

COMMERCIAL

SENSATION

MODELS: 86S5-0
80E8-0
80S8-0

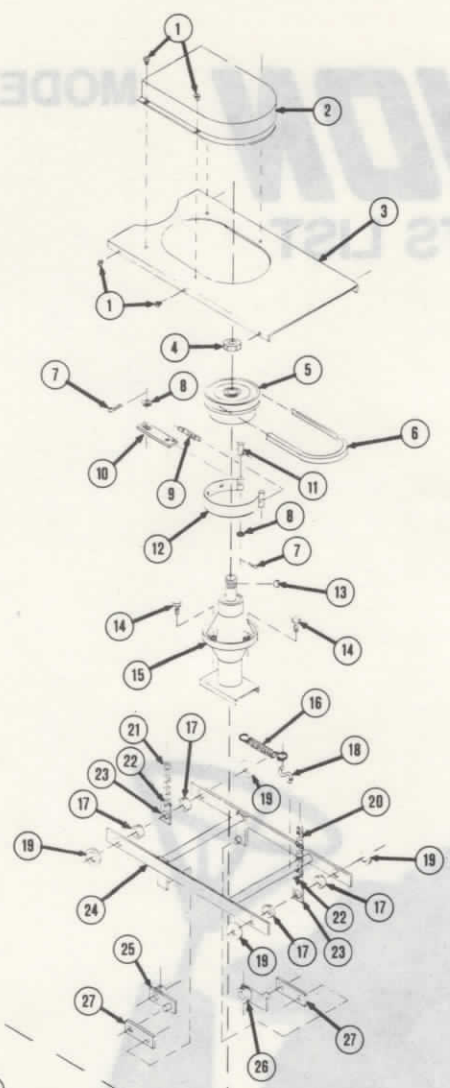
POWER MOWER PARTS LIST



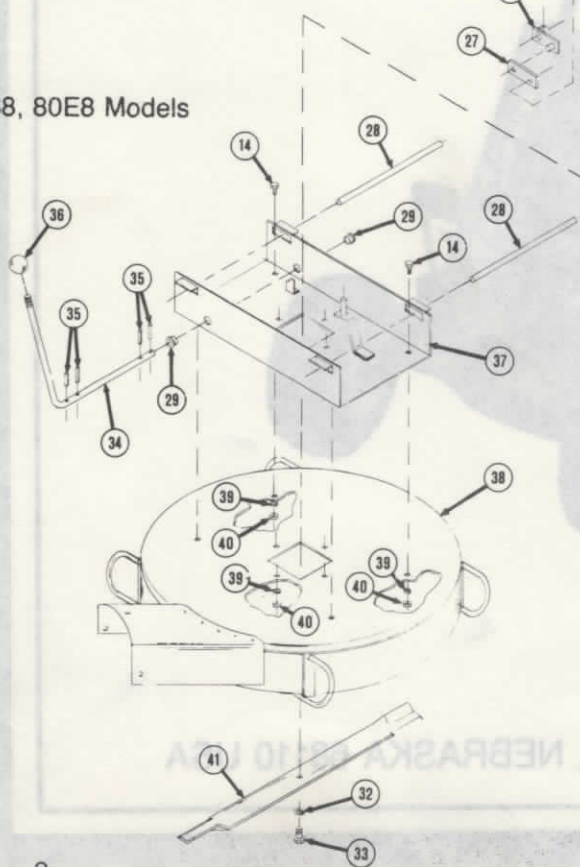
THE SENSATION CORPORATION • OMAHA, NEBRASKA 68110 USA

MODELS: 88S5-0
 80E8-0
 80S8-0

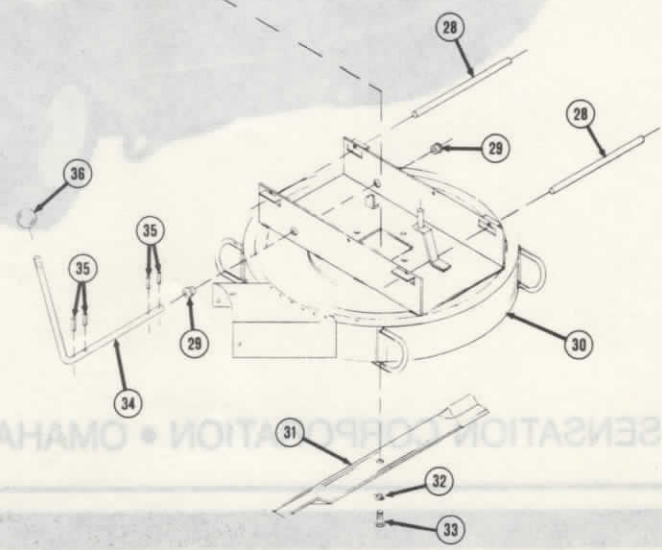
SENSATION
 POWER MOWER PARTS LIST



80S8, 80E8 Models



86S5 Model

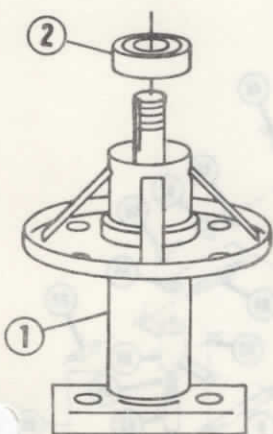


THE SENSATION CORPORATION • OMAHA, NEBRASKA 68101 USA

CUTTING DECK ASSEMBLY

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	956-153	Tapping Screw #10-32 x 3/8	22	163-204	Master Link #420
2	283-815	Belt Cover	23	023-828	Chain Hanger
3	283-814	Cover Plate	24	021-806	Support Frame — Deck
4	969-298	Nut, Spindle 3/4 NF Hex	25	041-806	Engaging Arm, R.H.
5	141-802	Pulley W/Brake Drum	26	041-807	Engaging Arm, L.H.
6	153-802	Blade Belt	27	043-821	Engaging Arm
7	992-134	Cotter Key 1/8 x 1-1/4	28	023-827	Carrier Bar
8	980-224	Washer, 3/8 Flat	29	243-808	Bearing, Flange 1/2 ID
9	203-805	Spring, Brake Band	30	131-807	Cutting Deck 26"
10	063-839	Brake Engagement Lever	31	123-803	Blade, 26 Formed Air Lift
11	993-301	Clevis Pin 3/8 x 1-3/8	32	982-224	Lock Washer 3/8 Split
12	063-823	Brake Band	33	904-230	Blade Bolt 3/8 NF 1-1/4
13	996-155	Woodruff Key #605	34	043-822	Control Lever — Blade
14	901-205	Hex Cap Screw 5/16 NC x 3/4	35	990-158	Roll Pins 3/16 x 1
15	See Below	Spindle Assembly	36	323-804	Knob 1/2 NC
16	203-804	Spring Deck Return	37	131-808	Reinforcement Pan-Deck
17	273-502	Shaft Collar 5/8	38	131-809	Cutting Deck, 30"
18	043-823	"S" Hook	39	982-200	Lock Washer 5/16 Split
19	999-566	Washer Spacer	40	960-200	Nut, 5/16 NC Hex
20	163-801	Chain, Front	41	123-802	Blade, 30" Formed Air Lift
21	163-802	Chain, Rear			

BLADE SPINDLE ASSEMBLY



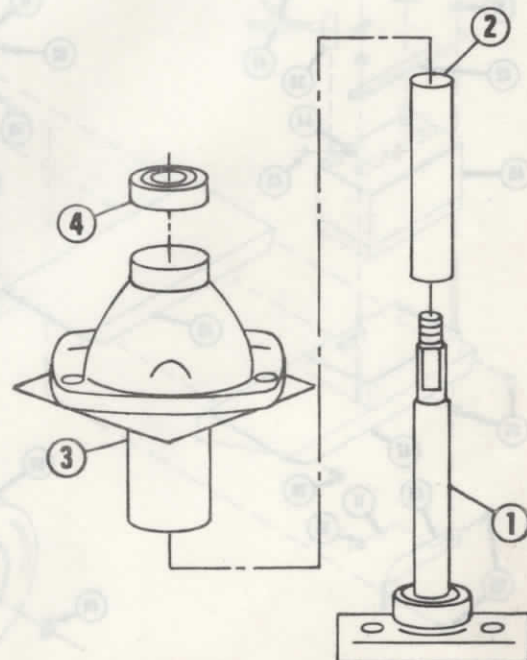
PART NO. 313-205

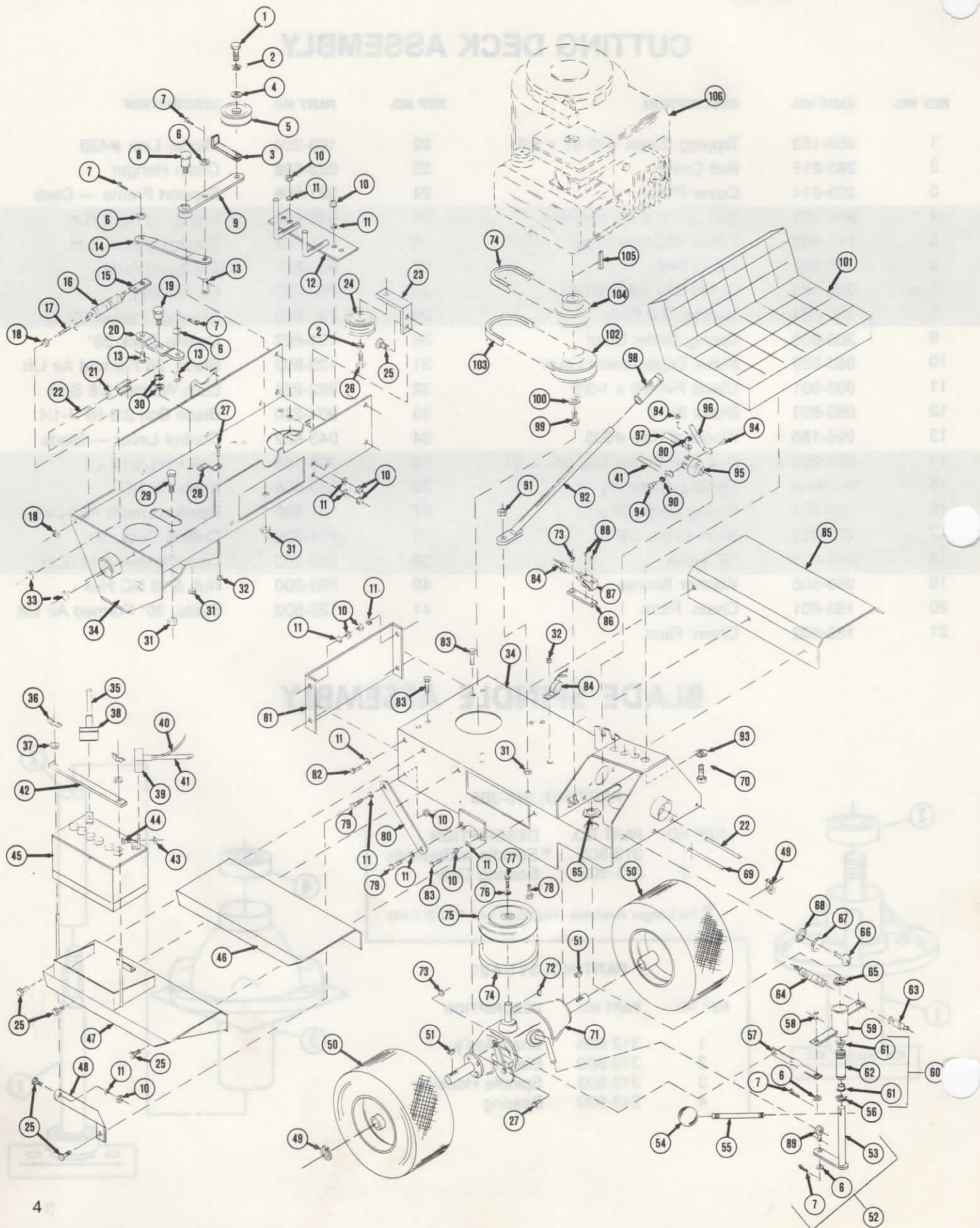
REF NO.	PART NO.	DESCRIPTION
1	313-805	* Spindle w/Bearings
2	243-209	Bearing Only

