



# Greensmaster<sup>®</sup> Flex 21

## Traction Unit

Model No. 04021—230000001 and Up

## Parts Catalog

### Ordering Replacement Parts

To order replacement parts, please supply: the part number, the quantity, and the description of each part desired.

### Understanding Reference Numbers

Each identified part in an illustration has a reference number. The reference number for a part also appears in the parts list, along with other information about the part.

This catalog uses two special reference number formats, one to indicate parts in a service assembly and another to indicate the quantity of a given part in an illustration.

### Service Assembly Reference Numbers

Parts in service assemblies have reference numbers in the form **a:b**. The **a** represents the reference number of the entire service assembly and the **b** represents a sequential number unique to each part within the service assembly.

For example, a wheel assembly might be identified by reference number **6**, the tire by **6:1**, the valve by **6:2**, and the wheel by **6:3**. When you order the assembly identified by reference number **6**, you receive all parts identified by reference numbers **6:1**, **6:2**, and **6:3**. However, you may also order any part individually.

Reference numbers of this type appear in illustrations and in part lists.

### Reference Numbers Indicating Quantity

In an illustration, if a reference number indicates more than one part, the reference number has the form **nX y**. The **n** represents the quantity of the part, the **X** is the multiplication symbol, and the **y** represents the reference number.

For example, in an illustration, the reference number **2X 37** means that two of the parts identified by reference number **37** are indicated.

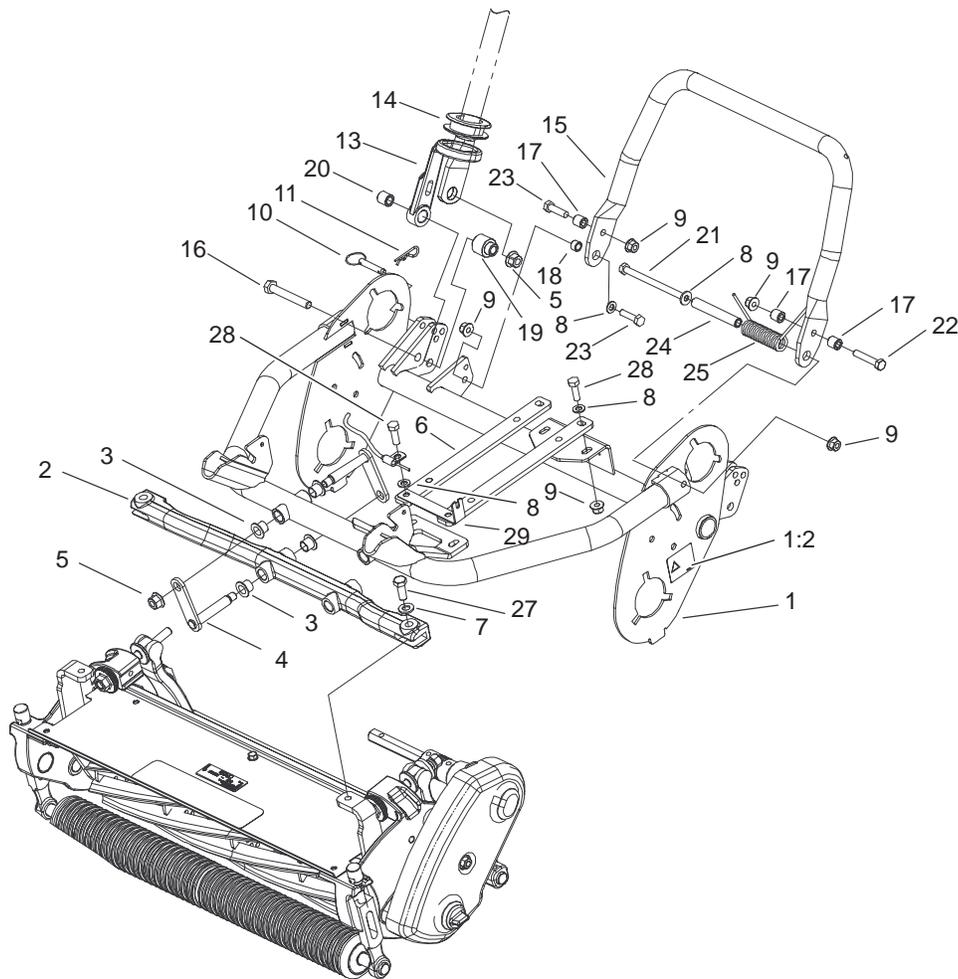
## Contents

<b>Description</b>	<b>Page</b>	<b>Description</b>	<b>Page</b>
Frame Assembly .....	3	Roller Assembly .....	15
Reel Drive Assembly .....	4	Reel Drive Assembly .....	16
Drum Drive and Basket Assembly .....	5	Crankcase Assembly .....	17
Engine Installation Assembly .....	6	Camshaft and Valve Assembly .....	18
Gearbox Assembly No. 99-3775 .....	7	Ignition Assembly .....	19
Handle Assembly .....	10	Governor Assembly .....	20
Roller Option Assembly .....	12	Carburetor Assembly .....	21
Right and Left Side Plate Assembly .....	13	Air Filter and Muffler Assembly .....	22
Reel Assembly .....	14	Fuel Tank Assembly .....	23

## Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

<b>Abbreviation</b>	<b>Meaning</b>	<b>Abbreviation</b>	<b>Meaning</b>
AR .....	as required	HYD .....	hydraulic
ASM .....	assembly	INC .....	incorporated
CARR .....	carriage	LH .....	left hand
DEG .....	degrees	NI .....	nylon insert
FH .....	flat head	PPH .....	Phillips pan head
GA .....	gauge	PTH .....	Phillips truss head
HF .....	hex flange	PTO .....	power take off
HH .....	hex head	RH .....	right hand
HHF .....	hex head flange	SFH .....	slotted fillister head
HLH .....	hex lag head	SHH .....	slotted hex head
HJ .....	hex jam	SQH .....	square head
HOC .....	height-of-cut	SHWH .....	slotted hex washer head
HS .....	hex socket	SPH .....	slotted pan head
HSBH .....	hex socket button head	SRH .....	slotted round head
HSFH .....	hex socket flat head	STD .....	standard
HSH .....	hex socket head	TAP .....	self tapping
HWH .....	hex washer head	TTH .....	Torx truss head
HWHTF .....	hex washer head thread forming	WH .....	wing head

