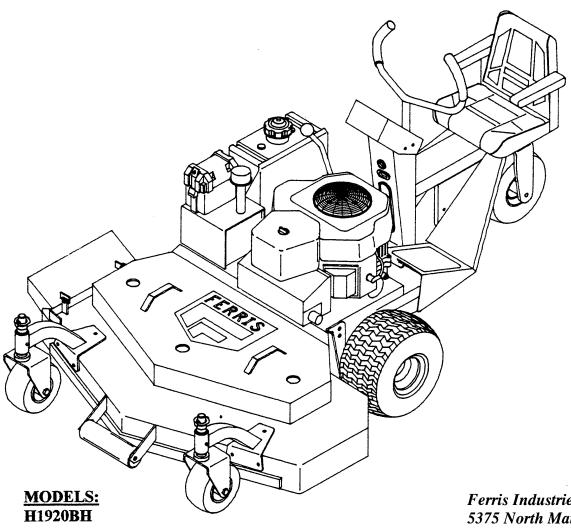
FERRIS

ILLUSTRATED PARTS LIST

Hydro Drive Rider Commercial Mowers



H1920BV

H2220K

H2220B

H2222K

CUTTER DECKS:

OF52

OF61

R52

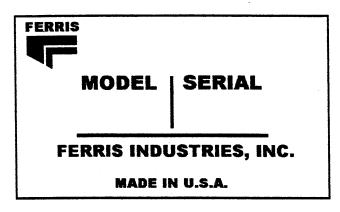
R61

Ferris Industries Inc. 5375 North Main Street Munnsville, NY 13409

Manual No. 21741 Beginning Serial No. 4259 Printed in USA December 1997

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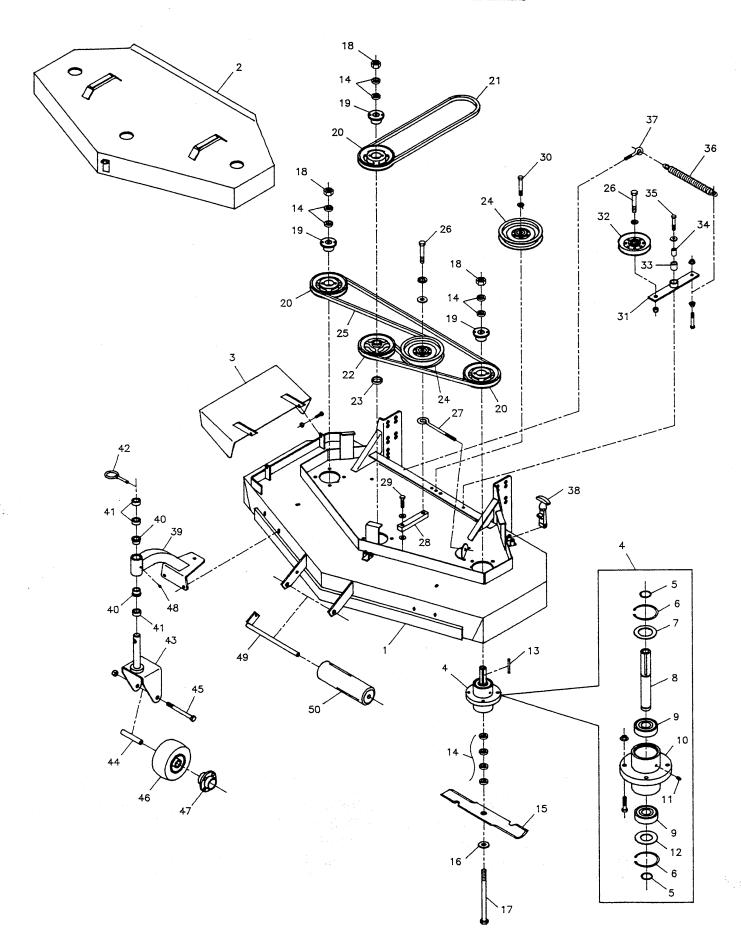
52" Cutter Deck Assemblies	Page 1-2
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Engine Deck Assembly	5-6
Transmission Assembly	7-8
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NOTE:

To insure that the correct parts for your machine are ordered and shipped, please be sure to use the parts book and pages that specifically cover your machine. Whenever in doubt, include the serial number of your machine along with the part numbers. For future reference, fill in the model and serial number of your machine in the space provided above.

WARNING: THOROUGHLY READ OPERATOR'S MANUAL AND COMPLETELY ASSEMBLE ALL LOOSE PARTS BEFORE OPERATING MOWER. DO NOT OPERATE YOUR MOWER UNLESS ALL PARTS ARE ATTACHED AND IN GOOD WORKING ORDER KEEP YOUR MOWER IN GOOD REPAIR AT ALL TIMES.



DESCRIPTION

Rubber Latch

Caster Mount Flange Bushing

Caster Spacer

Grease Fitting

Roller Pin

Roller

Caster Wheel Mount

1/2-13 x 5-1/2" GD. 5 Bolt

Hub Complete (Stamped M)

Hub Complete (Stamped T)

Caster Wheel Assembly

Lynch Pin

Sleeve

52" CUTTER DECK ASSEMBLIES

REF.

NO. 38

39

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PART NO.