* No Longer Available. Replaced with P/N 311-801

PART NO. 311-801

REF NO.	PART NO.	DESCRIPTION
1	313-808	Shaft Ass'y.
2	313-809	Sleeve
3	313-803	Spindle Housing
4	243-809	Bearing



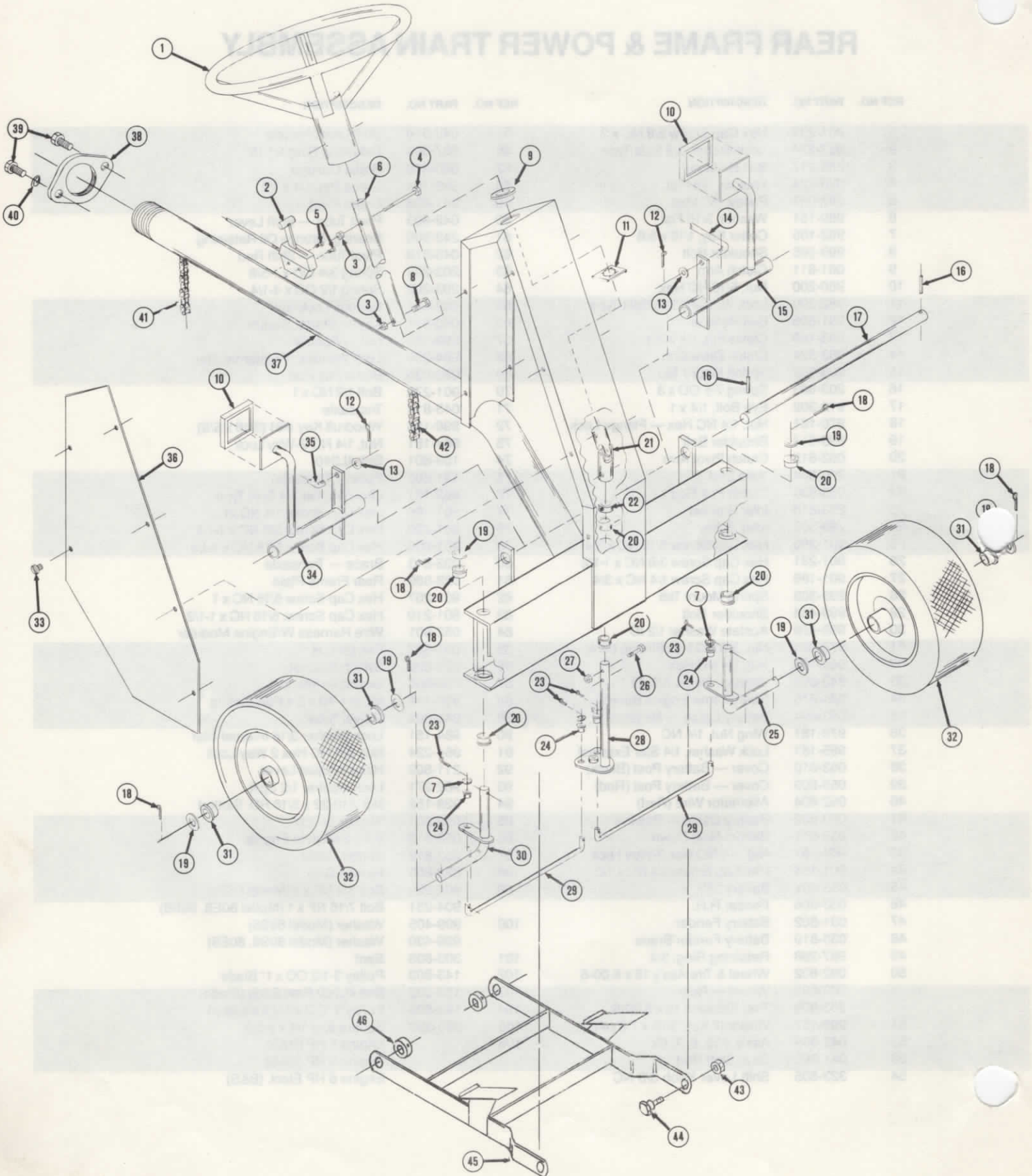


REAR FRAME & POWER TRAIN ASSEMBLY

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	901-233	Hex Cap Screw 3/8 NC x 2	55	043-818	Shift Lever Handle
2	982-224	Lockwasher, 3/8 Split Type	56	987-303	Retaining Ring 1-1/16
3	283-217	Belt Retainer	57	063-828	Brake Linkage
4	980-224	Washer, 3/8 Flat	58	993-184	Clevis Pin, 1/4 x 1/2
5	293-301	Pulley, "V" Idler	59	061-806	Brake Pivot
6	980-151	Washer, 3/16 Flat	60	042-803	Pivot Tube — Shift Lever
7	992-105	Cotter Key, 1/16 x 5/8	61	243-806	Bearing, Bronze Oil Retaining
8	999-565	Shoulder Bolt	62	043-819	Pivot Tube — Shift Rod
9	061-811	Clutch Arm	63	203-203	Spring 3/4 OD x 1-5/8
10	960-200	Nut, 5/16 NC Hex	64	203-202	Spring 1/2 OD x 4-1/4
11	982-200	Lock Washer, 5/16 Split Type	65	999-581	Conduit Lock Nut
12	281-806	Belt Retainer	66	053-811	Key — Starter Switch
13	993-186	Clevis Pin, 1/4 x 3/4	67	999-568	Nut — Special
14	063-824	Clutch Drive Arm	68	984-296	Lock Washer, 5/8 Internal Star
15	203-302	Spring Mount Tab	69	063-835	Brake Pull Rod
16	203-803	Spring 7/8 OD x 3	70	901-276	Bolt 1/2 NC x 1
17	912-302	Eye Bolt, 1/4 x 1	71	043-814	Transaxle
18	970-181	Nut, 1/4 NC Hex — Flange Lock	72	996-155	Woodruff Key #61 (3/16 x 5/8)
19	999-514	Shoulder Bolt	73	964-181	Nut, 1/4 NC 2-Way Lock
20	063-815	Clutch Pivot Arm	74	153-801	Belt 4L340
21	999-564	Yoke End	75	141-801	Pulley (Transaxle)
22	063-834	Clutch Pull Rod	76	982-181	Lock Washer 1/4 Split Type
23	293-810	Idler Bracket	77	901-188	Hex Cap Screw 1/4 NC x 1
24	293-303	Idler Pulley	78	901-230	Hex Cap Screw 3/8 NC x 1-1/4
25	901-205	Hex Cap Screw 5/16 NC x 3/4	79	901-209	Hex Cap Screw 5/16 NC x 1-1/4
26	901-231	Hex Cap Screw 3/8 NC x 1-1/2	80	023-813	Brace — Transaxle
27	901-186	Hex Cap Screw 1/4 NC x 3/4	81	023-809	Rear Frame Plate
28	203-303	Spring Mount Tab	82	901-207	Hex Cap Screw 5/16 NC x 1
29	999-456	Shoulder Bolt	83	901-210	Hex Cap Screw, 5/16 NC x 1-1/2
30	999-458	Acetate Washer 1/2 ID	84	052-801	Wire Harness W/Engine Modular
31	970-224	Nut, 3/8 NC Hex Flange Lock	85	033-807	Fender L.H.
32	960-181	Nut, 1/4 NC Hex	86	023-830	Switch Bracket
33	243-804	Bearing, Nylon 3/8 ID	87	053-806	Switch — Interlock
34	021-815	Rear Frame/Engine Base	88	926-118	MS #4-40 x 3/4 Pan Slotted
35	053-804	Battery Cable — Negative	89	041-804	Swivel Tube
36	976-181	Wing Nut, 1/4 NC	90	984-151	Lock Washer 3/16 Internal Star
37	985-181	Lock Washer, 1/4 Star External	91	964-224	Nut, 3/8 NC Hex 2 Way Lock
38	053-810	Cover — Battery Post (Black)	92	211-802	Height Adjust Lever
39	053-809	Cover — Battery Post (Red)	93	982-271	Lock Washer 1/2 Split
40	052-804	Alternator Wire (Red)	94	928-152	MS #10-32 x 5/16 RD. Slotted
41	053-802	Battery Cable — Positive	95	053-803	Starter Switch
42	033-811	Battery Hold Down	96	053-813	Wire-Switch to Engine
43	964-181	Nut, 1/4 NC Hex 2-Way Lock	97	053-812	Starter Cable
44	901-184	Hex Cap Screw 1/4 NC x 1/2	98	323-803	Handle Grip
45	053-801	Battery 12V	99	904-229	Bolt 3/8 NF x 1 (Model 86S5)
46	033-806	Fender R.H.		904-251	Bolt 7/16 NF x 1 (Model 80E8, 80S8)
47	031-802	Battery Fender	100	999-405	Washer (Model 86S5)
48	033-810	Battery Fender Brace		999-430	Washer (Model 80S8, 80E8)
49	987-298	Retaining Ring, 3/4	101	303-803	Seat
50	082-802	Wheel & Tire Ass'y 15 x 6.00-6	102	143-803	Pulley 3-1/2 OD x 1" Blade
	083-803	Wheel — Rear	103	153-802	Belt 4L700 Raw Edge (Blade)
	263-806	Tire, Tubeless 15 x 6.00-6	104	143-805	Pulley 3" OD x 1" (Transaxle)
51	996-157	Woodruff Key, 3/16 x 7/8 (#11)	105	995-330	Square Key 1/4 x 1-5/8
52	042-805	Ass'y #53, 6, 7, 89	106		Engine 5 HP (B&S)
53	041-805	Gear Shift Rod			Engine 8 HP (B&S)
54	323-805	Shift Lever Knob 3/8 NC			Engine 8 HP Elect. (B&S)

Note: The Engine and transmission used on this unit is warranted by the manufacturer and all parts and service must be obtained from the designated center which may be found in the Yellow Pages under "Engines"

