Form No. 3329–521

Z150

Z Master® with 52in SFS Side Discharge Mower

Model No. 74178—230006001 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.

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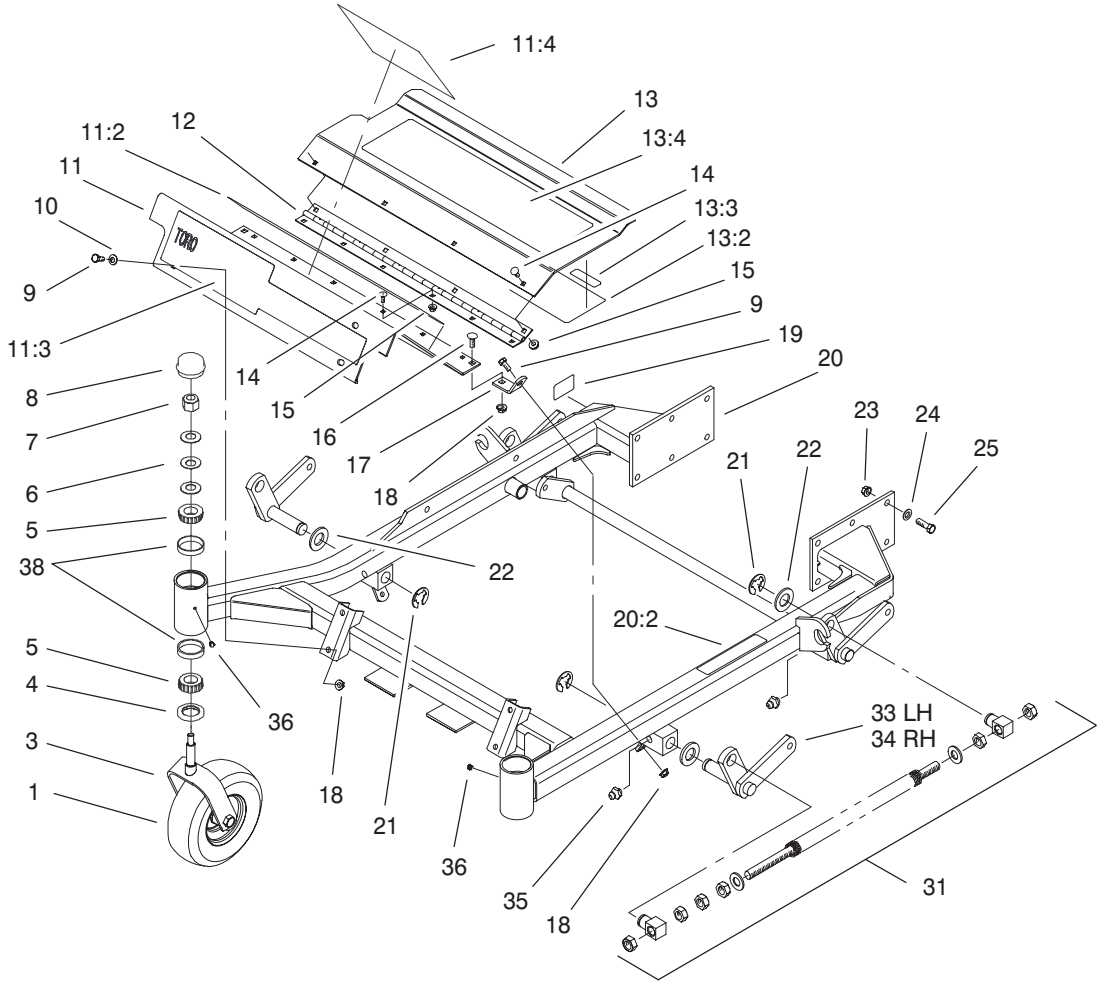
Accessories

Description	Model / Part No.
Recycler Kit	59225
Mulching Kit	59227
High Sail Blades (3 required for improved bagging)	56–2390–03
Atomic Blades (3 required for improved mulching)	104–1301
Steel Bagger	30107
Striping Kit	30121
High Suspension Seat	99–8522
Z–Stand Kit	105–1621
Hitch Kit	99–8924
DFS Bagger	78490
Boot and Tube Kit (For DFS Bagger)	78493
Twin Bagger Kit	78455
Twin Bagger Finishing Kit	78497
Filter Minder	99–4664
ROPS	TORO Dealer

Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

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

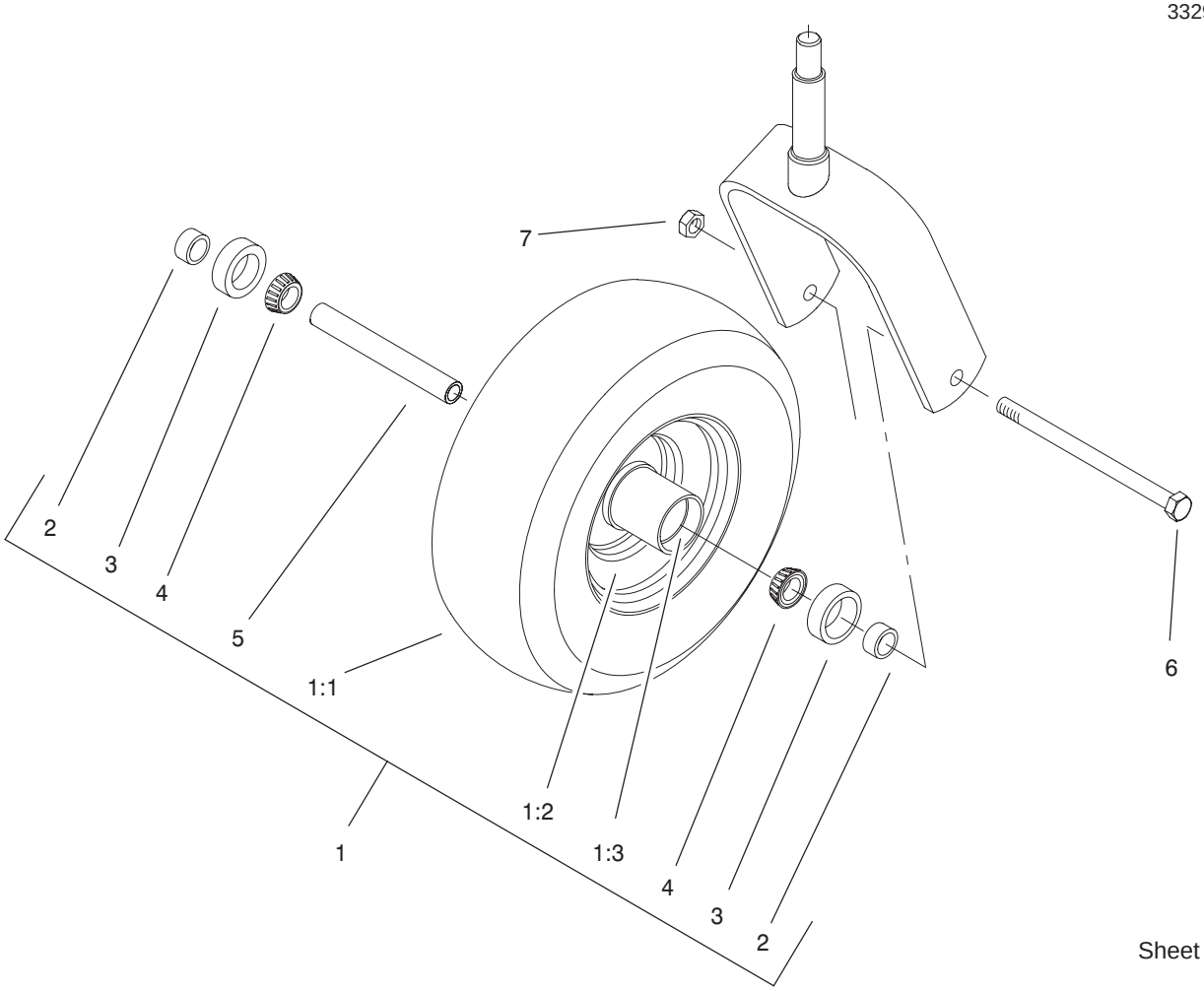


Sheet No.:2

Front Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	1–634662	2	Caster Wheel ASM
3	1–632511–01	2	Caster
4	1–543511	2	Seal–Grease
5	254–94	4	Bearing–Cone, Taper
6	1–633508	6	Washer–Bellville
7	3296–51	2	Nut–Lock, NI
8	1–543513	2	Cap–Grease
9	322–3	6	Screw–HH
10	3256–23	4	Washer–Flat
11	106–6588	1	Floorpan W/Decals ASM
11:2	1–633553	1	Pad–Antiskid
11:3	1–633737	1	Decal–Z Master
11:4	106–6571	1	Decal – Danger, Slope
12	1–653049	1	Hinge–Floorpan
13	99–3930	1	Footrest ASM
13:2	99–3924	1	Decal–Service
13:3	98–5954	1	Decal–Missing, Cover
13:4	1–633553	1	Pad–Antiskid
14	3229–10	10	Screw–CARR
15	32128–33	10	Nut–HF
16	3230–1	2	Bolt–CARR
17	99–3870–01	2	Bracket–Floorpan
18	32128–20	8	Nut–HF
19	105–2625	1	Decal–Safety STD
20	99–3931	1	Front Frame ASM

Ref. No.	Part No.	Qty.	Description
20:2	1–633818	1	Decal–Warning
21	32151–103	6	Ring–Snap
22	3256–29	6	Washer–Flat
23	3290–357	12	Nut–HHF
24	98–5975	12	Washer–Belleville
25	323–7	12	Screw–HH
31	103–1987	2	Front Spring ASM
33	99–3871–01	1	LH Lift Arm ASM
34	99–3872–01	1	RH Lift Arm ASM
35	302–19	4	Fitting–Grease
36	1–811010	2	Plug
38	254–72	4	Bearing–Cup, Tapered

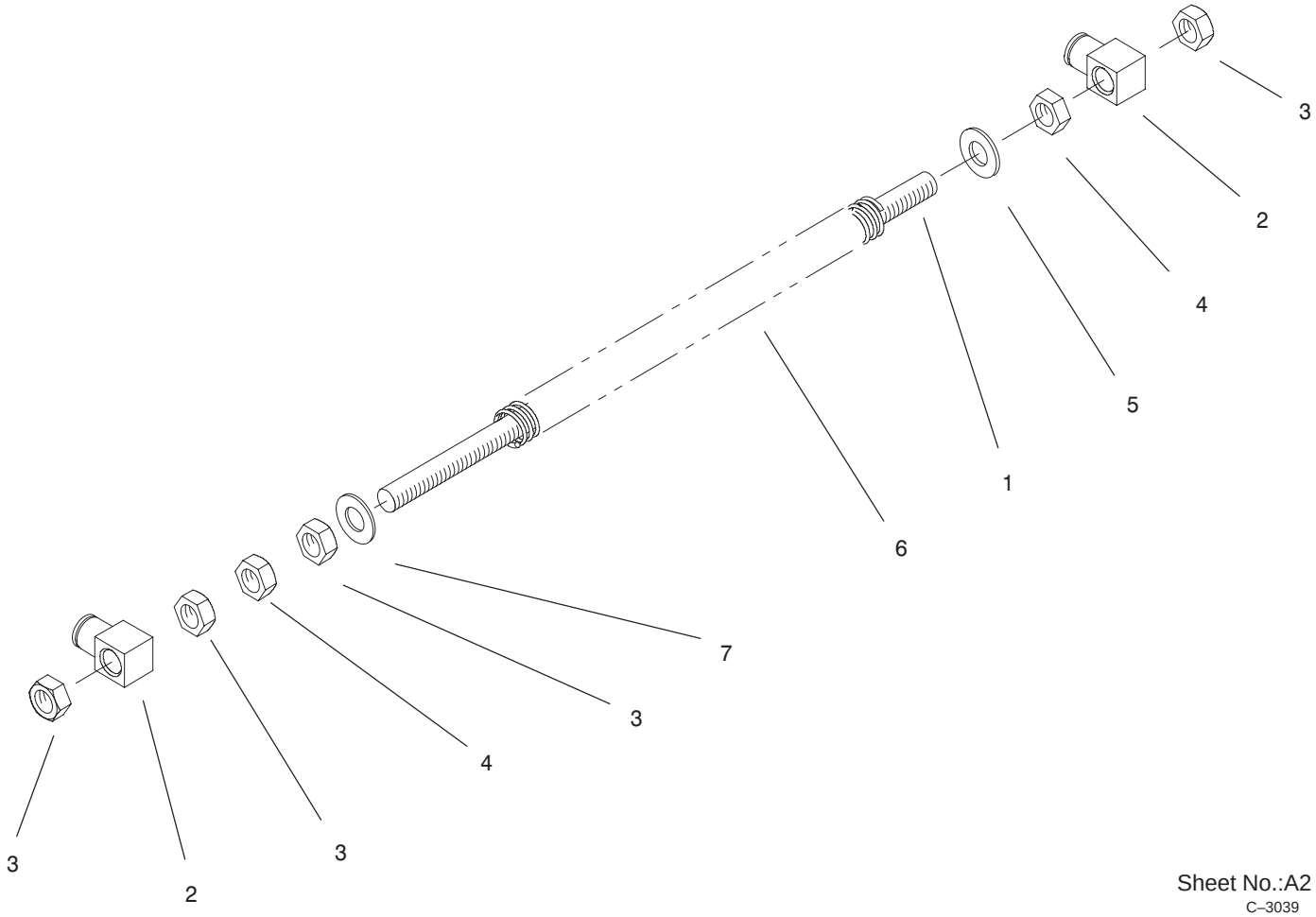


Sheet No.:A1
C–3038

Caster Wheel Assembly No. 1–634662

Ref. No.	Part No.	Qty.	Description
1	1–633582	1	Wheel And Tire ASM
1:1	1–633002	1	Tire
1:2	1–633583	1	Wheel
1:3	1–633584	2	Bearing–Cup
2	1–633581	2	Spacer–Bearing
3	1–633580	2	Seal–Bearing
4	1–633585	2	Bearing–Cone, Taper
5	1–633579	1	Spacer–Caster, Front
6	325–36	1	Screw–HH
7	3296–45	1	Nut–Lock, NI

Ref. No.	Part No.	Qty.	Description

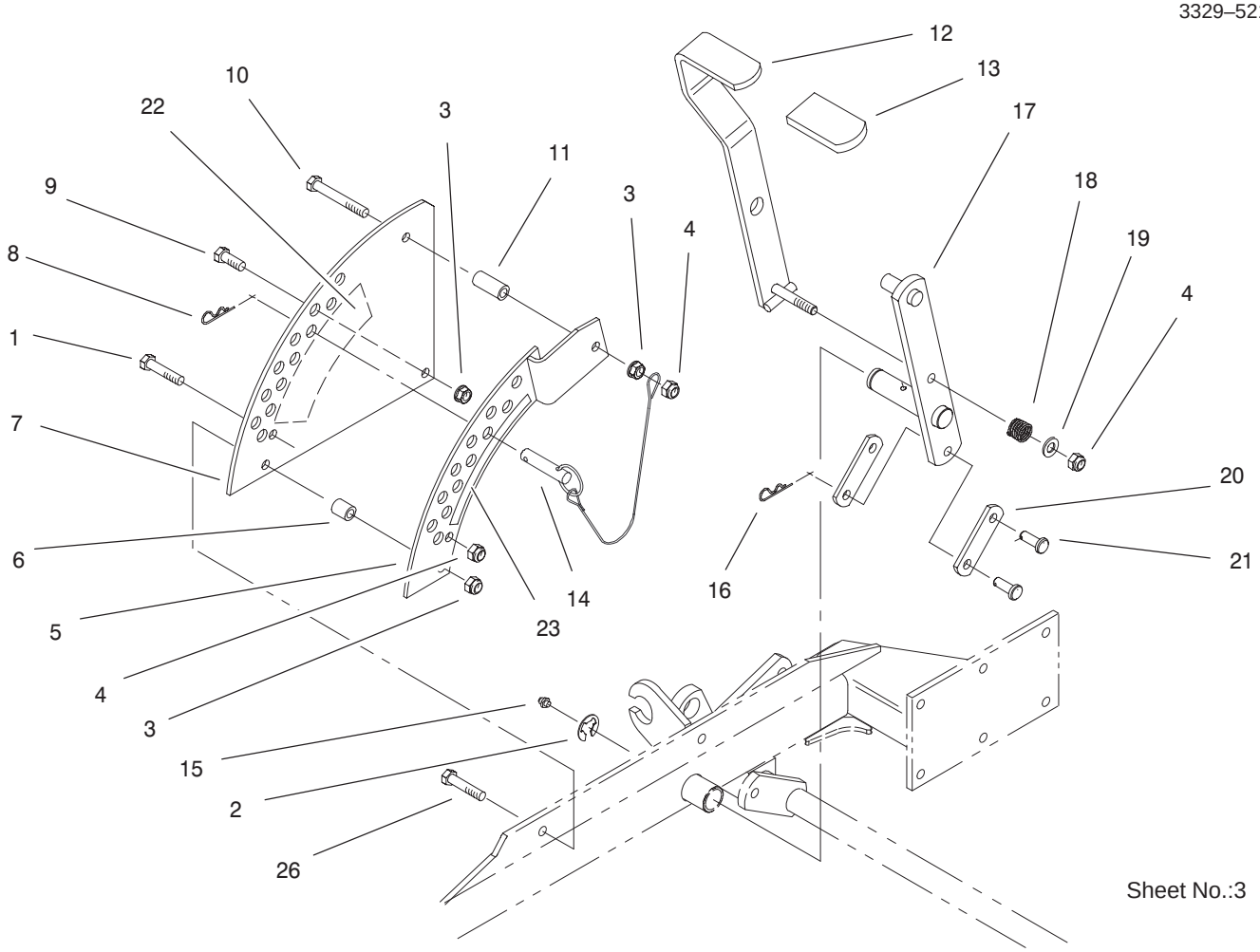


Sheet No.:A2
C–3039

Front Spring Assembly No. 103–1987

Ref. No.	Part No.	Qty.	Description
1	1–653011	1	Rod–Lift, Deck
2	1–633441	2	Swivel–Deck Mount, Rear
3	3217–11	4	Nut–Hex
4	3218–6	2	Nut–Jam
5	1–805517	1	Washer
6	1–653009	1	Spring–Compression
7	3256–27	1	Washer–Flat

