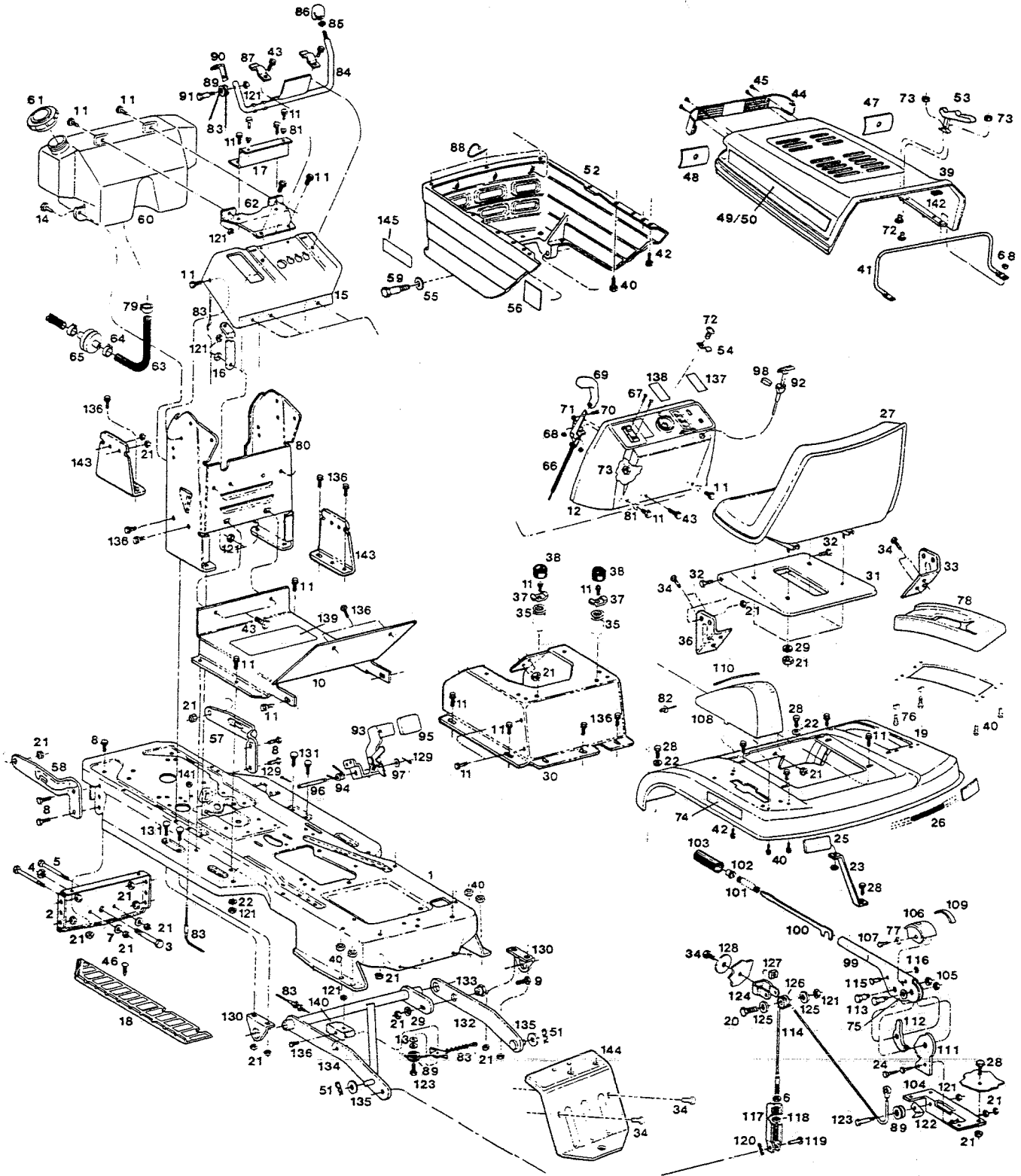


MODEL 645 ELECTRICAL SYSTEM

Index No.	Part No.	Description	Index No.	Part No.	Description
1	138735	Battery - 12 volt	22	157974	Nut - hex 5/16-24
2	134908	Wire - battery ground, black	23	152975	Washer - lock 5/16 ext tooth
3	449587	Bolt - hex 1/4-20 x 5/8	24	310151	Nut - hex 5/16-18 nylok
4	715037	Nut - hex 1/4-20 keps	25	153510	Washer - lock 5/16 int tooth
5	138997	Harness - wiring	26	--	Fuse - 15 amp (purchase locally)
6	112326	Retainer - harness	27	616342	Nut - hex 5/16-18 cntr. lock
7	136945	Harness - headlights	28	110379	Tie - cable
8	134676	Retainer - harness, press-on	29	138628	Wire - resistor
9	135533	Bulb - headlights	30	135145	Retainer - wire
10	135814	Switch - headlights	31	158717	Nut - switch
11	136051	Bulb - monitor indicator	32	136242	Key - ignition
12	138636	Harness - indicator lights	33	112698	Boot - ignition switch
13	138693	Switch - ignition	34	096123	Bracket - battery hold-down
14	138925	Switch - clutch interlock	35	096115	Rod - battery hold-down
15	157933	Screw - pan head #12	36	452615	Nut - hex 1/4-20 nylok
16	135822	Switch - no start	37	615690	Washer - flat 1/4
17	138750	Switch - system interlock	38	114942	Bushing - wire insulator
18	134940	Solenoid - starter	39	138867	Hourmeter
19	158121	Bolt - hex 1/4-20 x 3/4	40	764217	Rivet - pop 1/8
20	616375	Nut - hex 1/4-20 cntr. lock	41	138985	Switch - seat
21	152108	Bolt - hex 5/16-18 x 1	42	115557	Tray - battery

