	Nylon Washer	3
26	732-022	Push Nut	1
27	932-017	Latch Bracket	1
28	932-036	Upper Brake Pad	1
29	732-008	Rubber Stud Bumper	1



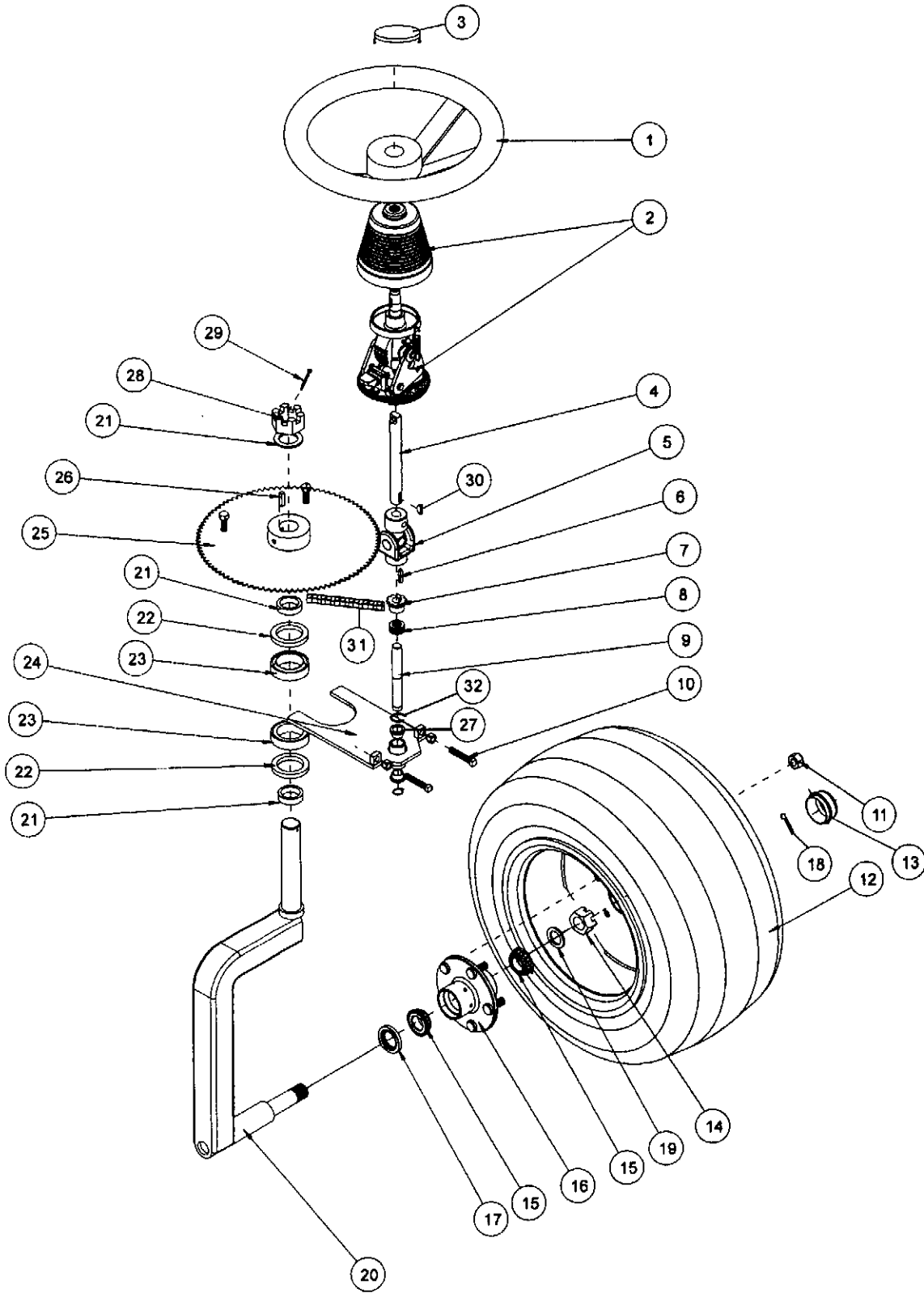
**8430 ACCELERATOR PEDAL ASSEMBLY DRAWING**



## 8430 ACCELERATOR PEDAL ASSEMBLY PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	730-022	Foot Pedal	1
2	832-015	Foot Pedal Pad Kit	1
3	720-078	Clevis Pin 5/16" x 1"	1
4	720-079	Cotter Pin 3/32" x 3/4"	1
5	832-509	Stop Switch	1
6	11-101-A	Linkage Yoke	1
7	400-118	5/16" - 24 Hex Nut	1
8	400-202	Flat Washer 5/16"	4
9	832-520	Throttle Spring	1
10	832-021	Foot Pedal Rod	1
11	400-094	#6 Metric Nut	1
12	400-208	1/4" Lock Washer	1
13	832-519	Speed Sensor Arm	1
14	400-249	Nut	2
15	832-518	Speed Sensor Switch	1
16	400-311	Bolt 10/32" x 1/2"	1
17	400-249	Locknut 10/32"	1
18	400-251	Bolt	2
19	730-022-3	Pin	1
20	730-022-4	Plastic Bearing	2
21	730-022-5	Push Nut	1
22	400-228	Bolt	2
23	400-234	Nut	2
24	400-244	Bolt	2
25	730-022-2	Foot Pedal Bracket	1
26	843-110	Stop Switch Plate	1
27	400-101	Nut	2
28	843-121	Spacer	1