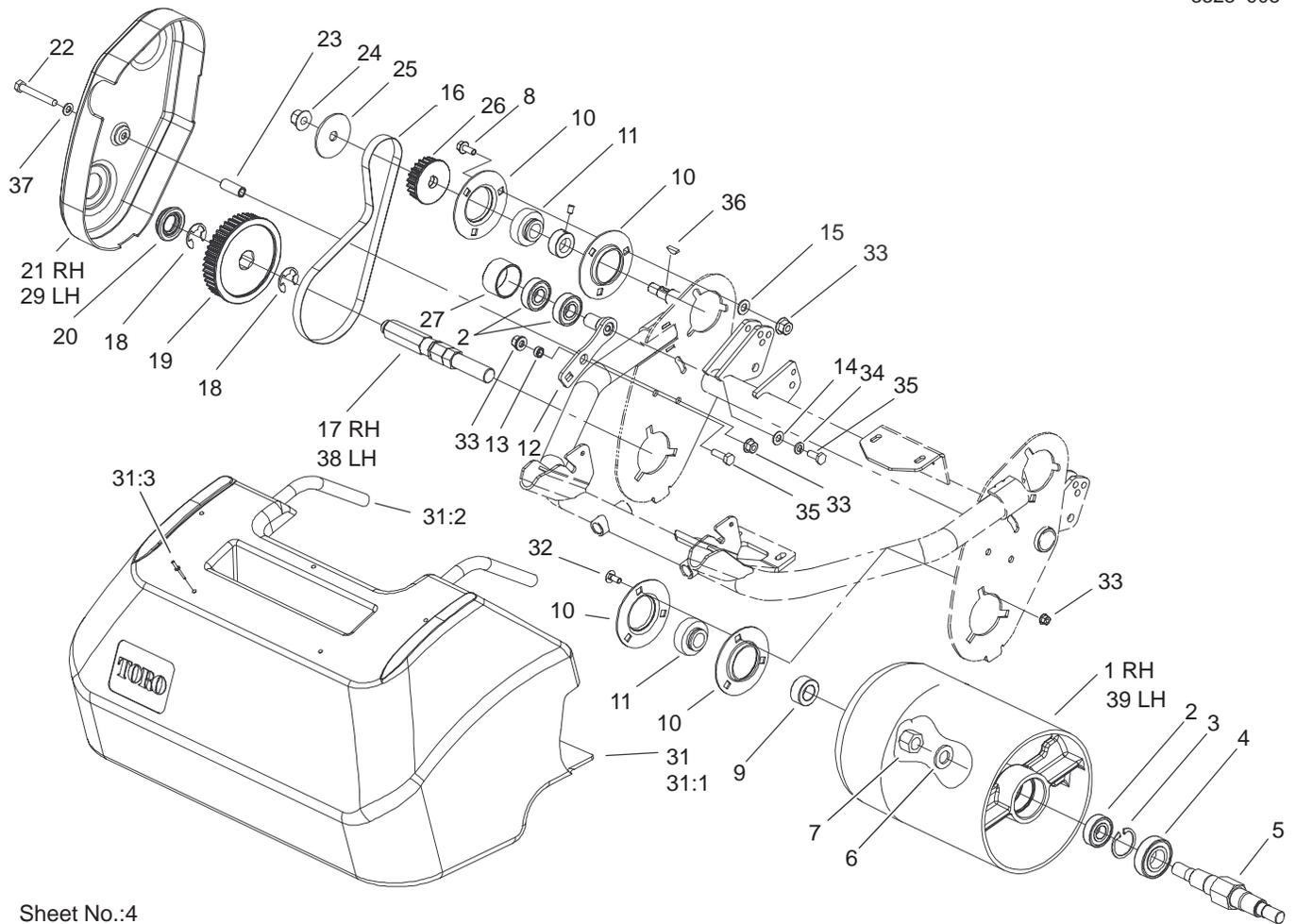


Sheet No.:2

## Frame Assembly

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	104-2630	1	Rear Frame ASM	23	33114-030	2	Screw-HH
1:2	93-9389	2	Decal-Warning, Belt (Japan)	24	104-0502	1	Spacer-Kickstand, Long
1:2	93-9356	2	Decal-Warning, Belt	25	99-2011	1	Spring-Torsion
2	104-9798-01	1	Front Frame ASM	27	33115-025	2	Screw-HH
3	93-2561	8	Bushing-Flange	28	33114-025	4	Screw-HH
4	99-2063	4	Link ASM	29	105-9939	1	Strap-Support, Cable
5	104-2611	6	Nut-HF				
6	99-2070-01	2	Base-Engine				
7	33095-00	2	Washer-Flat				
8	33094-00	6	Washer-Flat				
9	104-2612	8	Nut-HF				
10	93-6029	2	Pin-Clevis, Ring				
11	3290-467	2	Pin-Hair				
13	99-3774-03	2	Arm-Handle				
14	65-7510	2	Grommet-Handle				
15	99-3778-03	1	Kickstand				
16	33115-070	2	Screw-HH				
17	93-6024	3	Bushing-Support, Handle				
18	65-7910	1	Spacer				
19	99-2053	2	Pin-Pivot				
20	99-2058	2	Spacer-Support, Handle				
21	33114-100	1	Screw-HH				
22	33114-045	1	Screw-HH				



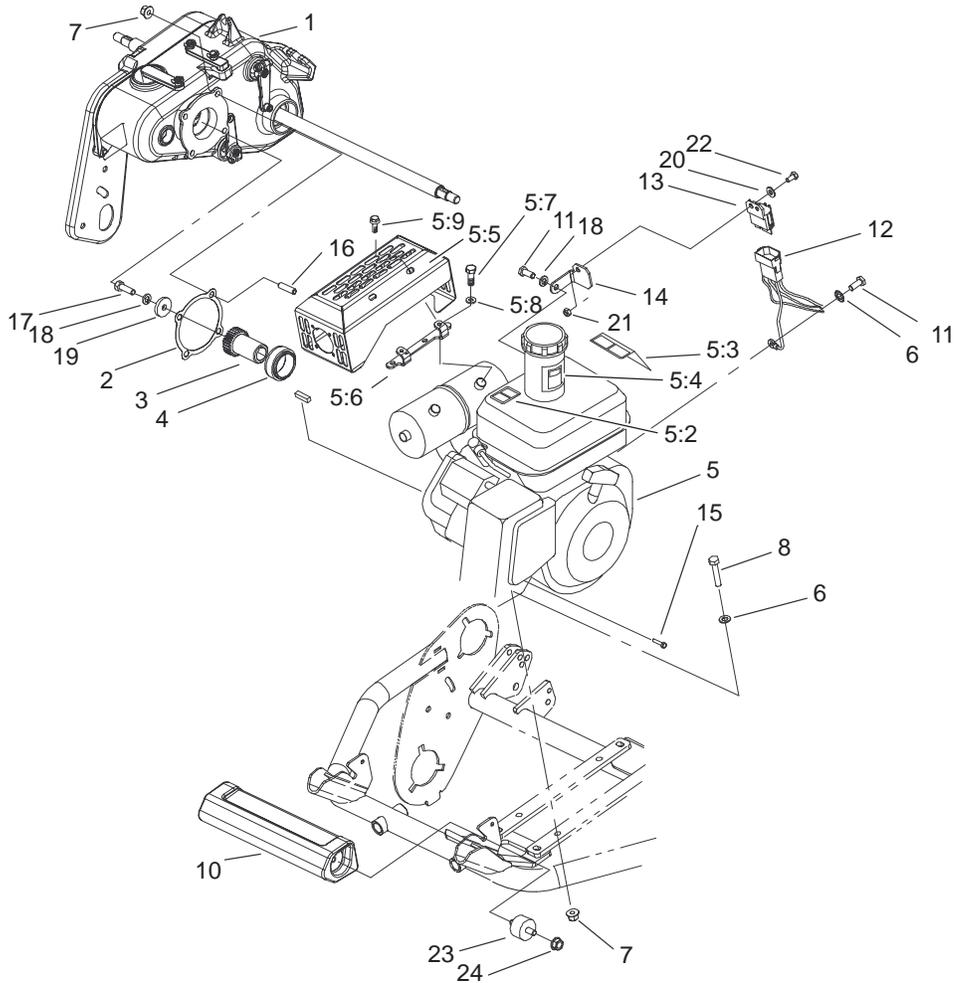


Sheet No.:4

## Drum Drive and Basket Assembly

Ref. No.	Part No.	Qty.	Description
1	99-3845	1	Drum-Traction, RH
2	38-7820	6	Bearing-Ball
3	32120-42	2	Ring-Retaining
4	251-82	2	Bearing-Ball
5	99-3848	1	Spindle-Drum
6	33098-00	2	Washer-Flat
7	33028-00	2	Nut-Lock NI
8	33104-020	6	Screw-HHF
9	104-0537	2	Spacer-Drum
10	65-6710	8	Flangette-Bearing
11	104-0538	4	Bearing-Aligning, Self
12	105-5345	2	Idler
13	99-2018	2	Spacer-Arm, Idler
14	3256-23	2	Washer-Flat
15	33094-00	6	Washer-Flat
16	99-2023	2	Belt-Drum
17	105-5329	1	Shaft-Hex, RH
18	32151-103	4	Ring-Snap
19	99-3799	2	Pulley-Drum
20	104-0533	2	Seal-Cover, Drum
21	105-5326	1	Cover-Drum, RH
22	33114-060	2	Screw-HH
23	105-5334	2	Spacer-Cover
24	104-2610	2	Nut-HF
25	104-0532	2	Washer-Pulley
26	99-2081	2	Pulley-22 Tooth

