Form No. 3328–520

Groundsmaster® 120

Model No. 30612—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.

© The TORO Company — 2002
All Rights Reserved

Contents

Description	Page
Frame and Steering Assembly	4
Frame and Steering Assembly (Continued)	5
Rear Axle Assembly	6
Front Wheel Assembly	7
Frame and Jackshaft Assembly	8
Frame and Jackshaft Assembly (Continued)	9
Seat Support Assembly	10
Seat Assembly	11
Vavle Assembly No. 54–0090	12
Parking Brake and Lift Frame Assembly	13
Hydraulic Lift Cylinder Assembly 54–0150	14
Hood, Fuel Tank and Hydraulic Reservoir Assembly	15
Engine Assembly	16
Clutch Assembly No. 54–0220	17
Electrical Schematic	18
Hydraulic Schematic	19
Differential Assembly	20
Transmission Assembly	21
Hydrostatic Transmission Assembly	22
Hydrostatic Transmission Assembly (Continued)	23
Crankshaft Assembly Kohler Engine CH20QS–64678	24
Crankcase Assembly Kohler Engine CH20QS–64678	25
Oil Pan/Lubrication Assembly Kohler Engine CH20QS–64678	26
Head/Valve/Breather Assembly Kohler Engine CH20QS–64678	27
Ignition/Electrical Assembly Kohler Engine CH20QS–64678	28
Blower Housing and Baffles Assembly Kohler Engine CH20QS–64678	29
Starting System Kohler Engine CH20QS–64678	30
Fuel System Assembly Kohler Engine CH20QS–64678	31
Engine Controls Assembly Kohler Engine CH20QS–64678	32
Air Intake/Filtration Assembly Kohler Engine CH20QS–64678	33
Exaust Assembly Kohler Engine CH20QS–64678	34

Accessories

Description	Model / Part No.
Flotation Kit	57–3190
44” Deck Baffle Kit	60–9030
52” Deck Baffle Kit	68–7210
44” Leaf Mulcher Deck	30752
52” Leaf Mulcher Deck	30700
Wheel Weight Kit	56–6620
44” Snowthrower	30761
44” Side Discharge Deck	30544
44/52” Striping Kit	99–4590