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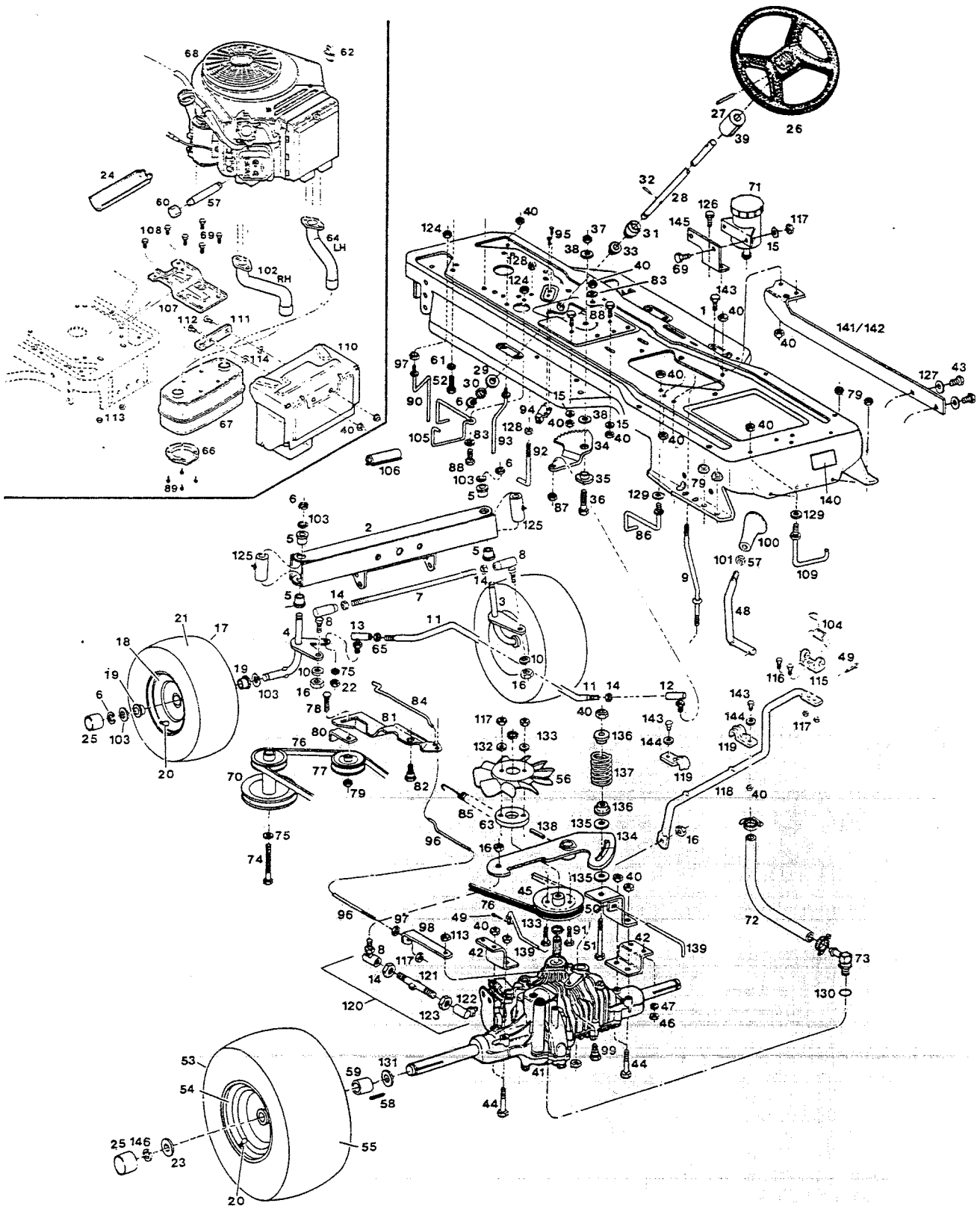


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MODEL 645 MAIN FRAME

Index No.	Part No.	Description	Index No.	Part No.	Description
1	023930	Frame - main	73	452102	Nut - hex keps #8-32
2	019240	Bracket - front axle	74	799941	Decal - 16-46
3	380303	Bolt - hex shoulder 1/2-13 x 2-5/8	75	159343	Washer - flat
4	380311	Nut - hex jam 1/2-13 lock	76	158840	Screw - plastite #10 x 3/4
5	164699	Bolt - shoulder 5/16-18 x 2-7/8	77	715136	Washer - #10 - 24
6	310052	Nut - hex 1/4-20	78	095288	Guide - shift lever
7	462762	Washer - flat 5/16	79	162404	Clamp - fuel line
8	157636	Bolt - hex 5/16-18 x 3/4 whiz	80	023810	Support - dash
9	156968	Bolt - hex 5/16-18 x 1-1/4	81	381822	Bushing - nylon w/shoulder
10	023806	Console - chassis	82	715243	Rivet - pop
11	158089	Screw - taptite 1/4-20 x 1/2	83	053109	Cable - mower drive control
12	115238	Dash - plastic	84	098848	Lever - mower drive control
13	158956	Washer - 1/4 special	85	615625	Nut - hex jam 1/2-13
14	166750	Screw - plastite 1/4 x 3/4	86	112664	Knob - lever
15	013763	Support - dash	87	097253	Clip - lever retaining
16	013771	Brace - dash	88	110379	Strap - tie
17	013789	Brace - dash & fuel tank	89	092429	Pulley - cable
18	114769	Pad - foot, L.H. platform	90	096305	Retainer - cable
	114751	Pad - foot, R.H. platform (not shown)	91	157446	Bolt - shoulder 1/4-20 x 1-3/8
19	023811	Fender - rear wheels	92	052183	Control - choke w/cable
