Form Number 3362-503 Rev A

Gearbox Service Kit

Greensmaster® Flex™ 21 Mower

Model No. 117-1457

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.

© The Toro Company - 2009
All Rights Reserved

Register your product at www.Toro.com

Contents

Description	Page	Description	Page
Gearbox Assembly No. 117-1457	 3	Differential Assembly No. 99-2038	 6
Gearbox Assembly	 4		

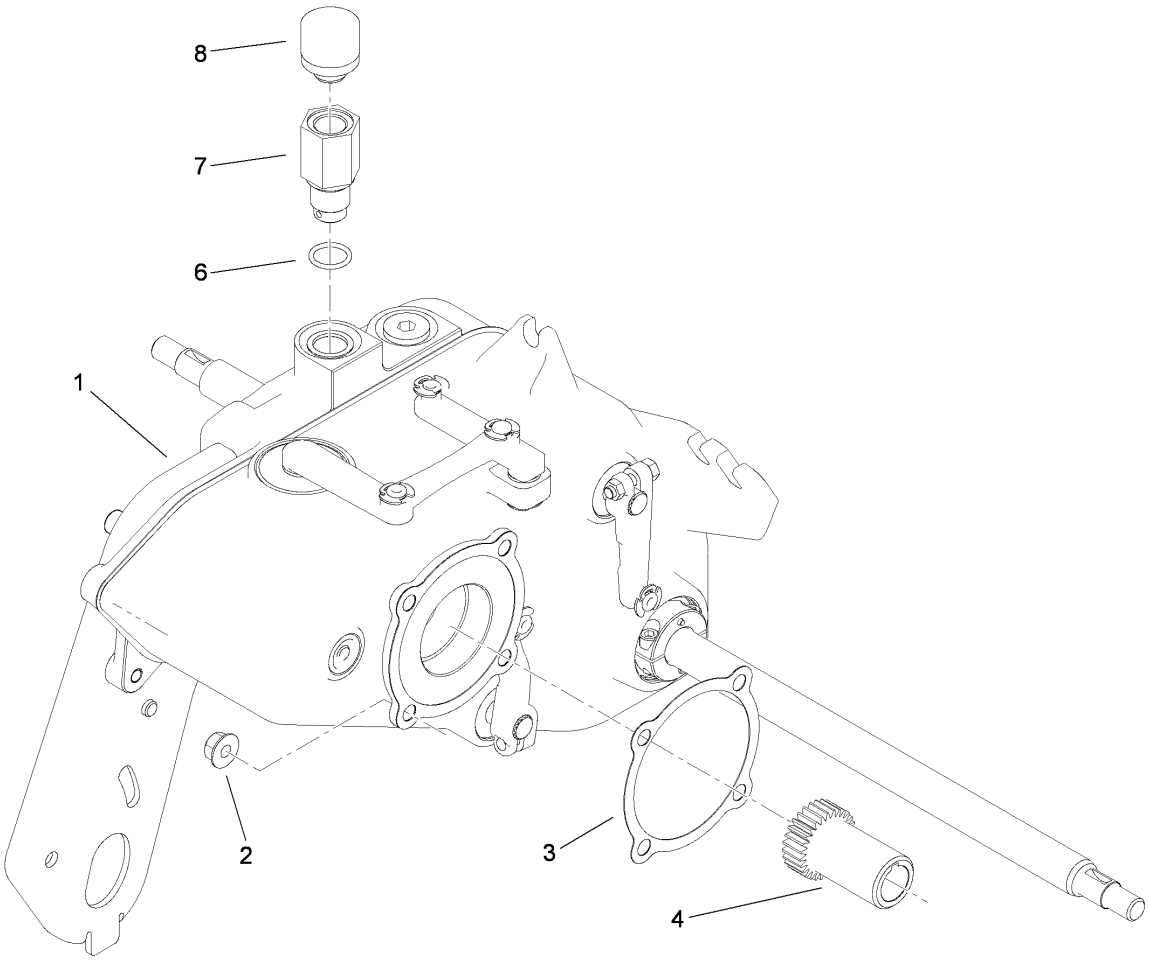
Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