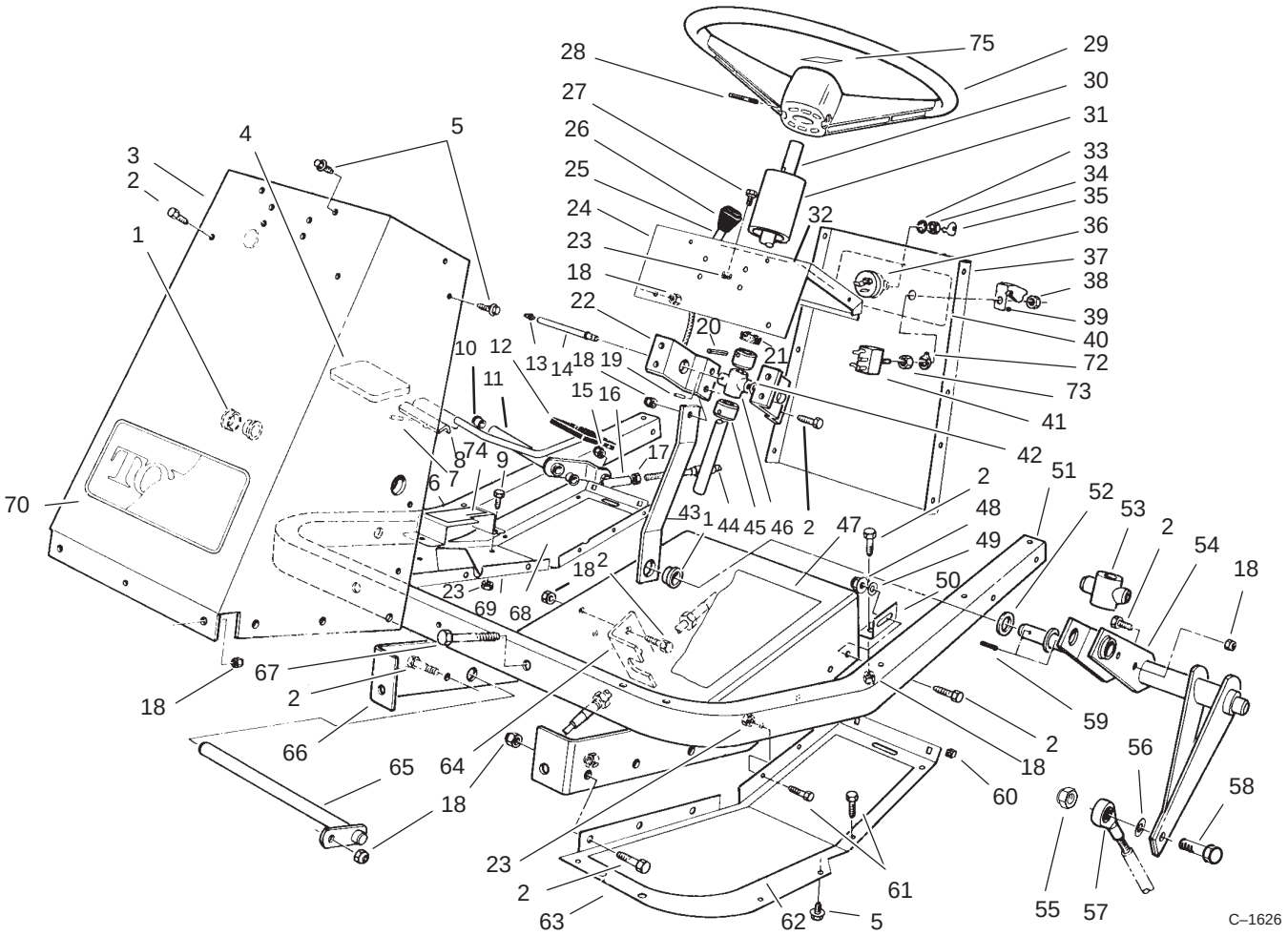
Description	Model / Part No.
52”Side Discharge Deck	30753
44” Grass Collection System	30751
52” Grass Collection System	30576
44” Recycler Kit	99–4582
52” Recycler Kit	99–4586
Armrest Kit	92–1186
Tire Chain Kit	56–6630
Rear Weight	24–5790
European Complacence Parts Kit	93–9450