REAR FRAME & POWER TRAIN ASSEMBLY

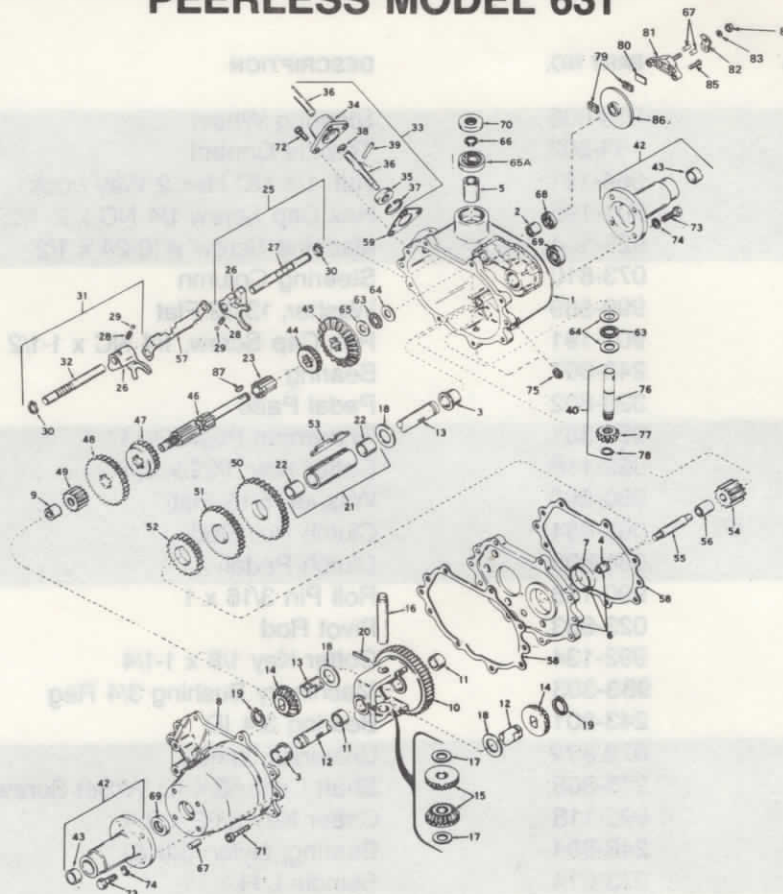


FRONT FRAME & STEERING ASSEMBLY

REF NO.	PART NO.	DESCRIPTION
1	073-808	Steering Wheel
2	193-802	Throttle Control
3	964-181	Nut, 1/4 NC Hex 2 Way Lock
4	901-195	Hex Cap Screw 1/4 NC x 2- 1/2
5	923-154	Machine Screw #10-24 x 1/2
6	073-810	Steering Column
7	999-569	Washer, 13/32 Flat
8	901-191	Hex Cap Screw, 1/4 NC x 1-1/2
9	243-807	Bearing
10	323-802	Pedal Pads
11	989-301	Tinnerman Push-On 1"
12	992-118	Cotter Key 3/32 x 3/4
13	980-200	Washer, 5/16 Flat
14	063-834	Clutch Pull Rod
15	061-808	Clutch Pedal
16	990-158	Roll Pin 3/16 x 1
17	023-833	Pivot Rod
18	992-134	Cotter Key 1/8 x 1-1/4
19	983-303	Machinery Bushing 3/4 Reg
20	243-801	Bearing 3/4 ID
21	072-802	Universal Joint
22	273-808	Shaft Collar 3/4 ID W/Set Screw
23	992-118	Cotter Key 3/32 x 3/4
24	243-804	Bearing, Nylon 3/8 ID
25	073-814	Spindle L.H.
26	901-210	Hex Cap Screw 5/16 NC x 1-1/2
27	964-200	Nut, 5/16 NC Hex 2 Way Lock
28	073-817	Steering Column
29	073-818	Steering Tie Rod
30	073-813	Spindle R.H.
31	243-805	Bearing — Wheel (ARCO 3/4 ID)
32	082-803	Wheel Assembly (Complete)
	083-804	Rim Only
	263-805	Tire — Tubeless 11 x 4.00 — 5
33	956-153	Screw#10-32 x 3/8 Tapping
34	061-807	Brake Pedal
35	063-835	Brake Pull Rod
36	033-808	Steering Column Side Panel
37	021-814	Front Frame (Complete with Items #7, 16, 17, 18, 19, 20, 22, 23, 24, 25, 28, 29, 30)
38	023-816	Flange Couple Nut
39	901-229	Hex Cap Screw 3/8 NC x 1
40	982-224	Lock Washer 3/8 Split Type
41	163-802	Chain #420 x 21P
42	163-801	Chain #420 x 63P
43	999-514	Shoulder Bolt
44	970-224	Nut 3/8 NC Whizlock
45	021-810	Deck Support Arm
46	273-502	Shaft Collar W/ Set Screw



TRANSAXLE ASSEMBLY PEERLESS MODEL 631



REF. PART NO.	PART NO.	DESCRIPTION	REF. PART NO.	PART NO.	DESCRIPTION	REF. PART NO.	PART NO.	DESCRIPTION
1	770063	Case Assy (Incl. #2, 3, 5)	31	784084	Shift Assy (Incl. #26, 28, 29, 30, 32)	59	788003	Gasket, Shift housing
2	780086	Bearing, Needle	32	784085	Rod, Shift	63	780071	Bearing, Thrust
3	780059	Bearing, Bronze	33	784118	Lever Assy., Shift (Incl. #34-39)	64	780072	Washer, Thrust
4	780060	Bearing, Bronze	34	784088	Housing, Shift lever	65	780073	Washer, Thrust
5	780061	Bearing, Bronze	35	784094	Keeper, Shift lever	65A	780093	Bearing, Ball
6	786033	Plate Assy (Incl. #4, 7)	36	784119	Lever, Shift	66	792035	Ring, Snap
7	780062	Bearing, Bronze	37	792016	Ring, Snap	67	786026	Pin, Dowel
8	772042	Cover Assy (Incl. #39)	38	792001	Ring, Quad	68	788043	Seal, Oil
9	780063	Bearing, Needle	39	792049	Pin, Drive	69	788009	Seal, Oil
10	778053	Gear Assy (Incl. #11)	40	776102	Shaft & Gear Assy (Incl. #76-78)	70	788035	Seal, Oil
11	780064	Bearing, Bronze	42	782048	Axle Housing (Incl. #43)	71	792036	Cap Screw 1/4 NC x 1-1/4
12	774099	Axle, Left hand	43	780091	Bearing & Seal Assy	72	792007	Cap Screw 1/4 NC x 3/4
13	774098	Axle, Right hand	44	778024	Gear (16 teeth)	73	792037	Cap Screw 5/16 NC x 1
14	778067	Gear, Bevel	45	778057	Gear, Bevel (33 teeth)	74	792029	Lockwasher, 5/16"
15	778068	Pinion, Bevel	46	776138	Shaft, Shifter & Brake	75	792039	Plug, Pipe, 1/8"
16	786034	Pin, Drive	47	778058	Gear, Shifting	76	776103	Shaft, Input
17	780065	Washer, Thrust	48	778059	Gear, Shifting	77	778077	Pinion, Input
18	780001	Washer, Thrust	49	778060	Gear, Spur (12 teeth)	78	788040	Ring, Retaining
19	788038	Ring, Snap	50	778061	Gear (39 teeth)	79	790006	Pad, Brake
20	792040	Pin, Roll	51	778062	Gear (34 teeth)	80	790007	Plate, Brake pad
21	786035	Sleeve Assy (Incl. #22)	52	778063	Gear (25 teeth)	81	790005	Holder, Brake pad
22	780066	Bearing, Bronze	53	792034A	Key, Countershaft	82	790013	Lever, Brake
23	776090	Shaft, Idler	54	778064	Idler, Reverse	83	792076	Washer, Flat
25	784079	Shift Assy (Incl. #26-30)	55	776057	Shaft, Reverse Idler	84	792075	Nut, Lock
26	784004	Fork, Shift	56	786036	Spacer, Reverse Idler	85	792073	Tap Screw 1/4 NC x 1-1/4
27	784083	Rod, Shift	57	784087	Stop, Shifter	86	790009	Disk, Brake
28	792003	Spring	58	788033	Gasket, Case & Cover	87	792045	Key, Woodruff #61
29	792004	Ball, Steel						
30	792017	Ring, Snap						

COMMERCIAL

SENSATION

POWER MOWER PARTS LIST

MODELS: 86S5-1

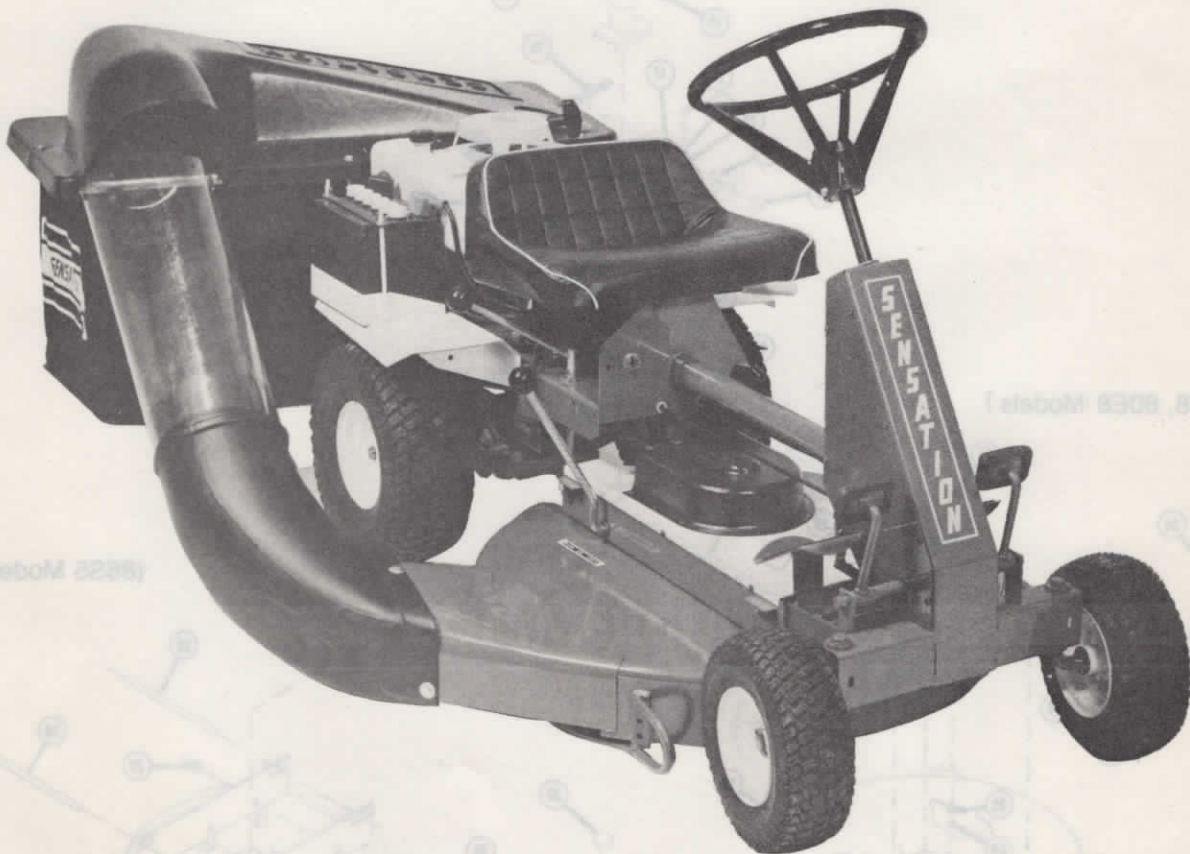
80E8-1

80S8-1

86S5-2

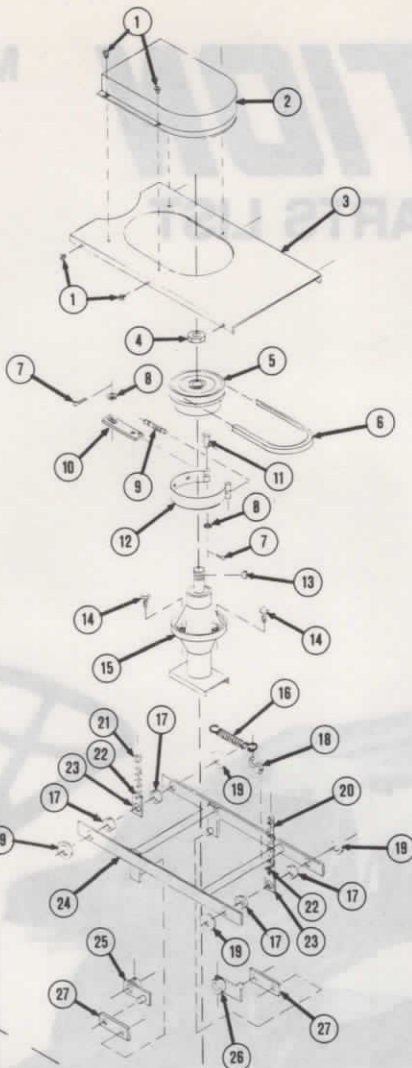
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80S8-2