1520841-1

1543887

1521541

1541476

8820655

1541702

1541657

1521181

1521262

1521729

1541655

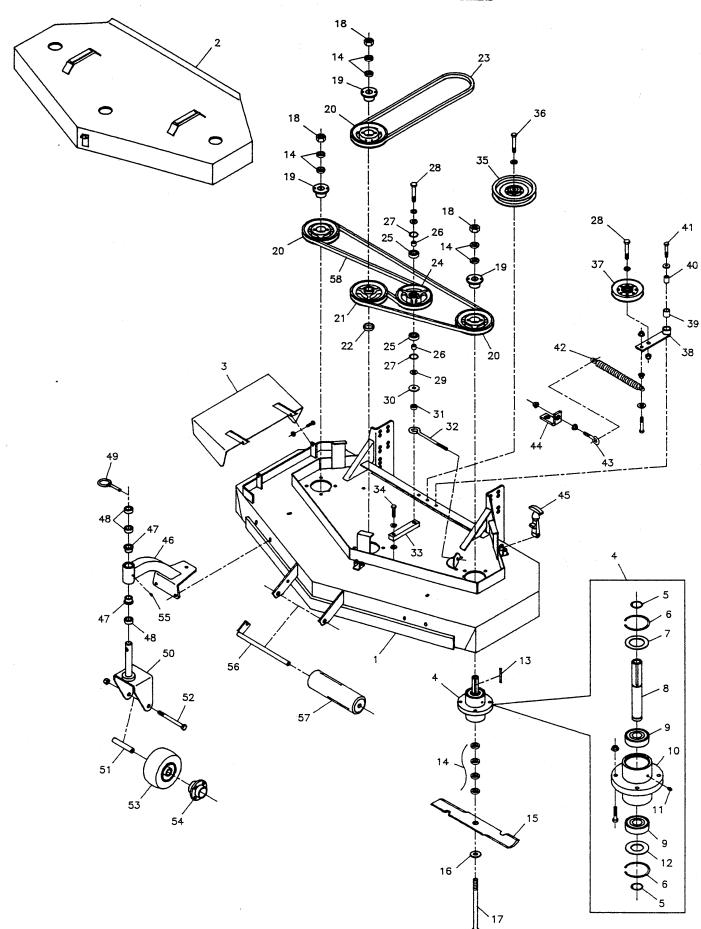
1520785

1525017-44

1521181-4

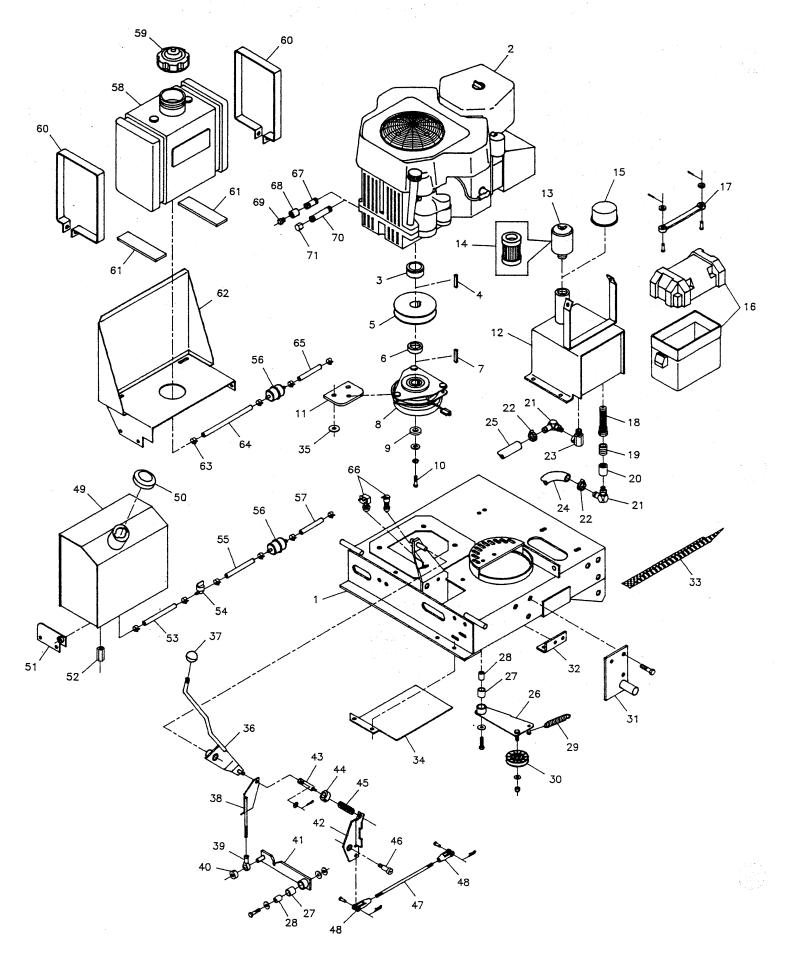
REF.	PART NO.	DESCRIPTION
1	1530843	52" Cutter Deck
2	1530845	52" Guard
3	1541668	Discharge Chute
4	1530301	Spindle Assembly
5	1520864	Snap Ring
6	1520866	Snap Ring
7	1541653	Washer
8	1541480	Spindle Shaft
9	1520828	Bearing
10	1530293	Aluminum Housing
11	1520095	Grease Fitting
12	1541672	Washer
13	1550407-9	Key 1/4" x 2-1/2"
14	1541477	Blade Spacer
15	1521227	Blade
16	1525159	5/8" SAE Flat Washer
17	1525019-76	5/8-11 x 9-1/2" GD. 5 Bolt
18	8825040	5/8-11 Hex Nut
19	1520819	Hub
20	1520814	Cast Iron Pulley (H22's)
	1521492	Split Steel Pulley (H19's)
21	1521298	Deck Drive Belt (H22's)
	1521677	Deck Drive Belt (H19's)
22	1541478	Cast Iron Pulley (H22's)
**	1521492	Split Steel Pulley (H19's)
23	1541484	Spindle Spacer
24	1521096	Idler Pulley
25	1521297	Blade Belt
26	1525018-18	1/2-20 x 2-1/4" GD. 5 Bolt
27	1521811	3/8" x 8" Eyebolt
••	1541671	J-Bolt (before SN 613, H19's)
28	1544610	Idler Arm
••	1541622	Idler Arm (before SN 613, H19's)
29	1525016-14	7/16-20 x 1-3/4" GD. 5 Bolt
30	1525018-20	1/2-20 x 2-1/2" GD. 5 Bolt
31	1542338	Idler Arm w/ Bushing
32	1521097	V-Idler Pulley
33	1520876B	Brass Bushing
34	1542134	Pivot Spacer
35	8825011-14	5/16-18 x 1-3/4" GD. 5 Bolt
36 37	1521103	Spring
37	1525141	Eyebolt