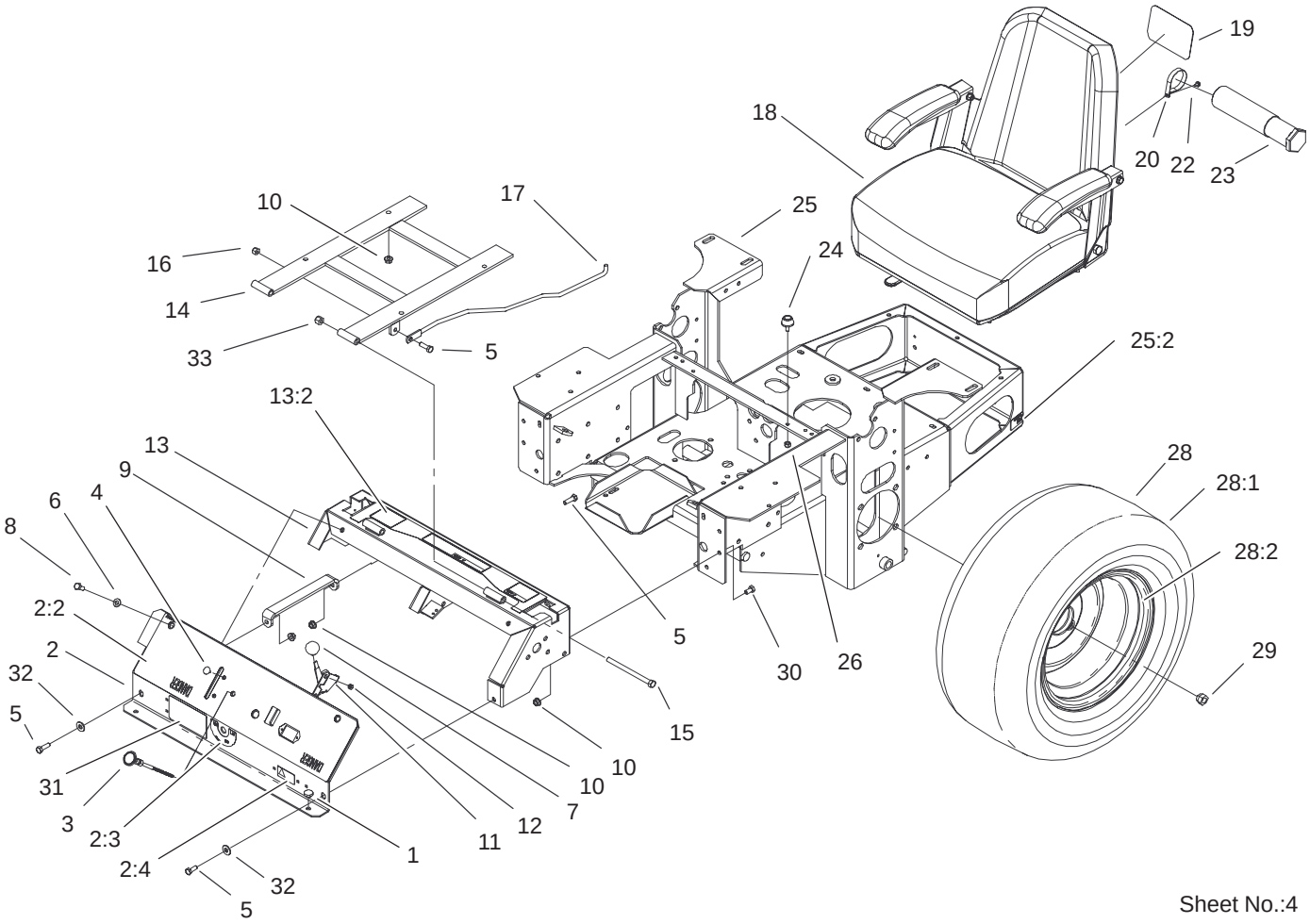
Ref. No.	Part No.	Qty.	Description



Height of Cut Assembly

Ref. No.	Part No.	Qty.	Description
1	323–9	1	Screw–HH
2	32151–103	1	Ring–Snap
3	3290–357	3	Nut–HHF
4	3296–39	3	Nut–Lock, NI
5	1–652235–01	1	Plate–Lift, Deck
6	1–633080	1	Bushing–Lever, Lift
7	1–653230–01	1	Plate–Lift, Deck
8	1–806005	1	Pin–Hair
9	323–6	1	Screw–HH
10	323–13	1	Screw–HH
11	1–633082	1	Bushing–Lever, Lift
12	103–2078–03	1	Handle–Lift
13	1–633295	1	Grip–Lever, Lift
14	1–633097	1	Pin–Hitch W/Lanyard
15	302–19	1	Fitting–Grease
16	1–806003	2	Pin–Hair
17	99–3922–03	1	Arm–Lift
18	1–633325	1	Spring–Compression
19	3256–24	1	Washer–Flat
20	1–633068	2	Arm–Lift, Deck
21	1–808284	2	Pin–Clevis
22	1–653140	1	Decal–Deck Height, Outer
23	1–653147	1	Decal–Deck Height, Inner
26	323–8	1	Screw–HH

Ref. No.	Part No.	Qty.	Description

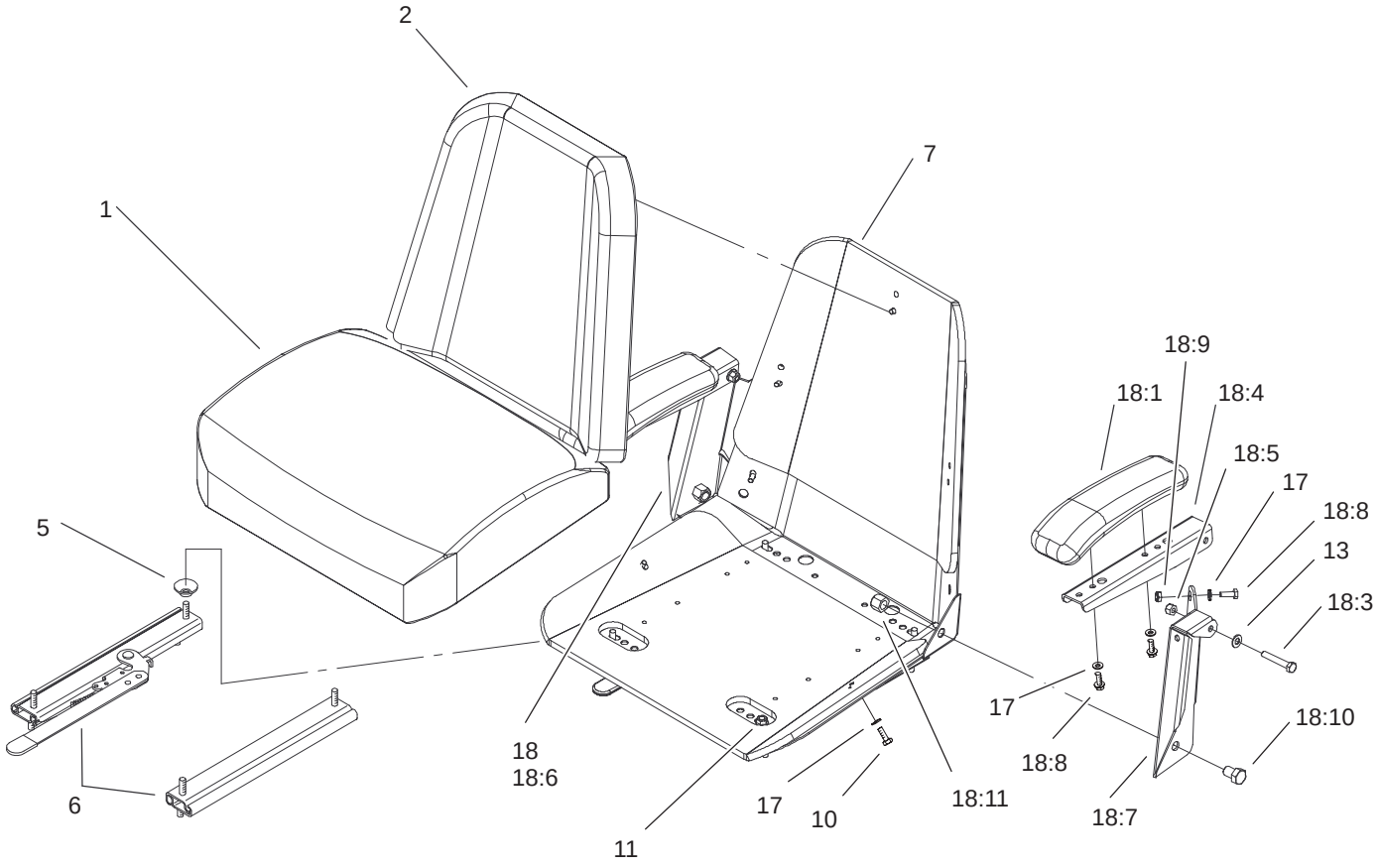


Sheet No.:4

Main Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	1–513658	2	Bumper–Catcher, Grass
2	106–6589	1	Console W/ Decals
2:2	106–6586	1	Decal–Control Panel
2:3	103–0262	1	Decal–Valve, Fuel
2:4	98–4387	1	Decal–Protection, Ear
3	103–3085	1	Control–Choke
4	1–807513	2	Bolt–CARR
5	322–5	3	Screw–HH
6	3256–23	2	Washer–Flat
7	1–513592	1	Knob–Ball
8	322–3	3	Screw–HH
9	1–653089–03	1	Bracket
10	32128–20	12	Nut–HF
11	103–3086	1	Control–Throttle
12	3296–2	2	Nut–Lock
13	105–6123	1	Console ASM
13:2	103–1997	1	Decal–Console, Top
14	1–632187–03	1	Frame–Seat
15	323–39	2	Screw–HH
16	3296–29	1	Nut–Lock, NI
17	103–1731	1	Rod–Retainer, Seat
18	1–633705	1	Seat ASM
19	99–4693	1	Decal–Toro
20	2412–120	2	R–Clamp
22	32104–76	2	Screw

Ref. No.	Part No.	Qty.	Description
23	74–0720	1	Tube–Manual
24	1–523420	2	Bumper
25	105–3649	1	Main Frame ASM
25:2	65–2690	2	Decal–Surface, Hot
26	3296–42	2	Nut–Lock, NI
28	1–653159	2	Wheel And Tire ASM
28:1	1–653160	1	Tire
28:2	1–653161	1	Wheel
29	242–50	8	Nut–Lug
30	322–2	6	Screw–HH
31	99–4604	1	Decal–Z150
32	3256–3	2	Washer–Flat
33	3296–39	2	Nut–Lock, NI



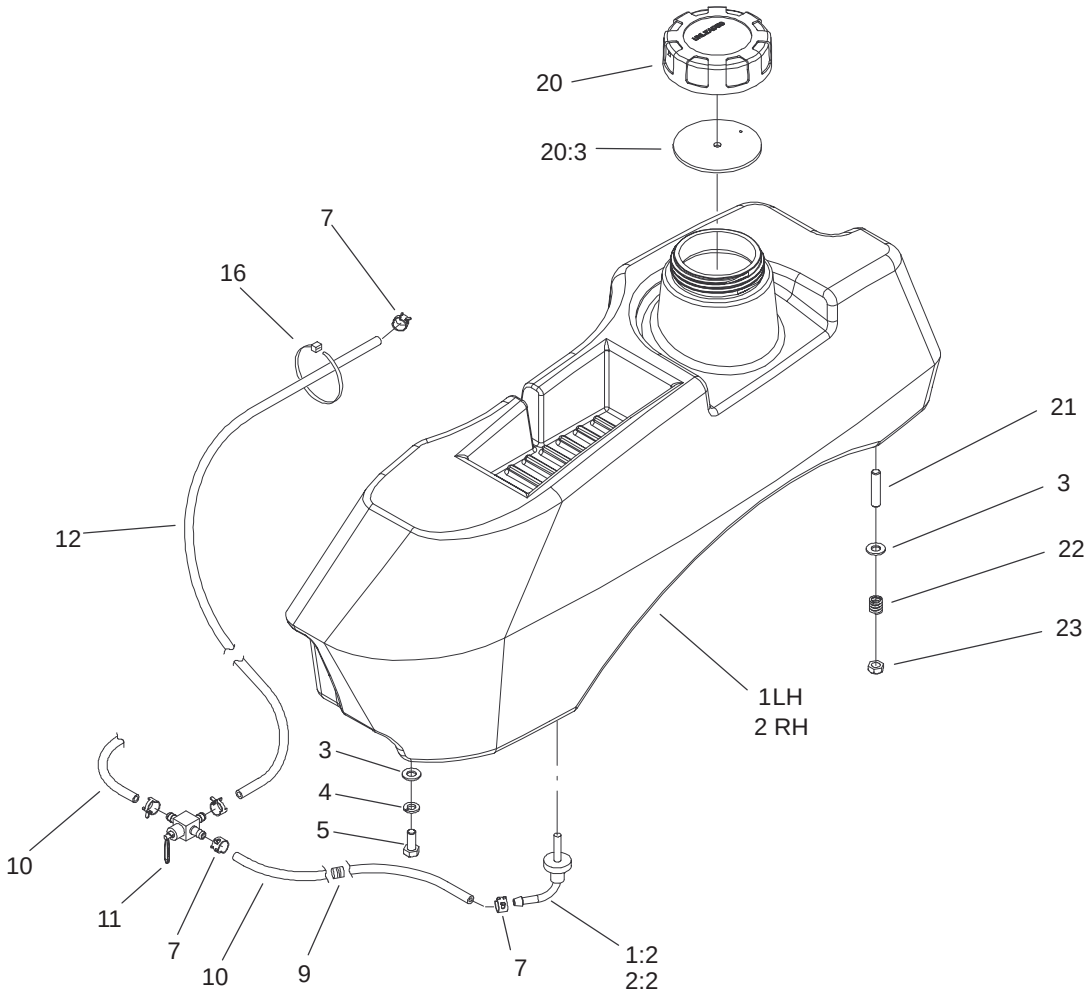
Sheet No.:A3

C–3037

Seat Assembly No. 1–633705

Ref. No.	Part No.	Qty.	Description
1	103–0290	1	Cushion–Seat, Bottom
2	104–7754	1	Cushion–Seat, Back
5	1–543401	4	Spacer–Track
6	1–643255	1	Track–Seat
7	1–633859	1	Frame–Seat
10	321–4	11	Screw–HH
11	32128–20	4	Nut–HF
13	3256–23	4	Washer–Flat
17	3256–22	11	Washer–Flat
18	105–3620	1	Armrest Kit
18:1	1–633710	2	Cushion–Armrest
18:3	322–10	2	Screw–HH
18:4	105–3623	2	Channel, Armrest
18:5	32153–3	2	Nut–Lock
18:6	105–3621	1	Bracket–Armrest, RH
18:7	105–3622	1	Bracket–Armrest, LH
18:8	321–30	6	Screw–HH
18:9	3296–42	2	Nut–Lock, NI
18:10	325–2	2	Screw–HH
18:11	32153–5	2	Nut–Lock