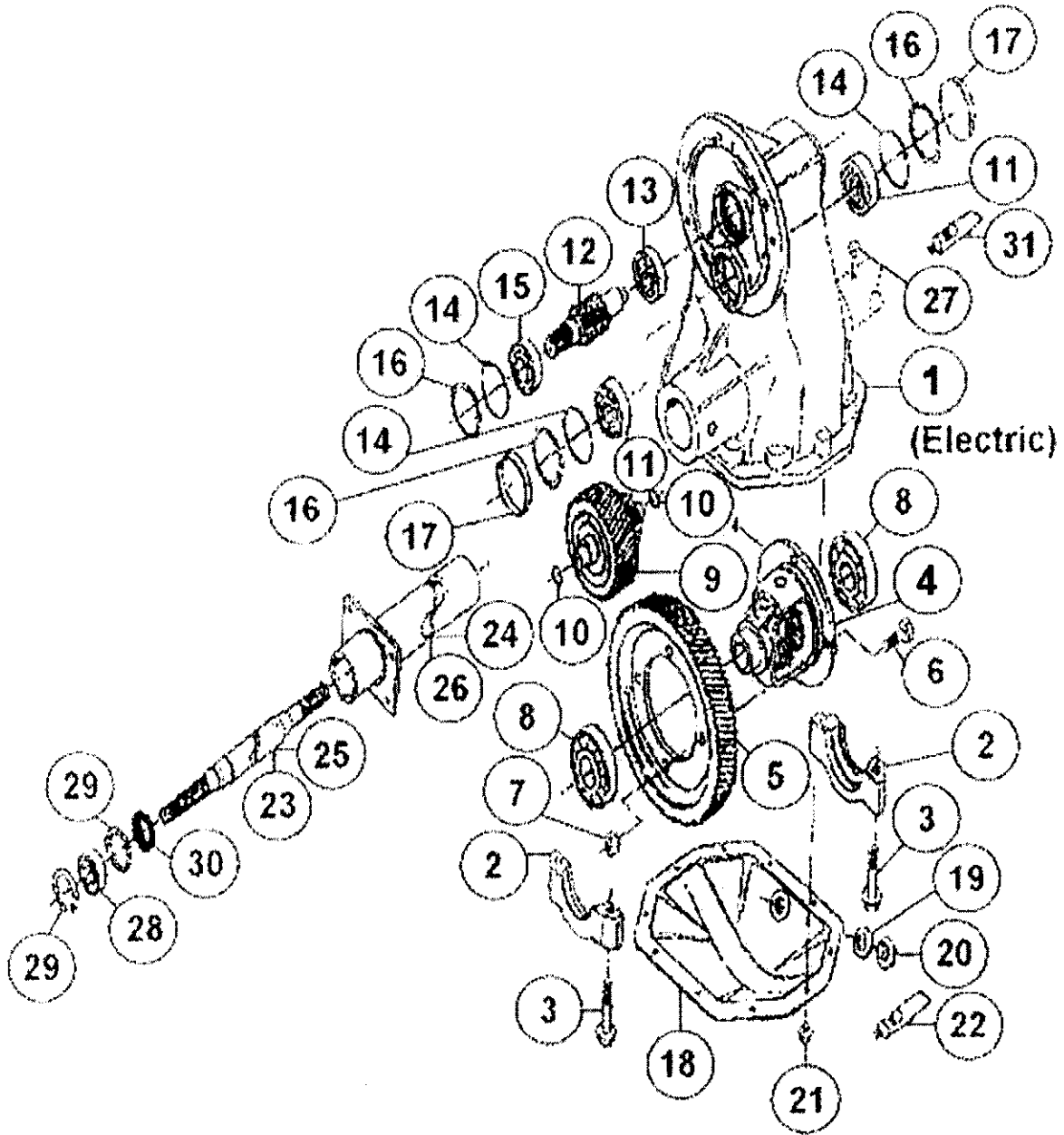
# 8430 STEERING GROUP ASSEMBLY DRAWING



## 8430 STEERING GROUP ASSEMBLY PARTS LIST

REF.#	PART#	DESCRIPTION	QTY.
1	720-046	Steering Wheel	1
2	832-028	Tilt Steering	1
3	720-046-1	Steering Wheel Cap	1
4	943-021	Upper Steering Shaft	1
5	932-035	U-Joint	1
6	1088	3/16" x 1" Key	2
7	932-030	Steering Sprocket 10T	1
8	40-166	Machine Bushing 5/8 x 14GA	3
9	932-034	Bottom Steering Shaft	1
10	932-067	Adjuster Bolt	2
11	1187	Lug Nut	4
12	932-020	Wheel & Tire	1
13	2024	Grease Cap	1
14	709-126	Spindle Nut	1
15	2028	Tapered Bearing	2
16	2027-1	Hub Only	1
17	709-171	Seal	1
18	720-043	Cotter Pin 1/8" x 1 1/2"	1
19	2013	Spindle Washer	1
20	932-021	Front Fork	1
21	932-024	Spacer	3
22	932-022	Seal	2
23	932-023	Bearing	2
24	932-043	Chain Adjuster Bracket	1
25	932-031	Steering Sprocket 96T	1
26	1517	1/4" Key	1
27	932-051	Oillite Bushing 5/8" ID x 3/4" OD	2
28	932-042	Thick Slotted Hex Nut 1 1/4 - 12	1
29	720-043	Cotter Pin 1/8" x 1 1/2"	1
30	740-023	Woodruff Key 3/16" x 3/4"	1
31	932-032	Steering Chain #35 x 100 Pitch	1
32	932-050	Retainer Ring 9/16 External	2

# REAR AXLE ASSEMBLY

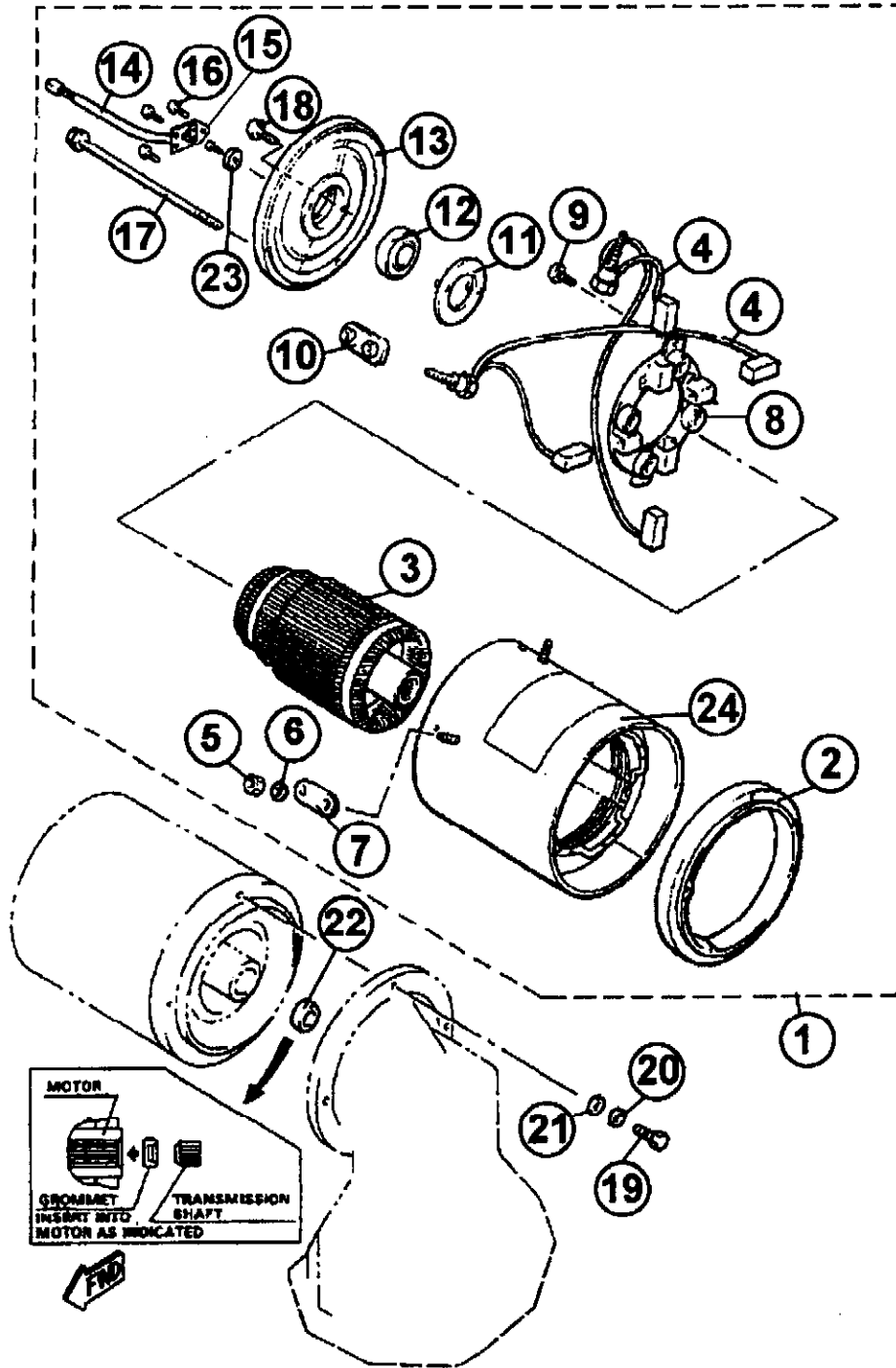


## 8430 REAR AXLE PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
	732-007	Complete Axle	1
1	730-075	Carrier Sub-Assembly	1
2	730-076	Bearing Cap	2
3	730-077	Bolt-Bearing cap	4
4	730-078	Differential Case Assembly	1
*5		Gear Output	
6	730-080	Cap Screw	4
7	730-081	Nut	4
8	730-082	Bearing-Ball	2
*9		Intermediate Shaft & Gear Assy.	
10	730-083	O-Ring	2
11	730-084	Bearing-Ball	2
*12		Input Shaft	
13	730-086	Bearing-Ball	1
14	730-087	O-Ring	3
15	730-088	Bearing-Ball	1
16	730-089	Snap Ring	3
17	730-090	Plug, Cup	2
18	730-091	Cover Carrier	1
19	730-092	Washer-Flat	1
20	730-093	Plug-Fill	1
21	730-094	Screw-Cover Plate	10
22	730-095	Sealant-Cover Plate	1
23	730-096	Shaft, Axle Left Hand	1
24	730-097	Tube-Assembly Left Hand	1
25	730-098	Shaft, Axle Right Hand	1
26	730-099	Tube Assembly Right Hand	1
27	730-100	Vent	1
28	730-101	Bearing	2
29	730-102	Snap Ring	4
30	730-103	Seal Oil	2
31	730-104	Sealant Anaerobic	1
N. I.	730-063	Wheel & Tire Rear	2

- Note: Order as part #732-006 Gear Kit.