Ref. No.	Part No.	Qty.	Description
27	104-2609	2	Sleeve-Pulley
29	105-5327	1	Cover-Drum, LH
31	104-2600	1	Basket ASM
31:1	105-2439	1	Basket-Grass
31:2	99-4282-03	1	Basket Frame ASM
31:3	3269-28	5	Rivet-Pop
32	33124-020	6	Screw-CARR
33	104-2612	16	Nut-HF
34	3253-4	2	Washer-Lock
35	33114-020	4	Screw-HH
36	3257-30	2	Key-Woodruff
37	33094-00	2	Washer-Flat
38	99-3844	1	Shaft-Hex, LH
39	99-3846	1	Drum-Traction, LH

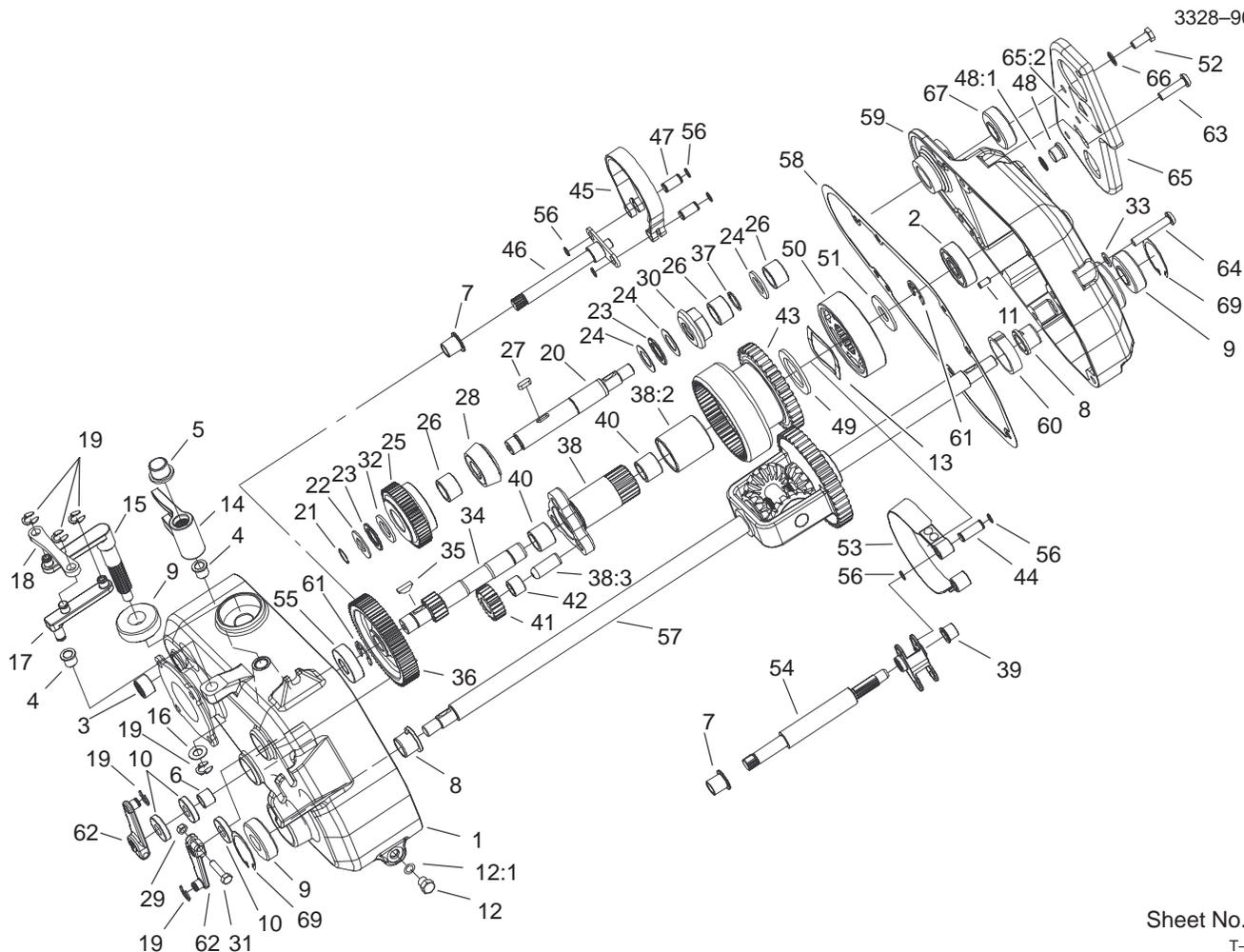


Sheet No.:5

## Engine Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	99-3775	1	Gearbox ASM
2	99-2052	1	Gasket-Flange
3	99-2002	1	Gear-Engine
4	99-2001	1	Adapter-Engine
5	105-5320	1	Engine ASM
5:2	105-5309	1	Decal-Surface, Hot
5:2	83-2560	1	Decal-Surface, Hot (Japan)
5:3	93-7348	1	Decal-Danger
5:3	92-4813	1	Decal-Danger (Japan)
5:4	93-9886	1	Decal-Fuel
5:5	104-9784-03	1	Guard-Muffler
5:6	104-9771	2	Bracket-Guard, Muffler
5:7	33113-012	4	Screw-HH
5:8	3256-22	4	Washer-Flat
5:9	104-2628	4	Screw-HWH
6	33094-00	5	Washer-Flat
7	104-2612	8	Nut-HF
8	33114-040	4	Screw-HH
10	105-5304-01	1	Damper ASM
11	33114-016	2	Screw-HH
12	105-5323	1	Module-Harness, Wire
13	1-323430	1	Module-Interlock
14	94-5861	1	Bracket-Module
15	94-9015	1	Screw-HH

Ref. No.	Part No.	Qty.	Description
16	99-2039	4	Screw-Set
17	3210-5	1	Screw-HH
18	3253-4	2	Washer-Lock
19	65-8270	1	Washer
20	3256-22	1	Washer-Flat
21	33023-00	1	Nut-Lock
22	33113-016	1	Screw-HH
23	105-5303	2	Mount-Isolator
24	32128-26	2	Nut-Flange