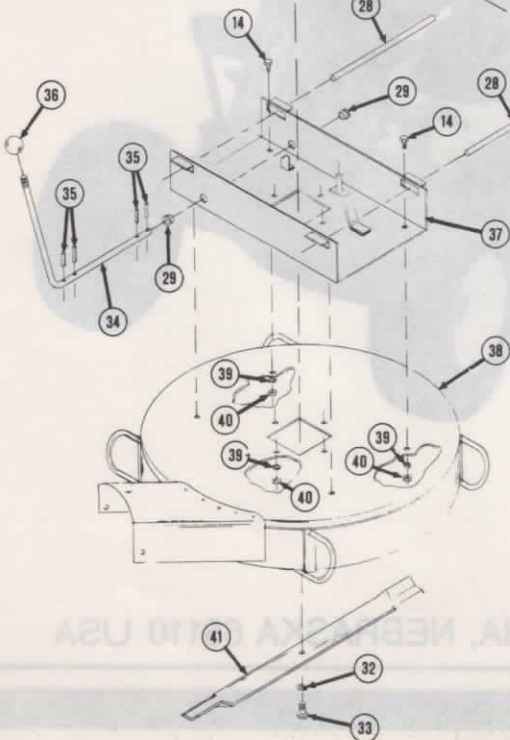


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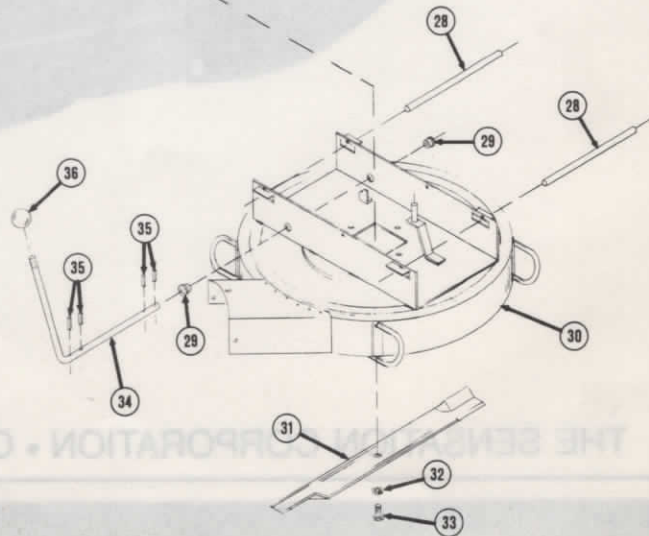
MODELS: 86S5-1
 80E8-1
 80S8-1
 86S5-2
 80E8-2
 80S8-2



(80S8, 80E8 Models)



(86S5 Model)

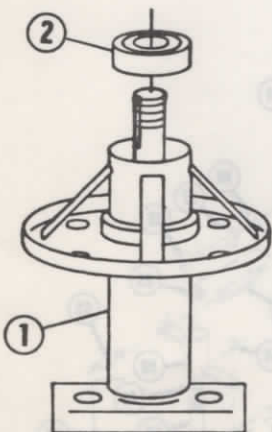


CUTTING DECK ASSEMBLY

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	956-153	Tapping Screw #10-32 x 3/8	22	163-204	Master Link #420
2	283-815	Belt Cover	23	023-828	Chain Hanger
3	283-814	Cover Plate	24	021-806	Support Frame — Deck
4	969-298	Nut, Spindle 3/4 NF Hex	25	041-806	Engaging Arm, R.H.
5	141-802	Pulley W/Brake Drum	26	041-807	Engaging Arm, L.H.
6	153-802	Blade Belt	27	043-821	Engaging Arm
7	992-134	Cotter Key 1/8 x 1-1/4	28	023-827	Carrier Bar
8	980-224	Washer, 3/8 Flat	29	243-808	Bearing, Flange 1/2 ID
9	203-805	Spring, Brake Band	30	131-807	Cutting Deck 26"
10	063-839	Brake Engagement Lever	31	123-803	Blade, 26 Formed Air Lift
11	993-301	Clevis Pin 3/8 x 1-3/8	32	982-224	Lock Washer 3/8 Split
12	063-823	Brake Band	33	904-230	Blade Bolt 3/8 NF 1-1/4
13	996-155	Woodruff Key #605	34	043-822	Control Lever — Blade
14	901-205	Hex Cap Screw 5/16 NC x 3/4	35	990-158	Roll Pins 3/16 x 1
15	See Below	Spindle Assembly	36	323-804	Knob 1/2 NC
16	203-804	Spring Deck Return	37	131-808	Reinforcement Pan-Deck
17	273-502	Shaft Collar 5/8	38	131-809	Cutting Deck, 30"
18	043-823	"S" Hook	39	982-200	Lock Washer 5/16 Split
19	999-566	Washer Spacer	40	960-200	Nut, 5/16 NC Hex
20	163-801	Chain, Front	41	123-802	Blade, 30" Formed Air Lift
21	163-802	Chain, Rear			

BLADE SPINDLE ASSEMBLY

(-1) Models



PART NO. 313-205

REF NO.	PART NO.	DESCRIPTION
1	313-805	* Spindle w/Bearings
2	243-209	Bearing Only

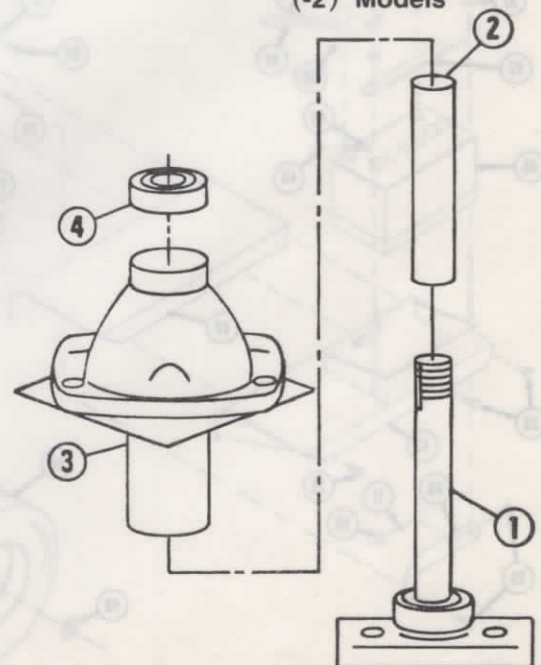
* No Longer Available, Replaced with P/N 311-801

PART NO. 311-801 / 313-807

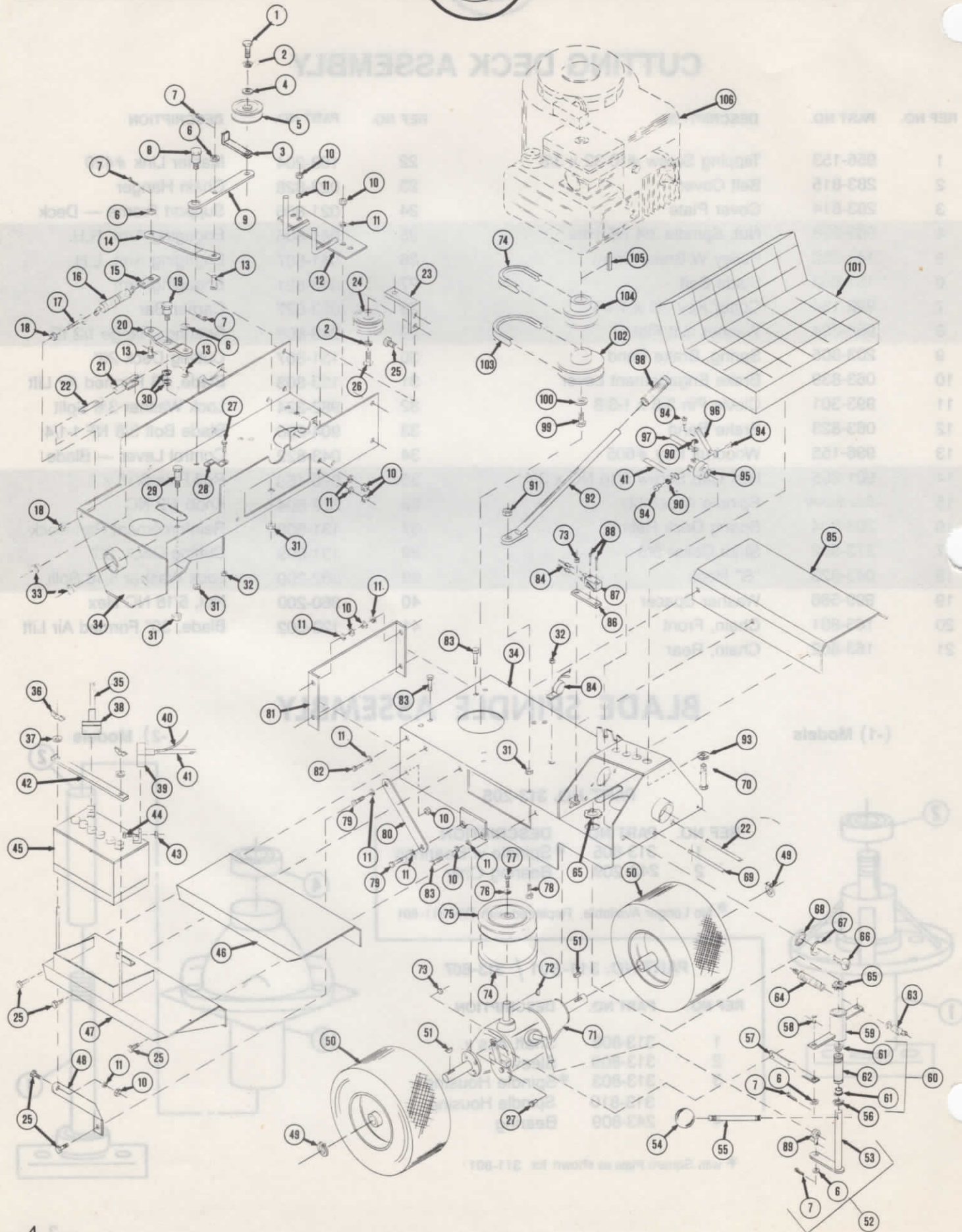
REF NO.	PART NO.	DESCRIPTION
1	313-808	Shaft Ass'y.
2	313-809	Sleeve
3	313-803	* Spindle Housing
	313-810	Spindle Housing
4	243-809	Bearing