20	158972	Bolt - hex 1/4-20 x 1	93	093815	Pedal - clutch/brake w/brake lever
21	310151	Nut - hex 5/16-18 nylok	94	100008	Spring - pedal return
22	158469	Washer - flat	95	112235	Pad - pedal
23	013797	Brace - fender L.H.	96	087668	Shaft - pedal
24	152108	Bolt - hex 5/16-18 x 1	97	158873	Washer - flat 1/2
25	114850	Reflector - fender, red	98	089243	Clip - choke retainer
26	112300	Strip - fender trim	99	013748	Lever - height adjusting
27	115519	Seat	100	097303	Rod - lever
28	450346	Bolt - hex 5/16-18 x 3/4	101	097295	Spring - lever
29	715185	Washer - flat 5/16	102	112672	Knob - adjusting lever
30	023812	Support - fender/seat	103	112680	Grip - lever
31	023878	Plate - seat mount	104	014134	Bracket - adjusting lever
32	157503	Bolt - hex shoulder, 5/16-18 x 5/8	105	157610	Nut - hex 5/16-18 flanged
33	023807	Bracket - seat plate R.H.	106	113316	Indicator - height of cut
34	450437	Bolt - hex 5/16-18 x 5/8	107	158527	Screw - 8-32 x 3/8
35	095503	Spring - seat	108	113308	Cover - height adjust lever
36	023808	Bracket - seat plate L.H.	109	008433	Decal - height indicator numbers
37	095174	Clamp - seat spring	110	008425	Decal - cover, height of cut
38	112334	Cover - seat spring	111	098459	Quadrant - height adjust
39	114959	Hood - upper	112	098467	Pawl - height adjust
40	158832	Screw - plastite #10 x 1/2	113	158675	Bolt - shoulder 5/16-18 x 5/8
41	098343	Support - hood	114	052563	Cable - deck lifting
42	159400	Screw #10-24 x 1	115	097337	Pin - clevis