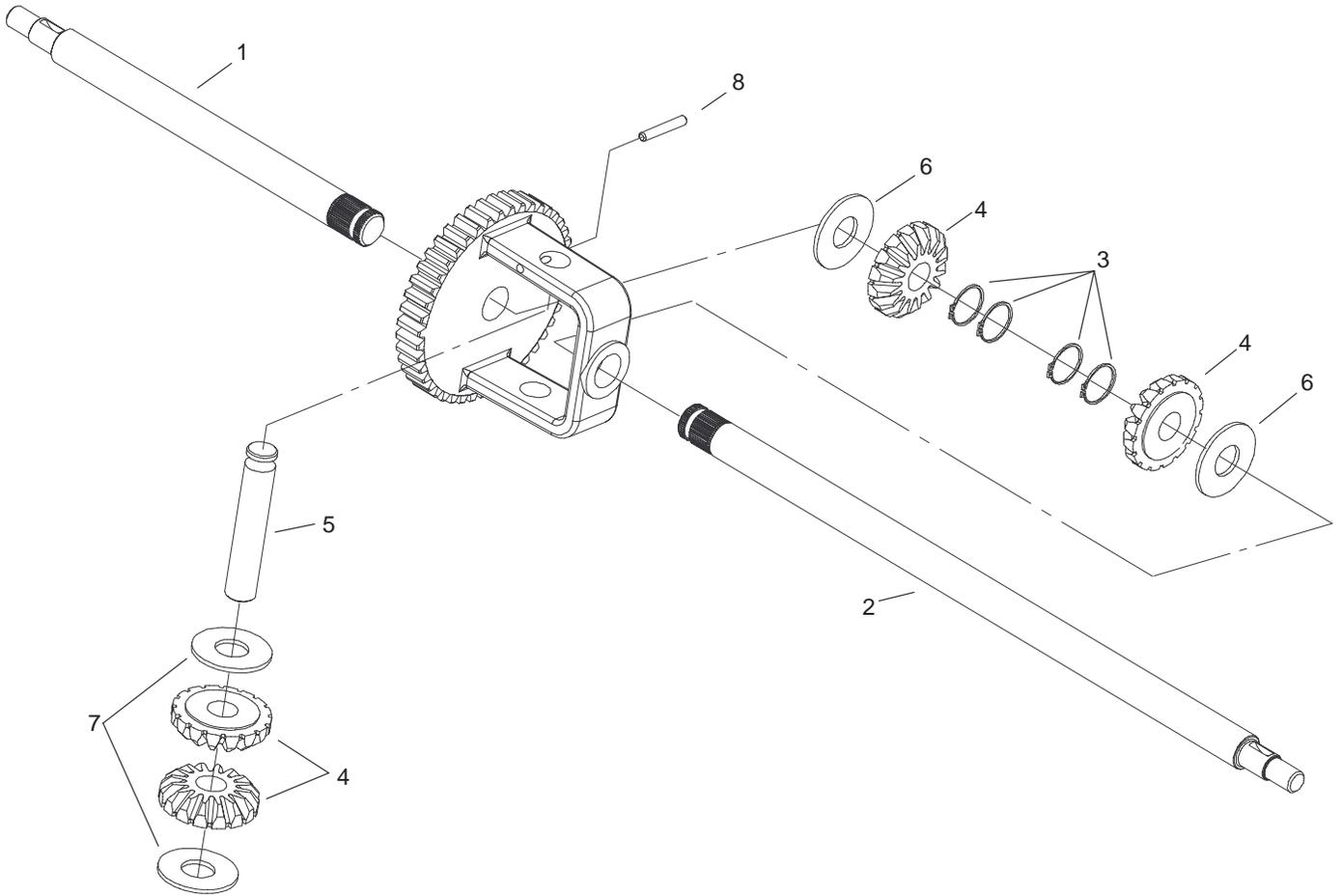
Sheet No.:A1  
T-3728

## Gearbox Assembly No. 99-3775

Ref. No.	Part No.	Qty.	Description
1	106-4682	1	Housing-Gearbox
2	99-2041	1	Bearing-Ball
3	98-4194	1	Bearing-Needle, Caged
4	256-316	2	Bushing
5	256-287	1	Bushing
6	256-1	1	Bushing
7	256-219	2	Bushing
8	99-2062	2	Bushing-Keyed, Flanged
9	99-3842	3	Seal-Oil
10	99-2056	3	Seal-Oil
11	95-0715	2	Pin-Dowel
12	353-948	1	Plug
12:1	237-118	1	O-Ring
13	105-9944	1	Washer-Wave, Spring
14	99-2014	1	Fork-Clutch
15	99-2015	1	Shaft-Fork
16	37-8080	1	Washer-Thrust
17	99-3779	1	Bellcrank
18	99-3780	1	Link
19	32151-47	6	Ring-Retaining
20	99-2009	1	Shaft-Clutch
21	99-3805	1	Ring-Retaining
22	99-3806	1	Washer-Thrust
23	99-3836	2	Bearing-Thrust

Ref. No.	Part No.	Qty.	Description
24	99-3837	3	Washer-Thrust
25	99-2008	1	Gear-Clutch
26	1523	3	Bearing-Needle
27	99-2059	2	Key
28	105-2430	1	Cone ASM
29	33023-00	2	Nut-Lock
30	99-2013	1	Hub-Plunger
31	33113-025	2	Screw-HH
32	99-3807	1	Washer-Thrust
33	33094-00	4	Washer-Flat
34	99-2003	1	Gear-Sun
35	3257-30	1	Key-Woodruff
36	99-2004	1	Gear-Input
37	32120-72	1	Ring-Snap
38	104-9777	1	Carrier ASM
38:2	104-0524	1	Bushing-Carrier
38:3	98-4052	3	Pin-Dowel
39	104-9776	1	Bushing-Flanged
40	104-0535	2	Bearing-Needle
41	98-4053	3	Gear-Planet
42	48-2060	3	Bearing-Roller
43	99-2006	1	Gear-Ring
44	104-2648	2	Pin-Clevis
45	99-2049	1	Band-Brake
46	99-2020	1	Shaft-Brake
47	99-2060	2	Pin-Clevis



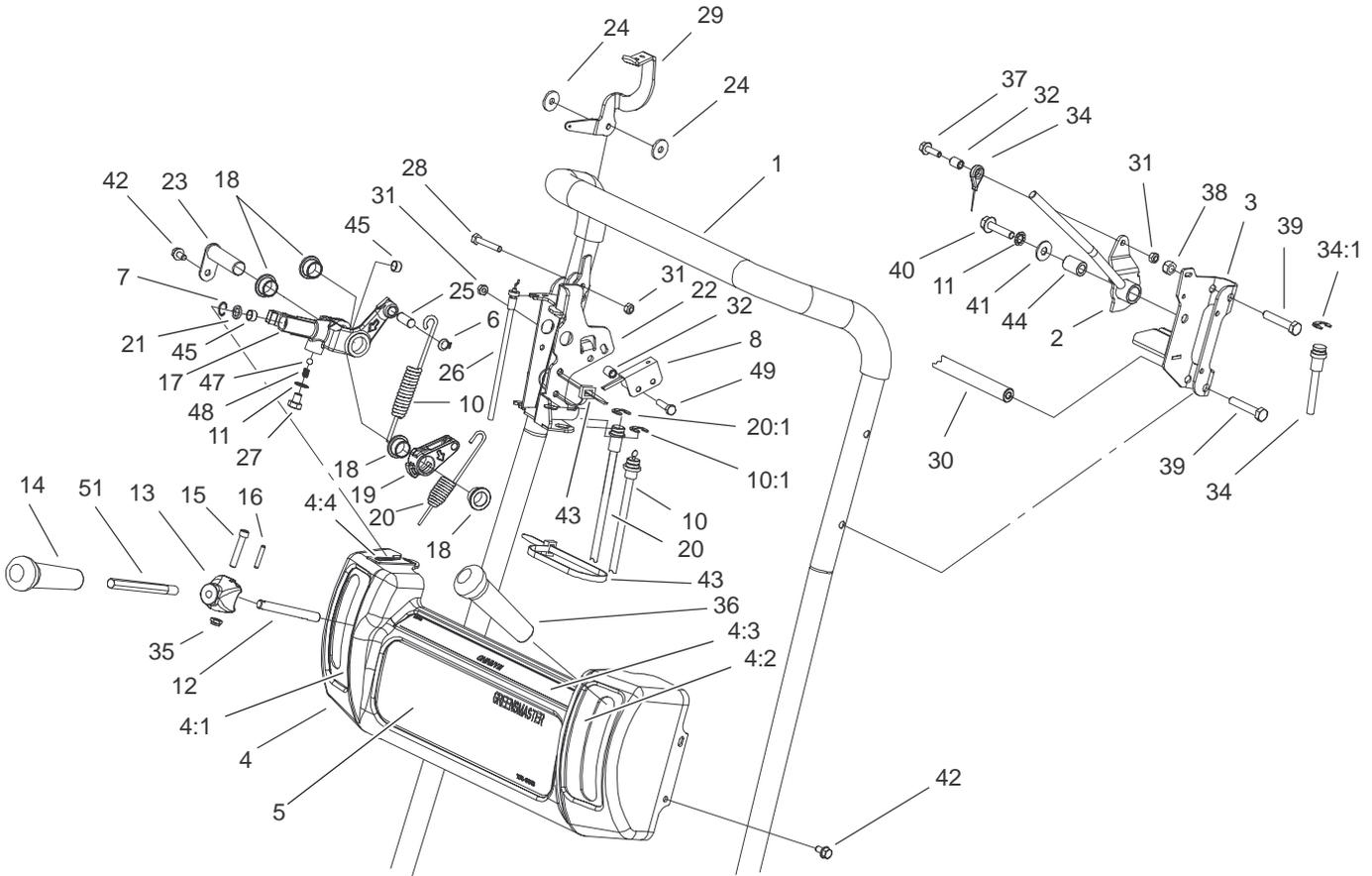


Sheet No.:A2

## Differential Assembly No. 99-2038

Ref. No.	Part No.	Qty.	Description
1	105-2402	1	Axle (Short)
2	105-2403	1	Axle (Long)
3	95-5746	2	Ring-Retaining
4	105-2405	1	Set-Gear, Differential
5	105-2404	1	Pin-Drive
6	95-5745	2	Washer
7	105-2406	2	Washer-Thrust
8	32121-79	1	Pin-Roll