# 8430 MOTOR ASSEMBLY DRAWING

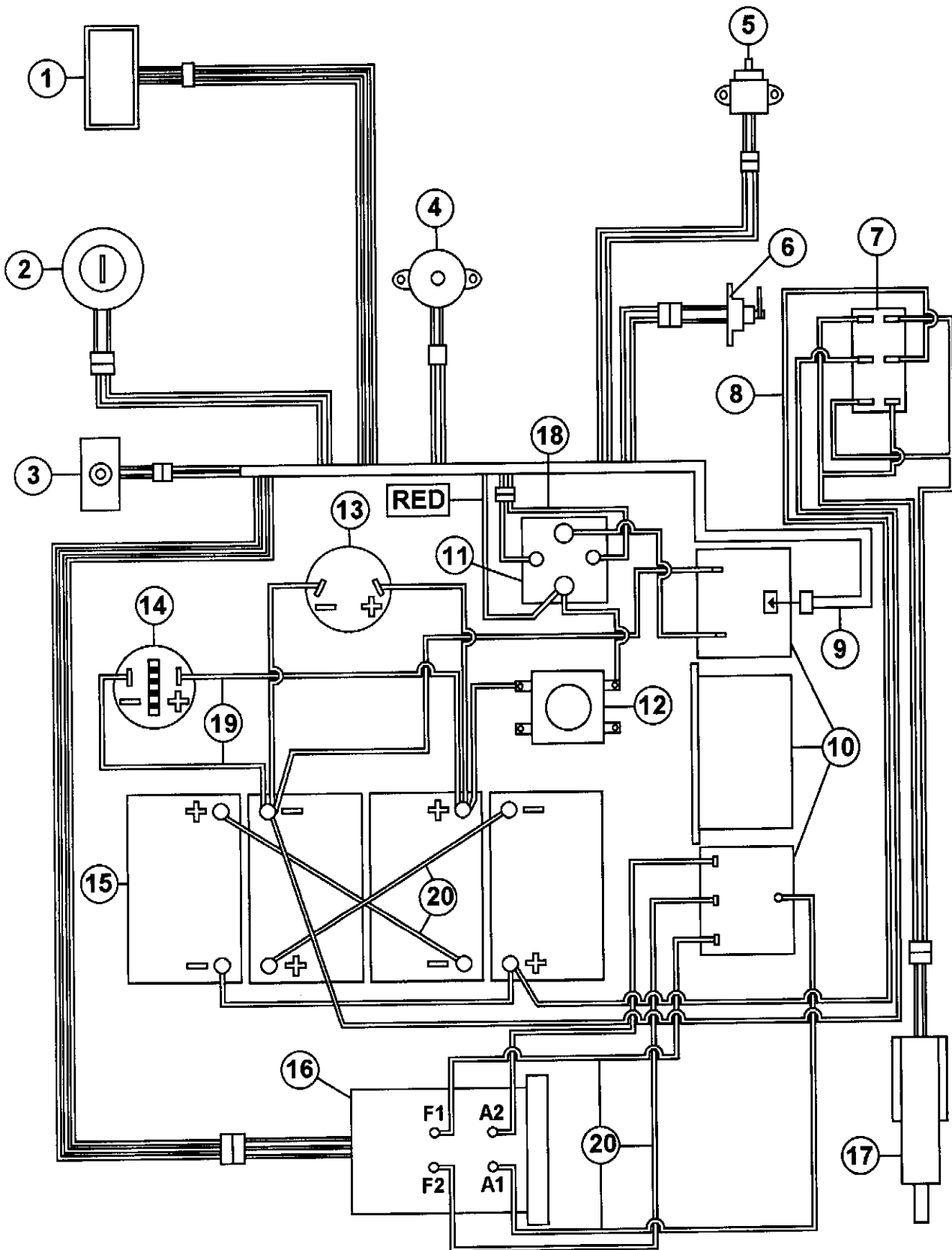


## 8430 MOTOR ASSEMBLY PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	832-508	Electric Motor 48v	1
2	832-550	Front Bracket	1
3	832-551	Armature Assembly	1
4	832-552	Field Coil Assembly	1
5	832-553	Special Nut	4
6	832-554	Plain Washer	4
7	832-555	#1 Washer Plate	2
8	832-556	Brush Holder	1
9	832-557	Brush Holder Screw	2
10	832-558	#2 Washer Plate	2
11	832-559	Retainer	1
12	832-560	Bearing	1
13	832-561	Electric Bracket	1
14	832-562	Pick-up Assembly	1
15	832-563	Cover	1
16	832-564	#1 Screw	3
17	832-565	#2 Bolt	4
18	862-566	Screw	2
19	400-043	1/4" x 3/4" Bolt	3
20	400-208	1/4" Lock washer	3
21	400-216	#12 Flat washer	3
22	832-567	Grommet	1
23	832-568	Washer	1
24	832-569	Motor Casing	1