43	158097	Screw - taptite 1/4-20 x 5/8	116	158857	E Ring
44	112565	Lens - headlights	117	159137	Clevis - lift cable
45	158865	Screw - taptite 6 x 1/2	118	157966	Nut - square 1/4-20
46	113738	Fastener - foot pad	119	157263	Pin - clevis
47	797696	Reflector - headlight R.H.	120	715029	Pin - cotter 3/32 x 3/4
48	797704	Reflector - headlight L.H.	121	452615	Nut - hex 1/4-20 nylok
49	799940	Decal - hood side L.H.	122	097352	Retainer - cable
50	799939	Decal - hood side R.H.	123	158683	Bolt - shoulder 1/4-20 x 1
51	715011	Hairpin cotter	124	097279	Clevis - pulley, fender
52	113183	Hood - lower	125	615690	Washer - flat 1/4
53	115139	Latch - hood	126	086702	Pulley - cable, steel
54	115147	Keeper - hood latch	127	158923	Nut - square 5/16-18
55	715417	Washer - flat 3/8	128	014142	Washer - formed
56	006874	Decal - heat reflective	129	317016	Pin - cotter
57	093989	Bracket - lower hood R.H.	130	013813	Bracket - hanger
58	093997	Bracket - lower hood L.H.	131	313502	Bolt - rd. head 5/16-18 x 1
59	162057	Bolt - shoulder 5/16-18	132	019976	Link - suspension R.H.
60	115533	Tank - fuel, 3 gal.	133	158691	Nut - eccentric, deck leveling
61	115473	Cap - fuel tank	134	022418	Suspension Assembly - lift
62	015305	Bracket - fuel tank	135	156075	Washer - flat 1/2
63	672832	Hose - fuel line	136	159228	Screw - tapping 5/16-18 x 3/4
64	303859	Clamp - fuel line	137	006593	Decal - monitor lights
65	432625	Filter - fuel	138	798843	Decal - dash, L.H.