Ref. No.	Part No.	Qty.	Description



Sheet No.:6

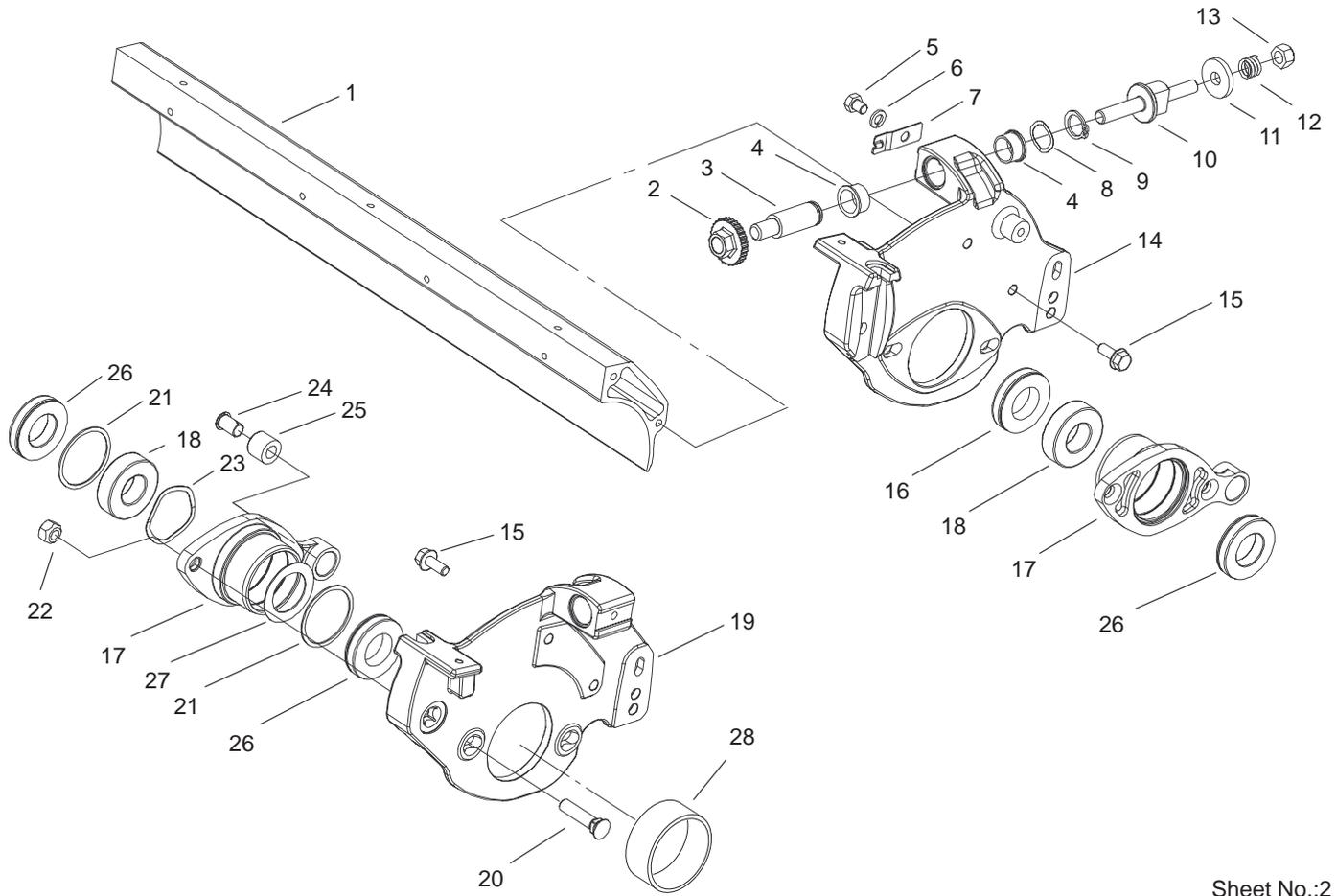
## Handle Assembly

Ref. No.	Part No.	Qty.	Description
1	104-9788	1	Handle
2	105-5321	1	Lever-Brake
3	99-6222-03	1	Brake Bracket ASM
4	104-2633	1	Console ASM
4:1	104-2617	1	Decal-Lever, Traction
4:2	104-2618	1	Decal-Lever, Brake
4:3	104-2621	1	Decal-Warning
4:4	93-6085	1	Decal-Throttle
5	105-9916	1	Decal-Main Console
6	105-2410	1	Ring-Retaining
7	105-5324	1	Ring-Retaining
8	100-1270	1	Switch-Proximity
10	105-5328	1	Cable-Clutch, Traction
10:1	32120-47	1	Ring-Retaining, External
11	3254-2	2	Washer-Lock, Internal
12	99-3835	1	Pin
13	104-9761	1	Hub-Handle, Mount
14	104-9760	1	Knob-Black
15	105-5349	1	Screw-HSH, Special
16	32121-51	1	Pin-Roll
17	104-9758	1	Lever-Control, Traction
18	80-1290	4	Bushing
19	99-3830	1	Lever-Reel
20	99-3765	1	Cable-Clutch, Reel

Ref. No.	Part No.	Qty.	Description
20:1	32120-47	1	Ring-Retaining, External
21	105-2407	1	Wiper
22	106-4697-03	1	Control Bracket ASM
23	99-3833	1	Pin-Lever, Reel
24	66-2921	2	Washer-Friction
25	104-9782	1	Pin-Dowel
26	104-2620	1	Cable-Throttle
27	33114-010	1	Screw-HH
28	33113-025	1	Screw-HH
29	105-5300	1	Lever-Throttle
30	106-4666	1	Rod-Support
31	33023-00	4	Nut-Lock
32	105-2401	3	Spacer-Cable, Brake
34	99-6214	1	Cable-Brake
34:1	32120-47	1	Ring-Retaining, External
35	3296-42	1	Nut-Lock, NI
36	104-9774	1	Knob-Red
37	33103-025	1	Screw-HHF
38	33024-00	2	Nut-Lock
39	33114-045	4	Screw-HH
40	33114-035	1	Screw-HH
41	3256-71	1	Washer-Flat
42	104-2628	5	Screw-HWH
43	3290-378	4	Tie-Cable