Ref. No.	Part No.	Qty.	Description

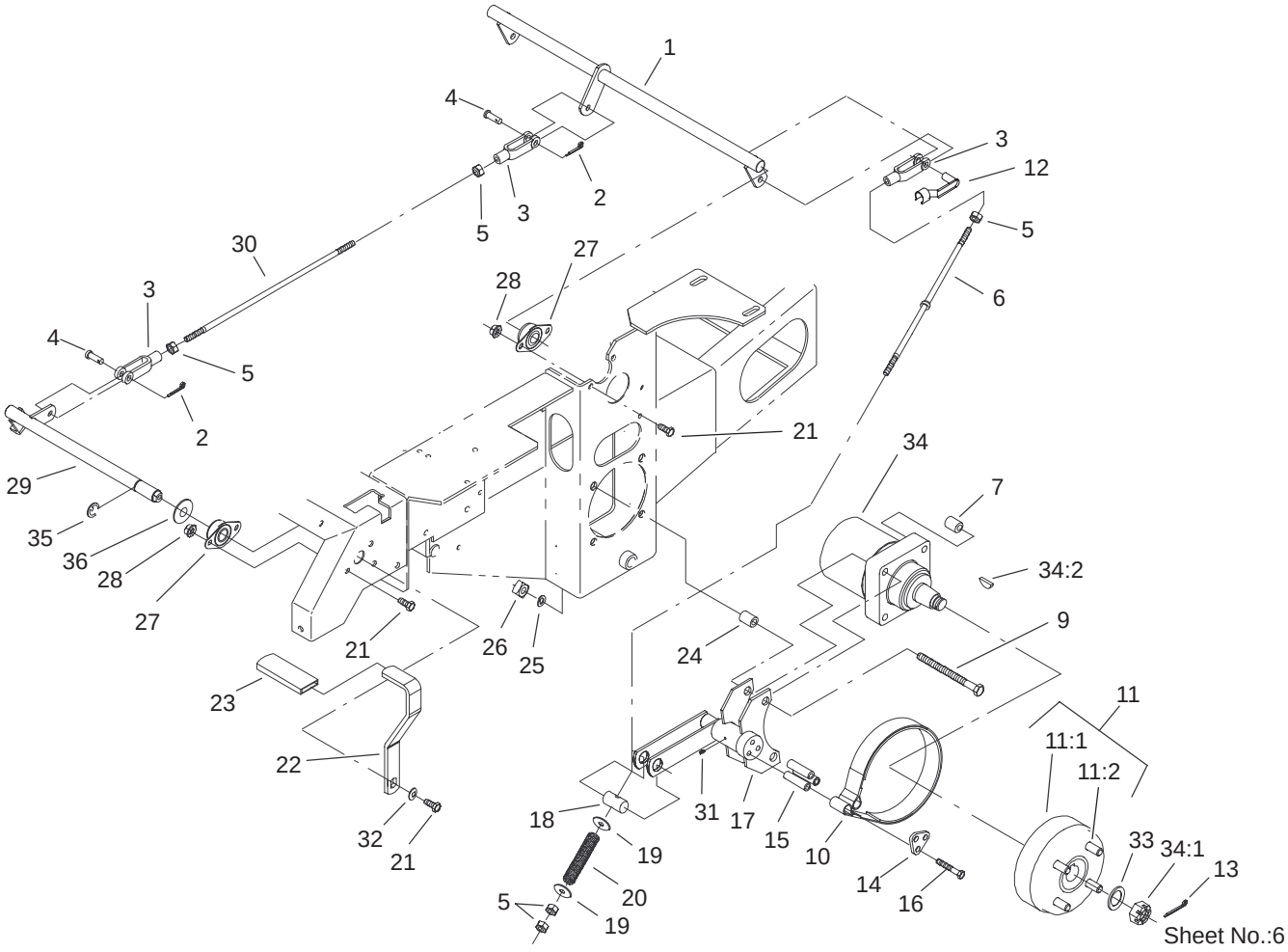


Sheet No.:5

Fuel System Assembly

Ref. No.	Part No.	Qty.	Description
1	105–3625	1	LH Fuel Tank ASM
1:2	103–2605	1	Fitting–Fuel, Bulkhead
2	105–3624	1	RH Fuel Tank ASM
2:2	103–2605	1	Fitting–Fuel, Bulkhead
3	3256–23	8	Washer–Flat
4	1–805005	4	Washer–Lock
5	322–3	4	Screw–HH
7	1–303077	6	Clamp
9	1–543296	2	Grommet
10	1–543526	2	Hose–Fuel
11	1–633347	1	Valve–Fuel
12	103–0216	1	Hose
16	1–303335	1	Tie–Plastic
20	88–3980	2	Gas Cap ASM
20:3	88–4010	1	Gasket–Cap, Gas
21	1–633023	4	Stud
22	1–633349	4	Spring–Tank, Fuel
23	3296–47	4	Nut–Lock, NI

Ref. No.	Part No.	Qty.	Description

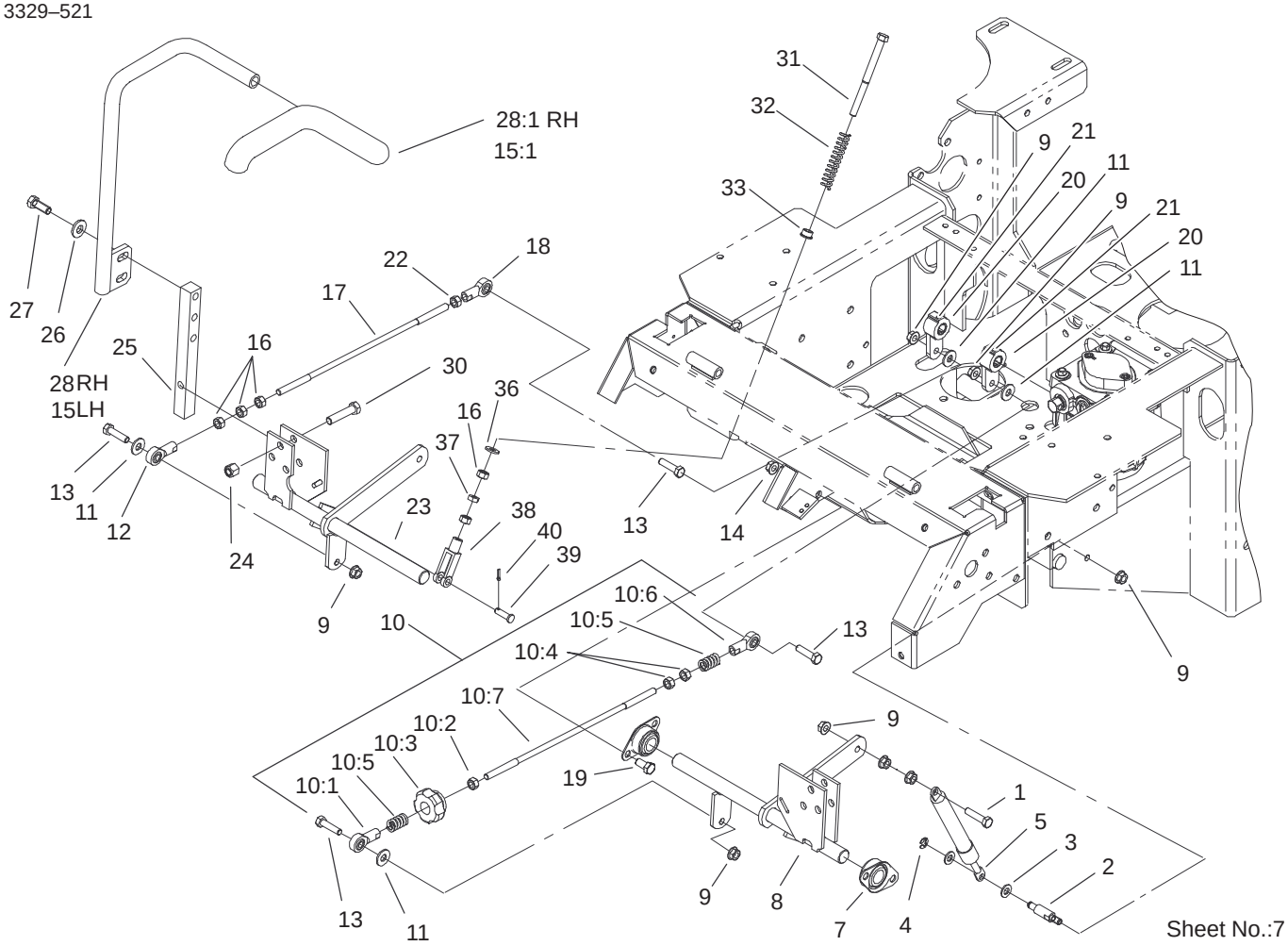


Parking Brake System Assembly

Ref. No.	Part No.	Qty.	Description
1	1–652073–03	1	Crank–Brake, Park
2	3272–10	2	Pin–Cotter
3	1–633131	4	Yoke–Linkage, Brake
4	1–808285	2	Pin–Clevis
5	3219–3	8	Nut–HH
6	103–0356	2	Rod–Brake
7	1–653068	4	Spacer–Wheel
9	325–13	8	Screw–HH
10	103–0355	2	Band–Brake
11	103–0590	2	Hub–Wheel
11:1	103–0589	1	Hub–Wheel
11:2	1–633926	4	Stud–Wheel
12	103–2399	2	Pin–Spring, Clevis
13	1–806800	2	Pin–Cotter
14	103–0374	2	Retainer–Band, Brake
15	103–0384	6	Spacer
16	322–9	6	Screw–HH
17	103–0352–03	2	Bracket–Brake
18	1–633144	2	Pin–Trunion
19	3256–4	4	Washer–Flat
20	1–633454	2	Spring–Brake
21	323–4	9	Screw–HH
22	1–653074–03	1	Handle–Brake, Park
23	1–633268	1	Grip–Lever, Brake
24	1–653069	4	Spacer–Wheel
25	3253–7	8	Washer–Lock

Ref. No.	Part No.	Qty.	Description
26	103–0131	8	Nut–Square
27	1–633102	4	Bearing–Flange, Side
28	3290–357	8	Nut–HHF
29	103–3116	1	Shaft–Brake, Parking
30	1–653061	1	Linkage–Handle, Brake
31	1481	2	Fitting–Grease
32	98–5975	1	Washer–Belleville
33	1–523157	2	Washer–Spacer
34	1–523328	2	Motor–Wheel
34:1	1–809036	1	Nut–HH
34:2	3257–42	1	Key–Woodruff
*34:99	1–000099	1	Seal Kit
*34:99	1–000139	1	Bearing Kit
*34:99	103–2748	1	Drive Link Kit
35	32151–48	1	E–Ring
36	3256–28	1	Washer–Flat

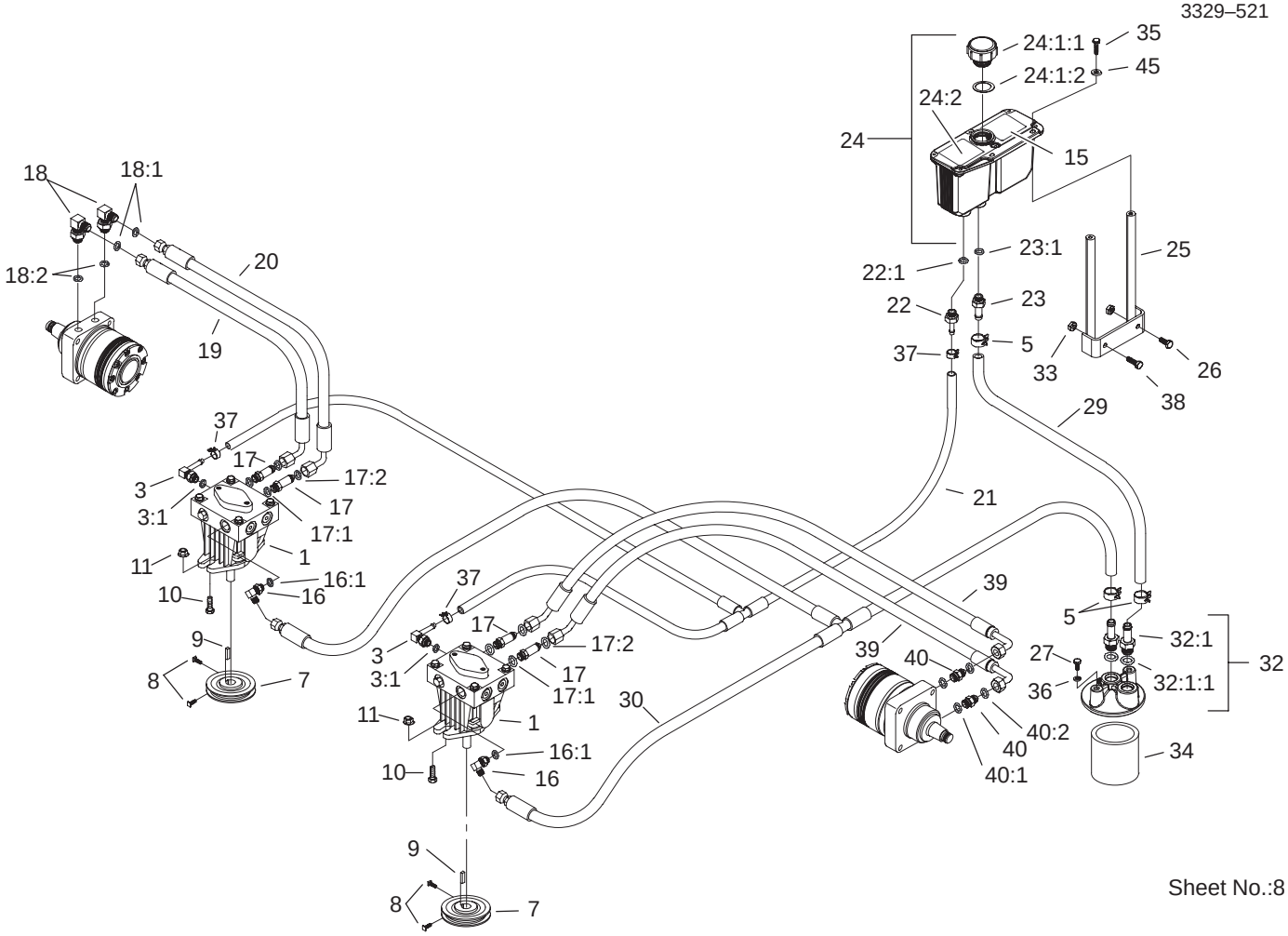
* Not illustrated



Motion Control System Assembly

Ref. No.	Part No.	Qty.	Description
1	1–403180	2	Screw–HH
2	1–653316	2	Pin–Damper
3	3256–23	4	Washer–Flat
4	32120–35	2	E–Ring
5	103–2913	2	Damper–Control, Motion
7	1–633102	4	Bearing–Flange, Side
8	103–2199	1	LH Motion Control ASM
9	32128–20	12	Nut–HF
10	103–3063	1	Tracking Rod ASM
10:1	1–543017	1	Balljoint–RH
10:2	3219–2	1	Nut–Hex
10:3	103–3060	1	Knob–Tracking
10:4	1–804524	2	Nut
10:5	1–323245	2	Spring–Compression
10:6	1–633152	1	Balljoint–Thread, LH
10:7	103–3066	1	Link–Rod, Tracking
11	3256–3	4	Washer–Flat
12	1–543017	1	Balljoint–RH
13	322–6	4	Screw–HH
14	3290–357	8	Nut–HHF
15	103–0631	1	LH Lever ASM
15:1	1–633257	1	Grip–Control, Motion
16	3219–2	7	Nut–Hex
17	103–3066	1	Link–Rod, Tracking

Ref. No.	Part No.	Qty.	Description
18	1–633152	1	Balljoint–Thread, LH
19	323–4	8	Screw–HH
20	103–3717	2	Arm,Pump Control
21	1–803022	2	Screw–Set
22	1–804524	1	Nut
23	103–2200	1	RH Motion Control ASM
24	3296–39	6	Nut–Lock, NI
25	103–0407	2	Arm–Shaft, Control
26	98–5975	4	Washer–Belleville
27	323–6	4	Screw–HH
28	103–0632	1	RH Lever ASM
28:1	1–633257	1	Grip–Control, Motion
30	323–9	6	Screw–HH
31	1–603737	2	Bolt–Return, Neutral
32	1–603807	2	Spring–Return, Neutral
33	1–603735	2	Bushing–Flanged
36	3256–2	2	Washer–Flat
37	3220–2	2	Nut
38	1–303105	2	Yoke–Adjustable
39	1–808280	2	Pin–Clevis
40	3272–5	2	Pin–Cotter