66	052175	Control - throttle w/cable	139	009589	Decal Danger, on console
67	158451	Screw - pan hd. 10-24 x 5/8	140	174128	Bracket - cable pulley
68	452318	Nut - hex 10-24 nylok	141	159426	Nut - 1/4-28 jam
69	112730	Knob - throttle lever	142	446799	Pad - hood
70	159335	Screw - pan head 8-32 x 3/8	143	023809	Bracket - dash
71	159244	Nut - hex 8-32	144	018093	Plate - rear hitch
72	459925	Screw - phil head #8-32 x 3/8	145	800189	Decal - HYDRO
			--	115303	Cover - vinyl (optional)

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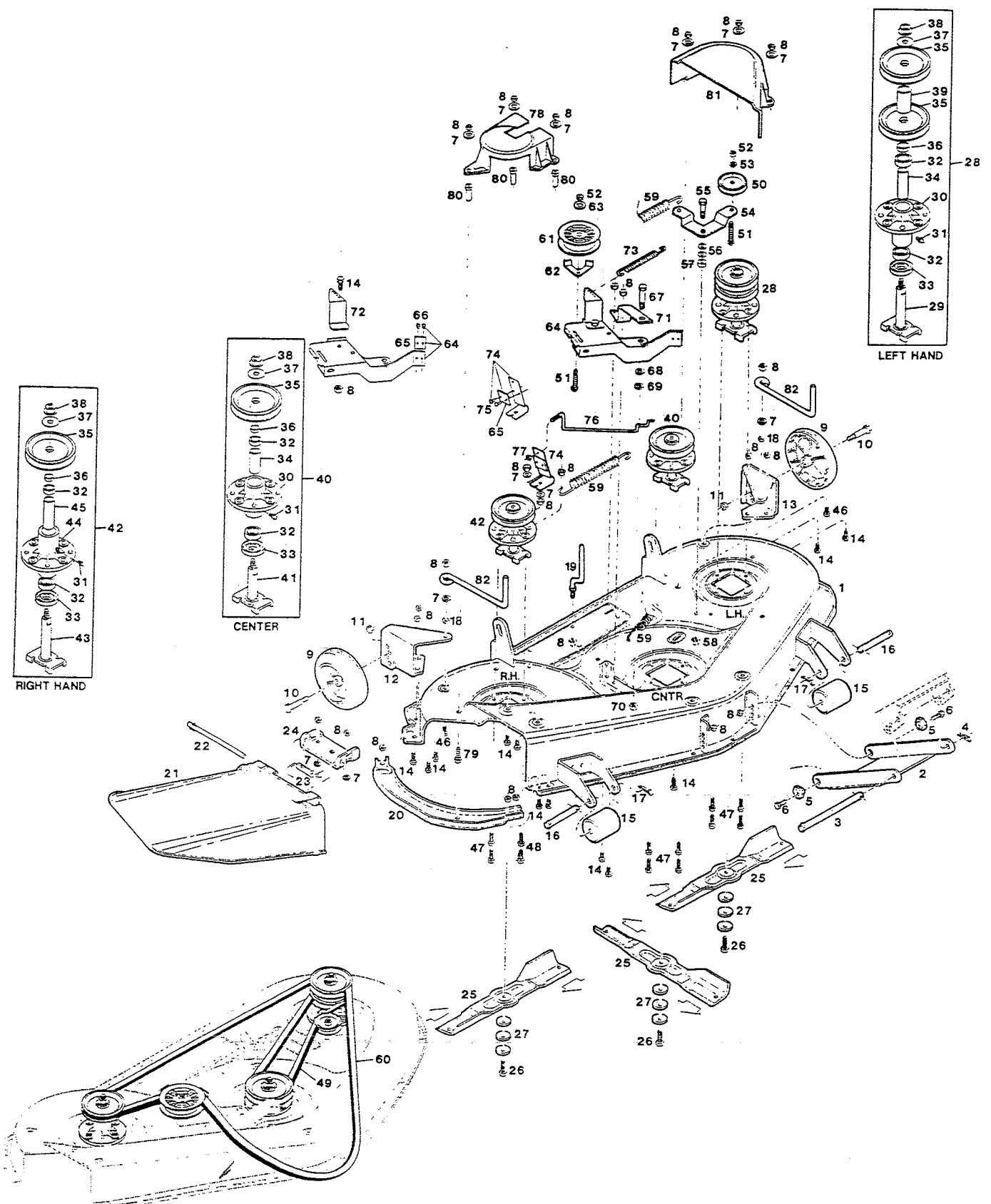
MODEL 645 CHASSIS GROUP

Index No.	Part No.	Description	Index No.	Part No.	Description
1	023930	Frame - main	75	311068	Washer - lock 7/16
2	023234	Axle - front (Includes 3, 4, 5, 103 & 123)	76	300042	Belt - drive
3	018911	Spindle - steering R.H.	77	109645	Pulley - idler
4	018945	Spindle - steering L.H.	78	158444	Bolt - carriage 3/8-16 x 2
5	134999	Bearing - spindle	79	451195	Nut - hex 3/8-16 nylok
6	316513	Ring - retainer	80	015198	Retainer - belt
	089581	Tie Rod Assembly (includes 7, 8 and 14)	81	105875	Arm - idler
7	089599	Rod - tie, steering	82	159129	Bolt - shoulder 5/16-18 x 11/16