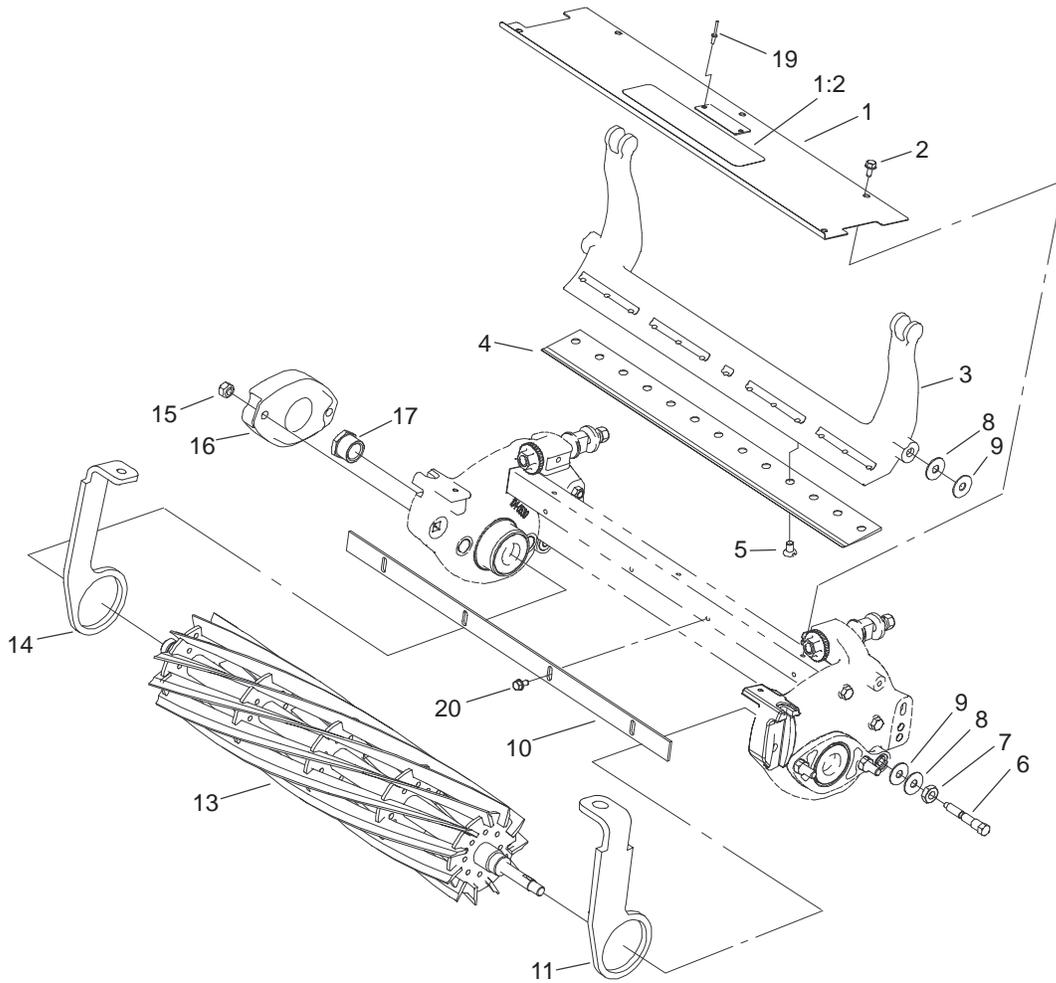


Sheet No.:2

## Right and Left Side Plate Assembly

Ref. No.	Part No.	Qty.	Description
1	106-4692	1	Frame-Shield, Extrusion
2	93-2549	2	Nut-Adjuster
3	99-2093	2	Nut-Adjuster, Bedbar
4	256-252	4	Bearing-Flange
5	33114-010	2	Screw-HH
6	3253-4	2	Washer-Lock
7	99-2097	2	Detent
8	95-3703	2	Washer-Spring, Wave
9	32120-93	2	Ring-Retaining
10	99-2096	2	Screw-Adjuster, Bedbar
11	99-2098	2	Washer
12	99-3755	2	Spring-Compression
13	33025-00	2	Nut-Lock
14	105-5348	1	Plate-Side, LH
15	33104-020	4	Screw-HHF
16	105-9945	2	Seal-Grease, Blue
17	99-3766	2	Housing-Bearing, Reel
18	251-342	2	Bearing-Ball
19	105-5347	1	Plate-Side, RH
20	105-5342	4	Bolt-Plow
21	32151-92	2	Ring-Retaining
22	105-5344	4	Nut-Tapered
23	3290-485	1	Washer-Wave

Ref. No.	Part No.	Qty.	Description
24	52-2890	2	Bushing-Nylon
25	63-9510	2	Bushing
26	105-9945	2	Seal-Grease, Blue
27	105-9943	1	Washer-Thrust
28	106-4691	2	Bushing-Pitch



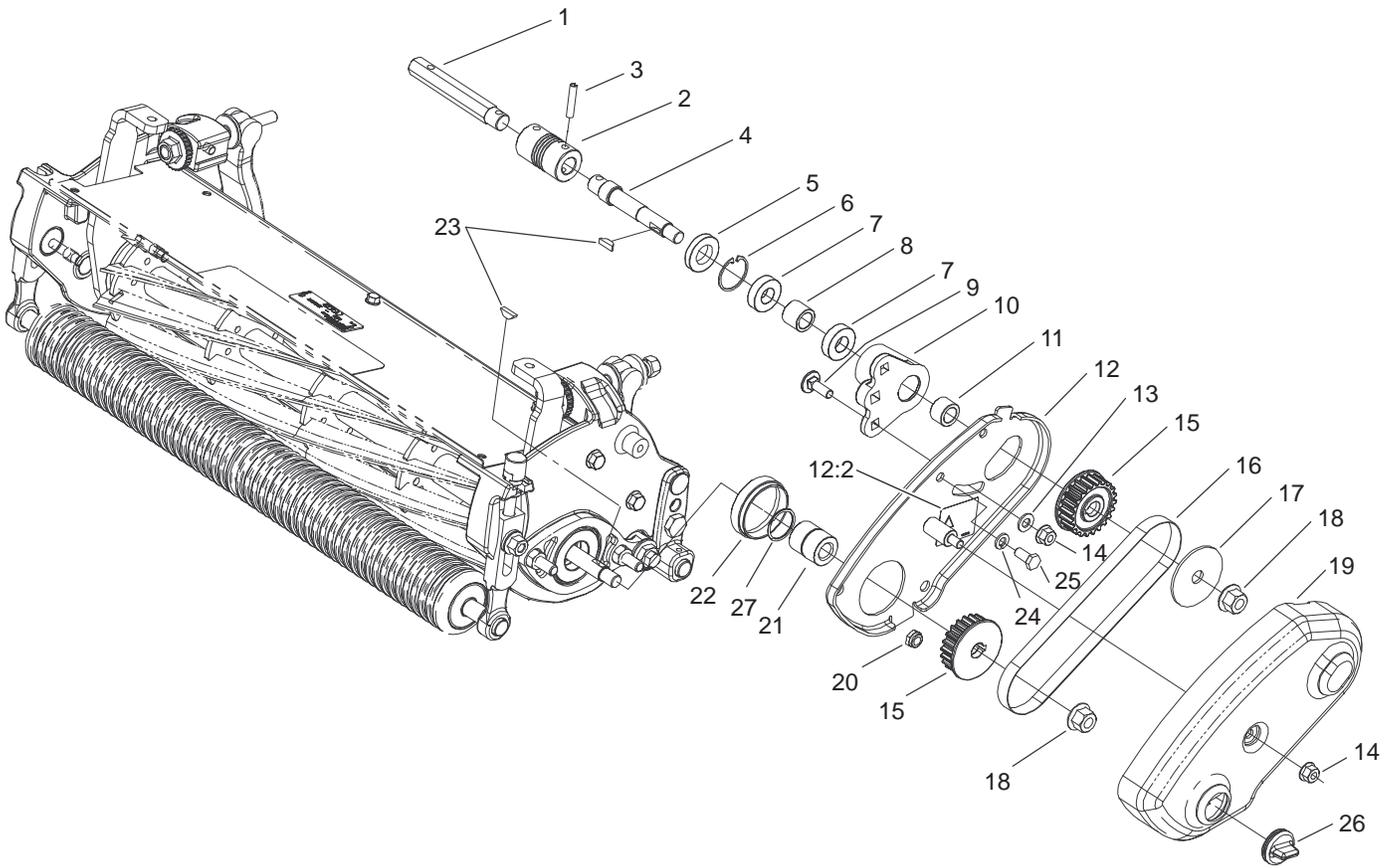
Sheet No.:3

## Reel Assembly

Ref. No.	Part No.	Qty.	Description
1	104-2632	1	Grass Shield ASM
1:2	84-6560	1	Decal-Warning (Japan)
1:2	93-8064	1	Decal-Danger (Europe)
2	104-2628	5	Screw-HWH
3	99-3794-01	1	Bedbar
4	104-7720	1	Bedknife-Microcut, Ext
4	93-4262	1	Bedknife-Microcut
4	93-4263	1	Bedknife-Tourney Cut
4	93-4264	1	Bedknife-Low Cut
5	57-4910	13	Screw
6	65-6270	2	Bolt-Bedbar
7	3220-26	2	Nut-Jam
8	52-2860	4	Washer
9	52-2900	4	Washer
10	106-2617-03	1	Bar-Cut Off
11	106-4677-01	1	Arm-Pitch, LH
13	104-0500	1	11 Blade Reel ASM
13	105-2400	1	8 Blade Reel ASM
14	106-4676-01	1	Arm-Pitch, RH
15	104-2611	2	Nut-HF
16	104-0534-03	1	Weight-Reel
17	99-3767	1	Nut-Lock, Bearing

Ref. No.	Part No.	Qty.	Description
19	3290-271	2	Rivet-Pop
20	33103-016	4	Screw-HHF