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

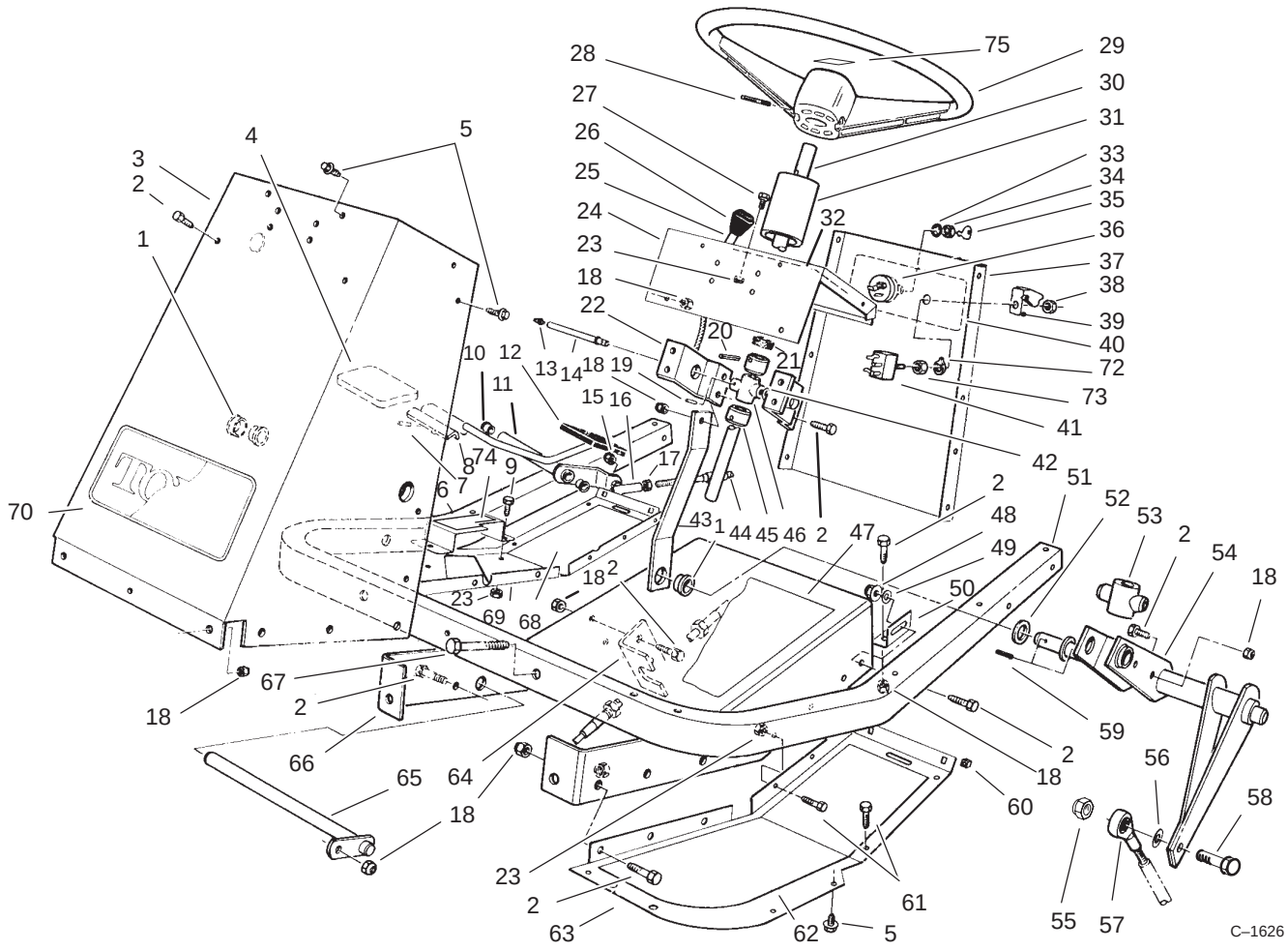
Abbreviation	Meaning
HYD	hydraulic
INC	incorporated
LH	left hand
NI	nylon insert
PPH	Phillips pan head
PTH	Phillips truss head
PTO	power take off
RH	right hand
SFH	slotted fillister head
SHH	slotted hex head
SQH	square head
SHWH	slotted hex washer head
SPH	slotted pan head
SRH	slotted round head
STD	standard
TAP	self tapping
TTH	Torx truss head
WH	wing head



Frame and Steering Assembly

Ref. No.	Part No.	Qty.	Description
1	27–9080	3	Bushing
2	322–4	19	Screw–HH
3	54–1900	1	Tower–Front
4	49–6470	1	Pad–Accelerator
5	46–8560	21	Screw–HH
6	80–4930	1	Footrest–Pedal
7	32121–51	1	Pin–Roll
8	80–4920	1	Pedal–Accelerator
9	321–3	2	Screw–HH
10	256–156	2	Bushing
11	74–0110	1	Pedal–Traction (Incl. Ref. #10)
12	49–6430	1	Pad–Reverse
13	302–22	1	Fitting–Grease
14	59–1610	1	Tube–Fitting, Grease
15	3296–3	1	Nut–Hex
16	2411–34	1	Ball Joint
17	3220–1	1	Nut–Jam
18	3296–29	24	Nut–Lock
19	32121–20	1	Pin–Roll
20	32121–31	2	Pin–Roll
21	21–9260	1	Cover–Dust
22	54–1950	2	Bracket–Support Bearing
23	3296–42	16	Nut–Lock
24	54–1000	1	Tower–Top