8	135038	Joint - ball, R.H. thread	83	158212	Washer - flat 5/16
9	095507	Rod - torque	84	095794	Rod - clutch
10	150185	Washer - lock 3/8	85	135228	Spring - clutch
	172346	Drag Link Assembly (Includes 11, 12, 13 & 14)	86	095552	Guide - belt, rear
11	174706	Link - drag, steering	87	162420	Nut - hex 3/8-24 fing
12	135244	Joint - ball, sector end	88	152108	Bolt - hex 5/16-18 x 1
13	137448	Joint - ball, axle end	89	158527	Screw - tapite #8-32 x 3/8
14	158105	Nut - hex jam 3/8-24 R.H.	90	097790	Guide - belt
15	715185	Washer - flat	91	450353	Bolt - hex 1/4-20 x 1-1/4
16	615633	Nut - hex 3/8-24	92	087791	Rod - stop, mower deck
17	043195	Wheel - front, w/tire & rim	93	097808	Guide - belt
18	043204	Rim - front tire	94	138925	Switch - clutch interlock
19	094908	Bearing - wheel	95	157933	Screw - pan head
20	136291	Stem - valve w/ cap	96	095550	Rod - brake
21	042895	Tire - front 15 x 6.00 tubeless	97	715037	Nut - hex keps 1/4-20
22	162123	Nut - hex 7/16-20	98	023929	Bracket - brake rod
23	158402	Washer - flat	99	157503	Bolt - shoulder 5/16-18 x 5/8
24	112805	Trough - oil drain	100	112664	Knob - shift lever
25	112417	Cap - hub	101	615625	Nut - hex jam 1/2-13
26	115516	Wheel - steering	102	177378	Pipe - exhaust R.H.