61" CUTTER DECK ASSEMBLIES



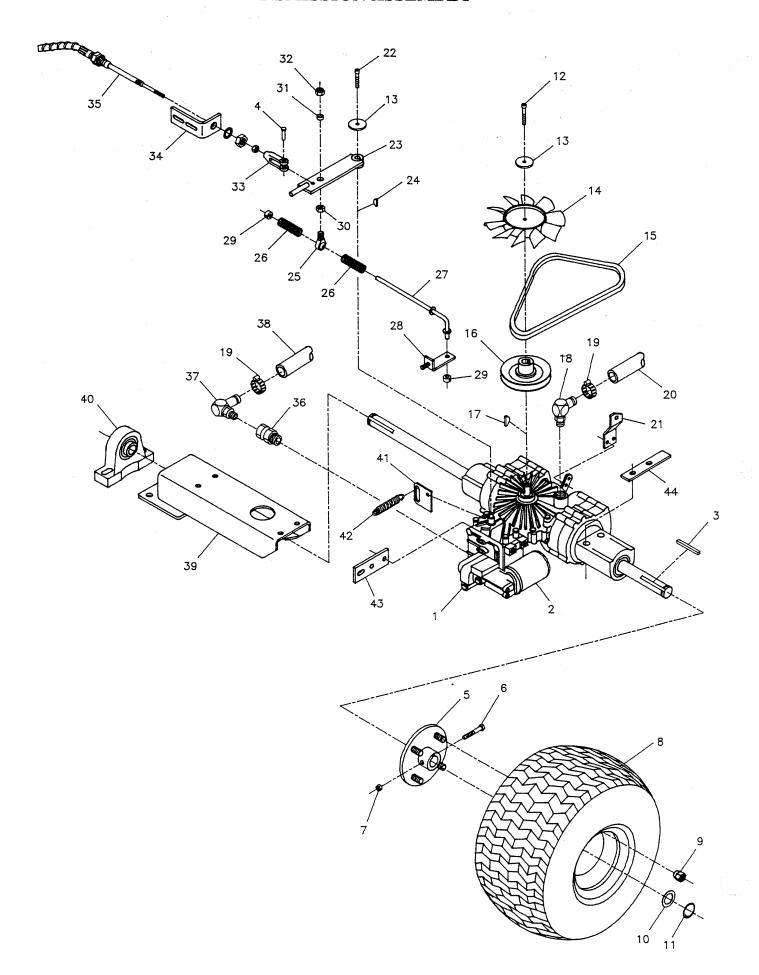
61" CUTTER DECK ASSEMBLIES

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	1530820	61" Cutter Deck	32	1521811	3/8" x 8" Eyebolt
2 3	1530822 1541668	61" Guard Discharge Chute		1541671	J-Bolt (before SN 4881, H19's) (before SN 4821, H22's)
4	1530301	Spindle Assembly	33	1544610	Idler Arm
5	1520864	Snap Ring		1541622	Idler Arm (before SN 4881, H19's)
6	1520866	Snap Ring			(before SN 4821, H22's)
7	1541653	Washer	34	1525016-14	7/16-20 x 1-3/4" GD. 5 Bolt
8	1541480	Spindle Shaft	35	1521096	Idler Pulley
9	1520828	Bearing	36	1525018-20	1/2-20 x 2-1/2" GD. 5 Bolt
10	1530293	Aluminum Housing	37	1521097	V-Idler Pulley
11	1520095	Grease Fitting	38	1542145	Idler Arm w/ Bushing
12	1541672	Washer	39	1520876B	Brass Bushing
13	1550407-9	Key 1/4" x 2-1/2"	40	1542134	Pivot Spacer
14	1541477	Blade Spacer	41	8825011-14	5/16-18 x 1-3/4" GD. 5 Bolt
15	1520842	Blade	42	1521103	Spring
16	1525159	5/8" SAE Flat Washer	43	1525141	Eyebolt
17	1525019-76	5/8-11 x 9-1/2" GD. 5 Bolt	44	1542142	Spring Anchor
18	8825040	5/8-11 Hex Nut	45	1520841-1	Rubber Latch
19	1520819	Hub	46	1543887	Caster Mount
20	1520815	Cast Iron Pulley (H22's)	47	1521541	Flange Bushing
	1521492	Split Steel Pulley (H19's)	48	1541476	Caster Spacer
21	1541478	Cast Iron Pulley (H22's)	49	8820655	Lynch Pin
	1521492	Split Steel Pulley (H19's)	50	1541702	Caster Wheel Mount
22	1541484	Spindle Spacer	51	1541657	Sleeve
23	1521063	Deck Drive Belt (H22's)	52	1525017-44	1/2-13 x 5-1/2" GD. 5 Bolt
	1521511	Deck Drive Belt (H19's)	53	1521181	Caster Wheel Complete
24	1530819	Idler Pulley (Complete)	54	1521181-4	Hub Complete (Stamped M)
	1541481	Idler Pulley Only		1521262	Hub Complete (Stamped T)
25	1520827	Bearing	55	1521729	Grease Fitting
26	1520870	Bearing Insert	56	1541655	Roller Pin
27	1520865	Snap Ring	57	1520785	Roller
28	1525018-18	1/2-20 x 2-1/4" GD. 5 Bolt	58	1520824	Blade Belt
	1525018-14	1/2-20 x 1-3/4" Bolt (before SN 4881, H19's) (before SN 4821, H22's)			
29	8825158	1/2" SAE Washer (SN 4881 & up, H19's) (SN 4821 & up, H22's)			
30	1525150	1/2" USS Washer (SN 4881 & up, H19's) (SN 4821 & up, H22's)			
31	1544609	Idler Spacer (SN 4881 & up, H19's) (SN 4821 & up, H22's)			