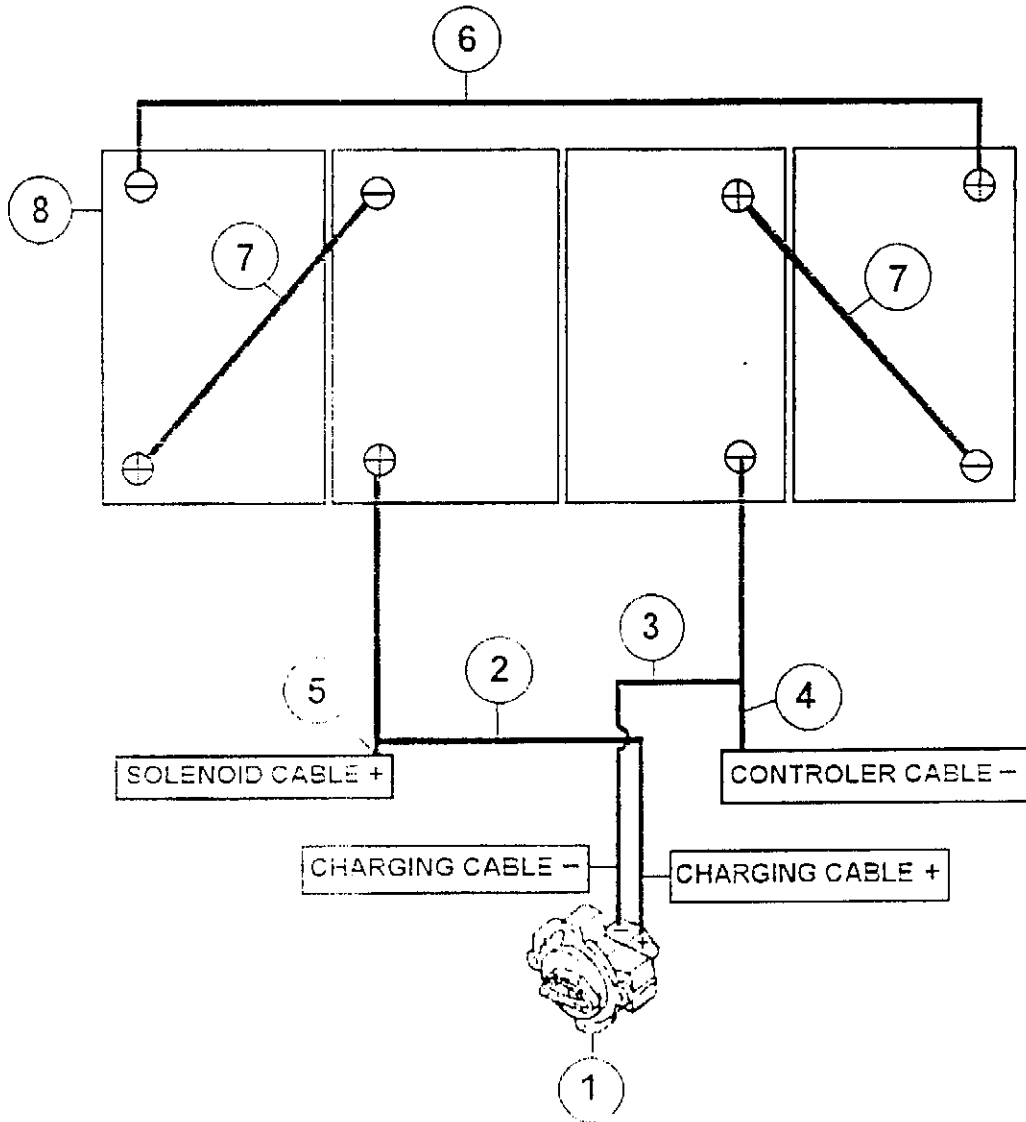
# SAND STAR E 48V WIRING DIAGRAM



## WIRING DIAGRAM PARTS LIST

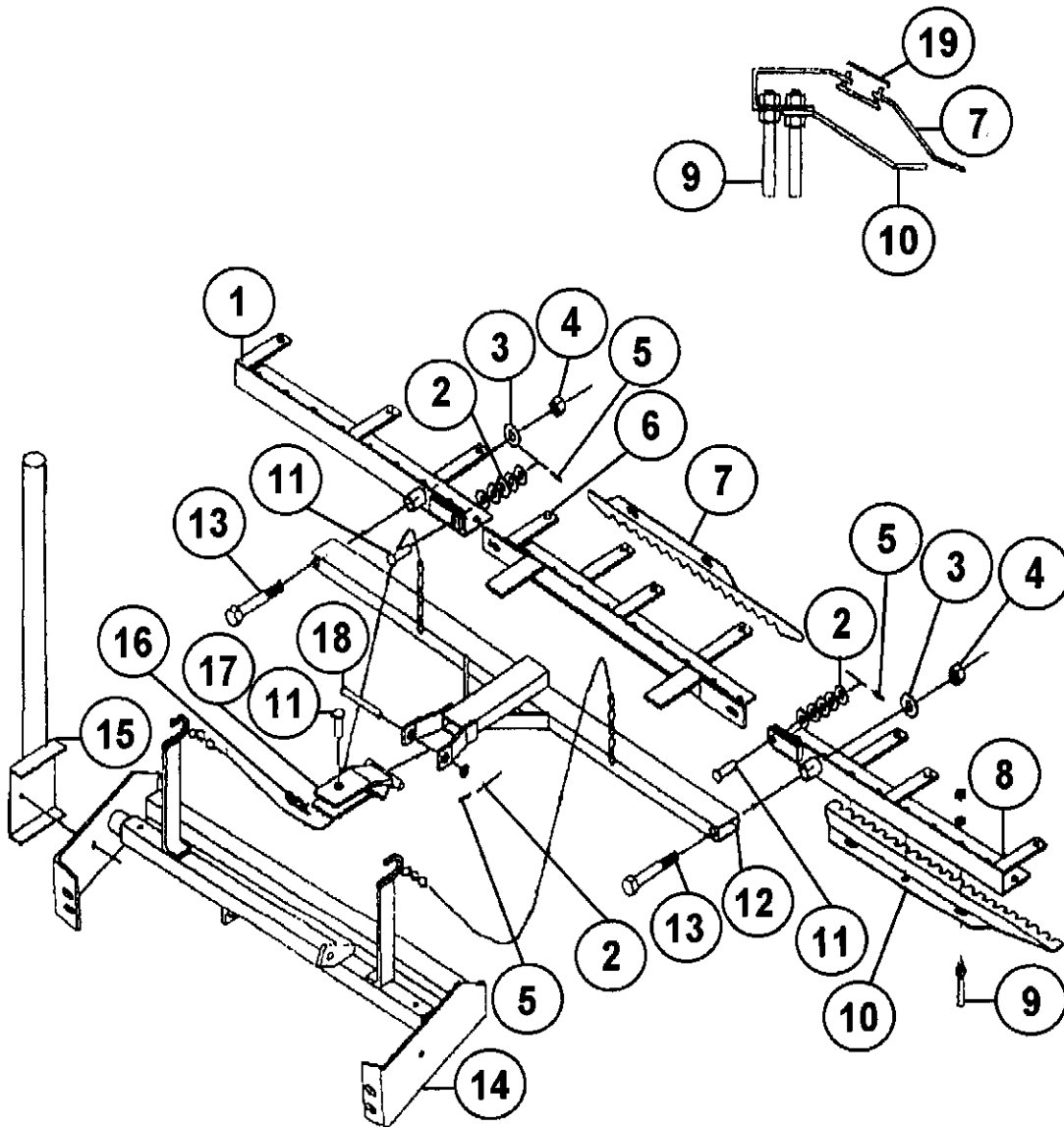
<u>REF#</u>	<u>PART#</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	832-511	Forward/Reverse Switch	1
2	832-514	Key Switch	1
3	832-517	Tow/Maintenance Switch	1
4	832-515	Reverse Beeper	1
5	832-509	Stop Switch	1
6	832-518	Gas Switch	1
7	730-220	Actuator Switch	1
8	843-103	Actuator Wiring	1
9	843-101	Main Wiring Harness	1
10	832-507	Controller	1
11	832-510	Solenoid Relay	1
12	843-106	Master Switch	1
13	732-017	Charge Plug	1
14	832-523	Battery Gauge	1
15	842-001	12 Volt Battery	4
16	832-508	48v Motor	1
17	832-001	Actuator 24v	1
18	832-512	Wiring Harness Relay	1
19	843-105	Battery Gauge Wiring	1
20	843-102	Battery Cable Kit	1

# SAND STAR E 48V WIRING DIAGRAM



REF#	PART#	DESCRIPTION	QTY.
1	732-017	Charging Receptacle	1
2	WA43	6 Ga Wire 17" Red	1
3	WA44	6 Ga Wire 17" Black	1
4	WA45	6 Ga Wire 13" Black	1
5	WA46	6 Ga Wire 10" Red	1
6	WA47	6 Ga Wire 28" Black	1
7	WA48	6 Ga Wire 13" Black	2
8	842-001	12 Volt Battery	4

**13-438 & 13-606 RAKE ASSEMBLY DRAWING**



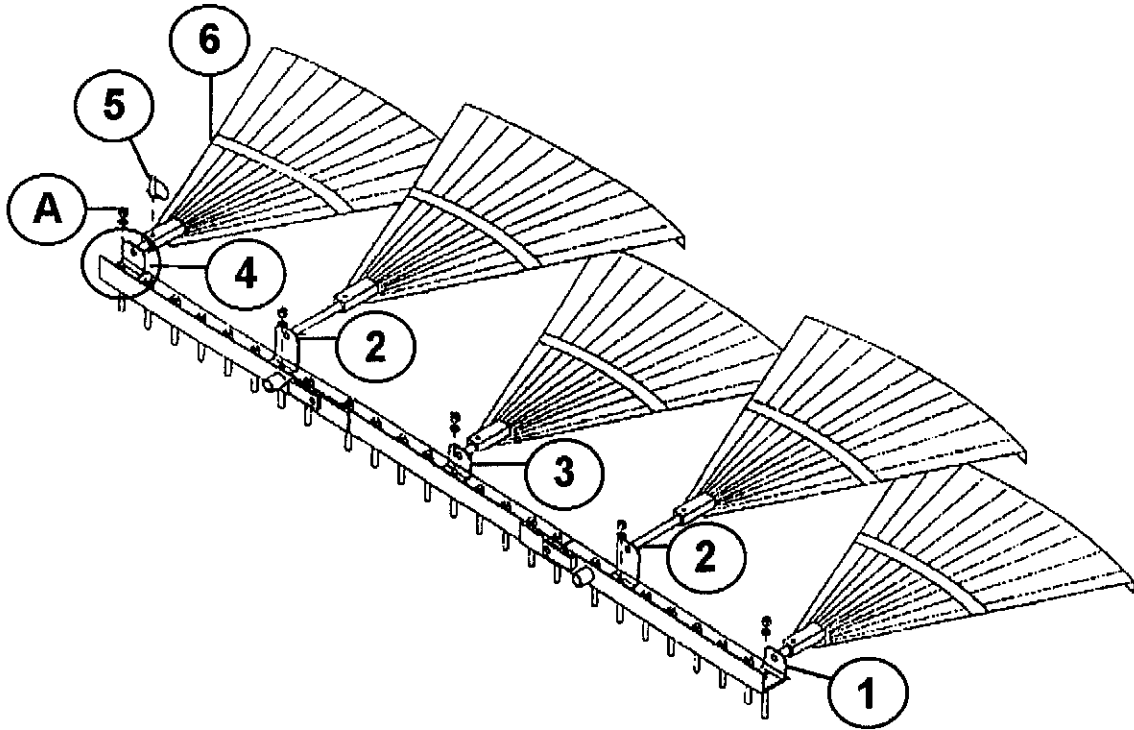
## 13-438 & 13-606 RAKE ASSEMBLY PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	13-441	Right Rake	1
2	HUM-12-14	Machine Bushing 1/2 x 14GA	11
3	HUM-58-14	Machine Bushing 5/8 x 14GA	2
4	HNCL-58-11	Lock Nut 5/8 - 11	2
5	HP-18-100	Cotter Pin 1/8 x 1	3
6	13-440	Center Rake	1
7	13-443	Finishing Blade (use with 13-438)	5
	13-605	Lexan Rake Blade (use with 13-606 Rake)	5
8	13-439	Left Rake	1
9	13-445	Rake Teeth Kit (25 studs)	1
10	13-442	Groomer Blade	3
11	HCP-12-150	Clevis Pin 1/2 x 1 1/2	3
12	13-365	Drawbar	1
13	HB-58-11-400	Bolt 5/8 - 11 x 4	2
14		Rake Lift (Part of Trap Rake)	
15		Rake Holder (Part of Trap Rake)	
16	HHP-18	Bridge Pin 1/8	1
17	13-155	Hitch	1
18	HCP-12-450	Clevis Pin 1/2 - 4 1/2	1
19	13-417	Connector Link	10