27	159434	Pin - roll 1/4 x 2	103	715144	Washer - flat 3/4
28	095499	Shaft - steering	104	179408	Spring - torsion - shift lever
29	159376	Washer - thrust	105	097261	Guide - belt
30	158162	Washer - flat 3/4	106	113381	Sleeve - split, belt guide
31	109801	Pinion - steering	107	017897	Bracket - muffler
32	158766	Pin - dowel 1/4 x 1-3/4	108	159483	Screw - hex tap 5/16-18 x 1/2
33	136275	Bushing - steering pinion	109	085423	Guide - belt
34	109850	Sector - steering	110	023572	Shield - heat
35	134742	Eccentric - steering adjust	111	178681	Bracket - heat shield
36	158147	Bolt - hex 1/2-13 x 1-1/2	112	158907	Bolt - carriage 5/16-18 x 5/8
37	382473	Nut - hex 1/2 x 13 nylok	113	616342	Nut - hex 5/16-18 center lock
38	158170	Washer - flat 1/2	114	380410	Nut - push 5/16
39	115517	Sleeve - steering shaft	115	179424	Bracket - shift lever
40	310151	Nut - hex 5/16-18 nylok	116	159004	Bolt - hex 1/4-20 x 3/4
41	**	Transmission - hydro	117	452615	Nut - hex 1/4-20 nylok
42	023876	Bracket - transmission	118	095520	Lever - shift, lower
43	159228	Bolt - hex tap 5/16-18 x 3/4	119	179119	Clip - retainer, lower lever
44	158154	Bolt - hex 5/16-18 x 2-3/4	120	095522	Link Assembly - shift
45	095504	Pulley - transmission			Includes 8, 14, 121, 122 and 123
46	715326	Bolt - hex 3/8-16 x 1	121	095523	Link - threaded
47	158469	Washer - flat 3/8	122	095524	Joint - ball L.H. thread
48	089201	Lever - shift, upper	123	382925	Nut - hex jam 3/8-24 L.H.
49	317016	Pin - cotter	124	159145	Nut - hex jam 5/16-18
50	023877	Support - pivot plate	125	391748	Sleeve w/grease fitting (order 391755 kit)
51	163576	Bolt - hex 5/16-18 x 3-1/2	126	450437	Bolt - hex 5/16-18 x 5/8
52	158014	Bolt - hex tap 3/8-16 x 1-1/4	127	715417	Washer - flat 3/8
53	043245	Wheel - rear w/ tire & rim	128	451500	Nut - hex keps 3/8-16
54	043246	Rim - rear tire	129	153510	Washer - lock 5/16 int. tooth
55	041657	Tire - rear 20 x 10.00	130	300028	Seal - O-ring, elbow
56	115523	Fan - cooling	131	163535	Washer - flat
57	178756	Pipe - engine oil drain	132	615690	Washer - flat 1/4
58	446443	Key - rear wheel	133	620807	Ring - retainer, fan/pulley
59	095508	Spacer - rear wheel	134	095509	Plate - pivot
60	109660	Cap - drain tube	135	150755	Washer - fibre
61	153551	Washer - lock 5/16 ext tooth	136	095366	Washer - stepped
62	135145	Clamp - throttle cable	137	135632	Spring - friction pressure
63	095558	Spacer - fan/pulley	138	166635	Pin - roll #6 x 1-1/4 metric
64	177386	Pipe - exhaust L.H.	139	095528	Rod - control, push/drive valve
65	162396	Nut - hex jam 7/16-20	140	800094	Decal - push/drive
66	086017	Deflector - muffler	141	023918	Support - frame R.H.
67	177394	Muffler - exhaust	142	023919	Support - frame L.H.
68	*	Engine - 16 HP	143	450346	Bolt - hex 5/16-18 x 3/4
69	158097	Bolt - hex tap 1/4-20 x 5/8	144	158337	Washer - flat 3/8
70	095073	Pulley - engine, double w/key	145	023920	Bracket - expansion tank
71	115537	Tank - expansion	146	163667	Ring - E, wheel retainer
72	115539	Hose - connector	--	042085	Tube - front tire 15 x 6.00
73	095556	Elbow - hose	--	042101	Tube - rear tire 20 x 10.00
74	158964	Bolt - hex 7/16-20 x 5	--	393736	Sealant - tire 16 oz. bottle
			--	393744	Sealant - tire 32 oz. bottle

*Contact Engine Manufacturer's authorized service dealer for parts and warranty.