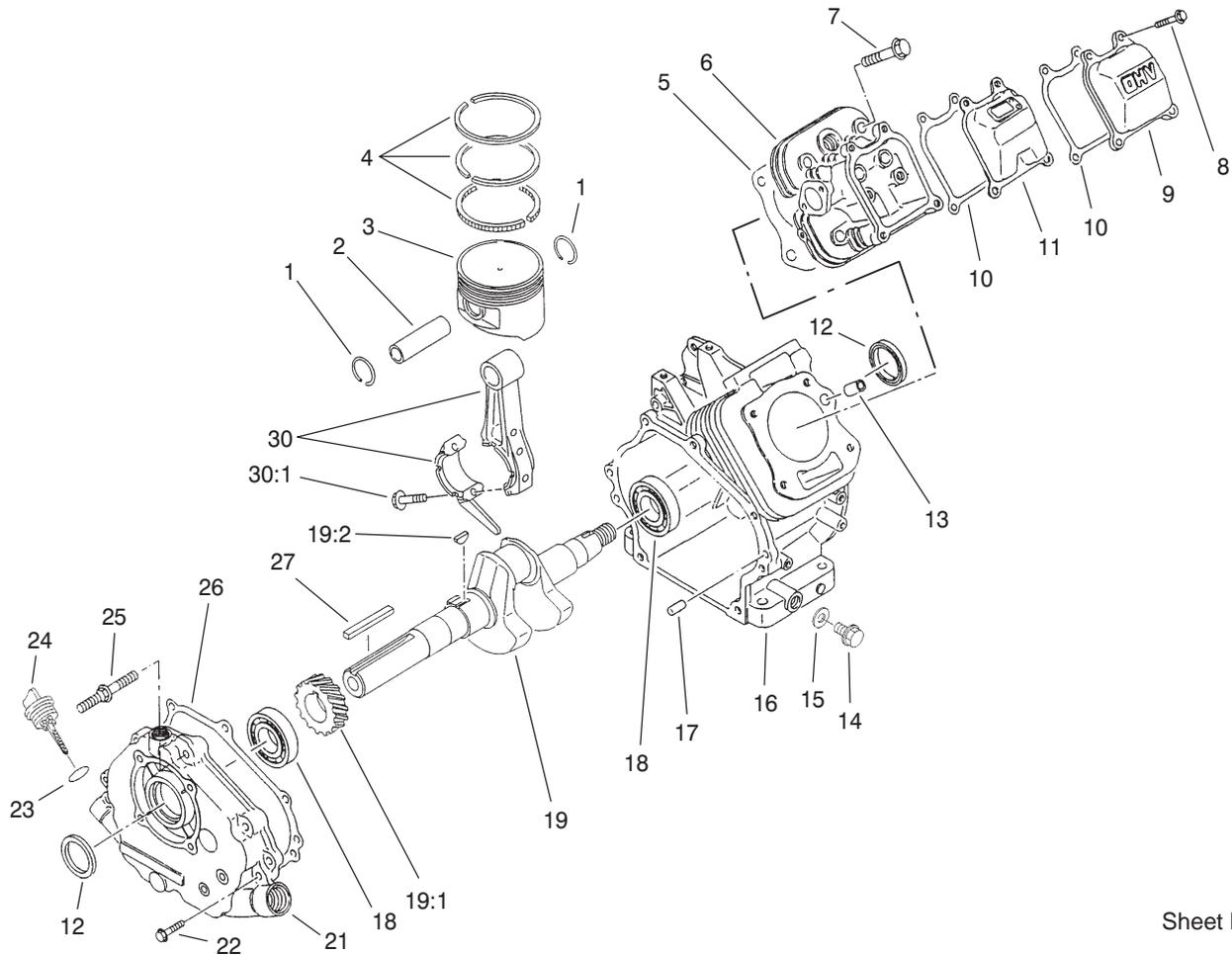


Sheet No.:5

## Reel Drive Assembly

Ref. No.	Part No.	Qty.	Description
1	99-3760	1	Shaft-Hex
2	99-3757	1	Coupling-Flex
3	32121-69	2	Pin-Spring
4	99-3756	1	Shaft
5	253-120	1	Seal-Oil
6	32151-51	1	Ring-Retaining
7	251-336	2	Bearing
8	99-2079	1	Spacer
9	33124-025	2	Screw-CARR
10	99-2083	1	Housing-Bearing
11	99-2080	1	Spacer
12	104-2631	1	Reel Drive Plate ASM
12:2	93-9356	1	Decal-Warning, Belt
12:2	93-9389	1	Decal-Warning, Belt (Japan)
13	3256-23	2	Washer-Flat
14	104-2612	3	Nut-HF
15	99-2081	2	Pulley-22 Tooth
16	99-2022	1	Belt
17	104-0532	1	Washer-Pulley
18	104-2610	2	Nut-HF
19	99-3793	1	Cover-Drive, Reel
20	104-2611	2	Nut-HF
21	99-2032	1	Spacer
22	99-2087	1	Spacer
23	3257-30	2	Key-Woodruff

Ref. No.	Part No.	Qty.	Description
24	3253-4	1	Washer-Lock
25	33114-016	1	Screw-HH
26	105-2438	1	Plug
27	32120-69	1	Ring-Snap