ENGINE DECK ASSEMBLY

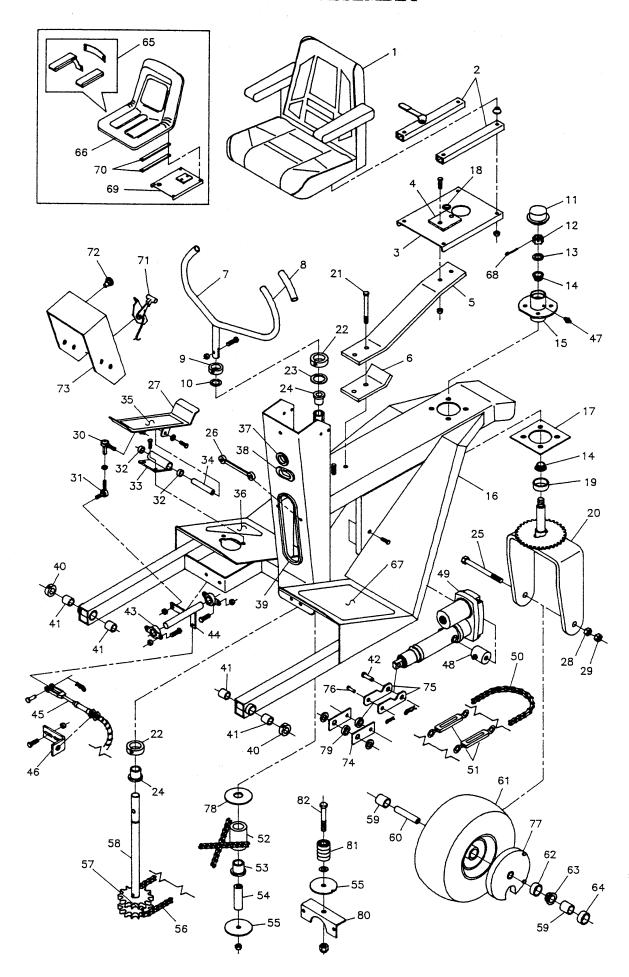
REF. NO.	PART NO.	DESCRIPTION	REE NO	PART NO.	DESCRIPTION
1	1530775	Engine Deck Weldment	41	1542317	Neutral Lock Out w/ Bushing
2	1521531	Kohler 20 HP	42	1543971	Brake Rocker Arm
-	1521532	Kohler 22 HP	43	1543982	Spring Bar
****	1521310	Briggs & Stratton 18 HP	44 .	8810477	5/8" Set Collar
	1521808	Briggs & Stratton 20 HP	- 45	1521667	Spring
3	1542840	Kohler Crank Shaft Spacer	46	1525523	1/2" x 1" Shoulder Bolt
	1543581	Briggs Crank Shaft Spacer	47	1543976	Brake Linkage Rod
4	1550407-10	Key 1/4" x 5/8"	48	1520979	Clevis
5	1542302	Kohler Engine Pulley	49	1530790	Fuel Tank Assembly
	1542129	Briggs Engine Pulley	50	1541657	Gas Cap
6	1542304	Kohler Spacer	51	1543980	Fuel Tank Mount Plate
	1543625	Briggs Spacer	52	8820766	Coupler Nut
7	1550407-1	Key 1/4" x 1"	53	1550831-19	1/4" Fuel Line, 19" Long
8	1521145	Electric Clutch (Kohler)	54	1521235	Fuel Shut Off
	1521083	Electric Clutch (Briggs)	55	1550831-9	1/4" Fuel Line, 9" Long (Kohler)
9	1542132	Retaining Washer	-	1550831-19	1/4" Fuel Line, 19" Long (Briggs)
10	1543626	Dri-Lock Bolt	56	1521178-3	Fuel Filter (Kohler only)
11	1543636	Clutch Anti-Rotational Pad	5 7		Fuel Line, supplied by Kohler
12	1530789	Hydro Tank Assembly	***	1550831-6	1/4" Fuel Line, 6" Long (Briggs)
		(complete w/ fittings and breather)	58	1521868	6 Gallon Fuel tank
-	1530774	Hydro Tank Weldment		1522151	Grommet, Fuel Tank
13	1521080	Air Filter Assembly	59	1521866	Gas Cap
14	1521080-1	Air Filter Element	60	1544693	6 Gallon Fuel tank Strap
15	1521871	Breather (SN 5958 & up, H22's only)	61	1521877	Rubber Tank Mount Pad
16	1521666	Battery Box w/ Cover	62	1544692	Fuel Tank Mount
17	1521670	Rubber Strap	63	1520835	Fuel Line Clamp
18	1521082	Line Strainer	64	1550831-29	1/4" Fuel Line, 29" Long (Kohler)
19	1521163	1/2" NPT Close Nipple	-	1550831-25	1/4" Fuel Line, 25" Long (Briggs)
20	1520985	1/2" NPT Pipe Coupler	65	~~~~~	Fuel Line, supplied by Kohler
21	1521160	90° Fitting	***	1550831-19	1/4" Fuel Line, 19" Long (Briggs)
22	1521164	Hose Clamp	66	1521522	Plunger Switch (2 terminals)
23	1521132	90° Fitting		1521765	Brake Switch (4 terminals)
24	1550836-4.87	Transmission Inlet Hose, 4.875" Long	67	1521122	Pipe Nipple
25	1550836-14.75	Transmission Return Hose, 14.75" Long	68	1520862	Coupler
26	1542169	Hydro Drive Idler Arm w/ Bushing	69	1525049	Plug
27	1520876B	Brass Bushing	70	1521707	Nipple
28	1542134	Pivot Spacer	71	1521466	Pipe Cap
29	1520807	Spring			1
30	1543627	Idler Pulley			
31	1541582R	Pivot Bracket Right (shown)			
	1541582L	Pivot Bracket Left			
32	1543660	Plate Bracket			
33	1544016	Grass Screen (steel fuel tank only)			
34	1544616	Transmission Skid Plate			
35	1544617	Clutch Anchor Washer			
36	1530919	Brake Lever Weldment (5/8" ID tube)			
	1543985	Brake Lever Weldment (3/4" ID tube)			
37	1521733	Knob (1/2" thread)			
	8810551	Knob (5/16" thread)			
38	1543972	Brake Lock			T.
39	1521146	Ball Joint			
, 40	8820047	5/16" Set Collar			



TRANSMISSION ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION
1	1521425	Transmission
2	1521068-1	Oil Filter
3	1543683	Drive Axle Key
4	1525121-8	1/4" x 1" Clevis Pin
5	1530480	Hub
6	1525025	5/16-24 x 2" GD. 8 Bolt
7	8825045	5/16-24 Nylon Lock Nut
8	1521094	20" Tire/Wheel Assembly
	1521045	18" Tire/Wheel Assembly
9	8820601	Lug Nut
10	1520928	Shim Washer
11	1521210	Snap Ring
12	1525268	1/4-20 x 1-3/4" Allen Screw
13	1544577	Transmission Fan Washer
14	1521081	Fan
15	1521105	Hydro Drive Belt
16	1543647	Transmission Input Pulley
17	1521839	Hi-Pro Woodruff Key
18	1521161	90° Fitting
19	1521164	Hose Clamp
20	1550836-4.87	Transmission Inlet Hose, 4.875" Long
21	1543674	Brake Lever
22	1525269	1/4-20 x 1-1/2" Allen Screw
23	1542319	Transmission Stroke Arm
24	8820149	Woodruff Key
25	1521124	Ball Joint
26	1521102	Spring
27	1542329	Neutral Spring Rod
28	1542328	Neutral Bracket
29	8820047	5/16" Set Collar
30	8825035	3/8-24 Hex Nut
31	1541930	Spacer
32	8825097	3/8-24 Nylon Lock Nut
33	1520981	5/16" Rod End Clevis
34	1542170	Cable Bracket
35	1521089	Push/Pull Cable
36	1521166	Adapter
37	1521160	90° Fitting
38	1550836-14.75	Transmission Return Hose, 14.75" Long
39	1543675	Axle Support
40	1521095	Bearing
41	1543671	Transmission Dump Valve Lever
42	1520639	Spring
43	1542177	Transmission Bracket
44	1544011	Differential Spacer