AR. . . . . as required
ASM. . . . . assembly
BBC. . . . . blade brake clutch
CARR. . . . . carriage
DEG. . . . . degrees
EXT. . . . . external
FH. . . . . flat head
GA. . . . . gauge
HD. . . . . heavy-duty
HF. . . . . hex flange
HH. . . . . hex head
HHF. . . . . hex head flange
HHFTF. . . . . hex head flange thread forming
HJ. . . . . hex jam
HLH. . . . . hex lag head
HOC. . . . . height-of-cut
HSBH. . . . . hex socket button head
HSFH. . . . . hex socket flat head
HSH. . . . . hex socket head
HWH. . . . . hex washer head
HWHTF. . . . . hex washer head thread forming
HYD. . . . . hydraulic
LH. . . . . left hand
NI. . . . . nylon insert
NPTF. . . . . national pipe thread fine
PFH. . . . . phillips flat head
PPH. . . . . phillips pan head
PPHTF. . . . . phillips pan head thread forming
PRH. . . . . phillips round head
PTH. . . . . phillips truss head
PTO. . . . . power-take-off
RH. . . . . right hand
ROPS. . . . . roll-over protection system
SFH. . . . . slotted fillister head
SHH. . . . . slotted hex head
SHWH. . . . . slotted hex washer head
SPH. . . . . slotted pan head
SQH. . . . . square head
SRH. . . . . slotted round head
STD. . . . . standard
TAP. . . . . self tapping
TTH. . . . . torx truss head