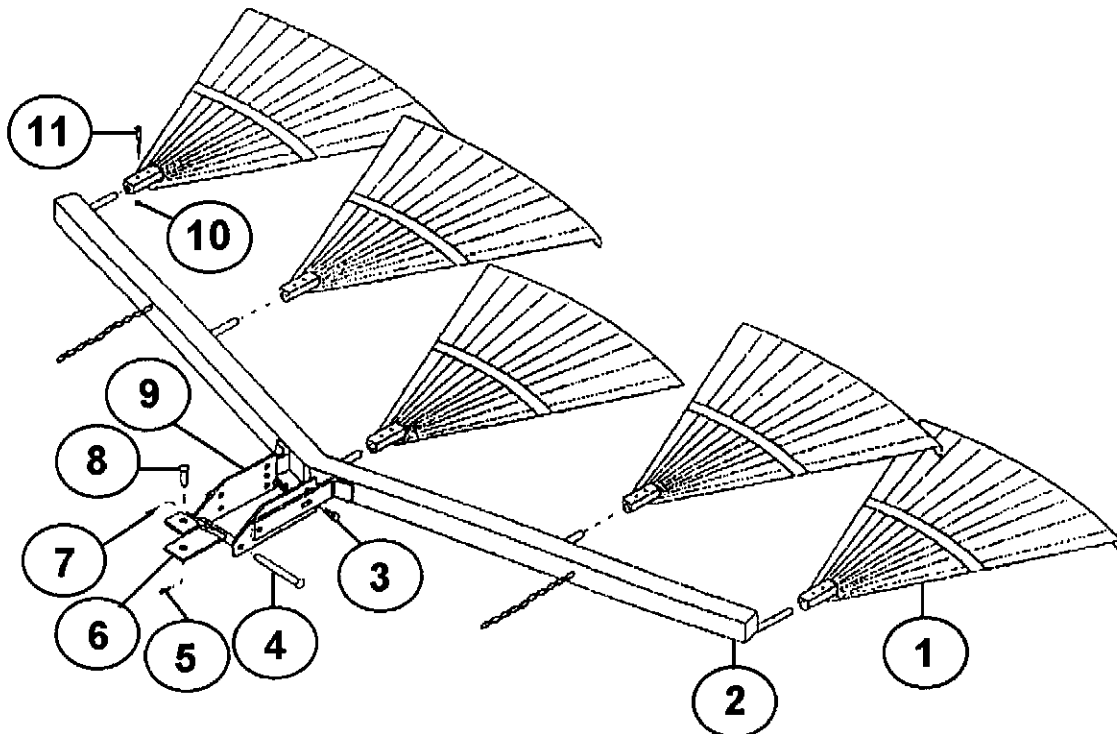
### RAKE ASSEMBLY INSTRUCTIONS

1. Attach (Ref# 12) Drawbar to (Ref# 17) Hitch using (Ref# 18) Clevis Pin and (Ref# 5) Cotter Pin.
2. Bolt (Ref# 9) Rake Teeth to frames, keeping all the same length.
3. Lay out (Ref# 1, 6 and 8) Rake Frames. Connect them using (Ref# 2) Machine Bushing and (Ref# 5) Cotter Pin.
4. Attach Drawbar to left and right Frames using (Ref# 13) Bolt, (Ref# 3) Machine Bushing, and (Ref# 4) Nut.
5. Attach five (Ref# 7) Finishing Blades to the tabs of the Rake Frames using (Ref# 19) Master Link. Blades may be mounted with saw tooth up or down, depending on the desired finish of the sand trap.
6. Attach (Ref# 17) Hitch to hitch of the trap rake using a (Ref# 11) Clevis Pin and (Ref#16) Bridge Pin.
7. Hook chains of the Drawbar to hooks of the Rake Lift.
8. Turn machine on and test for operation of rake assembly by raising and lowering the whole unit. Finishing blades should all hang freely and teeth should all be the same length.
9. Groomer Blades (optional) Golf Course Use ONLY.
10. Place the three (Ref# 10) Groomer Blades under the three (Ref# 1, 6, and 8) Rake Assemblies.
11. Center blades below rear most row of Rake Teeth. The blade is designed to miss the outside two 'teeth' and fit around the center 'tooth'.
12. Remove the two 'teeth' that line up with slots of each groomer blade. Move blade up and into position and reattach 'teeth'. Blade thickness should be accounted for by shortening the 'teeth' an equal length.

**13-319 FAN RAKE KIT**



**13-298 FAN RAKE ATTACHMENT**



## 13-319 FAN RAKE KIT PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	13-326	Left Holder	1
2	13-329	Long Holder	2
3	13-327	Center Holder	1
4	13-328	Right Holder	1
5	29-541	Lock Pin	5
6	13-310	Rake	5

## 13-319 FAN RAKE KIT INSTALLATION

Remove only five nuts and lockwashers (Ref A) from the rake assembly that are indicated in the drawing. Place holders in their proper places and replace lockwashers and nuts (Ref A).