RIDER FRAME ASSEMBLY

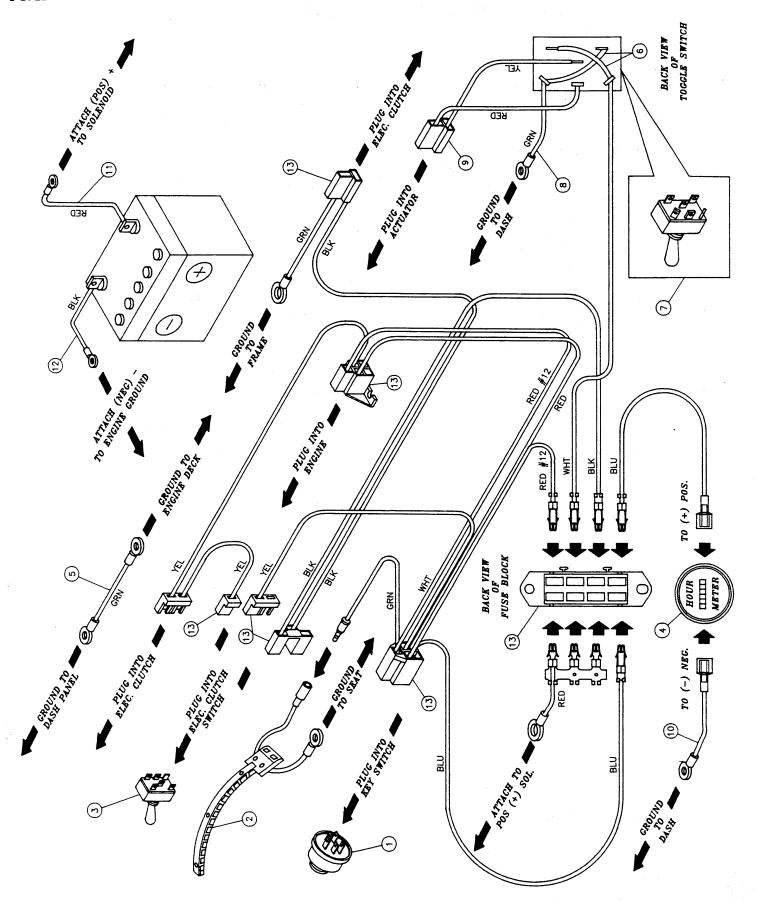


RIDER FRAME ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	1520930	Black & Silver Seat Complete	50	1510673-36	Roller Chain
	1520930-9	Back Cushion	51	1542090	Turnbuckle
	1520930-8	Seat Cushion	52	1543684	Steering Roller Assembly
	1520930-2	Right Arm Rest	53	1521665	Bushing
	1520930-4	Left Arm Rest	54	1543653	Steering Tube
1 A	1521883	Seat w/ embossed "FERRIS" logo	55	1543652	Chain Washer
2	1520930-3	Seat Adjuster (pair)	56	1510673-31	Roller Chain
3	1542082	Seat Plate	57	8810674	Connecting Link
4	1541522	Seat Plate Support	58	1542087	Steering Sprocket Shaft Weldment
5	1541836	Seat Spring	59	1542315	Axle Spacer
6	1542252	Seat Spring Support	60	1542314	Steering Tire Axle
7	1541770	Handle Bar	61	1521140	Tire/Wheel Assembly
8	1520837	Foam Grip	62	1520883	Bearing Cup
9	8820602	1" Split Collar	63	1520884	Bearing
10	1521034	Snap Ring	64	1540885	Seal
11	1521073	Dust Cap	65	1521185-1	Arm Rest Kit (optional)
12	1525104	3/4-16 Hex Nut	••	1521185-2	Arm Rest Right/Left (interchangeable)
13	1525160	Washer	66	1521185	Seat
14	1520884	Bearing	67	1541774	Safety Walk
15	1542110	Steering Hub	68	1525203-10	Cotter Pin
16	1530770	Trailer Weldment	69	1542447	Seat Plate
17	1542721	Steering Hub Support	70	1542428	Seat Plate Spacer
18	1521077	1/2" Grommet	71	1521662	Throttle Cable
19	1521072	Seal	72	1521675	Choke Cable (Briggs)
20	1542127	Steering Wheel Mount Weldment	-	1521663	Choke Cable (Kohler)
21	1525016-40	7/16-20 x 5" GD. 5 Bolt	73	1544212	Dash
22	1521052	1-1/4" Split Collar	74	1544618	Link (SN 585 & up, shown)
23	1525520-3	Shim		1543676	Link
24	1520823	Bushing	75	1543677	Double Link
25	1525019-76	5/8-11 x 9-1/2" GD. 5 Bolt	76	1525214-8	3/8" Clevis Pin
26	1520959	Rubber Strap	77	1544372	Wheel Weight (P72 Deck only)
27	1542185	Foot Pedal	78	1544612	Chain Washer Top
28	1525040	5/8-11 Hex Nut	79	1541477	Spindle Spacer
29	8825103	5/8-11 Nylon Lock Nut	80	1544627	Chain Roller Mount
30	1520805	Ball Joint	81	1521882	Bearing (4)
31	1521049	Ball Joint	82	1525280-24	5/8-11 x 3" GD. 2 Bolt
32	1520875	Bushing			5.0 11 x 5 - GB. 2 Box
33	1542137	Foot Pedal Mount			
34	1543147	Foot Pedal Pivot Shaft			
35	1542281	Foot Pedal Safety Walk		5.	
36	1542282	Safety Walk		4.	
37	1521379	7/8" Grommet			
38	1521397	1-1/4" Grommet			
39	1550852-24	Body Molding, 24" Long			
40	8810114	3/4" Split Collar			w **
41	1520876P	Plastic Bushing			
42	1543688	1/2" Clevis Pin			
43	1521089	Brass Flange Bushing	*		
44	1542184	Foot Pedal Bell Crank			
45	1521089	Push/Pull Cable			
46	1542170	Cable Bracket			
47	8820095	Grease Fitting			
48	1544082	Trunion Mount			
40	1542526				