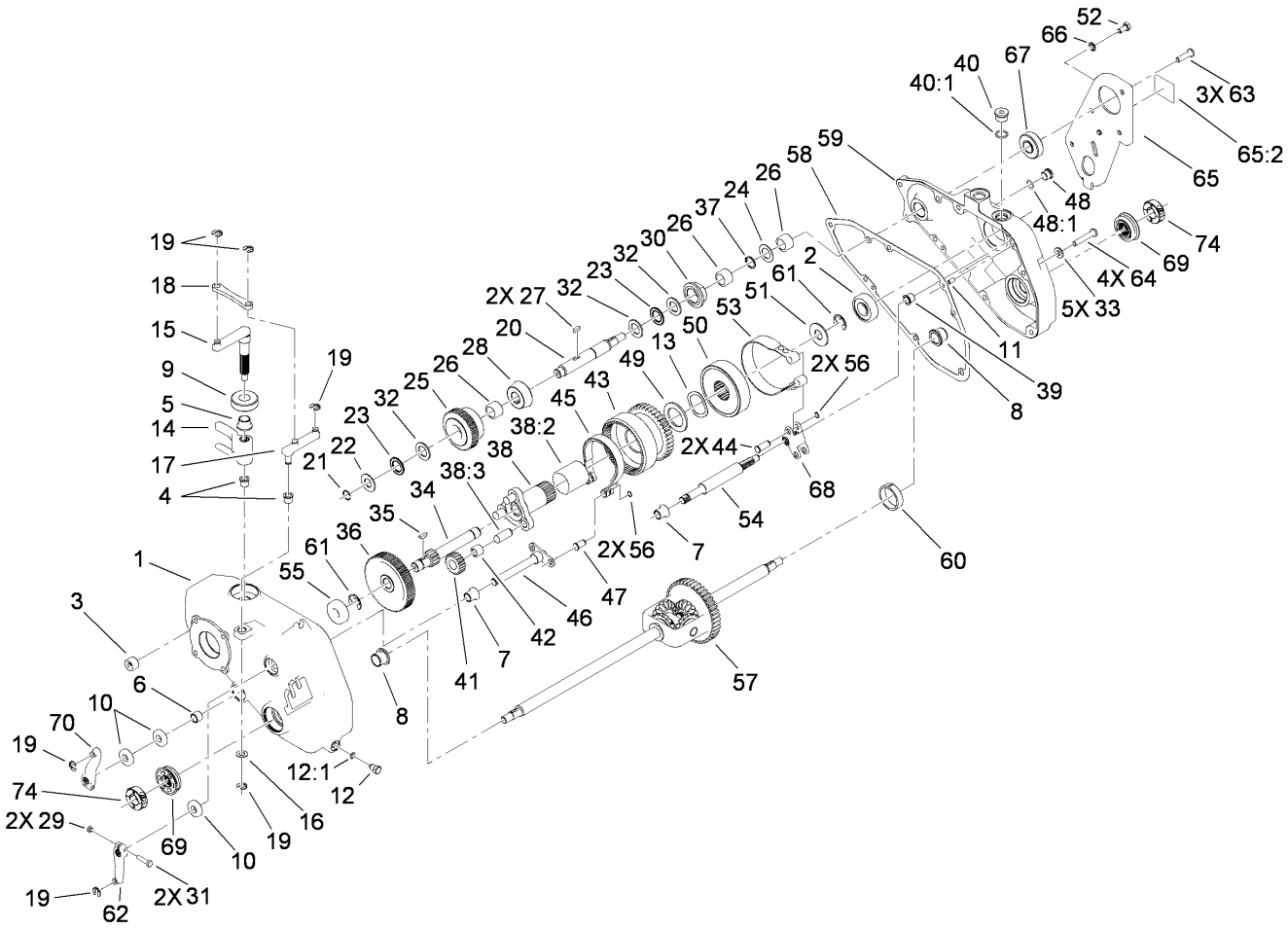
Footnotes

❶ Not serviced separately



Gearbox Assembly No. 117-1457

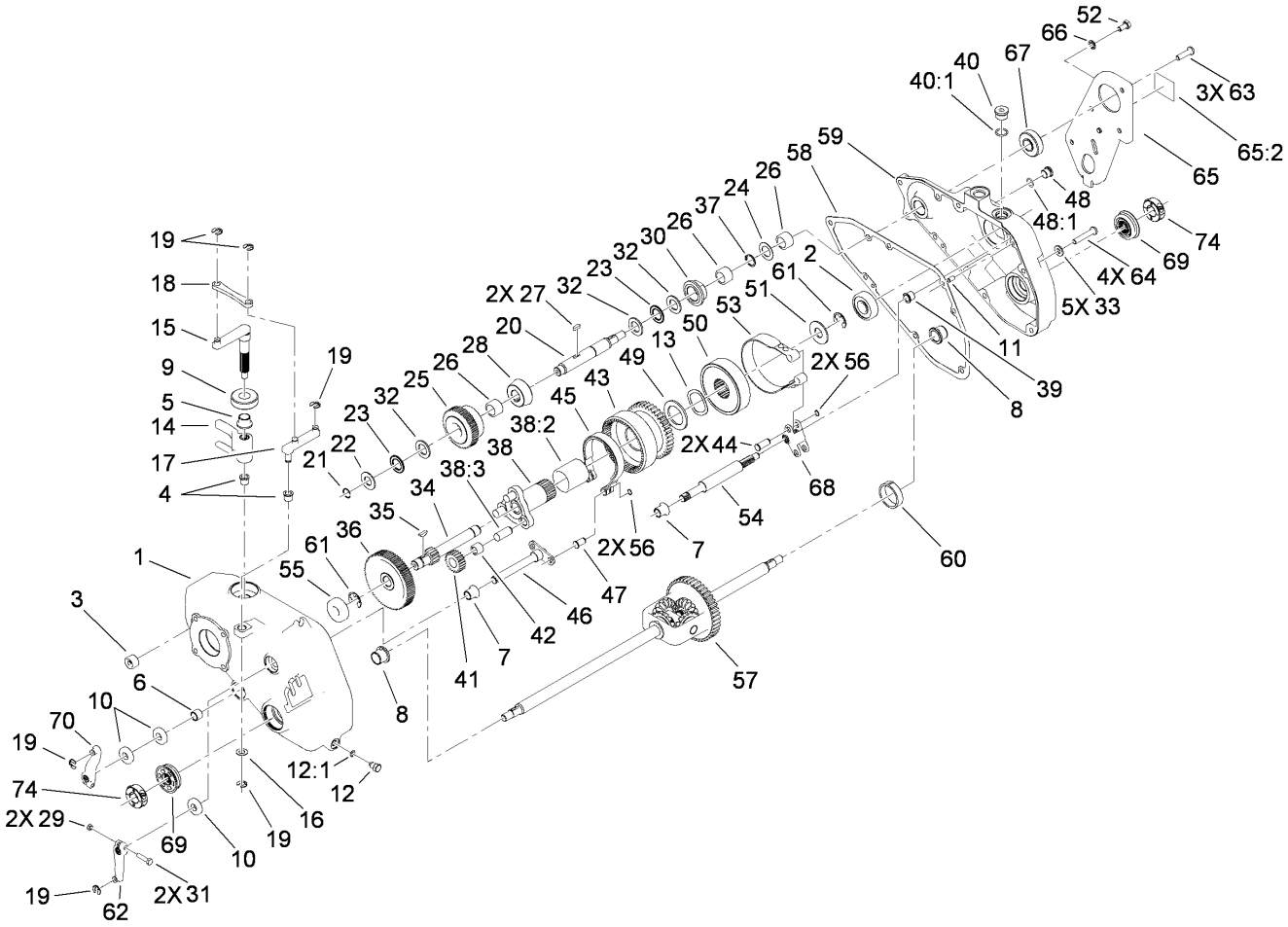
Ref	Part No.	Qty.	Description
❶1		1	Gearbox ASM
2	117-1350	4	Nut-HF, Lock
3	99-2052	1	Gasket-Flange
4	110-2445	1	Gear-Engine, 28 Tooth
6	237-79	1	O-Ring
7	117-1453	1	Adapter-Vent
8	117-1446	1	Vent-Breather