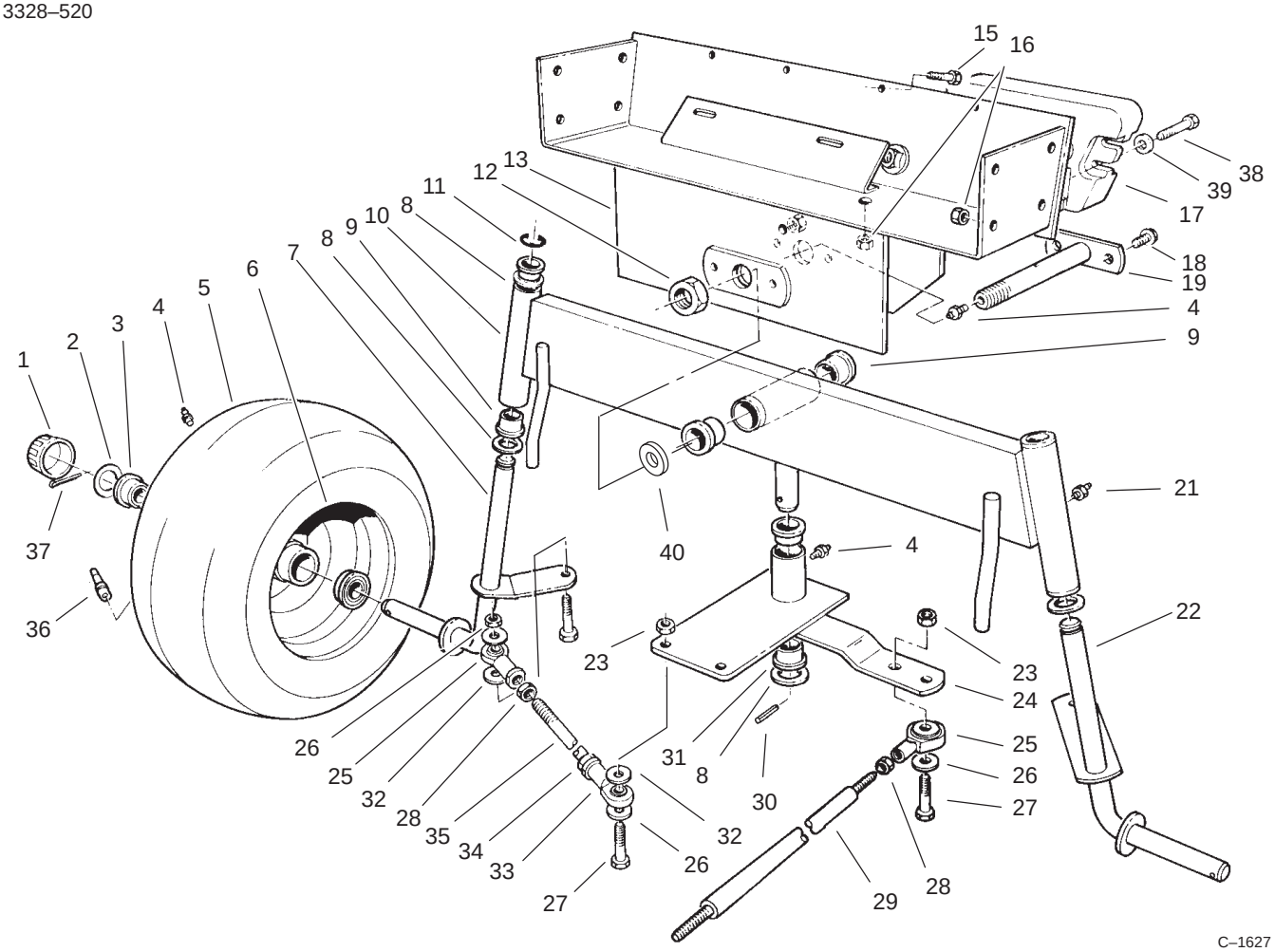
Ref. No.	Part No.	Qty.	Description
25	54–1451	2	Control–Throttle, Choke
26	66–0120	2	Knob
27	321–2	4	Screw–HH
28	32121–10	1	Pin–Roll
29	98–1467	1	Wheel–Steering
30	54–1420	1	Shaft–Steering
31	47–1980	1	Cover–Shaft, Steering
32	92–6278	1	Decal–Throttle, Choke
33	3254–5	1	Washer–Lock
34	218–461	1	Nut–Lock
35	63–8360	2	Key
36	88–9830	1	Switch–Ignition (Incl. Ref. #33–34)
37	92–6266	1	Panel–Tower, Rear
38	113179	1	Nut
39	113050	1	Cover–Switch, PTO
40	92–6277	1	Decal–Switch
41	116716	1	Switch–Clutch & Brake (Incl. Ref. # 38, 72 & 73)
42	3290–440	1	Washer–Belleville
43	54–1340	1	Link–Steering