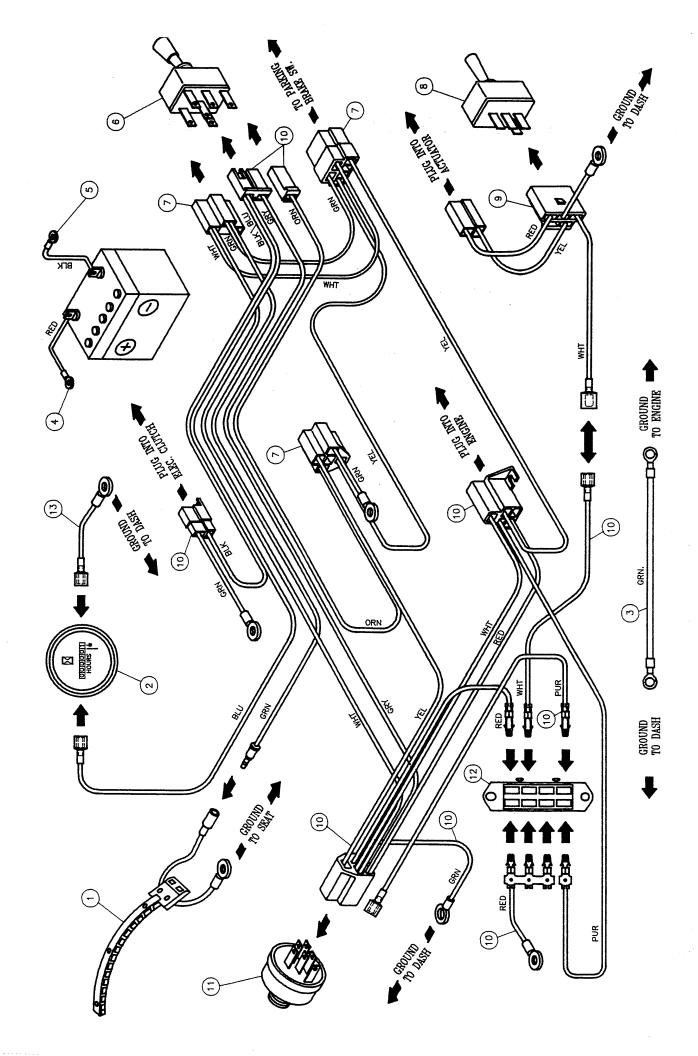
1543536

Electric Actuator



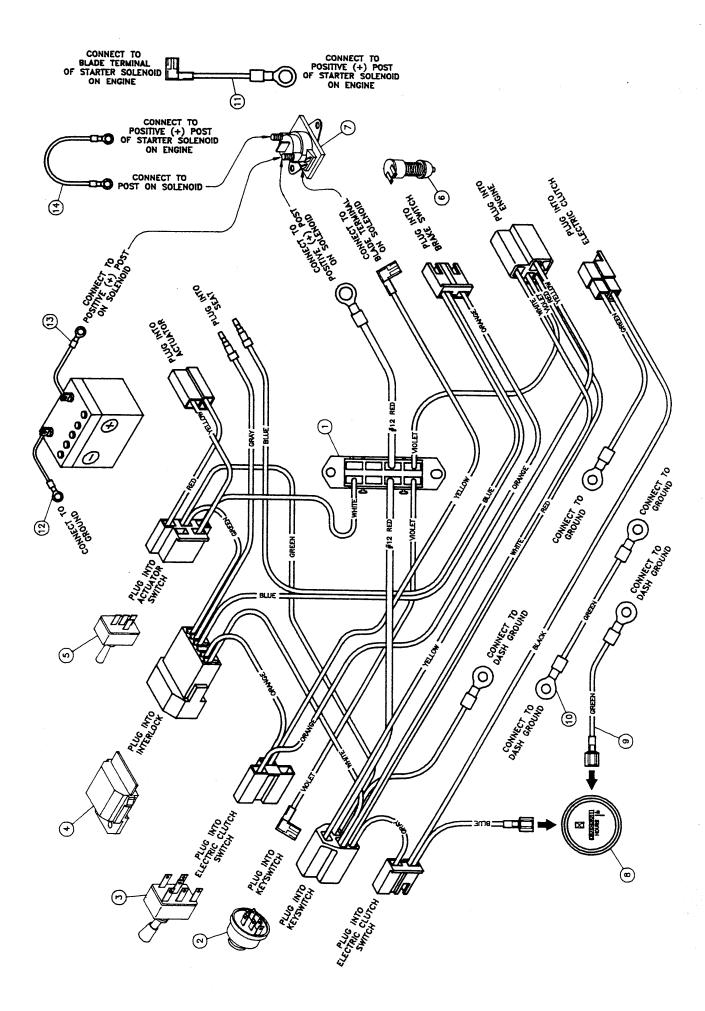
KOHLER ELECTRICAL SCHEMATIC

REF. NO.	PART NO.	DESCRIPTION
1	1520836	Key Switch
2		Seat Switch
3	1521545	Electric Clutch Switch
4	1520060	Hour Meter
5	1543695	Dash Ground Wire
6	1543668	Jumper Wire
7	1521651	Actuator Switch
8	1543666	Switch Ground Wire
9	1543667	Actuator Wire Assembly
10	1543665	Hour Meter Ground Wire
11	1521542	Positive (+) Battery Cable
12	1521406	Negative (-) Battery Cable
13	1530778	Rider Main Harness