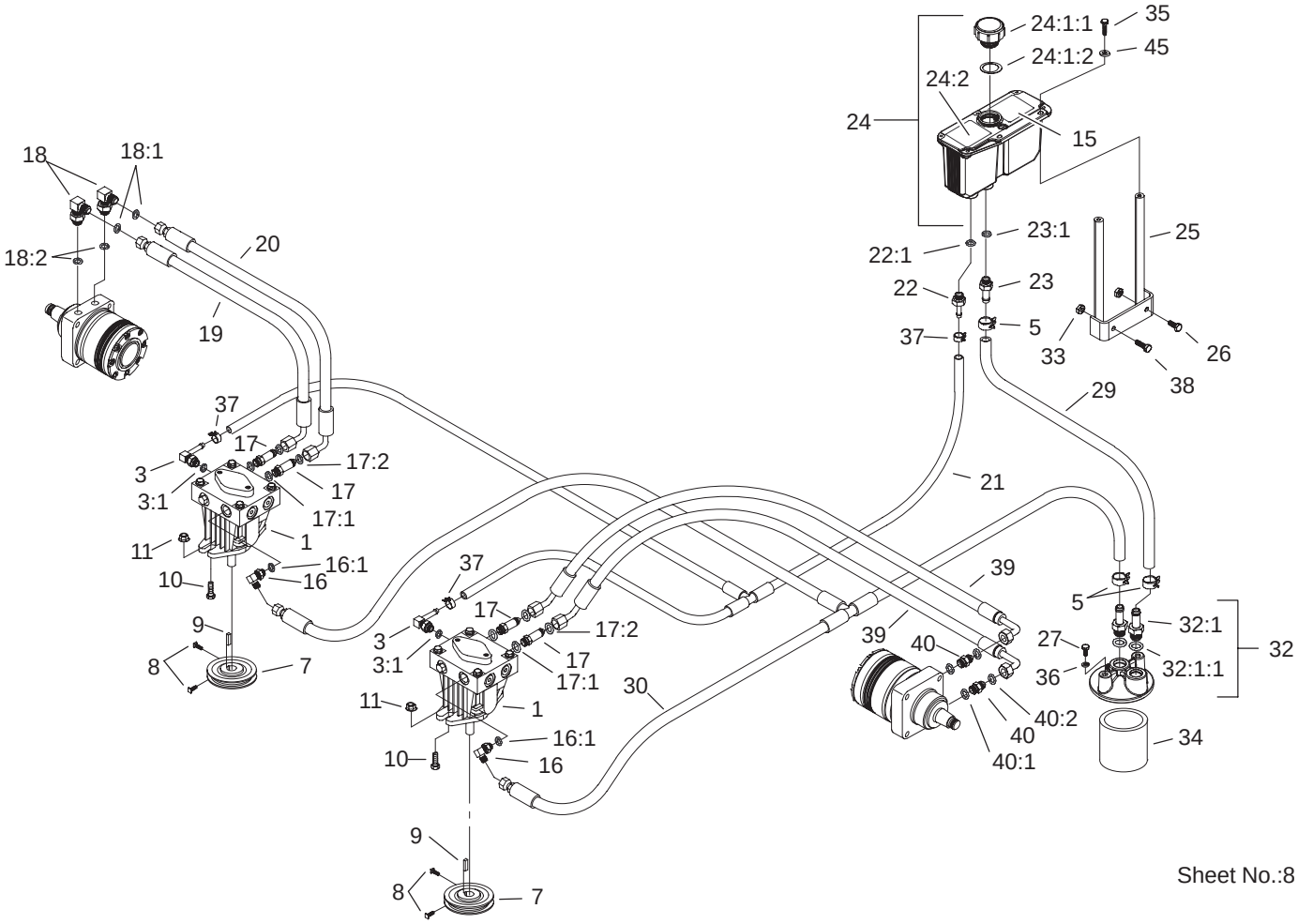
Sheet No.:8

Hydraulic System Assembly

Ref. No.	Part No.	Qty.	Description
1	103–1942	2	Pump–Hydraulic
*1:1	105–6184	1	Seal Overhaul Kit
*1:2	105–6185	1	Plate–Valve
*1:8	103–2664	1	Input Shaft Kit
*1:9	94–6922	1	Bearing–Thrust
*1:10	103–2666	1	Cylinder Block Kit
*1:14	106–2053	1	Shock Valve Kit
3	103–1799	2	Elbow–90°
3:1	237–42	1	O–Ring
5	103–1988	3	Clamp–Hose
7	1–653156	2	Sheave
8	1–803050	4	Screw–Set
9	1–807272	2	Key
10	323–7	4	Screw–HH
11	3290–357	4	Nut–HHF
15	103–2644	1	Decal–Exhaust
16	103–1802	2	Fitting–HYD, 90°
16:1	237–42	1	O–Ring
17	103–1940	4	Adapter–HYD, Straight
17:1	237–79	1	O–Ring
17:2	1–603992	1	O–Ring
18	1–633605	2	Fitting–HYD, 90°
18:1	1–603992	1	O–Ring
18:2	237–80	1	O–Ring
19	1–653186	1	Hose–Front
20	1–653187	1	Hose–RH, Rear

Ref. No.	Part No.	Qty.	Description
21	103–2357	1	HYD Hose ASM
22	103–1801	1	Adapter–Straight
22:1	237–42	1	O–Ring
23	103–1912	1	Adapter–Straight
23:1	237–42	1	O–Ring
24	103–1947	1	HYD Reservoir ASM
☆24:1		1	Reservoir–HYD
24:1:1	103–1948	1	Cap–Reservoir, HYD
24:1:2	103–1949	1	Gasket–Cap
24:2	1–523552	1	Decal–Tank, HYD
25	103–3071–03	1	Stand–Reservoir
26	322–3	1	Screw–HH
27	321–3	2	Screw–HH
29	103–3077	1	HYD Hose ASM
30	103–2930	1	HYD Hose ASM
32	103–2889	1	Filter Head ASM
32:1	103–1912	2	Adapter–Straight
32:1:1	237–42	1	O–Ring
33	32128–20	2	Nut–HF
34	1–633750	1	Filter–HYD
34	1–633752	1	Filter–HYD, Winter
35	321–6	2	Screw–HH
36	1–805004	2	Washer–Lock
37	103–1716	3	Clamp–Hose
38	322–5	1	Screw–HH
39	103–3809	2	Hose,LH 44/48

* Not illustrated
☆ Not serviced separately

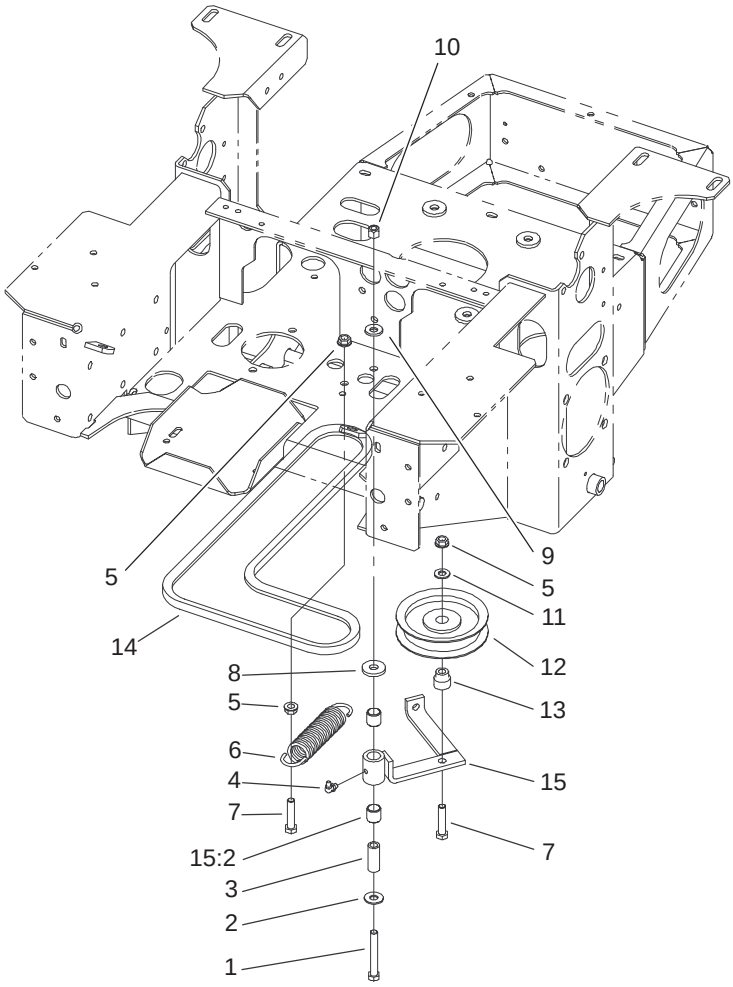


Sheet No.:8

Hydraulic System Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
40	1–603991	2	Fitting–Straight
40:1	237–80	1	O–Ring
40:2	1–603992	1	O–Ring
45	3256–22	2	Washer–Flat

Ref. No.	Part No.	Qty.	Description

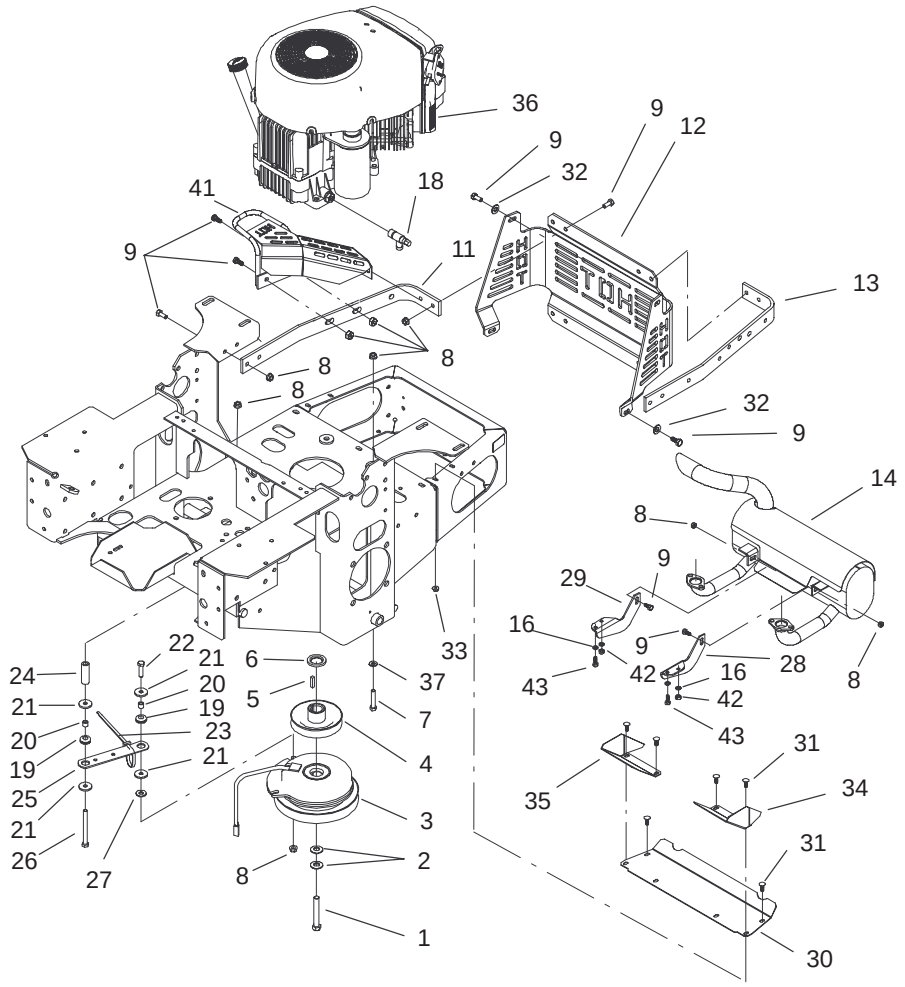


Sheet No.:9

Pump, Idler and Belt Assembly

Ref. No.	Part No.	Qty.	Description
1	323–13	1	Screw–HH
2	3256–4	1	Washer–Flat
3	1–603044	1	Bushing
4	302–40	1	Fitting–Grease
5	3290–357	3	Nut–HHF
6	103–1767	1	Spring–Extension
7	323–9	2	Screw–HH
8	63–8410	1	Washer
9	98–5975	1	Washer–Belleville
10	3296–39	1	Nut–Lock, NI
11	3256–24	1	Washer–Flat
12	1–603843	1	Pulley–Idler
13	1–603496	1	Bushing–Idler
14	1–653283	1	Belt–Pump
15	1–654143	1	Idler Arm
15:2	1–513034	2	Sleeve–Bearing

Ref. No.	Part No.	Qty.	Description



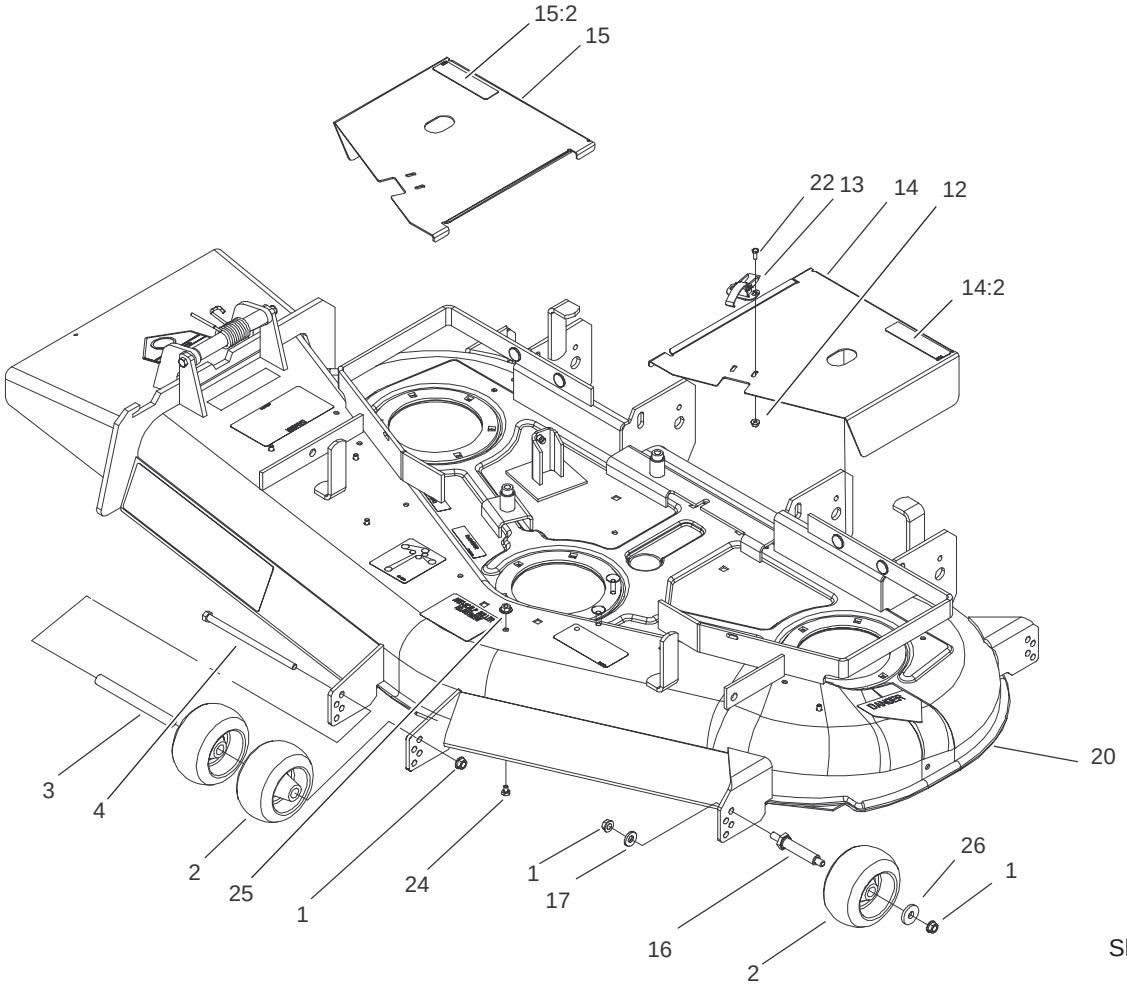
Sheet No.:10

Engine and Clutch Assembly

Ref. No.	Part No.	Qty.	Description
1	3212–10	1	Screw–HH
2	1–603610	2	Washer–Spring
3	103–0690	1	Clutch
4	1–653035	1	Sheave W/Hub
5	1–807259	1	Key
6	103–2308	1	Spacer–Crankshaft
7	322–9	4	Screw–HH
8	32128–20	33	Nut–HF
9	322–3	23	Screw–HH
11	103–3078–03	1	Strap–Guard, Engine RH
12	103–3219–03	1	Guard–Rear
13	103–3164–03	1	Strap–Guard, Engine LH
14	103–2760	1	Muffler
16	1–805004	4	Washer–Lock
18	103–1963	1	Valve–Drain, Oil
19	1–633630	2	Grommet–Brake
20	1–633545	2	Spacer–Grommet
21	1–613235	4	Washer
22	322–6	1	Screw–HH
23	1–303335	2	Tie–Plastic
24	103–2614	1	Spacer
25	1–633543–03	1	Strap–Clutch, Brake
26	322–22	1	Screw–HH
27	3256–3	3	Washer–Flat

Ref. No.	Part No.	Qty.	Description
28	103–2987–03	1	Bracket–Muffler, LH
29	103–2988–03	1	Bracket–Muffler, RH
30	103–2740–03	1	Deflector–Short
31	3229–10	6	Screw–CARR
32	3256–23	4	Washer–Flat
33	32128–33	6	Nut–HF
34	103–3094–03	1	Deflector–Air, LH
35	103–3095–03	1	Deflector–Air, RH
☆36		1	Engine–Kohler, Cv20s Pro–65593
37	1–303334	2	Washer–Spring
41	103–3218–03	1	Guard–Tailpipe
42	33013–00	2	Nut–Hex
43	33113–020	2	Screw–HH