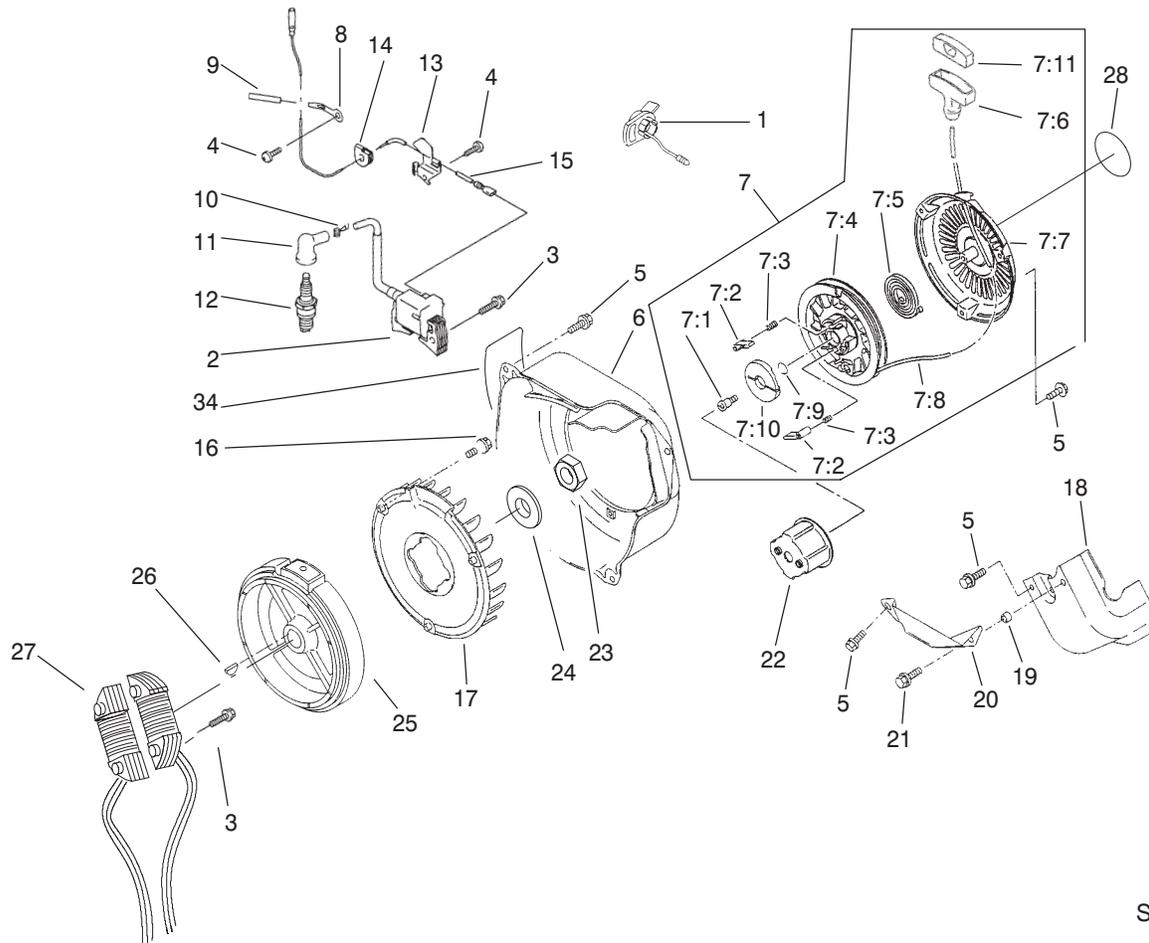
Sheet No.:50

## Crankcase Assembly

Ref. No.	Part No.	Qty.	Description
1	93-8500	2	Ring-Retaining
2	93-8501	1	Pin-Piston
3	93-8502	1	Piston
3	94-6836	1	Piston-0.5 O/S
4	93-8503	1	Set-Ring, Piston
4	94-6837	1	Set-Ring, Piston (.05mm)
5	93-8504	1	Gasket-Head
6	93-8505	1	Head-Cylinder
7	93-8506	4	Bolt-Flanged
8	94-6838	4	Bolt-Flanged
9	93-8508	1	Case-Rocker
10	93-8509	2	Gasket-Rocker
11	93-8510	1	Breather
12	93-8511	2	Seal-Oil
13	93-8512	2	Pin
14	93-8513	2	Plug-Drain
15	93-8514	2	Gasket-Plug, Drain
16	93-8515	1	Crankcase
17	93-8516	2	Pin
18	93-8517	2	Bearing-Ball
19	93-8696	1	Crankshaft ASM
19:1	94-9043	1	Gear-Helical
19:2	93-8526	1	Key
21	93-8697	1	Cover-Crankcase
22	93-8521	7	Bolt-Flanged

Ref. No.	Part No.	Qty.	Description
23	94-9041	2	O-Ring
24	93-8523	2	Cap-Filter, Oil
25	93-8524	1	Stud
26	93-8525	1	Gasket-Crankcase
27	93-8698	1	Key
30	93-8528	1	Connecting Rod ASM
30:1	93-8527	2	Bolt-Rod





Sheet No.:52

## Ignition Assembly

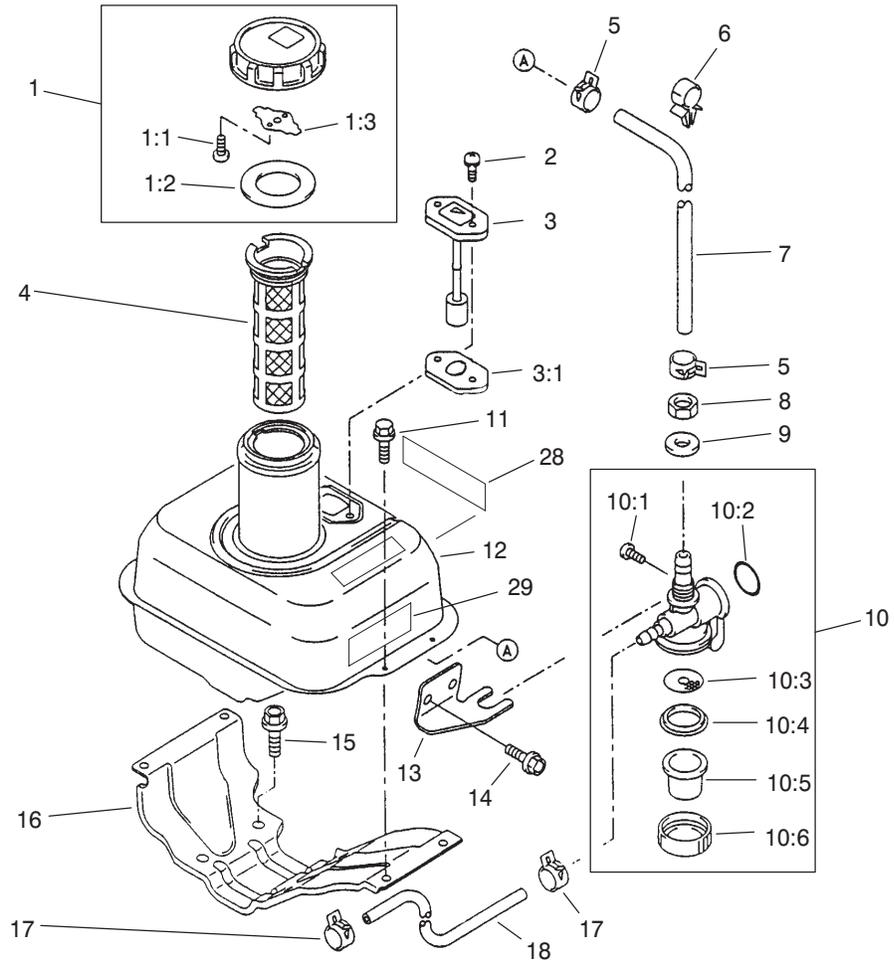
Ref. No.	Part No.	Qty.	Description
1	93-8546	1	Switch
2	94-9031	1	Ignition Coil ASM
3	93-8548	6	Bolt-Flanged
4	93-8549	1	Screw
5	93-8550	10	Bolt-Flanged
6	94-9047	1	Housing-Fan
7	93-8552	1	Recoil Starter ASM
7:1	93-8553	1	Screw
7:2	93-8554	2	Pawl-Recoil
7:3	93-8555	2	Spring-Return
7:4	93-8556	1	Reel-Recoil
7:5	93-8557	1	Spring
7:6	94-9045	1	Grip-Starter, Recoil
7:7	94-9046	1	Case-Recoil
7:8	93-8560	1	Rope
7:9	93-8561	1	Ring-Retaining
7:10	93-8562	1	Guide-Pawl
7:11	94-9044	1	Cap-Grip
8	94-9039	1	Clamp
9	94-9040	1	Tube
10	94-9049	1	Spring-Terminal
11	93-8585	1	Cap-Plug, Spark
12	93-8584	1	Spark Plug
13	93-8583	1	Clamp
14	93-8582	1	Grommet
15	94-9038	1	Wire-Lead

Ref. No.	Part No.	Qty.	Description
16	94-6840	3	Bolt-Flanged
17	93-8572	1	Fan
18	93-8563	1	Shroud-Engine
19	93-8564	1	Collar
20	93-8565	1	Shroud-Engine
21	93-8566	1	Bolt-Flanged
22	93-8567	1	Pulley-Recoil
23	93-8568	1	Nut
24	93-8569	1	Washer
25	99-6237	1	Flywheel ASM
26	93-8571	1	Key
27	99-4267	1	Coil-Lighting
28	94-9027	1	Label-Recoil
34	93-8689	1	Decal-Instructions









Sheet No.:56

## Fuel Tank Assembly

Ref. No.	Part No.	Qty.	Description
1	93-8660	1	Fuel Cap ASM
1:1	93-8661	2	Screw
1:2	93-8662	1	Gasket
1:3	93-8663	1	Spring
2	93-8686	2	Screw
3	93-8685	1	Gauge-Fuel
3:1	104-2384	1	Gasket-Gauge, Fuel
4	94-6826	1	Filter-Fuel
5	93-8664	2	Clamp
6	93-8665	1	Clamp
7	93-8666	1	Tube
8	94-9042	1	Nut
9	93-8668	1	Washer
10	93-8669	1	TAP ASM
10:1	93-8670	1	Screw
10:2	93-8671	1	O-Ring
10:3	94-6849	1	Filter-TAP
10:4	93-8673	1	Gasket
10:5	93-8674	1	Cup-TAP
10:6	93-8675	1	Nut
11	93-8683	4	Bolt
12	104-2382	1	Tank-Fuel
13	93-8681	1	Bracket
14	93-8680	2	Bolt-Flanged
15	94-6825	4	Bolt-Flanged
16	104-2383	1	Bracket-Tank

Ref. No.	Part No.	Qty.	Description
17	93-8676	2	Clamp
18	93-8677	1	Tube
28	94-9028	1	Label-Kawasaki
29	93-8692	1	Decal-Warning