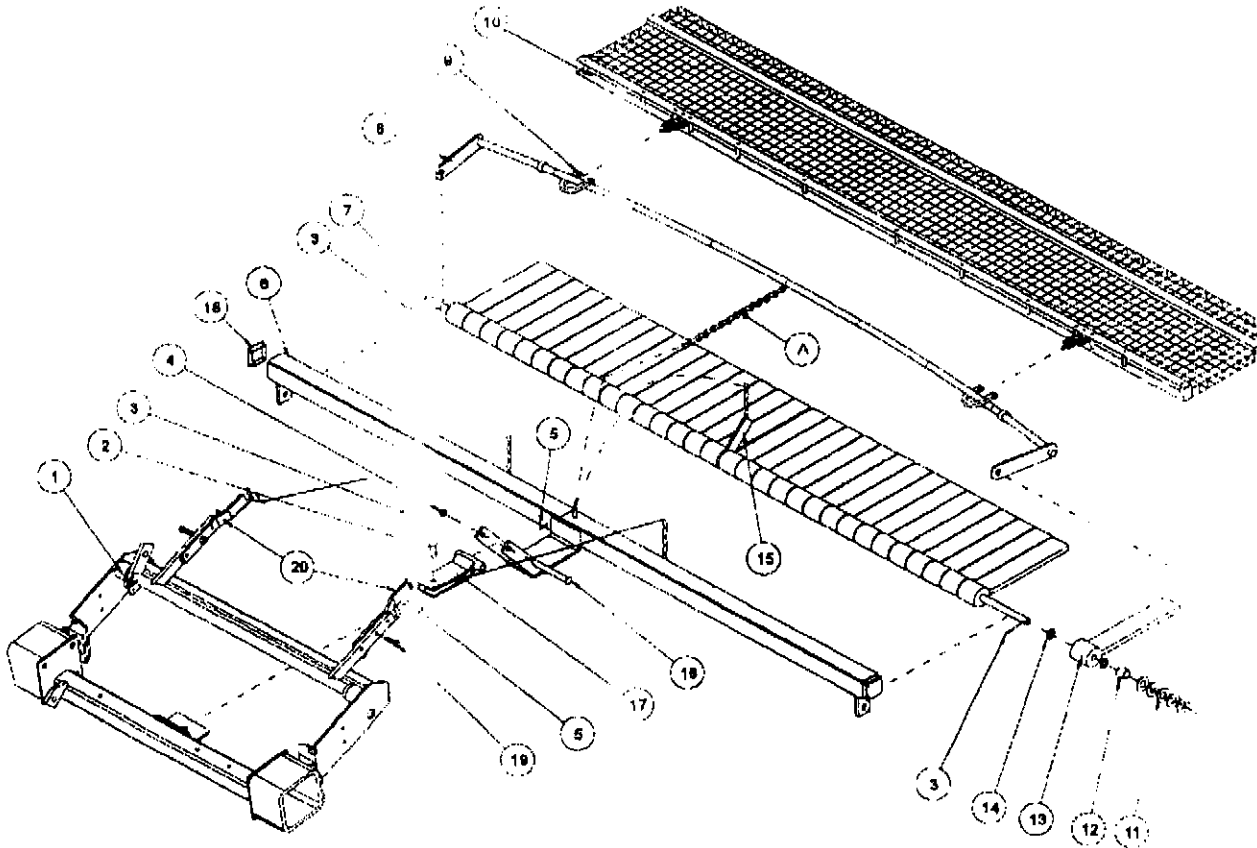
## 13-298 FAN RAKE ATTACHMENT PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	13-310	Rake	5
2	13-306	Frame	1
3	HB-38-16-100	Bolt 3/8 - 16 x 1	4
	HN-38-16	Nut 3/8 - 16	4
	HWL-38	Lockwasher 3/8	4
4	HCP-12-450	Clevis Pin 1/2 x 4 1/2	1
5	HHP-18	Bridge Pin 1/8	1
6	19-107	Drawbar	1
7	HP-18-100	Cotter Pin 1/8 x 1	1
8	HCP-12-150	Clevis Pin 1/2 x 1 1/2	1
9	13-307	Hitch	2
10	HNCL-14-20	Center Lock Nut 1/4 - 20	5
11	HB-14-20-200	Bolt 1/4 - 20 x 2	5

## 13-298 FAN RAKE ATTACHMENT INSTALLATION

1. Refer to 13-438: Remove the complete rake assembly by removing the (Ref# 11) Clevis Pin and the (Ref# 17) Hitch. Unhook the chains on the (Ref# 12) Drawbar from the (Ref# 14) Rake Lift. Replace the clevis pin and bridge pin in the hitch for future use with the rake.
2. Assemble the five (Ref# 1) Rakes to the (Ref# 2) Frame using 1/4 - 20 x 2 bolt and center lock nuts (Ref# 10 and 11). Slide the fan rake assembly under the rear of the trap rake to the hitch. Attach the (Ref# 6) Drawbar to the hitch using the (Ref# 8) Clevis Pin and the (Ref# 5) Bridge Pin.
3. Hook the chains from the Frame to the Hooks on the Rake Lift.

## 26-008 FLEX ACTION FIELD FINISHER



### MESH FINISHER

To get a smoother finish, Install a Mesh Finisher onto your ALLStar II Flex Action Field Finisher.

1. If the 26-008 Flex Action Finisher is on your machine, lower it to the ground. You may have to pull the machine ahead slightly so the Field Finisher is laying flat on the ground or floor.
2. Lay Mesh finisher behind field finisher with weight bar facing up and chain hooks towards field finisher.
3. Take the two Chain Clevis' and hook into Leveler Bar and then through the chain hooks on Mesh Finisher. The clevis pin that comes with the chain clevis should go through the chain clevis, first link on chain hook (on the Mesh Finisher) and then through other side of the chain clevis. Insert the cotter pin.
4. Center Mesh Finisher with Flex Action Field Finisher.
5. Raise lift on your machine to insure proper ground clearance before driving your machine.



**26-008 FLEX ACTION FIELD FINISHER PARTS LIST**

<b>REF#</b>	<b>PART#</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
1		Rake Lift (Part of Trap Rake)	1
2	HCP-12-150	Clevis Pin 1/2 x 1 1/2	1
3	HP-18-100	Cotter Pin 1/8 x 1	3
4	HMB-12-14	Machine Bushing 1/2 - 14GA	1
5	HHP-18	Bridge Pin 1/8	2
6	26-046	Frame	1
7	26-049	Mounting Bar	1
8	26-047	Leveler Bar	1
9	21-060	3/8 Chain Clevis	2
10	26-115	Mesh Finisher	1
11	HBM-58-14	Machine Bushing 5/8 x 14GA	10
12	11-040	Spacer 3/4"	2
13	26-041	Rasp Flail	32
14	HW-58	Washer 5/8	32
15	26-048	Flail Bar Strap	1
	HB-38-16-100	Bolt 3/8 – 16 x 1	1
	HNCL-38-16	Center Lock Nut 3/8 –16	1
16	HCP-12-450	Clevis 1/2 x 4 1/4	1
17	19-107	Hitch	1
18	18-297	Cap Plug	2
19	HB-38-16-125	Bolt 3/8 –16 x 1 1/4"	4
	HNTL-38-16	Lock Nut 3/8 – 16	4
20	26-116	Right Extension Arm	1
	26-117	Left Extension Arm	1

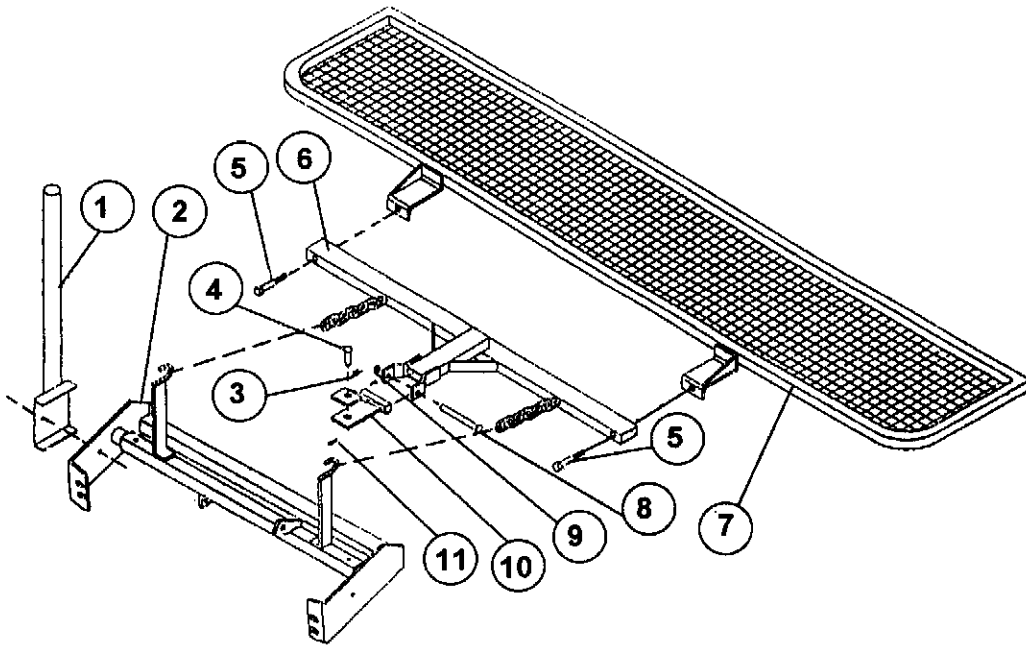
## **26-008 FLEX ACTION FINISHER INSTRUCTIONS**