☆ Not serviced separately

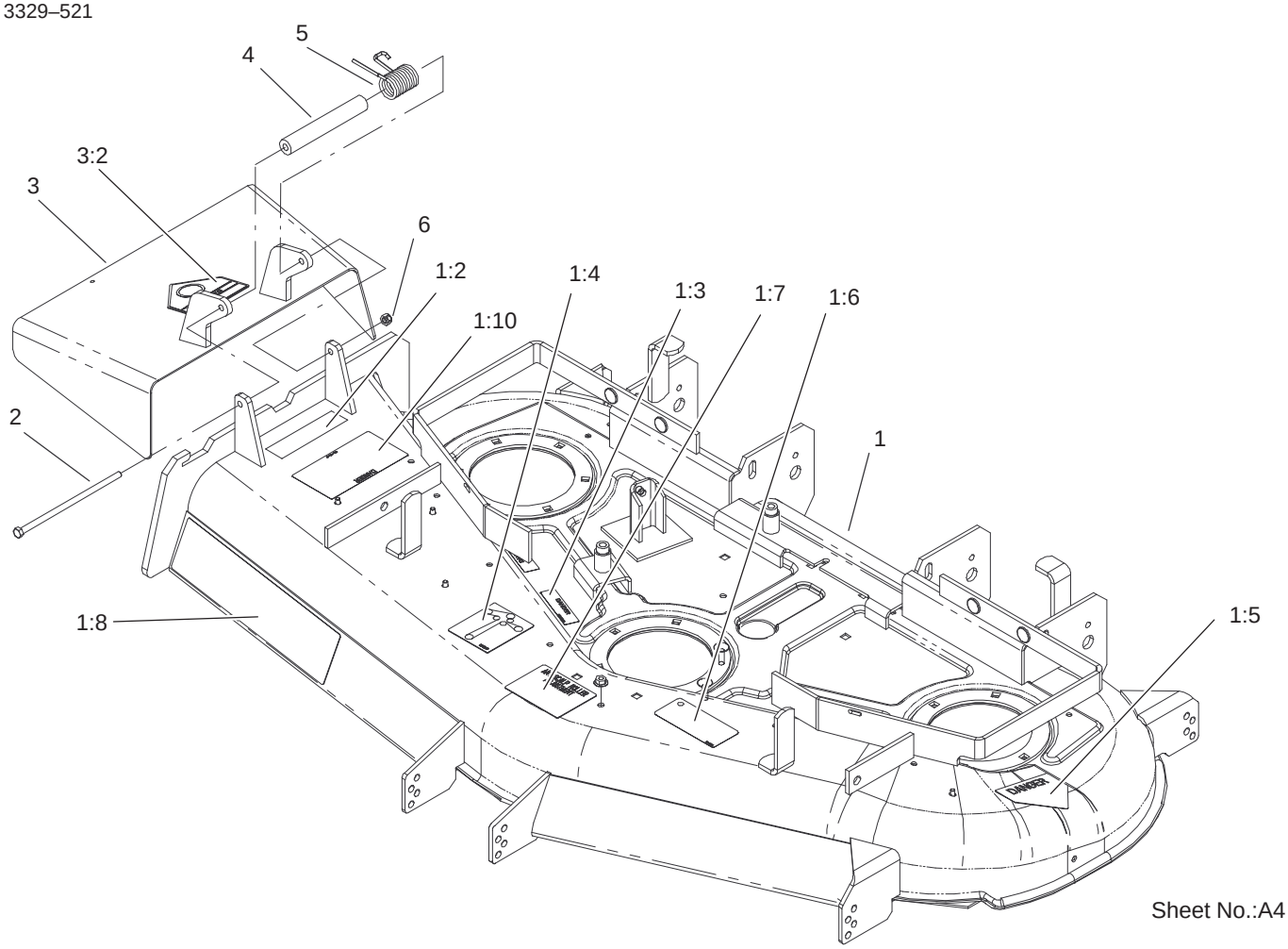


Sheet No.:14

Deck and Wheel Gage Assembly

Ref. No.	Part No.	Qty.	Description
1	3290–357	9	Nut–HHF
2	68–2730	6	Wheel–Gage
3	98–5967	1	Spacer
4	323–28	1	Screw–HH
12	32128–17	4	Nut–Lock, Flange
13	249–21	2	Clamp–Slotted
14	99–3896	1	LH Cover ASM
14:2	67–5360	1	Decal–Danger
15	99–3895	1	RH Cover ASM
15:2	67–5360	1	Decal–Danger
16	99–2842	4	Spacer
17	98–5975	4	Washer–Belleville
20	106–5876	1	Deck ASM
22	3290–321	4	Screw–HWH
24	321–1	6	Screw–HH
25	32128–33	6	Nut–HF
26	1–373034	4	Washer

Ref. No.	Part No.	Qty.	Description



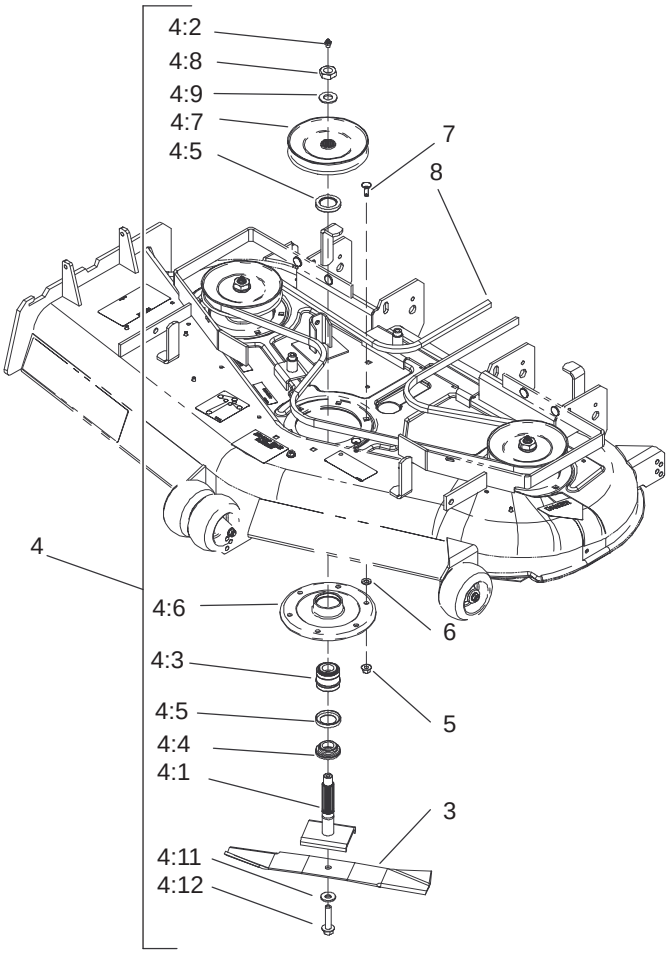
Sheet No.:A4

Deck Assembly No. 106–5876

Ref. No.	Part No.	Qty.	Description
☆1		1	Deck ASM
1:2	104–8569	1	Decal–Warning
1:3	98–5954	3	Decal–Missing, Cover
1:4	99–3943	1	Decal–Routing, Belt
1:5	43–8480	1	Decal–Danger
1:6	93–7818	1	Decal–Torque, Blade Bolt
1:7	98–3798	1	Decal–Wheel, Gage
1:8	98–5953	1	Decal–Sfs
1:10	66–1340	1	Decal–Danger
2	322–50	1	Screw–HH
3	105–4623	1	Deflector ASM
3:2	93–1122	1	Decal–Danger
4	105–4622	1	Spacer
5	104–8554	1	Spring–Torsion
6	3296–29	1	Nut–Lock, NI

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

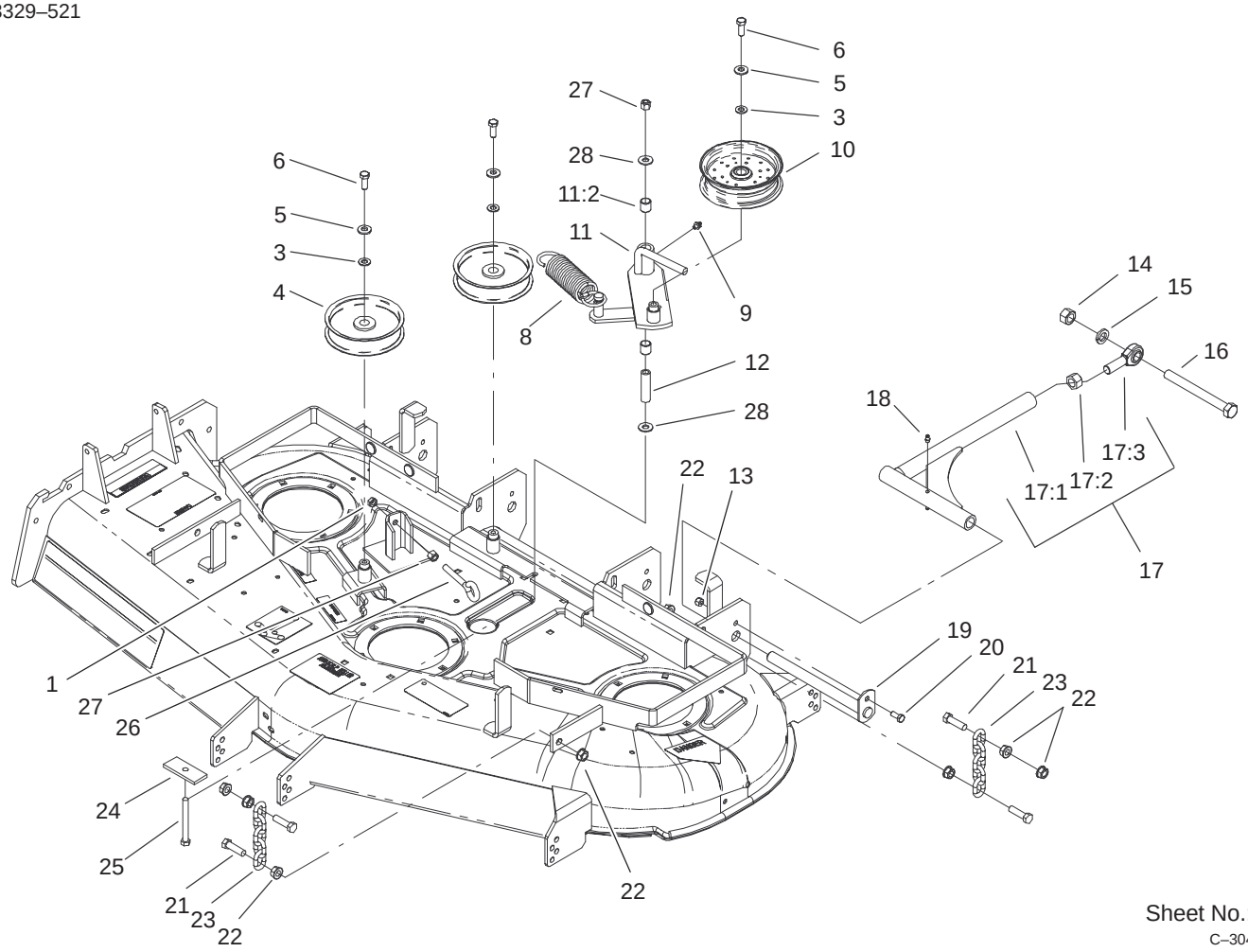


Sheet No.:15

Deck Spindle Assembly

Ref. No.	Part No.	Qty.	Description
3	56–2390	3	Blade
4	100–3976	3	Spindle Housing ASM
4:1	100–3972	1	Spindle Shaft ASM
4:2	302–2	1	Fitting–Grease
4:3	46–8530	1	Bearing ASM
4:4	27–0950	1	Spacer
4:5	253–139	2	Seal–Oil
4:6	61–4160	1	Housing
4:7	100–3970	1	Pulley And Hub ASM
4:8	32146–20	1	Nut–Jam
4:9	7–4150	1	Washer
4:11	1–513435	1	Washer–Spring
4:12	92–5816	1	Bolt–Blade
5	32128–21	18	Nut–HF
6	3256–24	6	Washer–Flat
7	3231–22	18	Screw–CARR
8	99–3904	1	Belt–Deck

Ref. No.	Part No.	Qty.	Description

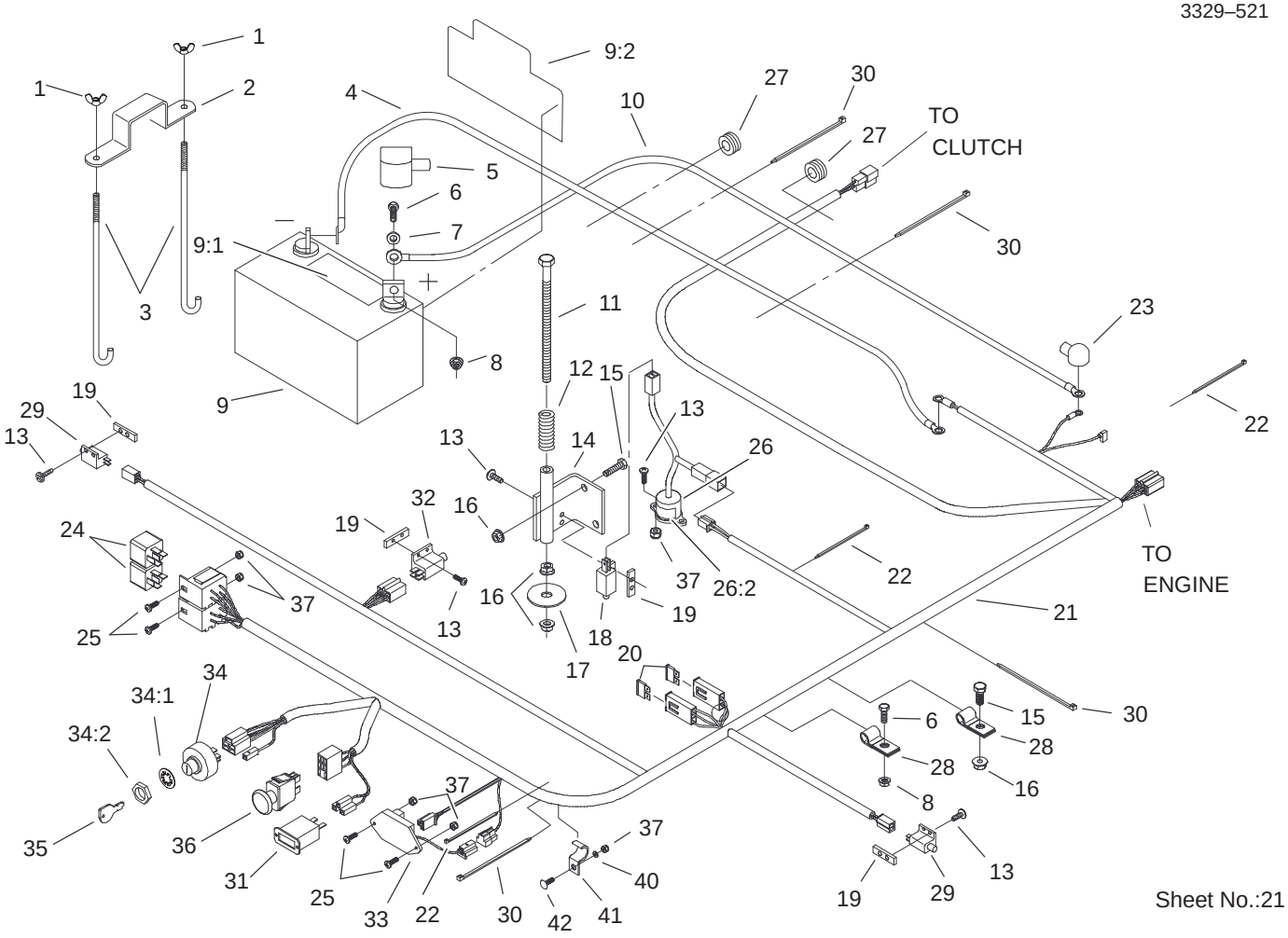


Sheet No.:16
C–3040

Idler, Pulley/Lift Strut, Chain Assembly

Ref. No.	Part No.	Qty.	Description
1	3217–7	1	Nut–Hex
3	3256–24	3	Washer–Flat
4	1–613098	2	Pulley–Idler
5	98–5975	3	Washer–Belleville
6	323–6	3	Screw–HH
8	103–3330	1	Spring–Extension
9	302–40	1	Fitting–Grease
10	1–413099	1	Pulley–Idler
11	99–3879	1	Idler Arm ASM
11:2	1–513034	2	Sleeve–Bearing
12	1–603384	1	Bushing–Pivot, Idler
13	3296–29	2	Nut–Lock, NI
14	3217–11	2	Nut–Hex
15	3253–8	2	Washer–Lock
16	1–800344	2	Screw
17	103–1081	2	Strut ASM
17:1	103–1072–01	1	Strut
17:2	3219–6	1	Nut–Hex
17:3	1–633029	1	Balljoint–Spherical
18	302–19	4	Fitting–Grease
19	1–632199–01	2	Pin–Strut
20	322–3	2	Screw–HH
21	1–800811	8	Screw–Cap, HH
22	32128–37	16	Nut–HF
23	1–633447	4	Chain–Lift, Deck
24	99–3946–01	1	Plate–Retainer, Bolt

Ref. No.	Part No.	Qty.	Description
25	1–800805	1	Screw–HH
26	94–2547	1	Bolt–Eye
27	3296–39	2	Nut–Lock, NI
28	1–809107	2	Washer–Hardened