Frame and Steering Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
44	54–2640	1	Cable–Control, Traction
45	28–3940	2	Collar–Shaft, Steering
46	60–9050	1	Bearing–Shaft, Steering
47	54–0880	1	Decal–Tunnel
48	32128–20	1	Nut–Lock, Flange
49	3256–23	4	Washer–Flat
50	54–1440	2	Bracket–Tunnel
51	60–9140	1	Frame–Footrest
52	3–6498	2	Washer–Thrust
53	54–2630	1	Follower–Shaft, Steering
54	54–2040	1	Lever–Follower
55	3296–48	1	Nut–Lock
56	3256–4	1	Washer–Flat
57	251–304	1	End–Rod
58	324–6	1	Screw–HH
59	32121–77	2	Roll–Pin
60	32115–5	4	Nut–Square
61	321–4	9	Screw–HH
62	54–2260	1	Pad–Footrest, LH
63	54–1470	1	Footrest–LH
64	54–1770	1	Bracket–Cable, Traction
65	59–1550	1	Pedal–Shaft

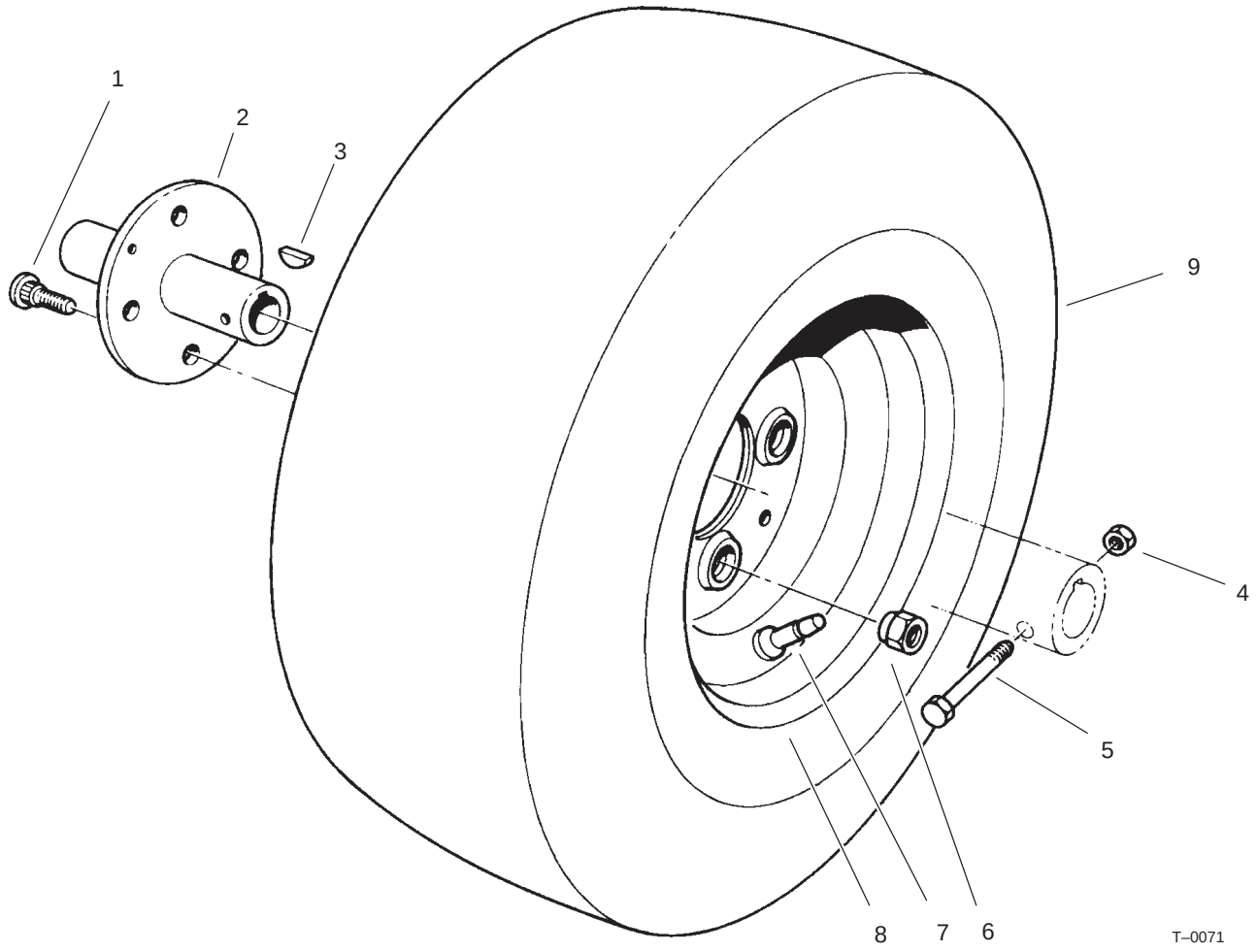
Ref. No.	Part No.	Qty.	Description
66	60–9150	1	Tunnel
67	322–10	2	Screw–HH