* with Square Plate as shown for 311-801

(-2) Models



SENSATION

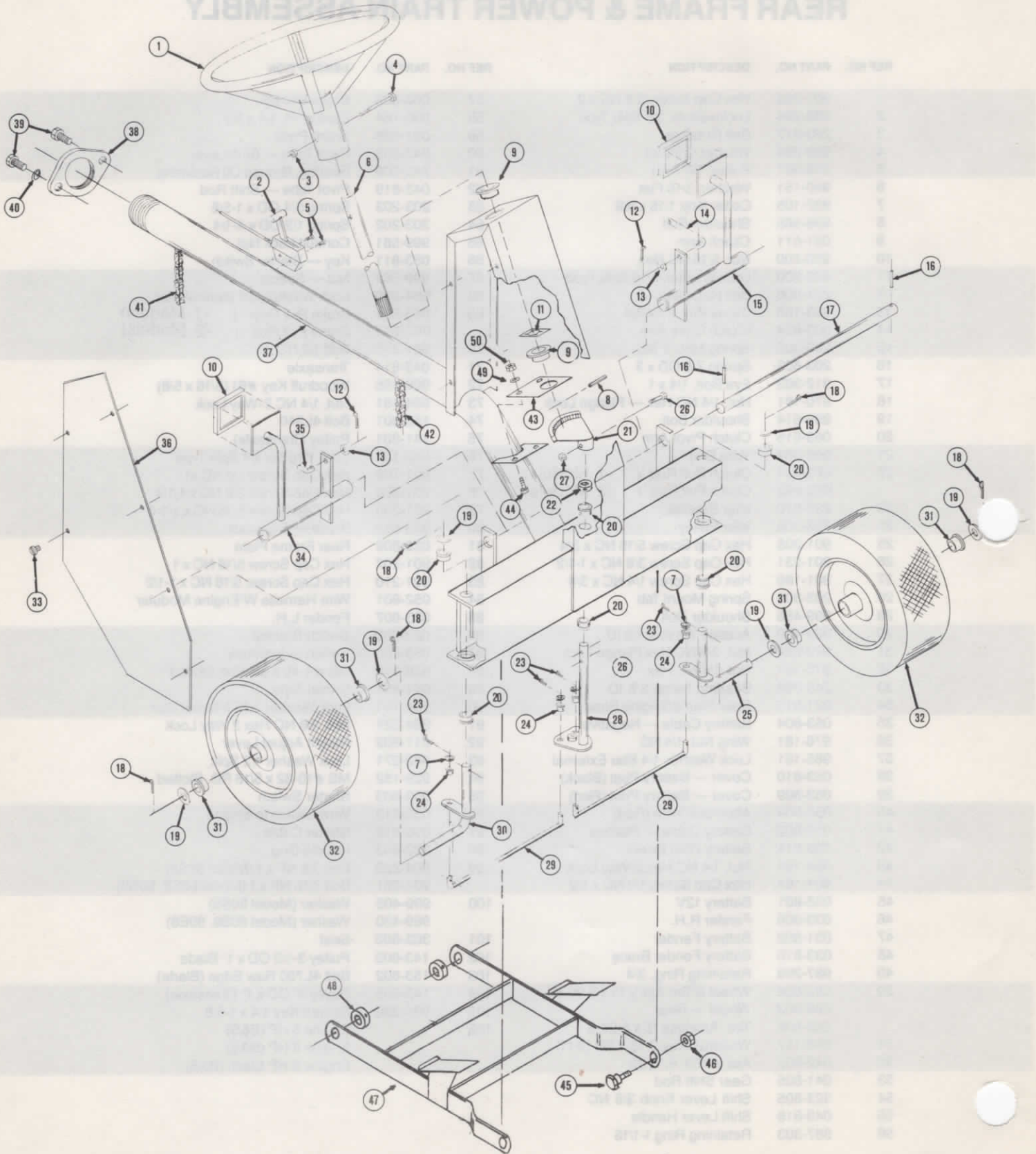


REAR FRAME & POWER TRAIN ASSEMBLY

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	901-233	Hex Cap Screw 3/8 NC x 2	57	063-828	Brake Linkage
2	982-224	Lockwasher, 3/8 Split Type	58	993-184	Clevis Pin, 1/4 x 1/2
3	283-217	Belt Retainer	59	061-806	Brake Pivot
4	980-224	Washer, 3/8 Flat	60	042-803	Pivot Tube — Shift Lever
5	293-301	Pulley, "V" Idler	61	243-806	Bearing, Bronze Oil Retaining
6	980-151	Washer, 3/16 Flat	62	043-819	Pivot Tube — Shift Rod
7	992-105	Cotter Key, 1/16 x 5/8	63	203-203	Spring 3/4 OD x 1-5/8
8	999-565	Shoulder Bolt	64	203-202	Spring 1/2 OD x 4-1/4
9	061-811	Clutch Arm	65	999-581	Conduit Lock Nut
10	960-200	Nut, 5/16 NC Hex	66	053-811	Key — Starter Switch
11	982-200	Lock Washer, 5/16 Split Type	67	999-568	Nut — Special
12	281-806	Belt Retainer	68	984-296	Lock Washer, 5/8 Internal Star
13	993-186	Clevis Pin, 1/4 x 3/4	69	063-835	Brake Pull Rod (-1 Models)
14	063-824	Clutch Drive Arm		063-842	Brake Pull Rod (-2 Models)
15	203-302	Spring Mount Tab	70	901-276	Bolt 1/2 NC x 1
16	203-803	Spring 7/8 OD x 3	71	043-814	Transaxle
17	912-302	Eye Bolt, 1/4 x 1	72	996-155	Woodruff Key #61 (3/16 x 5/8)
18	970-181	Nut, 1/4 NC Hex — Flange Lock	73	964-181	Nut, 1/4 NC 2-Way Lock
19	999-514	Shoulder Bolt	74	153-801	Belt 4L340
20	063-815	Clutch Pivot Arm	75	141-801	Pulley (Transaxle)
21	999-564	Yoke End	76	982-181	Lock Washer 1/4 Split Type
22	063-834	Clutch Pull Rod (-1 Models)	77	901-188	Hex Cap Screw 1/4 NC x 1
	063-843	Clutch Pull Rod (-2 Models)	78	901-230	Hex Cap Screw 3/8 NC x 1-1/4
23	293-810	Idler Bracket	79	901-209	Hex Cap Screw 5/16 NC x 1-1/4
24	293-303	Idler Pulley	80	023-813	Brace — Transaxle
25	901-205	Hex Cap Screw 5/16 NC x 3/4	81	023-809	Rear Frame Plate
26	901-231	Hex Cap Screw 3/8 NC x 1-1/2	82	901-207	Hex Cap Screw 5/16 NC x 1
27	901-186	Hex Cap Screw 1/4 NC x 3/4	83	901-210	Hex Cap Screw, 5/16 NC x 1-1/2
28	203-303	Spring Mount Tab	84	052-801	Wire Harness W/Engine Modular
29	999-456	Shoulder Bolt	85	033-807	Fender L.H.
30	999-458	Acetate Washer 1/2 ID	86	023-830	Switch Bracket
31	970-224	Nut, 3/8 NC Hex Flange Lock	87	053-806	Switch — Interlock
32	970-181	Nut, 1/4 NC Hex	88	926-118	MS #4-40 x 3/4 Pan Slotted
33	243-804	Bearing, Nylon 3/8 ID	89	041-804	Swivel Tube
34	021-815	Rear Frame/Engine Base	90	984-151	Lock Washer 3/16 Internal Star
35	053-804	Battery Cable — Negative	91	964-224	Nut, 3/8 NC Hex 2 Way Lock
36	976-181	Wing Nut, 1/4 NC	92	211-802	Height Adjust Lever
37	985-181	Lock Washer, 1/4 Star External	93	982-271	Lock Washer 1/2 Split
38	053-810	Cover — Battery Post (Black)	94	928-152	MS #10-32 x 5/16 RD. Slotted
39	053-809	Cover — Battery Post (Red)	95	053-803	Starter Switch
40	052-804	Alternator Wire (Red)	96	053-813	Wire-Switch to Engine
41	053-802	Battery Cable — Positive	97	053-812	Starter Cable
42	033-811	Battery Hold Down	98	323-803	Handle Grip
43	964-181	Nut, 1/4 NC Hex 2-Way Lock	99	904-229	Bolt 3/8 NF x 1 (Model 86S5)
44	901-184	Hex Cap Screw 1/4 NC x 1/2		904-251	Bolt 7/16 NF x 1 (Model 80E8, 80S8)
45	053-801	Battery 12V	100	999-405	Washer (Model 86S5)
46	033-806	Fender R.H.		999-430	Washer (Model 80S8, 80E8)
47	031-802	Battery Fender	101	303-803	Seat
48	033-810	Battery Fender Brace	102	143-803	Pulley 3-1/2 OD x 1" Blade
49	987-298	Retaining Ring, 3/4	103	153-802	Belt 4L700 Raw Edge (Blade)
50	082-804	Wheel & Tire Ass'y 15 x 6.00-6	104	143-805	Pulley 3" OD x 1" (Transaxle)
	083-803	Wheel — Rear	105	995-330	Square Key 1/4 x 1-5/8
	263-806	Tire, Tubeless 15 x 6.00-6	106		Engine 5 HP (B&S)
51	996-157	Woodruff Key, 3/16 x 7/8 (#11)			Engine 8 HP (B&S)
52	042-805	Ass'y #53, 6, 7, 89			Engine 8 HP Elect. (B&S)
53	041-805	Gear Shift Rod			
54	323-805	Shift Lever Knob 3/8 NC			
55	043-818	Shift Lever Handle			
56	987-303	Retaining Ring 1-1/16			

Note: The Engine and transmission used on this unit is warranted by the manufacturer and all parts and service must be obtained from the designated center which may be found in the Yellow Pages under "Engines".

REAR FRAME & POWER TRAIN ASSEMBLY



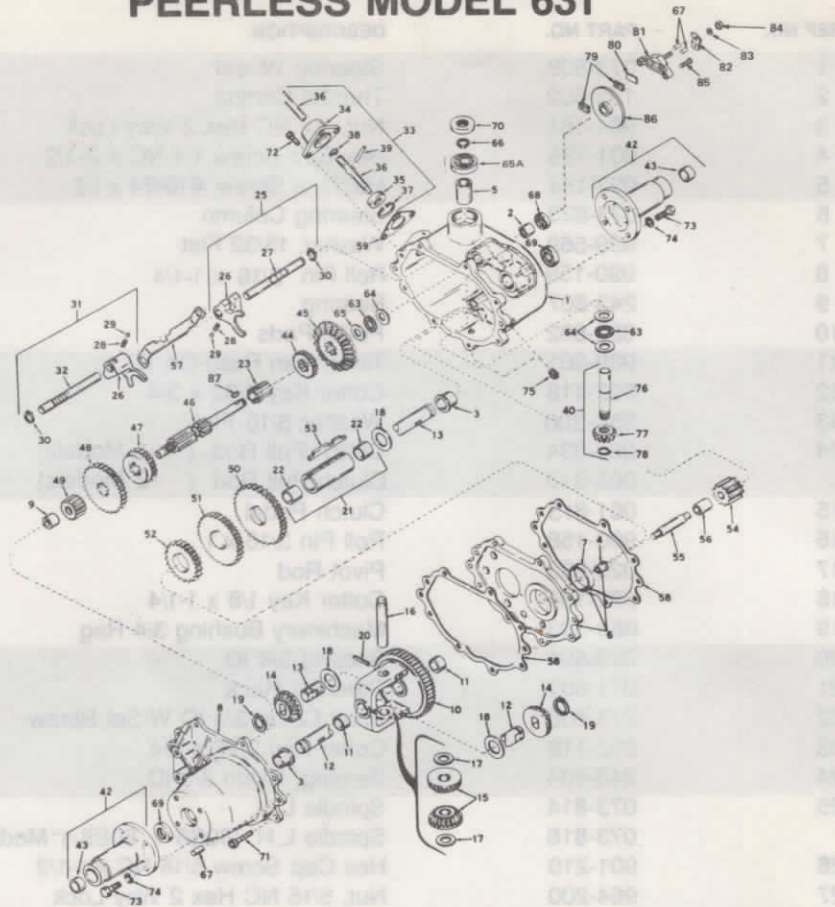
For the Engine and transmission used on this boat is warranted by the manufacturer and all parts and services must be obtained from the designated dealer when they are listed in the Yellow Pages under "Boats".