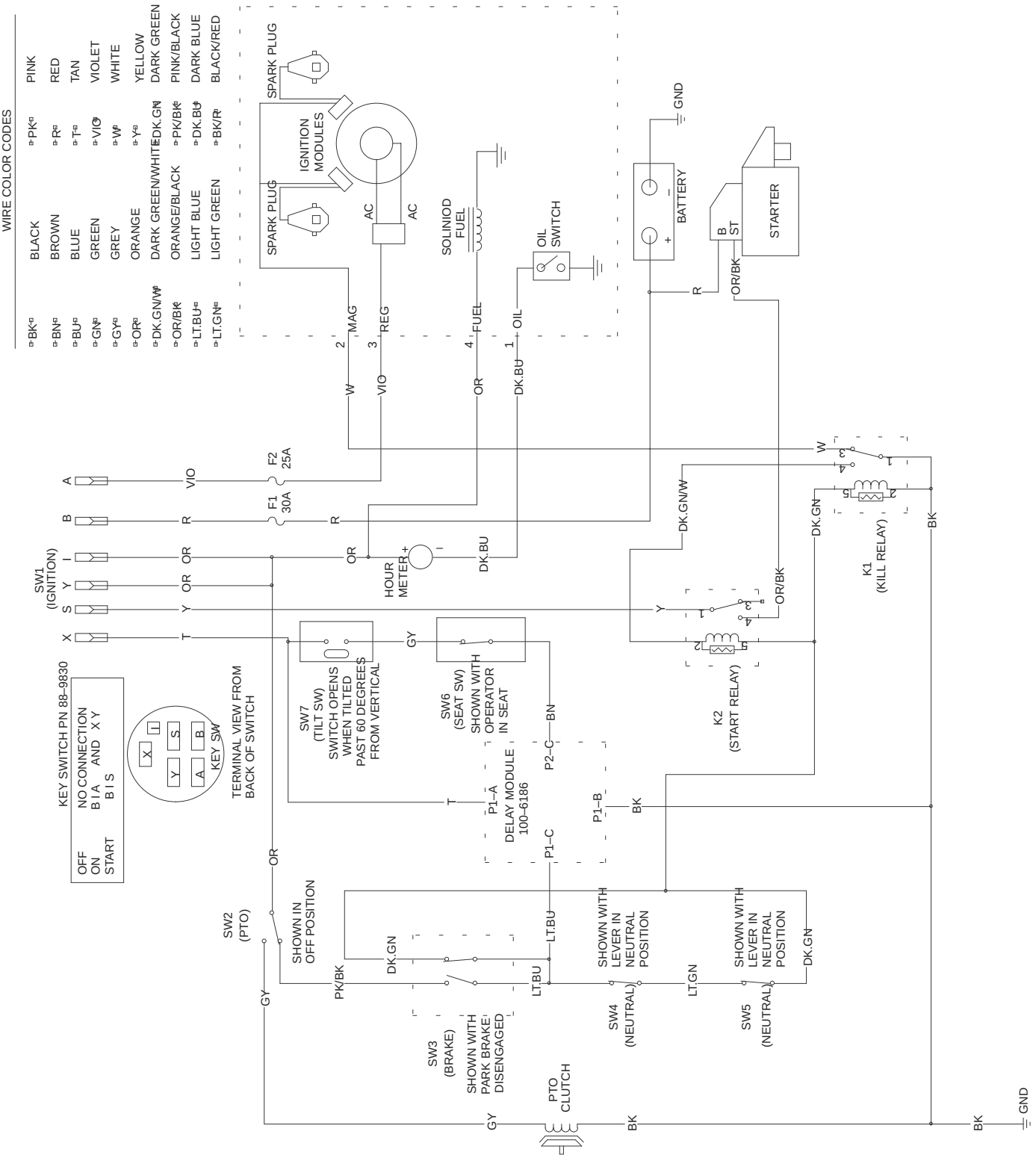


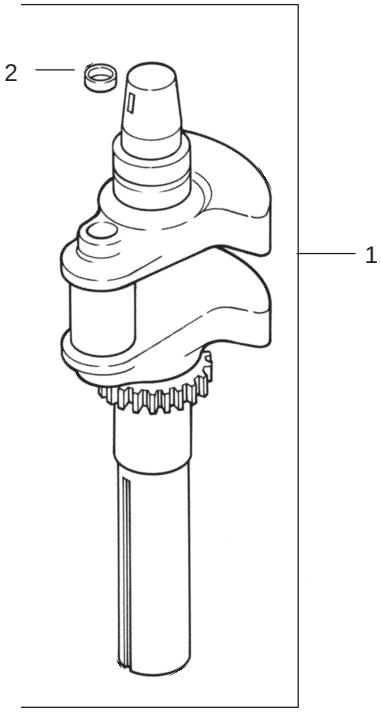
Electrical System Assembly

Ref. No.	Part No.	Qty.	Description
1	1–543792	2	Wingnut
2	1–633652–03	1	Strap–Holddown
3	1–633651	2	Bolt–Holddown
4	103–0705	1	Cable–Ground, Negative
5	1–543391	1	Insulator–Battery
6	321–4	3	Screw–HH
7	3256–2	2	Washer–Flat
8	32128–33	3	Nut–HF
9	105–1692	1	Battery
9:1	104–4163	1	Decal–Battery
9:2	104–4164	1	Decal–Battery
10	1–523281	1	Wire–Starter
11	1–800282	1	Screw–HH
12	1–523415	1	Spring–Switch, Seat
13	3290–500	10	Screw–PPH
14	1–652072–03	1	Bracket–Switch, Seat
15	322–3	3	Screw–HH
16	32128–20	5	Nut–HF
17	1–653036	1	Washer
18	1–513152	1	Switch–Closed, Normally
19	1–633181	4	Plate–Tapped
20	1–816001	2	Fuse–Type, Blade
21	103–0595	1	Harness–Wire
22	1–303287	2	Tie–Plastic

Ref. No.	Part No.	Qty.	Description
23	1–543393	1	Insulator–Solenoid
24	1–643275	2	Relay
25	1–807513	4	Bolt–CARR
26	1–644427	1	Tilt Switch ASM
26:2	1–643401	1	Decal–Switch, Mercury
27	1–543286	2	Grommet
28	1–633396	2	Clip–Loom
29	1–513051	2	Switch–Open, Normally
30	1–303335	4	Tie–Plastic
31	1–513374	1	Meter–Hour
32	1–633111	1	Switch
33	100–6186	1	Module–Delay, Seat
34	88–9830	1	Key Switch ASM
34:1	3254–5	1	Washer–Tooth
34:2	218–461	1	Nut–HH
35	63–8360	2	Key–Ignition
36	1–633673	1	Switch–Delta
37	3296–2	7	Nut–Lock
40	3256–14	1	Washer–Flat
41	103–1193	1	Clip–Half, Loom
42	1–807533	1	Bolt–CARR

Electrical Schematic



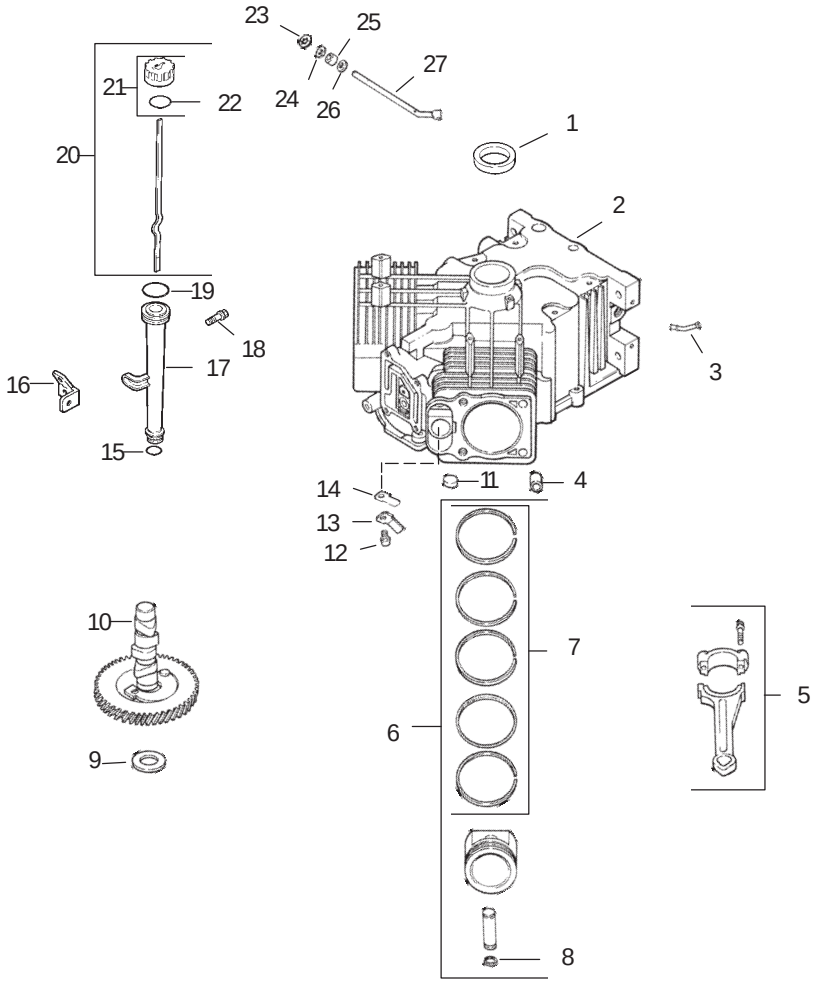


Crankshaft Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	24 014 32–S	1	Crankshaft (Includes 2)
2	52 139 09–S	1	Plug, cup

Ref. No.	Part No.	Qty.	Description

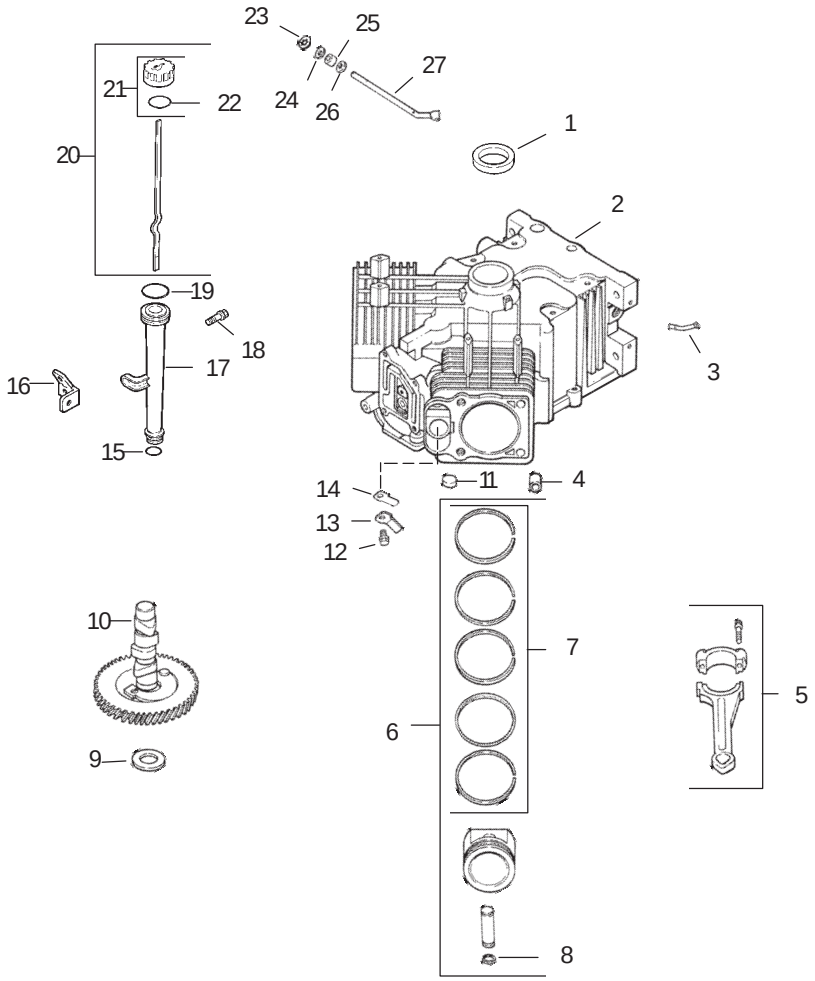
Obtain Parts from Kohler



Crankcase Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	24 032 01–S	1	Seal, front oil
2	N/A	1	Crankcase (Service with Short Block 24 522 226)
3	24 294 13–S	1	Fitting
4	24 380 13–S	6	Pin, locating
5	24 067 13–S	2	Connecting Rod (Std.)
	24 067 14–S	2	Connecting Rod (.25)
6	24 874 17–S	2	Piston w/Ring Set (Std.) (Includes 7,8)
	24 874 14–S	2	Piston w/Ring Set (.08)
	24 874 18–S	2	Piston w/Ring Set (.25)
	24 874 19–S	2	Piston w/Ring Set (.50)
7	24 108 11–S	2	Ring Set (Std. & .08)
	24 108 12–S	2	Ring Set (.25)
	24 108 13–S	2	Ring Set (.50)
8	24 018 01–S	4	Retainer, piston pin
9	12 422 09–S	1	Shim, camshaft (A.R.)
	12 422 13–S	1	Shim, camshaft (A.R.)
	12 422 07–S	1	Shim, camshaft (A.R.)
	12 422 08–S	1	Shim, camshaft (A.R.)
	12 422 10–S	1	Shim, camshaft
	12 422 11–S	1	Shim, camshaft (A.R.)
	12 422 12–S	1	Shim, camshaft (A.R.)
10	24 012 10–S	1	Camshaft (Includes 11,12)
11	52 139 09–S	1	Plug, cup
12	M–545010–S	2	Screw, hex. flange M5x0.8x10
13	24 018 04–S	2	Retainer, reed
14	24 402 05–S	2	Reed, breather
15	12 153 01–S	1	O–Ring, lower oil fill tube
16	24 126 19–S	1	Bracket, oil fill tube
17	12 123 04–S	1	Tube, oil fill
18	M–545016–S	1	Screw, hex. flange M5x0.8x16
19	12 153 02–S	1	O–Ring, upper oil fill tube
20	24 038 04–S	1	Dipstick assembly (Includes 21,22)
21	25 755 13–S	1	Kit, oil fill cap (Includes 22)
22	12 153 03–S	1	O–Ring, dipstick
23	24 018 09–S	1	Ring, retainer
24	M–931010–S	1	Washer, plain 9 mm
25	28 032 09–S	1	Seal, governor cross

Obtain Parts from Kohler

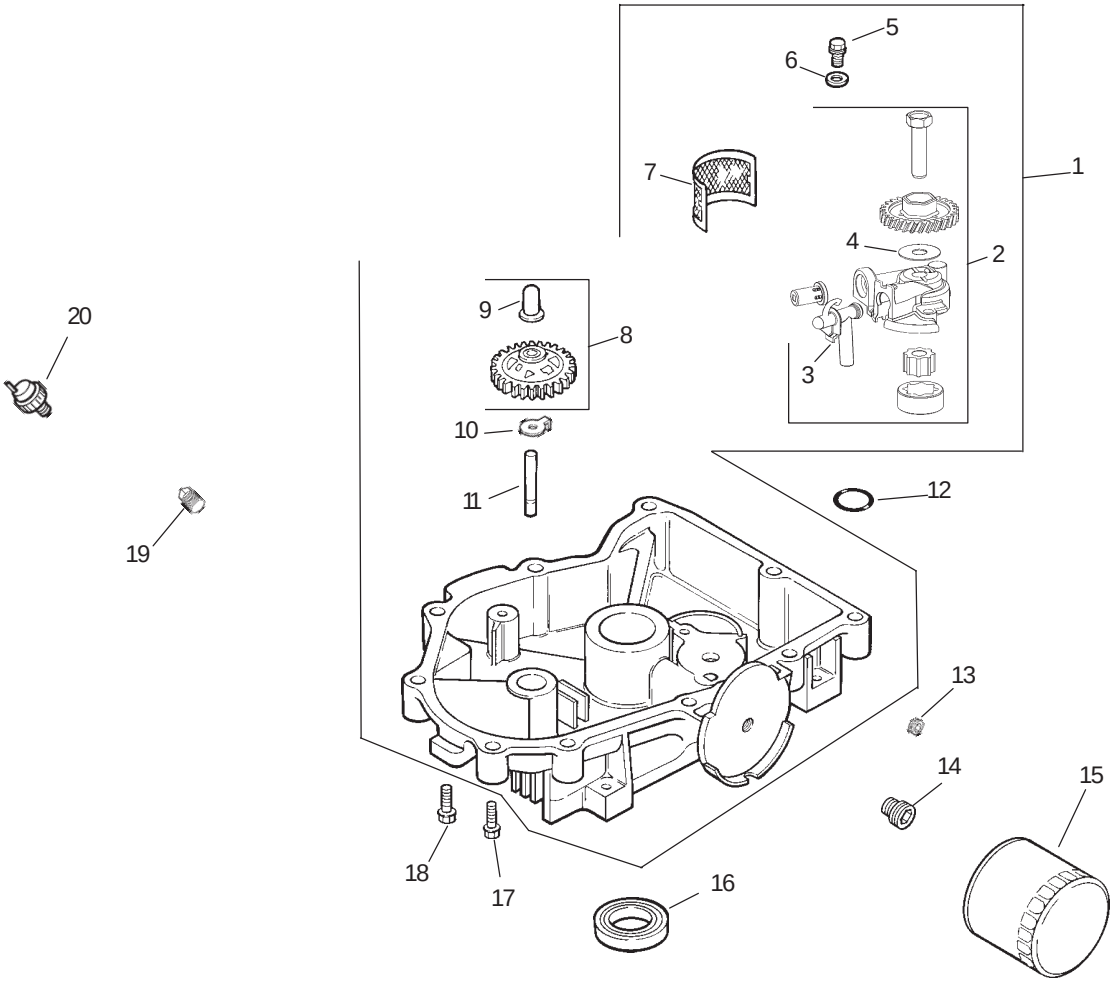


Crankcase Assembly (Continued)
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
26	24 468 15–S	1	Washer, plain 1/4”
27	24 144 38–S	1	Shaft, governor cross