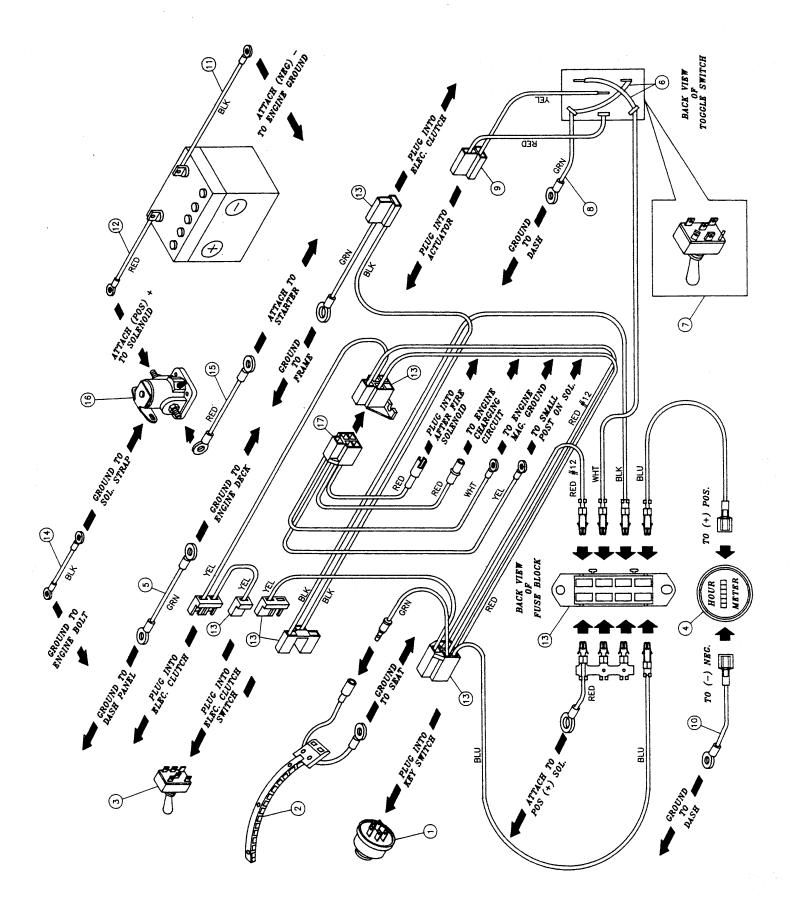
KOHLER ELECTRICAL SCHEMATIC

REF. NO.	PART NO.	DESCRIPTION
1		Seat Switch
2	1520060	Hour Meter
3	1544502	Dash Ground Wire
4	1521542	Positive (+) Battery Cable
5	1521406	Negative (-) Battery Cable
6	1521545	Electric Clutch Switch
7	1544499	Relay/Clutch Harness
8	1521734	Actuator Switch
9	1544474	Actuator Harness
10	1544504	Rider Main Harness
11	1520927	Key Switch
12	1521518	Fuse Block
13	1544501	Hour Meter Ground Wire



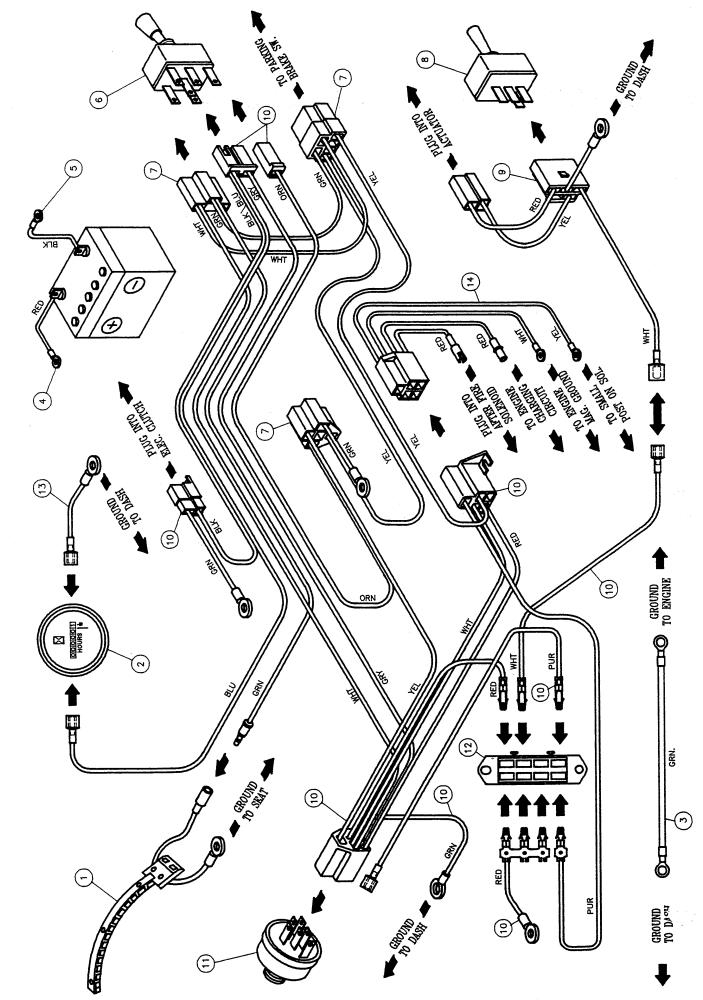
KOHLER ELECTRICAL SCHEMATIC Serial No. 6153 & up

REF. NO.	PART NO.	DESCRIPTION
1	1531051	Rider Wire Harness
2	1520927	Key Switch
3	1521545	Electric Clutch Switch
4	1521885	1601 Interlock
5	1521734	Actuator Switch
6	1521522	Plunger Switch N.O.
7	1521886	Starter Solenoid
8	1520060	Hour Meter
9	1544501	Hour Meter Ground Wire
10	1544502	Dash Ground Wire
11	1544731	Starter Jumper Wire
12	1521406	Negative (-) Battery Cable
13	1521542	Positive (+) Battery Cable
14	1544732	Starter Solenoid Cable