FRONT FRAME & STEERING ASSEMBLY

REF NO.	PART NO.	DESCRIPTION
1	073-808	Steering Wheel
2	193-802	Throttle Control
3	964-181	Nut, 1/4 NC Hex 2 Way Lock
4	901-195	Hex Cap Screw 1/4 NC x 2-1/2
5	923-154	Machine Screw #10-24 x 1/2
6	073-823	Steering Column
7	999-569	Washer, 13/32 Flat
8	990-159	Roll Pin 3/16 x 1-1/4
9	243-807	Bearing
10	323-802	Pedal Pads
11	989-301	Tinnerman Push-On 1"
12	992-118	Cotter Key 3/32 x 3/4
13	980-200	Washer, 5/16 Flat
14	063-834	Clutch Pull Rod (-1 Models)
	063-843	Clutch Pull Rod (-2 Models)
15	061-813	Clutch Pedal
16	990-158	Roll Pin 3/16 x 1
17	023-833	Pivot Rod
18	992-134	Cotter Key 1/8 x 1-1/4
19	983-303	Machinery Bushing 3/4 Reg
20	243-801	Bearing 3/4 ID
21	071-807	Steering Rack
22	273-808	Shaft Collar 3/4 ID W/Set Screw
23	992-118	Cotter Key 3/32 x 3/4
24	243-804	Bearing, Nylon 3/8 ID
25	073-814	Spindle L.H.
	073-816	Spindle L.H. (80S8-1, 80E8-1 Models Only)
26	901-210	Hex Cap Screw 5/16 NC x 1-1/2
27	964-200	Nut, 5/16 NC Hex 2 Way Lock
28	073-817	Steering Column
29	073-818	Steering Tie Rod
30	073-813	Spindle R.H.
	073-815	Spindle R.H. (80S8-1, 80E8-1 Models Only)
31	243-805	Bearing — Wheel (ARCO 3/4 ID)
32	082-803	Wheel Assembly (Complete)
	083-804	Rim Only
	263-805	Tire — Tubeless 11 x 4.00 — 5
33	956-153	Screw#10-32 x 3/8 Tapping
34	061-812	Brake Pedal
35	063-835	Brake Pull Rod (-1 Models)
	063-842	Brake Pull Rod (-2 Models)
36	033-808	Steering Column Side Panel
37	021-819	Front Frame (-1 Models) Frames Include #7, 16, 17, 18,
	021-823	Front Frame (-2 Models) 19, 20, 22, 23, 24, 25, 28, 29, 30
38	023-816	Flange Couple Nut
39	901-229	Hex Cap Screw 3/8 NC x 1
40	982-224	Lock Washer 3/8 Split Type
41	163-802	Chain #420 x 21P
42	163-801	Chain #420 x 63P
43	073-824	Shaft Bracket
44	901-205	Hex Cap Screw 5/16 NC x 3/4
45	999-514	Shoulder Bolt
46	970-224	Nut 3/8 Whizlock
47	021-810	Deck Support Arm (-1 Models)
	021-818	Deck Support Arm (-2 Models)
48	273-502	Shaft Collar 5/8
49	982-200	Lock Washer 5/16 Split
50	960-200	Nut 5/16 NC Hex

TRANSAXLE ASSEMBLY PEERLESS MODEL 631



REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	770063	Case Assy (Incl. #2, 3, 5)	31	784084	Shift Assy (Incl. #26, 28, 29, 30, 32)	59	788003	Gasket, Shift housing
2	780086	Bearing, Needle	32	784085	Rod, Shift	63	780071	Bearing, Thrust
3	780059	Bearing, Bronze	33	784118	Lever Assy., Shift (Incl. #34-39)	64	780072	Washer, Thrust
4	780060	Bearing, Bronze	34	784088	Housing, Shift lever	65	780073	Washer, Thrust
5	780061	Bearing, Bronze	35	784094	Keeper, Shift lever	65A	780093	Bearing, Ball
6	786033	Plate Assy (Incl. #4, 7)	36	784119	Lever, Shift	66	792035	Ring, Snap
7	780062	Bearing, Bronze	37	792016	Ring, Snap	67	786026	Pin, Dowel
8	772042	Cover Assy (Incl. #39)	38	792001	Ring, Quad	68	788043	Seal, Oil
9	780063	Bearing, Needle	39	792049	Pin, Drive	69	788009	Seal, Oil
10	778053	Gear Assy (Incl. #11)	40	776102	Shaft & Gear Assy (Incl. #76-78)	70	788035	Seal, Oil
11	780064	Bearing, Bronze	42	782048	Axle Housing (Incl. #43)	71	792036	Cap Screw 1/4 NC x 1-1/4
12	774099	Axle, Left hand	43	780091	Bearing & Seal Assy	72	792007	Cap Screw 1/4 NC x 3/4
13	774098	Axle, Right hand	44	778024	Gear (16 teeth)	73	792037	Cap Screw 5/16 NC x 1
14	778067	Gear, Bevel	45	778057	Gear, Bevel (33 teeth)	74	792029	Lockwasher, 5/16"
15	778068	Pinion, Bevel	46	776138	Shaft, Shifter & Brake	75	792039	Plug, Pipe, 1/8"
16	786034	Pin, Drive	47	778058	Gear, Shifting	76	776103	Shaft, Input
17	780065	Washer, Thrust	48	778059	Gear, Shifting	77	778077	Pinion, Input
18	780001	Washer, Thrust	49	778060	Gear, Spur (12 teeth)	78	788040	Ring, Retaining
19	788038	Ring, Snap	50	778061	Gear (39 teeth)	79	790006	Pad, Brake
20	792040	Pin, Roll	51	778062	Gear (34 teeth)	80	790007	Plate, Brake pad
21	786035	Sleeve Assy (Incl. #22)	52	778063	Gear (25 teeth)	81	790005	Holder, Brake pad
22	780066	Bearing, Bronze	53	792034A	Key, Countershaft	82	790013	Lever, Brake
23	776090	Shaft, Idler	54	778064	Idler, Reverse	83	792076	Washer, Flat
25	784079	Shift Assy (Incl. #26-30)	55	776057	Shaft, Reverse Idler	84	792075	Nut, Lock
26	784004	Fork, Shift	56	786036	Spacer, Reverse Idler	85	792073	Tap Screw 1/4 NC x 1-
27	784083	Rod, Shift	57	784087	Stop, Shifter	86	790009	Disk, Brake
28	792003	Spring	58	788033	Gasket, Case & Cover	87	792045	Key, Woodruff #61
29	792004	Ball, Steel						
30	792017	Ring, Snap						

COMMERCIAL

SENSATION

POWER MOWER OWNER'S MANUAL

MODELS: 86S5-0
80E8-0
80S8-0
86S5-1
80E8-1
80S8-1
86S5-2
80E8-2
80S8-2



THE SENSATION CORPORATION • OMAHA, NEBRASKA 68110 USA

Caution Symbol



THE TRIANGULAR SYMBOL SHOWN ABOVE IS USED THROUGHOUT THIS BOOKLET TO CALL SPECIAL ATTENTION TO

ITEMS AFFECTING THE OPERATOR'S PERSONAL SAFETY. THESE ITEMS SHOULD BE GIVEN CLOSE ATTENTION.

1. CAUTION: Before leaving the operator's position, shift transmission into Neutral, disengage attachment clutch, shut off engine, and remove ignition key.
2. Keep all shields in place.
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.
5. Know the controls and how to stop quickly - READ THE OWNER'S MANUAL.
6. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction.
7. Do not carry passengers.
8. Clear work area of objects which might be picked up and thrown. The blade can throw objects with sufficient force to cause damage or injury.
9. Disengage all attachment clutches and shift into Neutral before attempting to start engine.
10. Stop engine before leaving operator position and before making any repairs or adjustments.
11. Take all possible precautions when leaving vehicle unattended, such as disengaging power take-off, lowering attachments, shifting into Neutral, stopping engine, and removing key.
12. Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes, never across the face.
13. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
14. Stay alert for holes in terrain and other hidden hazards.
15. Handle gasoline with care - it is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors.
 - C. Wipe up any spilled gasoline thoroughly before starting the engine.
 - D. Open doors if engine is run in garage - exhaust fumes are dangerous. Do not run engine indoors.
16. Keep vehicle and attachments in good operating condition and keep safety devices in place.
17. Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
18. Never store equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark.
19. Allow engine to cool before storing in any enclosure.
20. To reduce fire hazard, keep engine free of grass, leaves, or excessive grease.
21. Vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.
22. Do not change engine governor settings or overspeed engine.
23. When using vehicle with mower:
 - A. Mow only in daylight or in good artificial light.
 - B. Never make a cutting-height adjustment while engine is running if operator must dismount to do so.
 - C. Shut engine off when removing grass catcher and/or unclogging chute.
 - D. Check blade-mounting bolts for proper tightness at frequent intervals.
 - E. The blade continues to rotate for a few seconds after the engine is shut off. Do not place any part of the body in the blade area until you are sure the blade has stopped.
 - F. Do not mow on wet grass.
24. Check grass catcher frequently for wear or deterioration. Replace with new grass catcher for safety protection.
25. Do not wear loose-fitting clothing that could get caught in moving parts.
26. Follow maintenance instructions as outlined in this manual.
27. DISCONNECT THE SPARK PLUG WIRE BEFORE MAKING ANY ADJUSTMENT OR REPAIR.

||||| set-up instructions

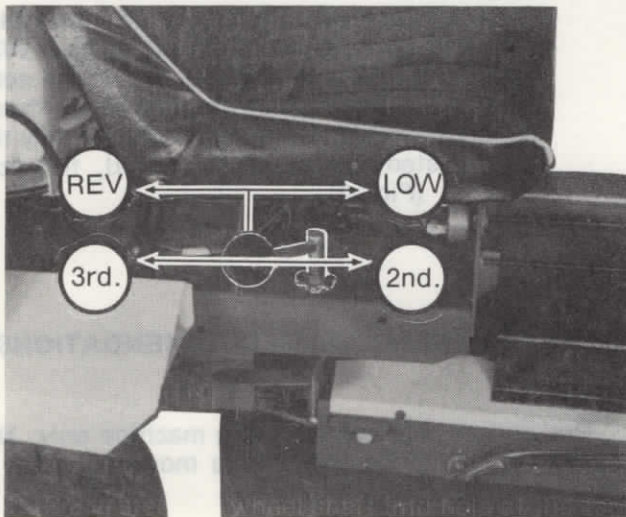
1. Place steering wheel shaft into hole at the top of steering column support.
2. Insert end of shaft into open end of steering U-joint and secure with hardware provided in owner's package.
3. Secure column support sideplates in place with self-tapping screws provided.
4. Add engine oil and gasoline per engine manufacturer's guidelines (refer to engine manual provided).

||||| controls

The following section is intended to familiarize the operator with the location and function of controls before operating the mower. Check all controls for smooth, un-obstructed action before operating machine.

Transmission Lever (Fig. 1)

When shifting between upper and lower gear levels, there is about 1" of vertical travel. Lever should be placed in Neutral and raised or lowered completely before making gear selection.



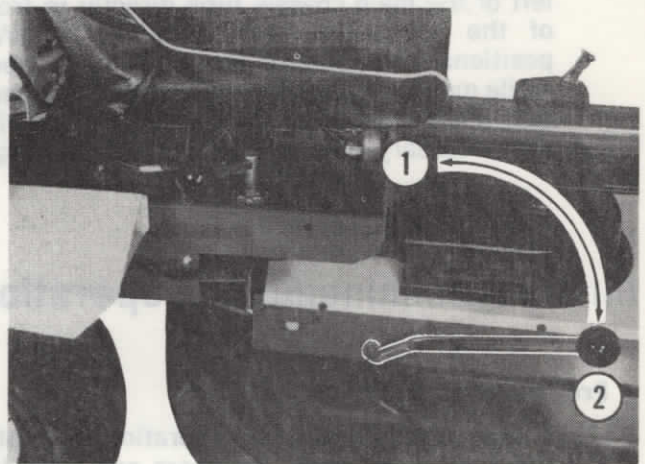
SHIFT PATTERN

Fig. 1

Blade Cut/Stop Lever (Fig. 2)

Pull up and toward operator to start blade rotation. Push forward to disengage belt and stop blade rotation.