Ref. No.	Part No.	Qty.	Description

Obtain Parts from Kohler

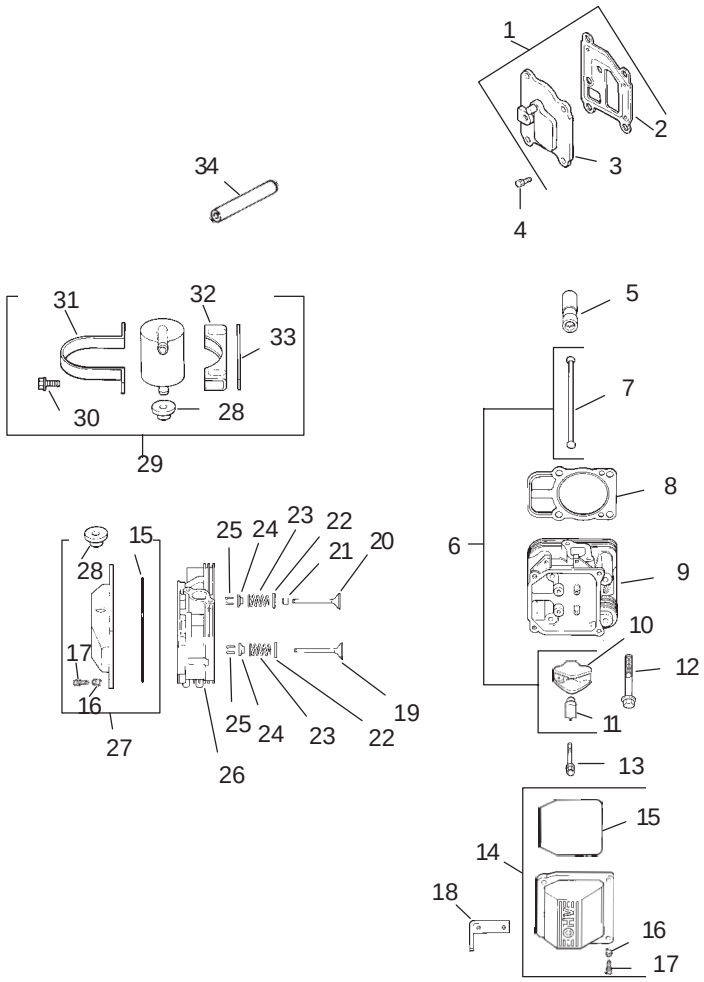


Oil Pan/Lubrication Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	24 199 07–S	1	Pan, oil assembly (Includes 2–10)
2	24 393 37–S	1	Pump assembly, oil before SN 3229000001
2	24 393 37–S	1	Pump assembly, oil (Includes 3,4) for SN 3229000001 and later
3	24 381 11–S	1	Tube, oil pickup
4	24 153 01–S	1	O–Ring, oil pump
5	M–645025–S	2	Screw, hex. flange M6x1.0x25
6	M–631005–S	2	Washer, plain 6 mm
7	24 162 26–S	1	Screen, oil
8	24 043 12–S	1	Kit, governor gear w/pin (Includes 9)
9	12 380 01–S	1	Pin, governor regulating
10	52 448 02–S	1	Tab, locking
11	12 144 02–S	1	Shaft, governor gear
12	24 153 08–S	1	O–Ring
13	25 139 62–S	1	Plug, hex. ctsk. 3/8”
14	24 136 01–S	1	Nipple, oil filter
15	52 050 02–S	1	Filter, oil

Ref. No.	Part No.	Qty.	Description
16	52 032 08–S	1	Seal, oil (PTO end)
17	24 086 17–S	1	Screw, hex. flange M8x1.25x45
18	24 086 16–S	9	Screw, hex. flange M8x1.25x45
19	25 139 57–S	1	Plug, pipe 3/8 N.P.T.F. sq. hd.
20	24 099 03–S	1	Switch, pressure

Obtain Parts from Kohler

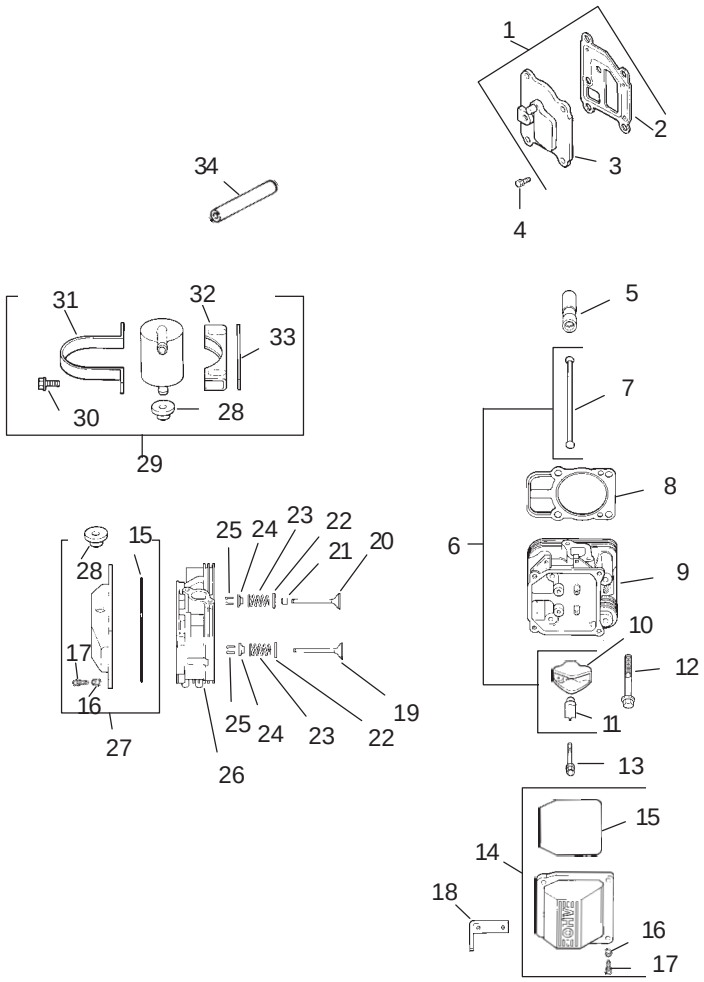


Head/Valve/Breather Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	24 033 03–S	1	Kit, breather cover w/gasket (Includes 2,3)
2	24 041 23–S	1	Gasket, breather
3	24 096 87–S	1	Cover, breather
4	M–645020–S	4	Screw, hex. flange M6x1.0x20
5	25 351 01–S	4	Lifter, valve
6	24 755 66–S	1	Kit, valve train (Includes 7,10,11)
7	24 411 05–S	4	Rod, push
8	24 041 08–S	2	Gasket, cylinder head
9	24 318 12–S	1	Head assembly, #2 cylinder
10	25 186 01–S	4	Arm, rocker
11	24 599 01–S	4	Pivot, rocker arm
12	12 086 16–S	8	Screw, hex. flange M10x1.5x90
13	M–640034–S	4	Screw, hex. flange M6x1.0x34
14	24 755 75–S	1	Kit, valve cover plain (Includes 15–17)
15	24 153 16–S	1	O–Ring
16	24 112 08–S	4	Spacer

Ref. No.	Part No.	Qty.	Description
17	M–651030–S	4	Screw, hex. flange M6x1.0x30
18	24 445 01–S	1	Strap, lifting
19	24 016 01–S	2	Valve, exhaust (Std.)
	24 016 02–S	2	Valve, exhaust (.25)
20	24 017 01–S	2	Valve, intake (Std.)
	24 017 02–S	2	Valve, intake (.25)
21	24 032 05–S	2	Seal, valve stem
22	235011–S	4	Retainer, spring
23	24 089 02–S	4	Spring, valve
24	12 173 01–S	4	Cap, valve spring
25	12 755 03–S	4	Kit, retainer
26	24 318 11–S	1	Head assembly, #1 cylinder
27	24 755 76–S	1	Kit, valve cover/ breather (Includes 15–17,28)
28	25 313 03–S	1	Grommet, rubber
29	24 755 57–S	1	Kit, breather separator (Includes 28,30–33)
30	M–545016–S	2	Screw, hex. flange M5x0.8x16
31	24 445 02–S	1	Strap, breather
32	24 126 44–S	1	Bracket, breather

Obtain Parts from Kohler

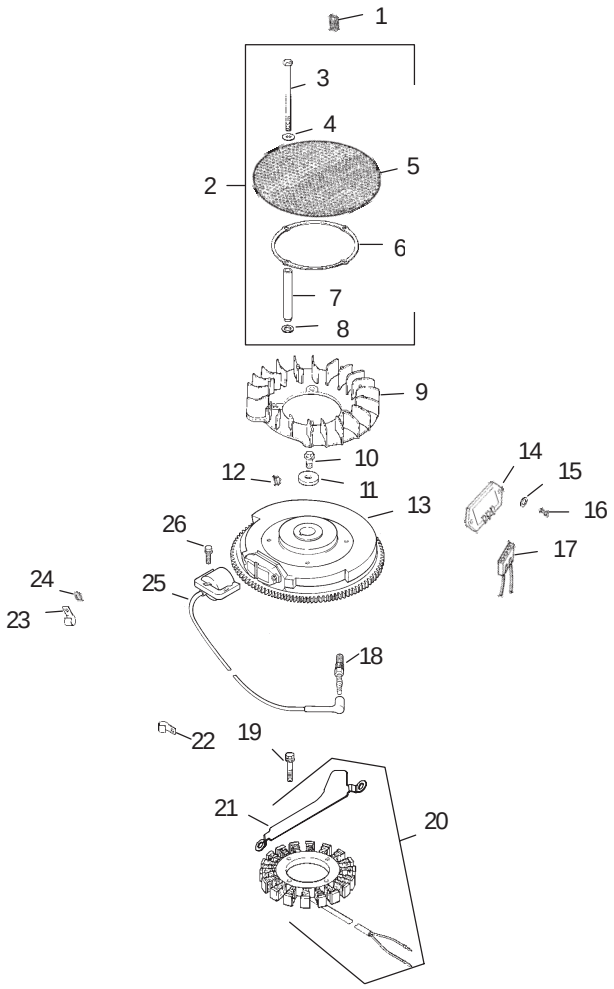


Head/Valve/Breather Assembly (Continued)
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
33	24 112 12–S	1	Spacer
34	24 326 54–S	1	Hose, breather

Ref. No.	Part No.	Qty.	Description

Obtain Parts from Kohler



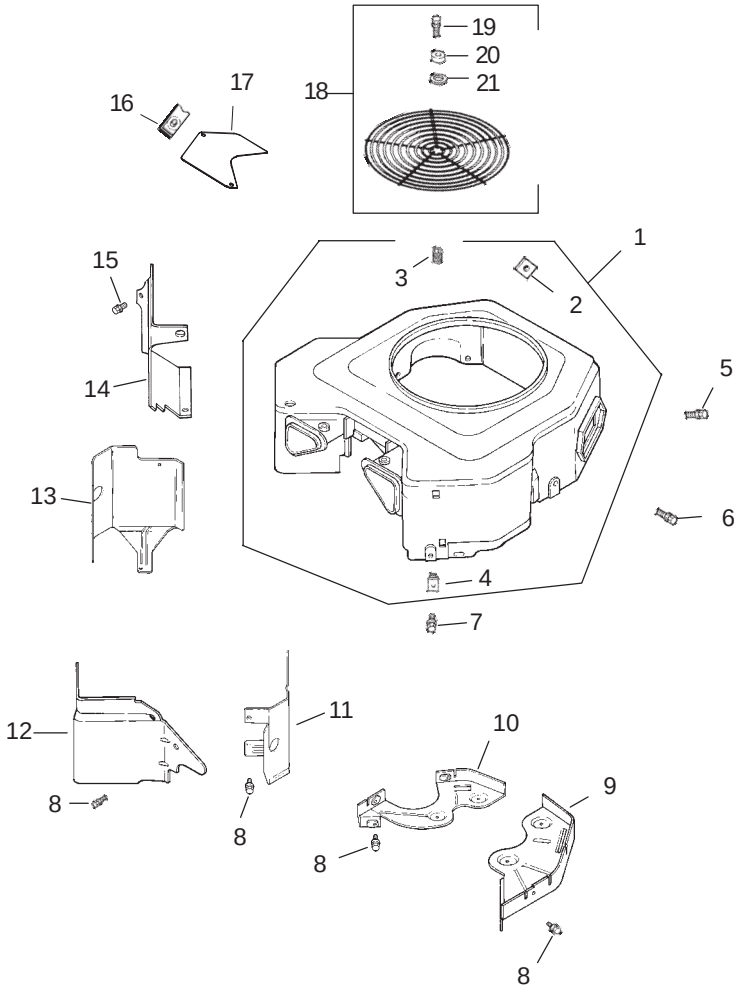
Ignition/Electrical Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	25 086 43–S	1	Screw, set
2	24 755 79–S	1	Kit, chopper screen (Includes 3–8,and 41 037 10–S)
3	M–603100–S	4	Screw, hex. hd. M6x1.0x100
4	X–25–53–S	4	Washer, plain 1/4
5	24 162 25–S	1	Screen, grass
6	24 141 06–S	1	Ring, support
7	24 112 14–S	4	Spacer, grass screen
8	24 468 11–S	1	Washer, spring
9	24 157 08–S	1	Fan
10	12 086 14–S	1	Screw, hex. flange M10x1.5x46
11	12 468 03–S	1	Washer, plain 3/8”
12	X–42–15–S	1	Key
13	24 025 01–S	1	Flywheel
14	25 403 03–S	1	Rectifier–regulator
15	X–25–92–S	2	Washer, plain 3/16”
16	24 086 18–S	2	Screw, phillips hd. 11–16x7/8
17	236602–S	1	Connector (3 contact)
18	12 132 06–S	2	Spark Plug

Ref. No.	Part No.	Qty.	Description
19	M–548025–S	2	Screw, hex. cap M5x0.8x25
20	54 755 09–S	1	Kit, 15 amp stator (Includes 21)
21	24 126 71–S	1	Bracket, stator wire
22	235173–S	1	Clip, cable
23	48 154 02–S	1	Clip, cable
24	X–25–63–S	1	Washer, plain 1/4”
25	24 584 25–S	2	Module, ignition
26	M–561025–S	4	Screw, hex. flange M5x0.8x25
*	X–22–11–S	1	Washer, lock 1/4” (to ground rectifier–regulator)
*	24 176 109–S	1	Harness, wiring
*	24 518 12–S	1	Lead, black (rectifier–regulator 5” – 12 gauge insulated grip barrel eyelets)
*	24 113 18–S	1	Decal, grass screen
*	25 454 03–S	3	Tie, wire

Obtain Parts from Kohler

* Not Illustrated



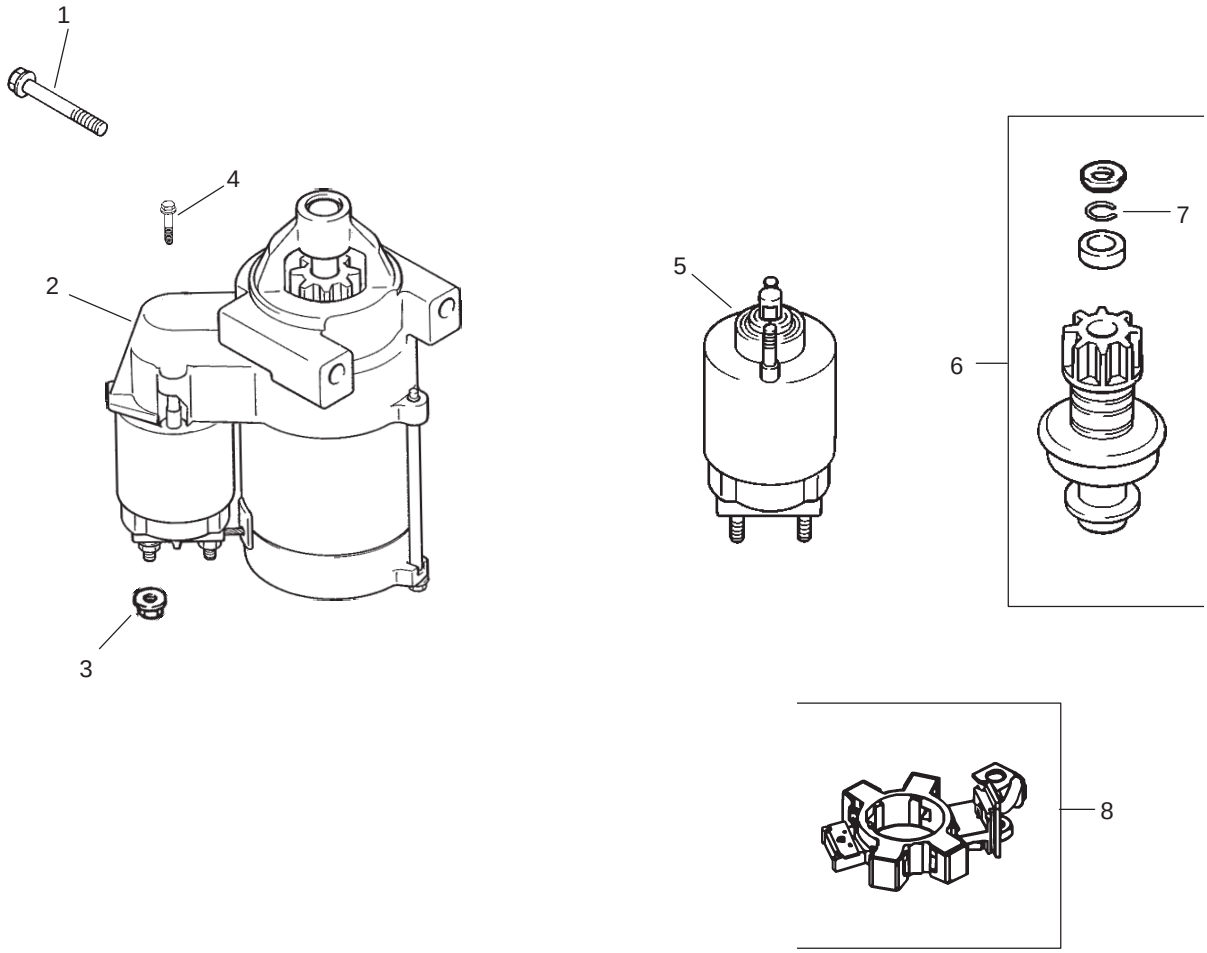
Blower Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	24 027 119–S	1	Housing, blower (Includes 2–4 & 24 332 01–S)
2	24 100 01–S	2	Nut, plastic
3	25 086 43–S	1	Screw, set
4	24 100 02–S	2	Nut, plastic
5	M–551016–S	1	Screw, hex. flange M5x0.8x16
6	M–545016–S	3	Screw, hex. flange M5x0.8x16
7	M–545020–S	4	Screw, hex. flange M5x0.8x20
8	M–645016–S	10	Screw, hex. flange M6x1.0x16
9	24 146 16–S	1	Plate, backing – # 2 side
10	24 146 20–S	1	Plate, backing – # 1 side
11	24 063 20–S	1	Baffle, cylinder barrel – # 2 side
12	24 063 14–S	1	Baffle, valley – #2 side
13	24 063 58–S	1	Baffle, cylinder barrel– # 1 side
14	24 063 60–S	1	Baffle, valley – #1 side