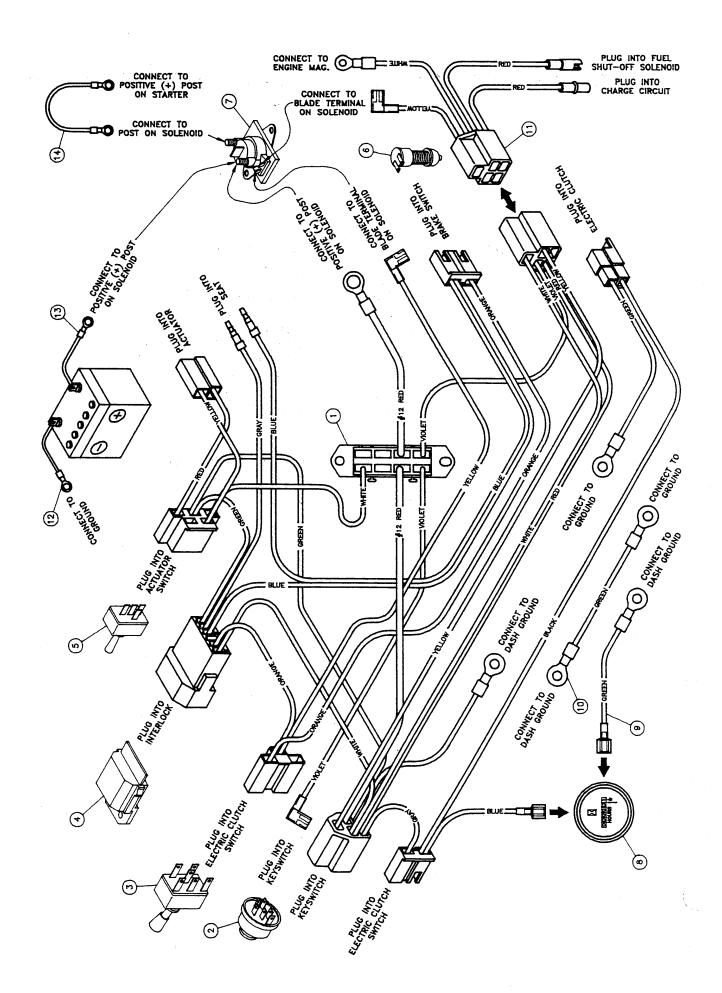
BRIGGS & STRATTON ELECTRICAL SCHEMATIC

REF. NO.	PART NO.	DESCRIPTION
1	1520927	Key Switch
2		Seat Switch
3	1521545	Electric Clutch Switch
4	1520060	Hour Meter (optional)
5	1543695	Dash Ground Wire
6	1543668	Jumper Wire
7	1521651	Actuator Switch
8	1543666	Switch Ground Wire
9	1543667	Actuator Wire Assembly
10	1543665	Hour Meter Ground Wire (optional)
11	1521406	Negative (-) Battery Cable
12	1521542	Positive (+) Battery Cable
13	1530783	Rider Main Harness
14	1544014	Ground Cable
15	1544092	Starter Cable
16	1520801	Starter Solenoid
17	1544015	Briggs Adapter Harness



BRIGGS & STRATTON ELECTRICAL SCHEMATIC

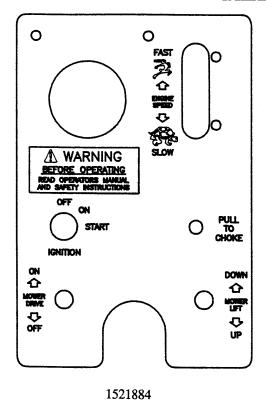
REF. NO.	PART NO.	DESCRIPTION
1		Seat Switch
2	1520060	Hour Meter
3	1544502	Dash Ground Wire
4	1521542	Positive (+) Battery Cable
5	1521406	Negative (-) Battery Cable
6	1521545	Electric Clutch Switch
7	1544499	Relay/Clutch Harness
8	1521734	Actuator Switch
9	1544474	Actuator Harness
10	1544504	Rider Main Harness
11	1520927	Key Switch
12	1521518	Fuse Block
13	1544501	Hour Meter Ground Wire
14	1544015	Briggs Adapter Harness



BRIGGS & STRATTON ELECTRICAL SCHEMATIC Serial No. 6153 & up

REF. NO.	PART NO.	DESCRIPTION
1	1531051	Rider Wire Harness
2	1520927	Key Switch
3	1521545	Electric Clutch Switch
4	1521885	1601 Interlock
5	1521734	Actuator Switch
6	1521522	Plunger Switch N.O.
7	1521886	Starter Solenoid
8	1520060	Hour Meter
9	1544501	Hour Meter Ground Wire
10	1544502	Dash Ground Wire
11	1544730	Briggs Adapter Harness
12	1521406	Negative (-) Battery Cable
13	1521542	Positive (+) Battery Cable
14	1544092	Starter Cable

REPLACEMENT DECALS



MARNING

TO AVOID SERIOUS INJURY OR DEATH;

- READ OPERATORS MANUAL & FOLLOW ALL SAFETY PRECAUTIONS.
 CONTACT DEALER FOR MANUALS:
- * KEEP SHIELDS & GUARDS IN PLACE.
 KEEP CLEAR OF DRIVES & BELTS.
- LOWER IMPLEMENT, STOP ENGINE & REMOVE KEY BEFORE DISMOUNTING.
- + CLEAR MOWING AREA OF DEBRIS.
- DO NOT OPERATE MOWER IN VICINITY
 OF OTHER PERSONS. NO RIDERS.
- * KNOW HOW TO STOP TRACTOR AND EQUIPMENT QUICKLY IN AN EMERGENCY.
- * BLOCK UP IMPLEMENT & REMOVE KEY BEFORE WORKING UNDERNEATH.
- * ALLOW NO CHILDREN OR UNQUALIFIED PERSONS TO RUN EQUIPMENT.
- BE CAREFUL ON UNEVEN TERRAIN.
 DECREASE SPEED WHEN TURNING.
- . DO NOT OPERATE IN TRANSPORT

3130

1520850



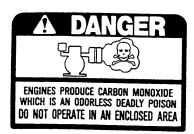
1520337



KEEP AWAY!

THROWN OBJECTS OR BLADE CONTACT CAN CAUSE SERIOUS INJURY OR DEATH. KEEP DISCHARGE CHUTE AND SHIELDS IN PLACE.

1520851



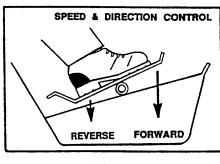
1521411





DO NOT OVERFILL OR START ENGINE NEAR SPILLED GASOLINE. LEAVE 11/4 INCH SPACE AT TOP OF TANK FOR FUEL EXPANSION. DO NOT ADD GASOLINE WHILE ENGINE IS HOT OR RUNNING. DO NOT OPERATE WHILE FUEL CAP IS REMOVED.

1521159



1521111



SPEED AND DIRECTION CONTROL

1521112

MOWER LIFT

1521057

OHER SEOK OF III

1521156

REPLACEMENT DECALS



ALWAYS - DISENGAGE CUTTER BLADES BEFORE RAISING THE MOWER DECK. ALWAYS - MOW WITH DECK LIFT COMPLETELY LOWERSD. HEYER-DRIVE MACHINE WITH CUTTER DECK RAISED EXCEPT TO CLEAR AN OBSTACLE. (CURE)

NO RIDERS HIM

1521158

HYDRAULIC OIL RESERVOIR

PREMIUM HYDRAULIC OIL MOBIL DTE-26

OR
ENGINE CRANKCASE OIL
S.A.E. 20W-20

*NEYER FILL OIL RESERVOIR MORE THAN 3/4 FULL

DOWN
A
B
UP

1521113

1521114



1521126

GASOLINE ONLY !!!

1521110



1521154



SLOW E

1520859

PARKING BRAKE ON

OFF

1521109

OFF ON START

1520861

PULL OUT TO CHOKE

1520939

CUTTER

1521155

15 PS.I.

1521153

GREASE DAILY

1521036

FERRIS

1520849

Commercial

1520846

ProCut
1521300

52

1521299

61

1521302