5. Check tires for proper inflation (16 lbs.).
6. Electric Start Models Only:
It will be necessary to add electrolyte (a special acid) to the battery before using the machine. This should be done by someone with proper equipment, such as your SENSATION dealer or your local Service Station. Battery is easily removed from machine for servicing.



BLADE CUT/STOP LEVER

① CUT ② STOP

Fig. 2



CAUTION: OPERATOR SHOULD BE SEATED, WITH HANDS AND FEET CLEAR OF BLADE AREA WHEN STARTING BLADE ROTATION.

NOTE: Two electrical interlock devices are provided; one to prevent the engine from starting while the transmission is in gear and one to prevent starting with mowing blade in "CUT" position.



CAUTION: THE ELECTRICAL INTERLOCK SYSTEM IS PROVIDED SPECIFICALLY AS A SAFETY FEATURE AND CARE SHOULD BE TAKEN TO INSURE THAT BOTH SWITCHES FUNCTION PROPERLY AT ALL TIMES. INTERLOCK SYSTEM TEST PROCEDURES ARE CONTAINED IN THE MAINTENANCE SECTION OF THIS BOOKLET.

Clutch/Brake/Steering

These controls are arranged in standard fashion; clutch pedal on the left side of the steering column support and brake pedal on the right.

Clutch pedal must be depressed in order to select gears and also must be depressed along with brake pedal when halting machine.



CAUTION: USE OF FOOT BRAKE ALONE IS NOT SUFFICIENT TO HALT MACHINE WHILE UNDER POWER. CLUTCH PEDAL MUST BE DEPRESSED SIMULTANEOUSLY TO DISENGAGE ENGINE POWER.

Engine

Throttle Control

A lever type throttle control is located on the left of the main chassis tube directly in front of the seat. The "FAST" and "SLOW" positions are used to vary machine speed while mowing. The "START" position is used only while starting to provide the engine with the necessary fuel/air mixture for starting.

The "STOP" position serves to shut off engine power by halting fuel supply and breaking ignition system continuity.

Ignition Control

Manual Start Models: As mentioned above, "STOP" position on the throttle control shorts the ignition system and halts engine power.

Electric Start Models: A key switch ignition control is provided on electric start models in addition to the throttle control. The switch is located on the seat support plate just below the seat and to the right of the main chassis tube. Three switch positions are provided.

"OFF"; An additional method of shutting off the engine.

"RUN"; Center position, automatically held while engine runs.

"START"; Position used to engage electric start feature.

operation

Pre-operation check and service

Before each period of operation, visually check all nuts, bolts, fasteners and tires for proper condition. Service engine per engine manufacturer's specifications.

Starting



CAUTION: LOCATE MACHINE ON A LEVEL SURFACE BEFORE STARTING TO PREVENT MACHINE FROM ROLLING.

1. Place blade Cut/Stop lever in "STOP" (forward) position.
2. Place transmission lever in "NEUTRAL" position.
3. Move throttle control lever to "START".

Manual Start Models Only: Pull recoil handle briskly until engine starts.

Electric Start Models Only: With operator seated and brake and clutch pedals depressed, turn key switch fully clockwise (to "START" position) until engine starts, then release key allowing switch to return to "RUN" position. Manual start procedure may be followed if electric start system does not function (key switch must be in "RUN" position).

Mowing Hints

Mow with a sharp blade only as a dull blade tends to tear, rather than cut grass. When beginning operation, blade should be set at highest cutting position and test strips mowed to check actual cutting height. Blade may then be adjusted downward if desired, for closer cutting. (Fig. 3)

GEAR SELECTION RECOMMENDATIONS

Reverse... For maneuvering machine only. NOT to be used while mowing.

1st Gear ... Primary mowing gear.

2nd Gear ... For windrowing cut grass or towing lightweight lawn maintenance accessories (lawn sweep, fertilizer applicators, etc.).

3rd Gear ... For transporting machine on level, clear terrain only. DO NOT use for mowing.

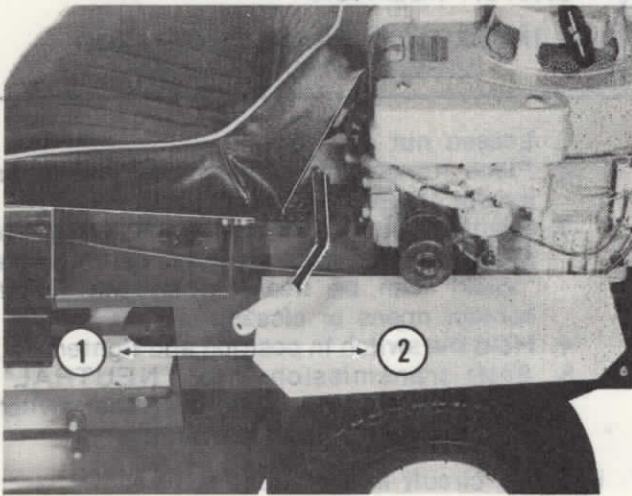
adjustments

Seat Location

A retaining nut under the seat allows front or rear adjustment as desired.

Blade Height (Fig. 3)

Lift blade height lever and move rearward to raise blade, forward to lower blade. Full height is approximately 3" above ground with stops at 1/2" intervals down to approximately 1" above ground.



BLADE HEIGHT ADJUSTMENT

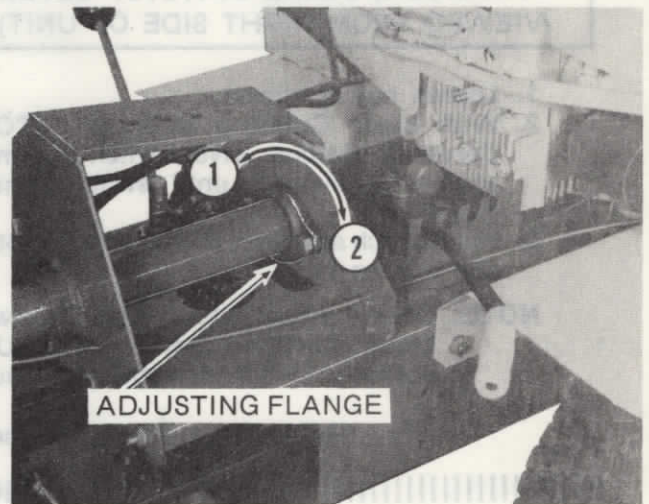
① LOWER ② RAISE

Fig. 3

Blade Belt Tension

An automatic feature provides correct tension in all but extreme cases. If manual tension adjustment should be required, use the following procedure:

1. Remove seat.
2. Remove the two bolts from the adjusting flange. (Fig. 4).
3. Turn adjusting flange as required (Refer to Fig. 4).
4. Check clutch pedal for proper function and adjust if required.



FLANGE LOCATION

① LOOSEN ② TIGHTEN

Fig. 4



CAUTION: BLADE HEIGHT ADJUSTMENT SHOULD BE MADE WHILE OPERATOR IS DISMOUNTED AND ENGINE IS STOPPED. USE CARE TO AVOID TOUCHING HOT MUFFLER WHILE MAKING ADJUSTMENT.

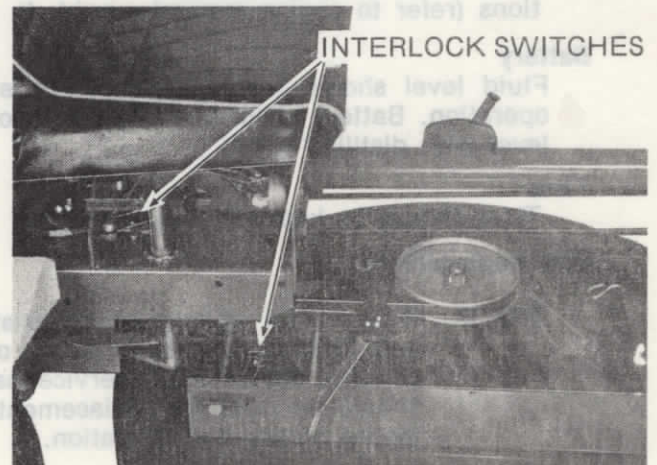
Clutch Pedal Tension

Loosen the locking nut on the eyebolt located behind the seat support plate (lower left side) and turn the adjusting nut (front side of seat support plate) clockwise to increase tension or counter-clockwise to decrease tension.

Clutch Pedal Travel

To adjust clutch, remove the cotter pin and rod from the clutch pedal (inside steering column support) and turn clutch rod clockwise.

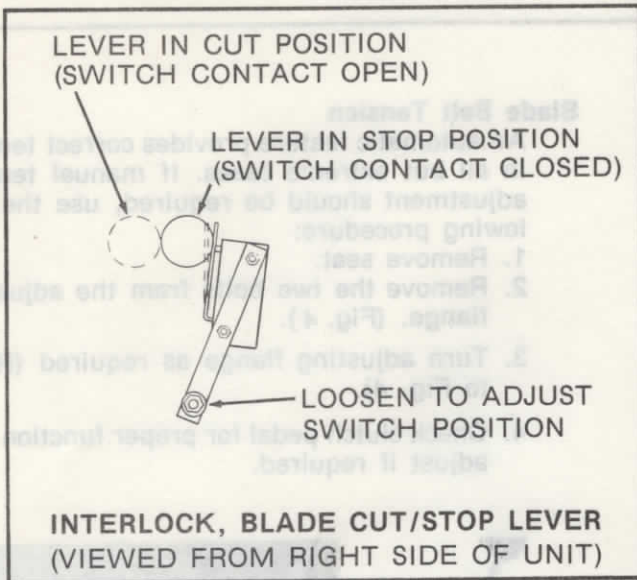
Electrical Interlock System



INTERLOCK SWITCH LOCATIONS

Fig. 5

Blade Cut/Stop Lever:

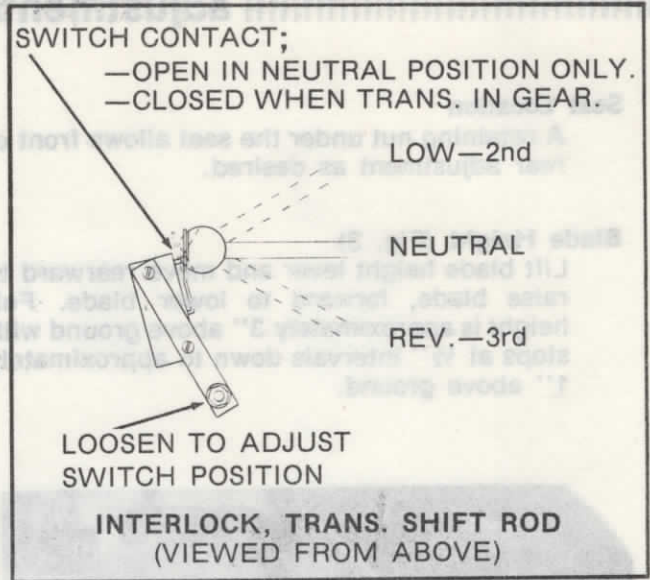


1. Loosen nut as shown.
2. With blade Cut/Stop lever in "STOP" (forward) position, pivot switch assembly against cross-shaft until switch contact closes.
3. Hold switch assembly in the closed position and tighten nut.