Gearbox Assembly

Ref	Part No.	Qty.	Description
1	117-1450	1	Housing-Gearbox
2	110-7339	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	1	Seal-Oil
10	99-2056	3	Seal-Oil
11	95-0715	2	Pin-Dowel
12	110-2455	1	Fitting-Plug, Magnetic
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	110-2450	1	Lever-Bellcrank
18	99-3780	1	Link
19	32151-47	6	Ring-Retaining
20	115-1117	1	Shaft-Clutch, Reel
21	99-3805	1	Ring-Retaining
22	99-3806	1	Washer-Thrust
23	99-3836	2	Bearing-Thrust

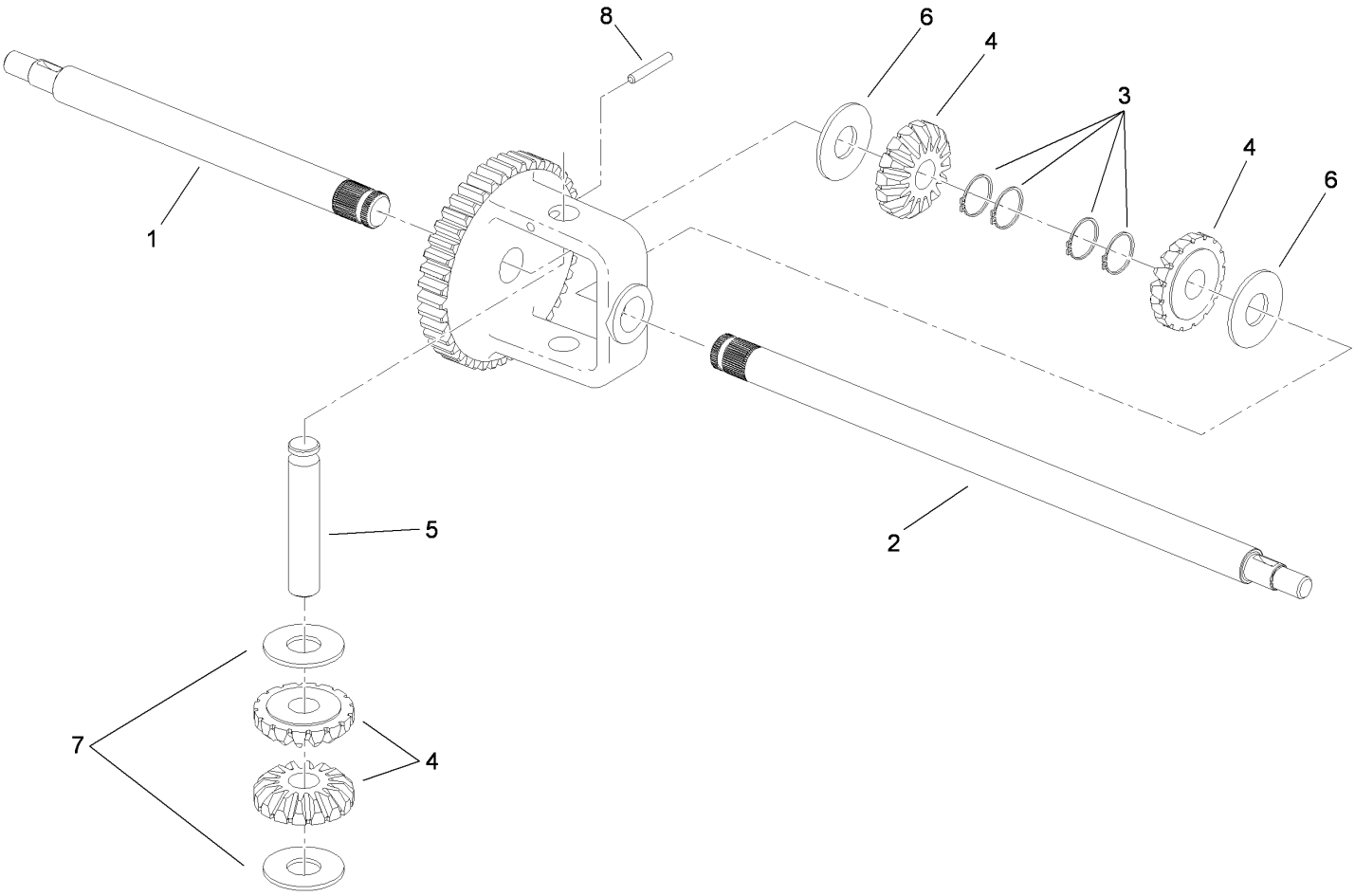
Ref	Part No.	Qty.	Description
24	99-3837	1	Washer-Thrust
25	110-2444	1	Gear-Clutch, 55 Tooth (Reel Crowned)
26	1523	3	Bearing-Needle
27	99-2059	2	Key
28	107-3232	1	Cone ASM
29	33023-00	2	Nut-Lock
30	110-2459	1	Hub-Plunger
31	33113-025	2	Screw-HH
32	99-3807	3	Washer-Thrust
33	33094-00	5	Washer-Plain
34	107-8128	1	Shaft-Sun
35	3257-30	1	Key-Woodruff
36	110-2442	1	Gear-Traction, 78 Tooth (Crowned)
37	32120-72	1	Ring-Snap
38	110-2439	1	Carrier ASM
38:2	104-0524	1	Bushing-Carrier
38:3	107-9031	3	Pin-Dowel
39	104-9776	1	Bushing-Flanged
40	353-988	1	Plug-Hex
40:1	237-79	1	O-Ring
41	106-4694	3	Gear-Spur
42	48-2060	3	Bearing-Roller