1. Install (Ref# 15) Flail Bar Strap to center of (Ref# 7) Mounting Bar with Chain on top of Flail Bar Strap and Mounting Bar bent away from you. Apply a light coat of lubricant to overall length of Mounting Bar
2. Install one (Ref# 13) Rasp Flail with knobby side down adjacent to sides (Ref# 15) Flail Bar Strap. Now install a (Ref# 14) Flat Washer so it sits adjacent with the outside of the Rasp Flail. Continue to install Flails with knobby sides down with Washers between until you have 16 flails and washers on each side of Bar Strap. Force all Flails tightly toward Bar Strap.
3. After all 32 Flails have been installed, place one (Ref# 12) Spacer to each end of Mounting Bar adjacent to Washer.
4. Install (Ref# 8) Leveler Bar to Mounting Bar, with curved Leveler Bar resting on top on the smooth side of Flails. If all Flails and Washers do not fit snugly at this time, remove Leveler Bar and install enough Machine Bushings to ensure a snug fit. Then reinstall Leveler Bar.
5. Lay the (Ref# 6) Frame on the floor or bench with weld tabs facing up. Install ends of assembled Mounting Bar, with knobby sides of Flails up, into welded tabs on each end of Frame and secure with (Ref# 3) cotter pin.
6. Install Bar Strap (Ref# 15) to center tab on frame with 3/8 - 16 x 1 bolt and 3/8 - 16 center lock nut. Loose fit is required. Do not over tighten.
7. Flip assembly over so knobby sides of Flails are facing down. Install (Ref# 17) Hitch to frame with clevis pin (Ref #16) and cotter pin (Ref# 3). The hitch should be attached to the frame as shown.
8. Install Bar Strap Chain over welded pin on Frame. Install Leveler Bar Chain on to pin and secure in place with Bridge Pin. Use last Bridge Pin and Clevis Pin to hitch field finisher to your machine.
9. Add extension arms (Ref# 20) to rake lift. Use the center hole and only (2) 1 1/4" bolts (Ref# 19).

### **OPERATING INSTRUCTIONS**

Running attachment with all flails down, flat on the surface, will provide a leveling function. Running attachment partially raised and flails at a 20° - 40° angle in relation to the level surface, will provide a finishing function. The flails increase down pressure for desired finish. Drive in wide circular patterns and increase or decrease ground speed to achieve desired finish.

## 26-007 PROFESSIONAL INFIELD FINISHER



### 26-007 PARTS LIST

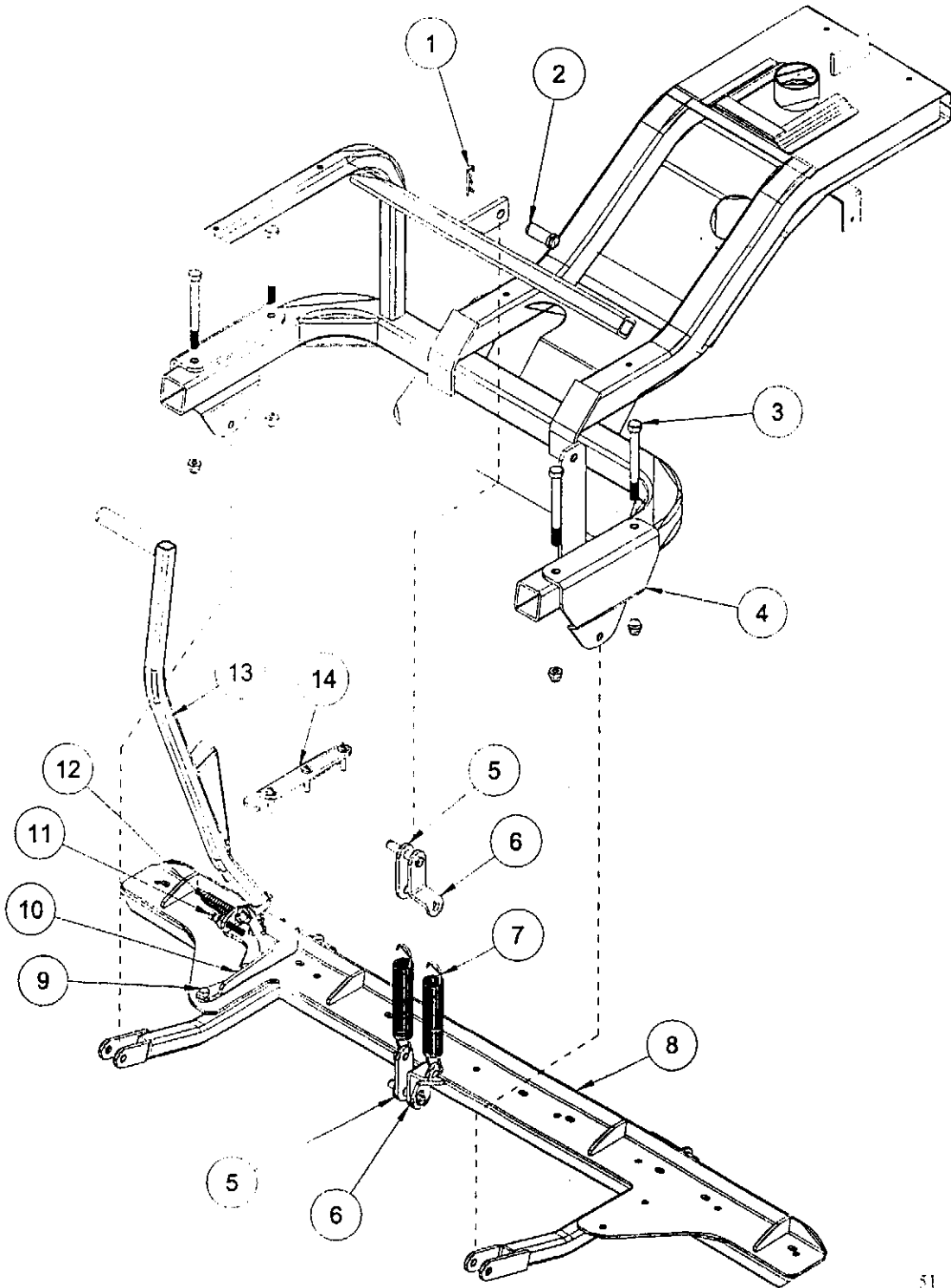
REF#	PART#	DESCRIPTION	QTY.
1		Rake Holder (Part of Trap Rake)	1
2		Lift Rake (Part of Trap Rake)	1
3	HP-18-100	Cotter Pin 1/8 x 1	1
4	HCP-12-150	Clevis Pin 1/2 x 1 1/2	1
5	HB-58-11-300	Bolt 5/8 - 11 x 3	2
	HNCL-58-11	Center Lock Nut 5/8 - 11	2
6	13-365	Drawbar	1
7	26-045	Leveling Screen	1
8	HCP-12-450	Clevis Pin 1/2 x 4 1/2	1
9	HMB-12-14	Machine Bushing 1/2 x 14GA	1
10	19-107	Hitch	1
11	HHP-18	Bridge Pin 1/8	1

### 26-007 INSTALLATION

The Professional Field Finisher is used for smoothing and leveling fields to professional standards.

1. Attach (Ref# 7) Leveling Screen to (Ref# 6) Drawbar using two bolts and (Ref# 5) Center Lock Nuts.
2. Attach (Ref# 10) Hitch to (Ref# 6) Drawbar using (Ref# 8) 1/2 x 4 1/2 Clevis Pin. (Ref# 9) 5/8 x 14GA Machine Bushing and a (Ref# 3) 1/8 x 1 Cotter Pin.
3. Mount Professional Field Finisher to (Ref# 12) Hitch on the trap rake with a (Ref# 4) 1/2 x 1 1/2 Clevis Pin and (Ref# 11) 1/8" Bridge Pin.