NOTE: Do not adjust switch assembly with blade Cut/Stop lever in "CUT" position. Switch damage will result.

Refer to maintenance section for interlock circuit information.

Transmission Shift Rod:



1. Loosen nut as shown.
2. Place transmission in gear (any position except "NEUTRAL").
3. Position switch lever against shaft with the switch in a closed position (an audible "click" can be heard when the switch contact opens or closes).
4. Hold the switch in position and tighten nut.
5. Shift transmission into "NEUTRAL" position and check to be sure that switch lever moves to open position.

||||| maintenance



CAUTION: DISCONNECT SPARK PLUG LEAD PRIOR TO PERFORMING ANY MAINTENANCE.

Engine

Follow engine manufacturer's recommendations (refer to engine manual provided).

Battery

Fluid level should be checked before each operation. Battery should be filled to proper level with distilled water.

Tires

Tires should be kept inflated to 16 lbs.

Belt Replacement

NOTE: Due to the unique characteristics and functions of these belts, only genuine SENSATION service parts should be used for replacement to insure proper belt operation.

Blade Belt:

1. Place blade Cut/Stop lever in "STOP" position.

2. Place blade height lever in full slack position.
3. Remove covers from cutting deck.
4. Insure that spark plug lead is removed before proceeding.
5. Remove master chain link at base of rear chain.
6. Disconnect wires from Blade Cut/Stop Lever Interlock Switch.
Belt may now be easily removed. Install new SENSATION belt and re-assemble.

NOTE: When replacing Blade Belt, insure belt is on rear idler.

Drive Belt:

1. Remove blade belt.
2. Block front tires to prevent machine from rolling in either direction when rear is raised from ground.
3. Raise rear of machine (3 to 6 inches off ground should be adequate) and place a safe support under rear of main chassis.
4. Remove clutch tension spring from eyebolt at lower left corner of seat support plate.

- Remove belt retainer bar and clutch idler pulley.
 - Remove entire transaxle assembly from chassis (two bolts on each side of chassis and one brace bolt on each side).
- Belt may now be removed and replaced. Install new SENSATION belt and re-assemble.

Blade Removal



CAUTION: PLACE A PROTECTIVE COVERING OVER SHARP EDGE OF BLADE TO PREVENT INJURY FROM ACCIDENTAL CONTACT.

Place blade Cut/Stop lever in "STOP" position. Use a 9/16" wrench to remove blade retaining bolt.

Blade Sharpening

Due to length of blade, it is recommended that blade be taken to your SENSATION dealer to insure proper sharpening and balancing.

Blade Replacement

Be sure blade is properly seated into the blade saddle and that curved edges of blade turn up (toward deck housing). Blade retaining belt should be torqued to 35 Ft. Lbs.



CAUTION: CHECK FOR ANY ABNORMAL VIBRATION AFTER BLADE INSTALLATION AND STOP ENGINE IMMEDIATELY IF ANY IS NOTICED. RE-CHECK INSTALLATION PROCEDURE AND CHECK AGAIN. IF VIBRATION PERSISTS, CHECK BLADE BALANCE.

Deck Housing

Area beneath deck housing should be clear of matted grass or other debris to prevent possible blade interference and to insure best cutting performance.

Electrical Interlock Test Procedure



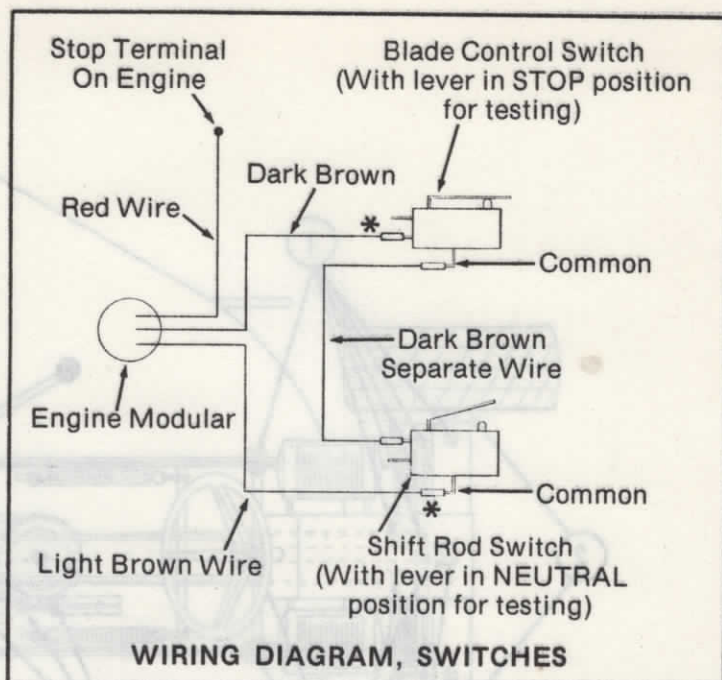
CAUTION: THE ELECTRICAL INTERLOCK SYSTEM IS PROVIDED SPECIFICALLY AS A SAFETY FEATURE AND CARE SHOULD BE TAKEN TO INSURE THAT BOTH SWITCHES FUNCTION PROPERLY AT ALL TIMES.



CAUTION: REMOVE SPARK PLUG LEAD BEFORE TESTING.

NOTE: This test requires a circuit testing device (continuity light or meter) generally available at electronic or automotive supply stores.

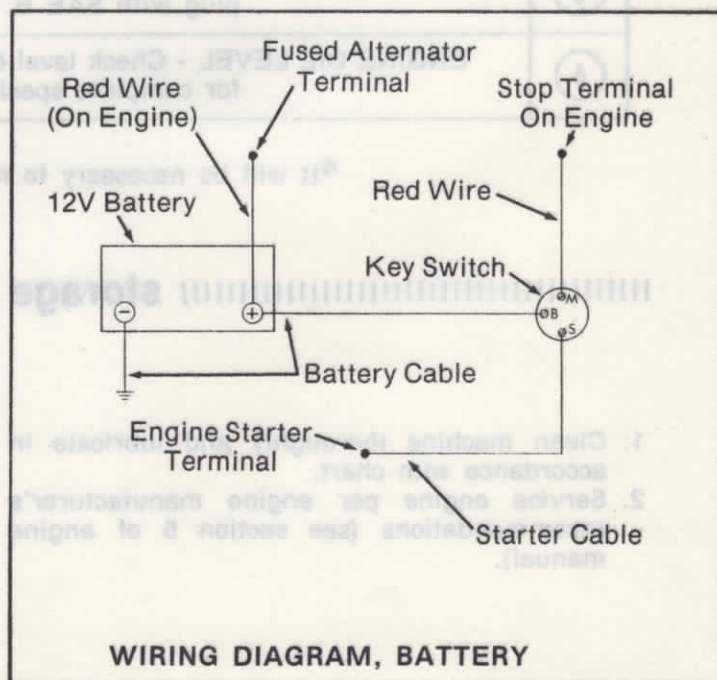
- Remove belt covers from cutting deck to allow access to blade control switch.
- Refer to wiring diagram (switches) to insure wires are attached to correct contacts on switches.

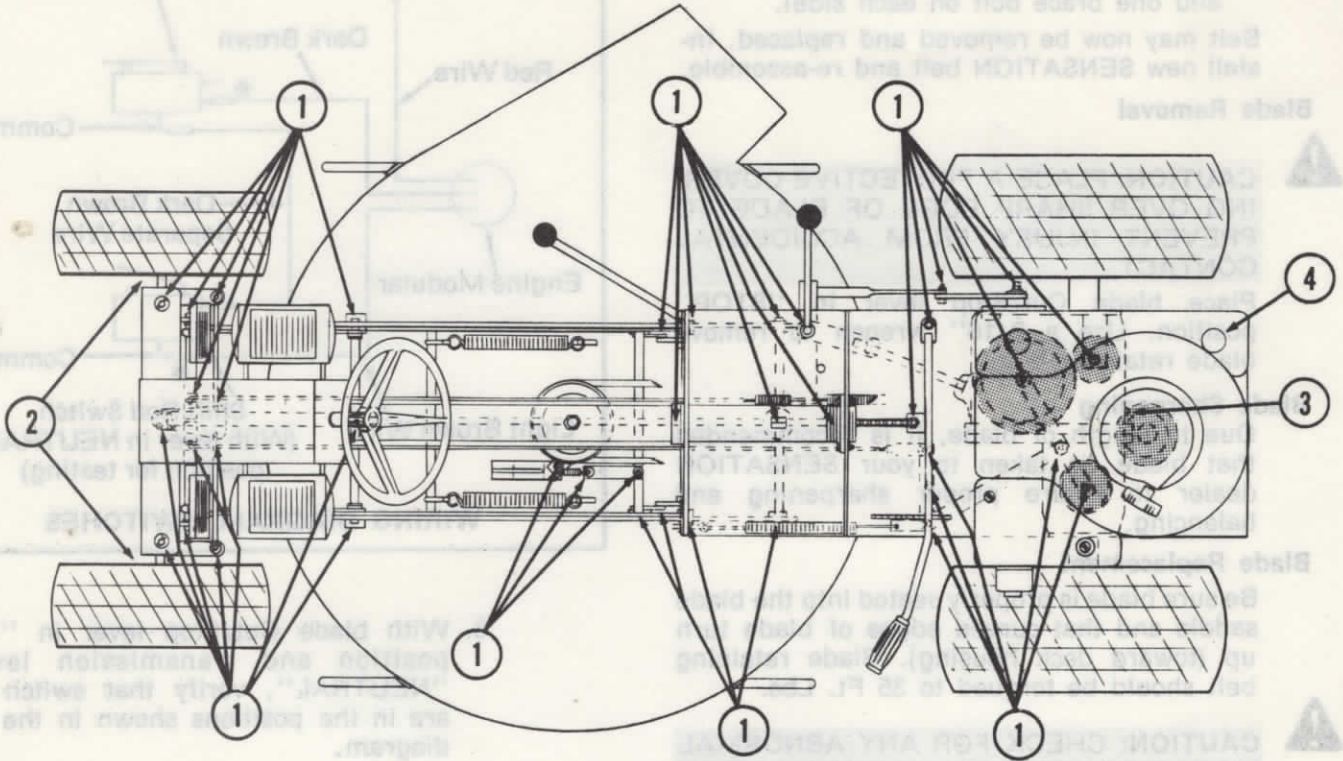


- With blade Cut/Stop lever in "STOP" position and transmission lever in "NEUTRAL", verify that switch levers are in the positions shown in the wiring diagram.

NOTE: If adjustment is required to obtain the proper switch lever position refer to the adjustment section of this booklet.

- Attach tester leads to switch connectors marked with an asterisk (*) in the wiring diagram. Circuit testing device should indicate a complete circuit at this time.





LUBRICATION CHART

Shaded or dashed lines indicate location on underneath side of machine.

①	*PIVOT POINTS - Maintain light film of SAE 30 Engine Oil.
②	FRONT WHEEL BEARINGS - Grease every 20 hours during cutting season with lithium base pressure gun grease.
③	TRANSAXLE LUBE LEVEL - Check prior to each mowing season. Maintain level at filler plug with SAE E. P. 90 lube.
④	ENGINE OIL LEVEL - Check level before each usage. Refer to engine manual provided for complete specifications.

*It will be necessary to remove guards to obtain access to some pivot points.

storage

1. Clean machine thoroughly and lubricate in accordance with chart.
2. Service engine per engine manufacturer's recommendations (see section 5 of engine manual).

3. Make sure blade Cut/Stop lever is in "STOP" position to remove tension from belt.

Electric Start Models Only:

Remove battery and store in a cool, dry place where there is no danger of freezing.