Ref. No.	Part No.	Qty.	Description
15	M–545010–S	2	Screw, hex. flange M5x0.8x10
16	24 096 63–S	2	Panel, access
17	25 154 02–S	4	Clip, mounting
18	24 755 94–S	1	Kit, guard (Includes 19–21 & 24 332 01–S)
19	24 086 39–S	3	Screw, pan hd. M5x0.8x15
20	24 112 09–S	3	Spacer
21	24 468 10–S	3	Washer, plain 1/4
*	24 332 01–S	3	Insert, threaded
*	24 113 95–S	1	Decal, 20 HP

Obtain Parts from Kohler

* Not Illustrated

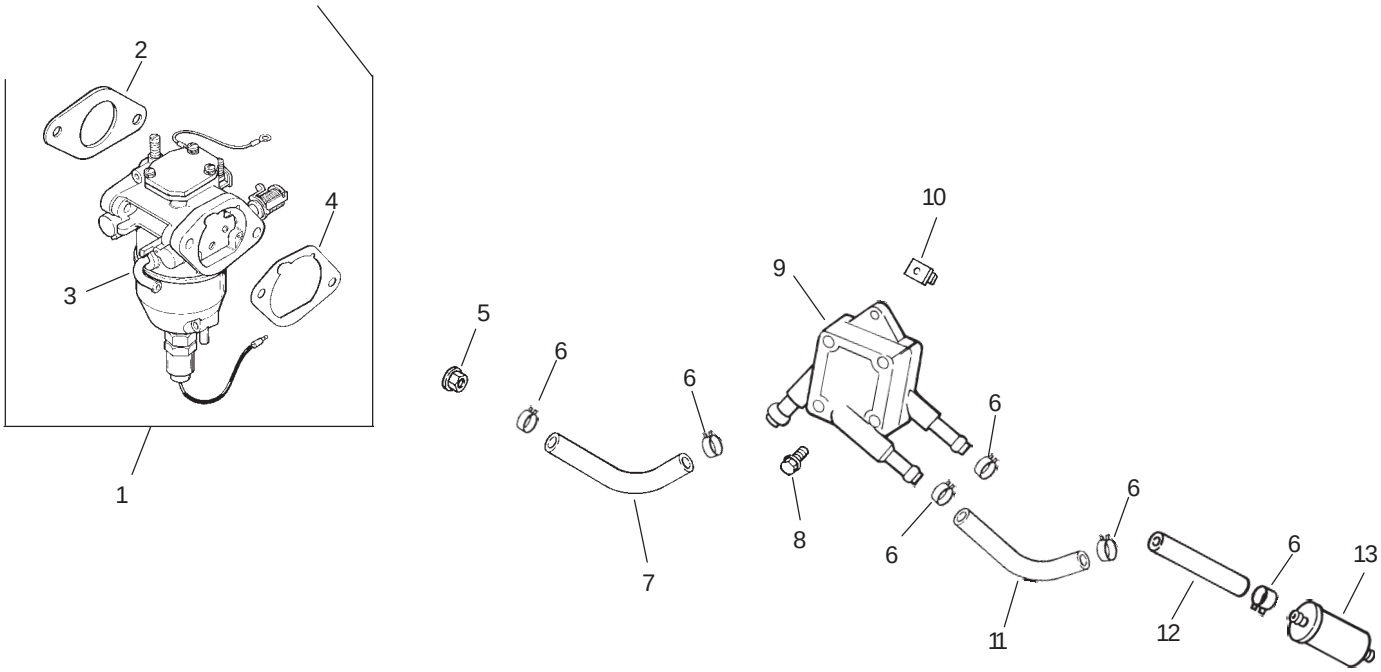


Starter Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	M–839080–S	2	Screw, hex. flange M8x1.25x80
2	25 098 09–S	1	Starter, solenoid shift (Includes 3–8)
3	M–841080–S	1	Nut, hex. flange M8x1.25
4	25 086 113–S	3	Screw, external torx hd.
5	25 435 05–S	1	Kit, solenoid (Includes 4)
6	25 755 33–S	1	Kit, drive (Includes 7)
7	25 141 05–S	1	Ring
8	25 221 01–S	1	Kit, brush

Ref. No.	Part No.	Qty.	Description

Obtain Parts from Kohler



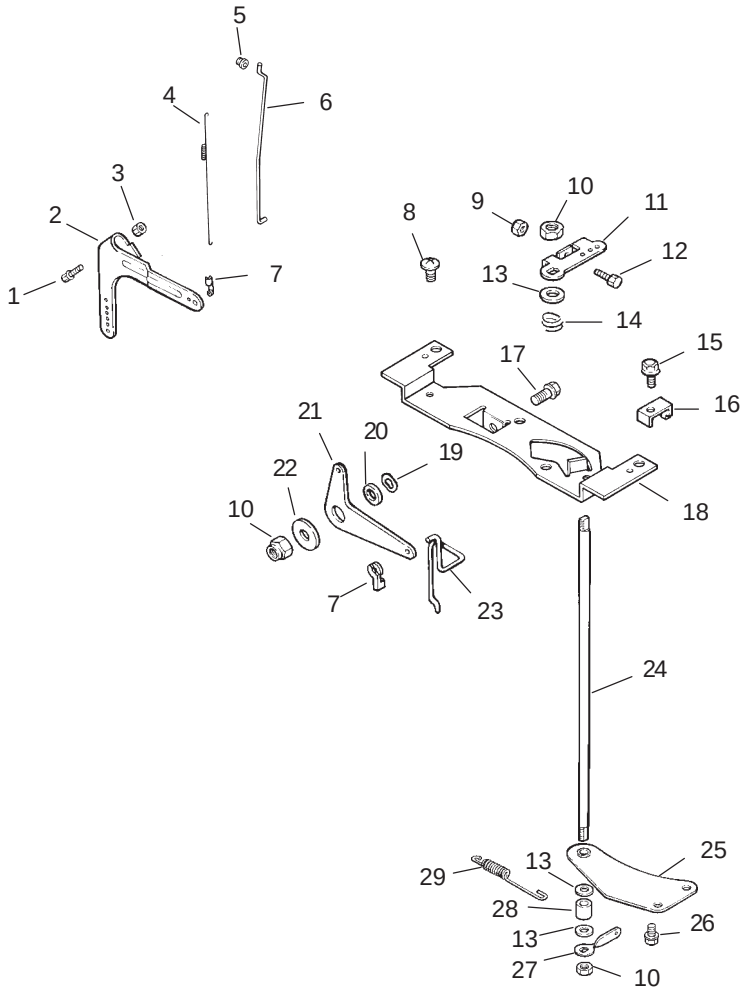
Fuel System Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	24 853 99–S	1	Kit, carburetor w/gaskets (Includes 2–4)
2	24 041 15–S	1	Gasket, carburetor
3	24 053 99	1	Carburetor assembly (For information only not available separately) (Service with kits 24 234 02–S, 24 757 18–S, 24 757 19–S, 24 757 20–S, 24 757 21–S & 24 757 22–S)
4	24 041 14–S	1	Gasket, air cleaner base
5	M–641060–S	2	Nut, hex. flange M6x0.8
6	25 237 14–S	6	Clamp, hose
7	25 353 04–S	1	Line, fuel 6–1/4
8	24 086 12–S	2	Screw, hex. cap M6x1.7x18
9	24 393 16–S	1	Pump, fuel

Ref. No.	Part No.	Qty.	Description
10	24 100 01–S	2	Nut, plastic
11	24 353 03–S	1	Line, fuel 10–5/8”
12	52 353 22–S	1	Line, fuel 12–1/4
13	24 050 02–S	1	Filter, fuel
*	24 234 02–S	1	Bowl, float
*	24 431 01–S	1	Sleeve, insulating
*	24 757 18–S	1	Kit, overhaul w/gaskets
*	24 757 19–S	1	Kit, choke repair w/gaskets
*	24 757 20–S	1	Kit, gasket w/gaskets
*	24 757 21–S	1	Kit, accelerator pump w/gaskets
*	24 757 22–S	1	Kit, solenoid replacement w/gaskets

Obtain Parts from Kohler

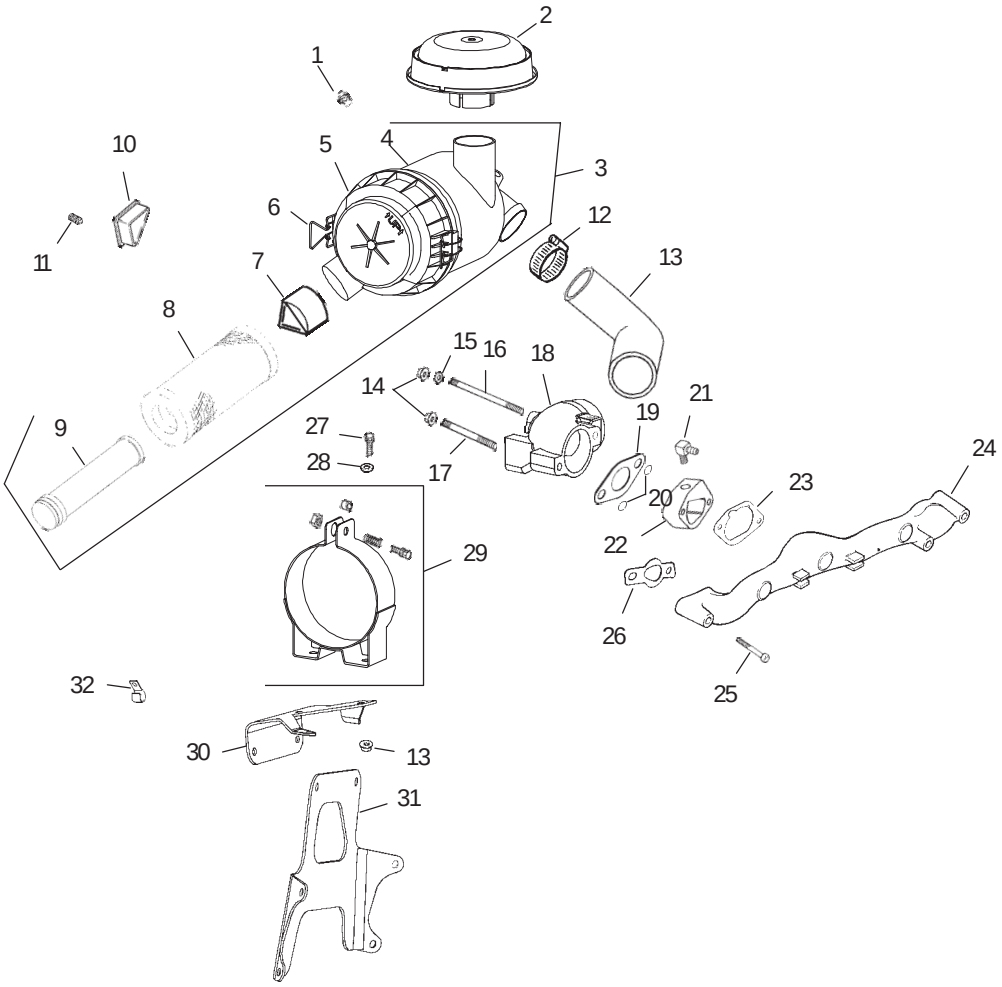
* Not Illustrated



Engine Control Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	24 211 03–S	1	Bolt, rd. hd. sq. neck M6x1.0x25
2	24 090 33–S	1	Lever, governor
3	M–641060–S	1	Nut, hex. flange M6x1.0
4	24 089 01–S	1	Spring, linkage
5	25 158 08–S	1	Bushing, linkage retaining
6	24 079 04–S	1	Linkage, throttle
7	25 158 11–S	2	Bushing, throttle linkage
8	24 086 06–S	2	Screw, phillips hd. 11–16x3/4” (2)
9	M–446030–S	1	Nut, hex. M4x0.7
10	M–647060–S	3	Nut, hex. lock M6x1.0
11	24 090 09–S	1	Lever, throttle control
12	M–401030–S	1	Screw, hex. cap M4x0.7x25
13	X–25–72–S	3	Washer, plain 1/4”
14	24 089 20–S	1	Spring, throttle shaft
15	M–545016–S	2	Screw, hex. flange M5x0.8x16
16	12 237 01–S	2	Clamp, cable
17	M–639016–S	1	Screw, hex. flange M6x1.0x16
18	24 126 111–S	1	Bracket, control
19	277341–S	1	Washer, spring 3/8”
20	25 431 01–S	1	Spacer
21	24 090 20–S	1	Lever, choke
22	X–25–52–S	1	Washer, plain 1/4”
23	24 079 10–S	1	Linkage, choke
24	24 144 11–S	1	Shaft, throttle
25	24 126 17–S	1	Bracket, throttle shaft
26	M–645016–S	3	Screw, hex. flange M6x1.0x16
27	24 090 12–S	1	Lever, throttle control
28	24 112 10–S	1	Spacer
29	24 089 45–S	1	Spring, governor

Obtain Parts from Kohler



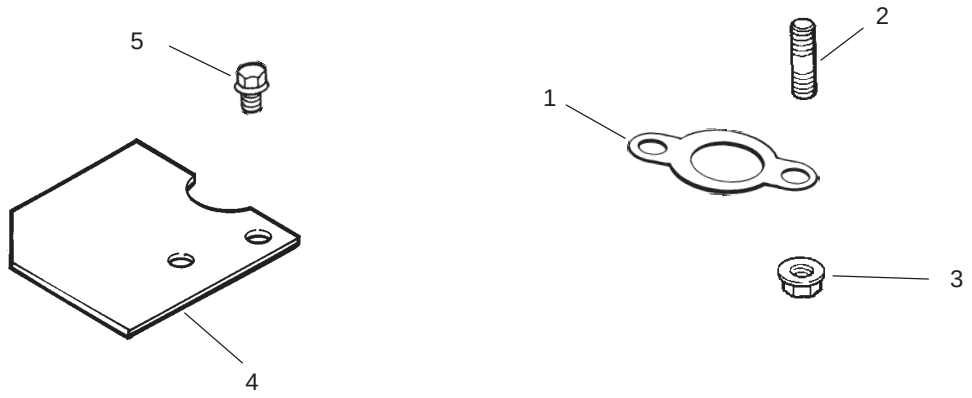
Air Intake/Filtration Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	25 139 20–S	1	Plug, pipe
2	25 324 02–S	1	Hood, air cleaner
3	25 048 07–S	1	Assembly, air cleaner (Includes 4–9)
4	25 081 01–S	1	Housing, heavy duty air cleaner
5	25 096 06–S	1	Cover assembly, plastic air cleaner
6	25 154 05–S	2	Clip
7	24 462 07–S	1	Valve, dust ejector
8	25 083 01–S	1	Element, air cleaner primary
9	25 083 04–S	1	Element, air cleaner safety
10	24 096 17–S	2	Cover, blower housing
11	25 086 91–S	2	Screw, tapping
12	25 237 07–S	2	Clamp, hose
13	24 326 53–S	1	Hose, air cleaner
14	M–647060–S	4	Nut, hex. lock M6x1.0x60
15	25 468 01–S	1	Washer, copper 1/4
16	24 072 10–S	1	Stud M6x1.0x180
17	M–629140–S	1	Stud M6x1.0x40
18	24 029 43–S	1	Adapter, elbow

Ref. No.	Part No.	Qty.	Description
19	24 041 44–S	1	Gasket, air cleaner adapter
20	25 153 05–S	2	O–Ring, heavy–duty air cleaner
21	25 155 38–S	1	Connector, hose
22	24 029 57–S	1	Adapter, remote heavy–duty air cleaner
23	24 041 14–S	1	Gasket, air cleaner base
24	24 164 06–S	1	Manifold, intake
25	25 086 84–S	4	Screw, hex. flange M6x1.0x55
26	24 041 01–S	2	Gasket, intake manifold
27	X–25–73–S	2	Washer, plain 1/4
28	25 126 02–S	1	Bracket, air cleaner
29	24 126 104–S	1	Bracket, air cleaner mounting
30	24 126 105–S	1	Bracket, main support
*	47 154 01–S	1	Clip, cable
*	25 113 27–S	1	Decal, air cleaner
*	25 454 04–S	1	Tie, wire

Obtain Parts from Kohler

* Not Illustrated



Exhaust Assembly
Kohler CV20S PRO 65593

Ref. No.	Part No.	Qty.	Description
1	24 041 49–S	2	Gasket, exhaust
2	25 072 04–S	4	Stud, M8x1.25x33 (4)
3	M–841080–S	4	Nut, hex. flange M8x1.25
4	24 265 09–S	2	Deflector, heat
5	M–645016–S	2	Screw, hex. flange M6x1.0x16
*	24 072 08–S	2	Stud, exhaust
*	M–641060–S	2	Nut, hex. flange M6x1.0
*	24 522 226	1	Short Block
*	24 782 24	1	Miniblock
*	24 755 107–S	1	Gasket Set

Ref. No.	Part No.	Qty.	Description

Obtain Parts from Kohler

* Not Illustrated

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