**Contact Tuff-Torq Corporation authorized service dealer or distributor for parts and warranty.

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46" MOWER DECK AND DRIVE

Index No.	Part No.	Description	Index No.	Part No.	Description
1	020149	Deck - mower 46"	43	093880	Shaft - blade w/saddle
2	022426	Drawbar - deck	44	095054	Housing - spindle w/o brgs
3	097469	Pin - drawbar	45	093864	Spacer - bearings
4	715011	Hairpin - cotter	46	156950	Bolt - hex 5/16-18 x 1-1/4
5	158691	Nut - eccentric deck leveling	47	159830	Bolt - hex tap 5/16-18 x 7/8
6	156968	Bolt - hex 5/16-18 x 1-1/4	48	159202	Bolt - hex tap 5/16-18 x 1-3/8
7	715185	Washer - flat 5/16	49	138891	Belt - drive, center blade
8	310151	Nut - hex 5/16-18 nylok	50	098079	Pulley - idler
9	042226	Wheel - gauge 6"	51	158444	Bolt - carriage 3/8-16 x 2
10	157495	Bolt - shoulder 3/8-16 x 2-3/8	52	715391	Nut - hex 3/8-16
11	451195	Nut - hex 3/8-16 nylok	53	150185	Washer - split lock 3/8
12	019406	Bracket - gauge wheel R.H.	54	097626	Arm - idler pulley
13	019398	Bracket - gauge wheel L.H.	55	157479	Bolt - shoulder 5/16-18 x 7/8
14	450346	Bolt - hex 5/16-18 x 5/8	56	311324	Washer - flat 5/8
15	042838	Roller - deck front	57	158337	Washer - flat 3/8
16	086470	Pin - roller axle	58	157610	Nut - hex 5/16-18 whiz lock
17	715029	Pin - cotter 1/8 x 1-1/4	59	109637	Spring - idler tension
18	159145	Nut - hex 5/16-18 jam	60	138909	Belt - drive, from engine
19	097808	Guide - belt, rear	61	098004	Pulley - idler
20	019364	Bar - skid	62	093211	Retainer - belt, double
21	114033	Deflector - discharge opening	63	715417	Washer - flat 3/8
22	086330	Pin - deflector pivot	64	093427	Arm - idler w/brake pad Includes 2 next parts
23	086322	Spring - deflector	65	135046	Pad - brake
24	019356	Bracket - deflector	66	159152	Rivet - 3/16 x 1/2
25	138446	Blade - 16" Hillift	67	381616	Bolt - shoulder 3/8-16 x 2-3/4
--	030858	Blade - 16" Lolift (optional)	68	158469	Washer - flat 3/8
26	158543	Bolt - hex nylok 3/8-24 x 1	69	337584	Washer - flat 3/8
27	158055	Washer - conical lock	70	156406	Nut - hex 3/8-16 whiz lock
28	094921	Spindle Assembly - blade L.H. Includes items 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 & 39	71	023242	Brace - idler arm
29	094910	Shaft - blade w/saddle	72	023283	Extension - idler arm
30	095053	Housing - spindle w/o brgs	73	086710	Spring - clutch engaging
31	164673	Fitting - grease	74	093435	Arm - brake w/brake pad Includes #65 and 75
32	137760	Bearing - shaft	75	159186	Rivet - 3/16 x 7/16
33	134981	Shield - dust	76	093245	Rod - brake
34	098194	Spacer - bearings	77	452615	Nut - hex 1/4-20 nylok
35	023675	Pulley - drive	78	114702	Guard - belt R.H.
36	093856	Spacer - drive pulley, top	79	158493	Bolt - hex 5/16-18 x 2-1/4
37	164905	Washer - drive pulley, special	80	093260	Spacer - R.H. guard
38	159301	Nut - hex 7/16-20 flange lock	81	115513	Guard - belt L.H.
39	094909	Spacer - between pulleys, L.H. spindle	82	094916	Guide - belt, R.H. & L.H. pulleys
40	094923	Spindle Assembly - blade, center Includes items 30, 31, 32, 33, 34, 35, 36, 37, 38 & 41	--	143115	Decal - DANGER
41	138511	Shaft - blade w/saddle	--	396739	Deck Assembly - complete
42	094922	Spindle Assembly - blade R.H. Includes items 31, 32, 33, 35, 36, 37, 38, 43, 44 & 45			

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