**42-401 MANUAL LIFT DRAWING**



## 42-401 MANUAL LIFT PARTS LIST

REF#	PART#	DESCRIPTION	QTY.
1	HP-18-100	Cotter Pin 1/8" x 1"	3
2	HCP-12-250	Clevis Pin 1/2" x 2 1/2"	3
	HW-12	Washer 1/2"	8
3		Bolt 1/2" - 13 x 5	4
		Lock Nut 1/2 - 13	4
4		Attachment Mount	2
5	42-383	Flat Spring Bracket	2
6	42-384	Offset Spring Bracket	2
7	21-445	Spring	2
8		Attachment Lift	1
9	HB-38-16-125	Bolt 3/8" - 16 x 1 1/4"	3
	HNTL-38-16	Lock Nut 3/8" - 16	3
10	42-382	Lift Handle Mount	1
11	HSSQ-38-16-250	Square Head Set Screw 3/8" - 16 x 2 1/2"	1
12	HB-516-18-400	Bolt 5/16" - 18 x 4"	1
	HW-516	Washer 5/16"	2
	11-055	Die Spring	1
	HNFL-516-18	Flange Whiz Lock Nut 5/16" - 18	1
13	42-381	Attachment Lift Handle	1
	15-019	Round Grip	1
14	42-385	Handle Lock Bracket (Bolts to LH Floorboard)	1
	HSTP-516-18-150	Phillips Machine Screw 5/16" - 18 x 1 1/2"	3
	HW-516	Washer 5/16"	3
	HNTL-516-18	Lock nut 5/16" - 18	3

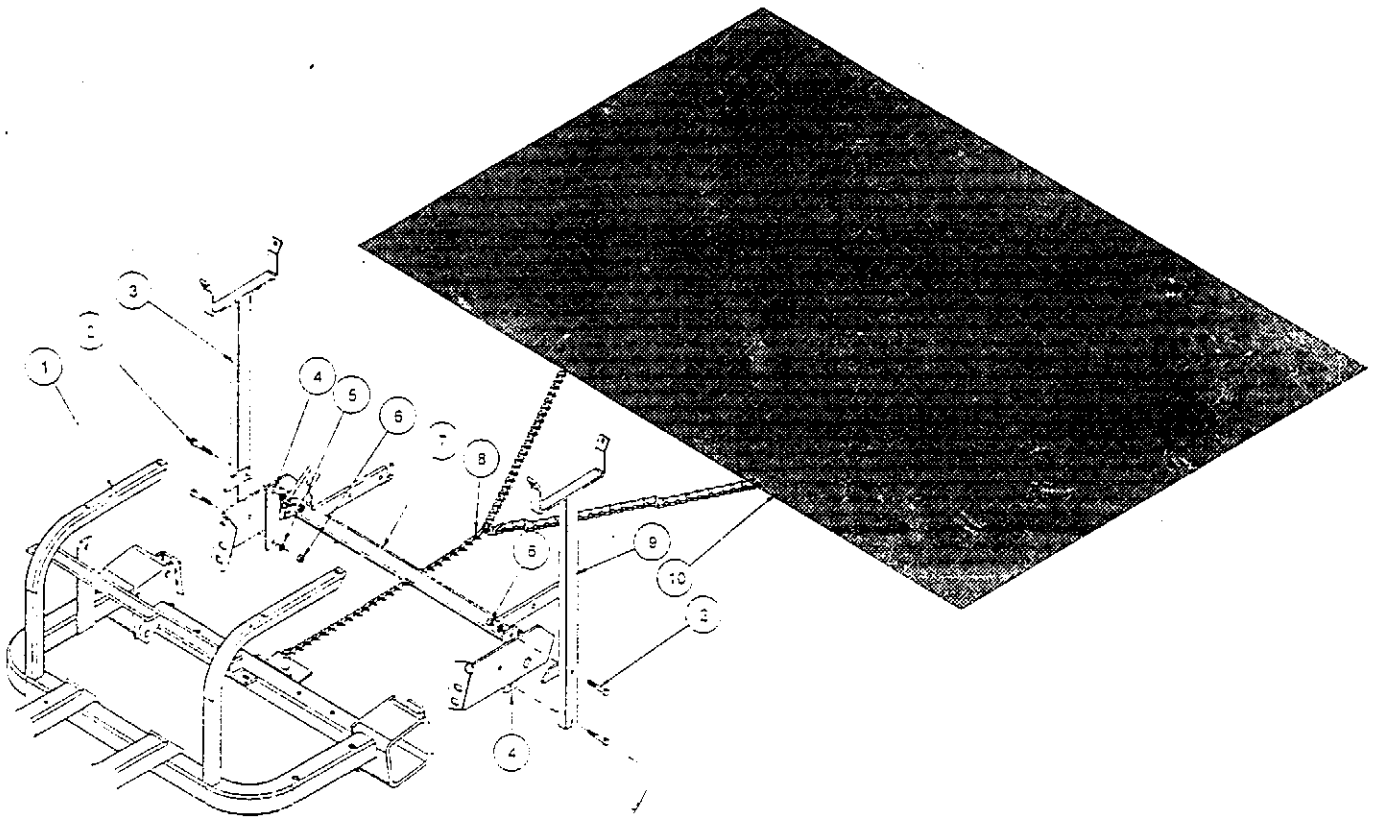
**41-401 MANUAL LIFT PACKING LIST**

<b>PART#</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
42-381	Attachment Lift Handle	1
42-382	Lift Handle Mount	1
42-385	Handle Lock Bracket	1

**SMALL PARTS BAG**

<b>PART#</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
11-055	Die Spring	1
15-019	Round Grip	1
21-445	Spring	2
42-383	Flat Spring Bracket	2
42-384	Offset Spring Bracket	2
HB-38-16-125	Bolt 3/8" – 16 x 1 1/4"	3
HB-516-18-400	Bolt 5/16" – 18 x 4"	1
HCP-12-250	Clevis Pin 1/2" x 2 1/2"	3
HNFL-516-18	Flange Whiz Lock Nut 5/16" – 18	1
HNTL-38-16	Lock Nut 3/8" – 16	3
HNTL-516-18	Lock Nut 5/16" – 18	3
HP-18-100	Cotter Pin 1/8" x 1"	3
HSSQ-38-16-250	Square Head Set Screw 3/8" – 16 x 2 1/2"	1
HSTP-516-18-150	Phillips Machine Screw 5/16" – 18 x 1 1/2"	3
HW-12	Washer 1/2"	8
HW-516	Washer 5/16"	5

# 42-185 DRAG MAT KIT



REF#	PART#	DESCRIPTION	QTY.
1		Main Frame	1
2	HB-38-16-225	Bolt 3/8 – 16 x 2 1/4	4
3	42-186	Right Mat Carrier	1
4	13-157	Strap	2
5	HWL-38	Lock Washer 3/8	4
6	HN-38-16	Nut 3/8 – 16	4
7	42-024	Rake Lift (part of machine)	1
8	19-605	Drag Mat Chain	1
	HHP-18	Bridge Pin 1/8	1
9	42-187	Left Mat Carrier	1
10	19-601	Steel Mat	1

## INSTALLATION INSTRUCTIONS

- Looking from the rear of the unit, mount the mat carrier posts (Ref 3 & 9) outside the rear corner of the rake lift with the straps (Ref 4) on the inside of the rake lift side plate. Bolt into place with 3/8 – 16 x 2 1/4 bolts, lockwasher and nuts. 49
- To carry the Drag Mat, roll it up and place it in the brackets of the mat carriers.
- To use the Drag Mat, unroll the mat flat and hook it up to the hitch with the clevis pin in the chain and the bridge pin provided.

## LIMITED WARRANTY

SMITHCO warrants this product to be free from defects in material and workmanship under normal use for one year from the date of purchase by the original user. (60 days if product is used for rental purposes.) All warranty claims must be handled through a SMITHCO authorized dealer or by SMITHCO, INC. All transportation charges must be paid by the purchaser.

There is no further express warranty. All implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one year. (60 days if product is used for rental purposes) from date of purchase by the original user, and, to the extent permitted by law any and all implied warranties are excluded and disclaimed after the expiration of such period.

All incidental and consequential damages, including pick-up and delivery of the unit, communication, mileage charges and/or rental of a replacement unit during repair, are not covered under this warranty, or is any loss of income and/or other loss resulting from the failure of the product to function due to a warranty defect.

The following items are not covered under the SMITHCO warranty and are warranted by their respective manufacturer.

- a) Engine and engine parts including starters, generators, alternator and filters.
- b) Transaxle, differentials, gear boxes, and mechanical pumps.
- c) Hydrostatic transmissions, hydraulic pumps and motors.
- d) Batteries
- e) Wheels and tires.

A copy of the warranty for the above items is furnished if necessary with each SMITHCO product.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion of limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Federal law now requires disclosure of the warranty which applies to this product prior to the sale to a consumer. Please leave this statement attached to the product and allow the buyer to remove it after purchase.

# **SMITHCO**

Wayne, Pennsylvania 19087