Gearbox Assembly (continued)

Ref	Part No.	Qty.	Description
43	110-2451	1	Gear-Ring, Planetary
44	106-8444	2	Pin-Clevis, Long
45	99-2049	1	Band-Brake
46	99-2020	1	Shaft-Brake
47	106-8445	2	Pin-Clevis, Short
48	353-989	1	Plug-Hex, Hollow
48:1	237-42	1	O-Ring
49	99-2054	1	Washer-Thrust
50	110-2452	1	Drum-Clutch, Traction
51	99-2055	1	Washer-Thrust
52	33114-016	1	Screw-HH
53	107-9042	1	Clutch Band ASM
54	105-9937	1	Shaft-Clutch, Traction
55	251-6	1	Bearing-Ball
56	32120-46	4	Ring-Retaining
57	99-2038	1	Differential ASM
58	117-1452	1	Gasket-Gearbox
59	117-1451	1	Cover-Gearbox
60	99-2061	1	Bushing-Keyed
61	32151-48	2	E-Ring
62	99-3761	1	Lever-Gearbox
63	99-6208	3	Screw-HSH
64	99-6207	4	Screw-HSBH
65	110-2293	1	Drive Plate ASM

Ref	Part No.	Qty.	Description
65:2	93-9356	1	Decal-Warning, Belt
65:2	93-9389	1	Decal-Warning, Belt (Japan)
66	3254-2	1	Washer-Lock, Internal
67	105-2429	1	Seal-Oil
68	105-9938	1	Hub-Clutch, Traction
69	117-1443	2	Seal-Oil
70	110-3451	1	Lever-Gearbox
74	117-1375	2	Collar ASM



Differential Assembly No. 99-2038

Ref	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	Gear Set-Differential
5	105-2404	1	Pin-Drive
6	95-5745	2	Washer
7	105-2406	2	Washer-Thrust
8	32121-79	1	Pin-Roll

NOTES


TORO®