68	54–2270	1	Pad–Footrest, RH
69	80–4910	1	Footrest–RH
70	62–7400	1	Decal–Toro
72	102950	1	Washer
73	105805	1	Nut
74	82–4720	1	Pad–Footrest
75	98–1459	1	Decal–Toro



Rear Axle Assembly

Ref. No.	Part No.	Qty.	Description
1	61–9780	2	Cap–Hub
2	28–2480	2	Washer–Flat
3	251–210	4	Bearing–Ball
4	302–5	4	Fitting–Grease
5	231–126	2	Tire
6	242–60	2	Rim
7	54–0570	1	Spindle–RH
8	3–6498	5	Washer–Thrust
9	46–6680	6	Bushing
10	92–6255	1	Axle–Rear (Incl. Ref. #9)
11	32151–48	2	Ring–Retaining
12	3296–41	1	Nut–Hex
13	54–0330	1	Frame–Rear
15	321–4	4	Screw
16	3296–29	8	Nut
17	24–5790	1	Weight–Rear
18	32144–15	2	Screw
19	59–1500	1	Pivot–Axle
21	302–49	3	Fitting–Grease
22	54–0560	1	Spindle–LH
23	3296–48	5	Nut
24	92–6257	1	Plate–Pivot (Incl. Ref. 31)
25	251–305	3	End–Rod
26	3256–4	6	Washer–Flat

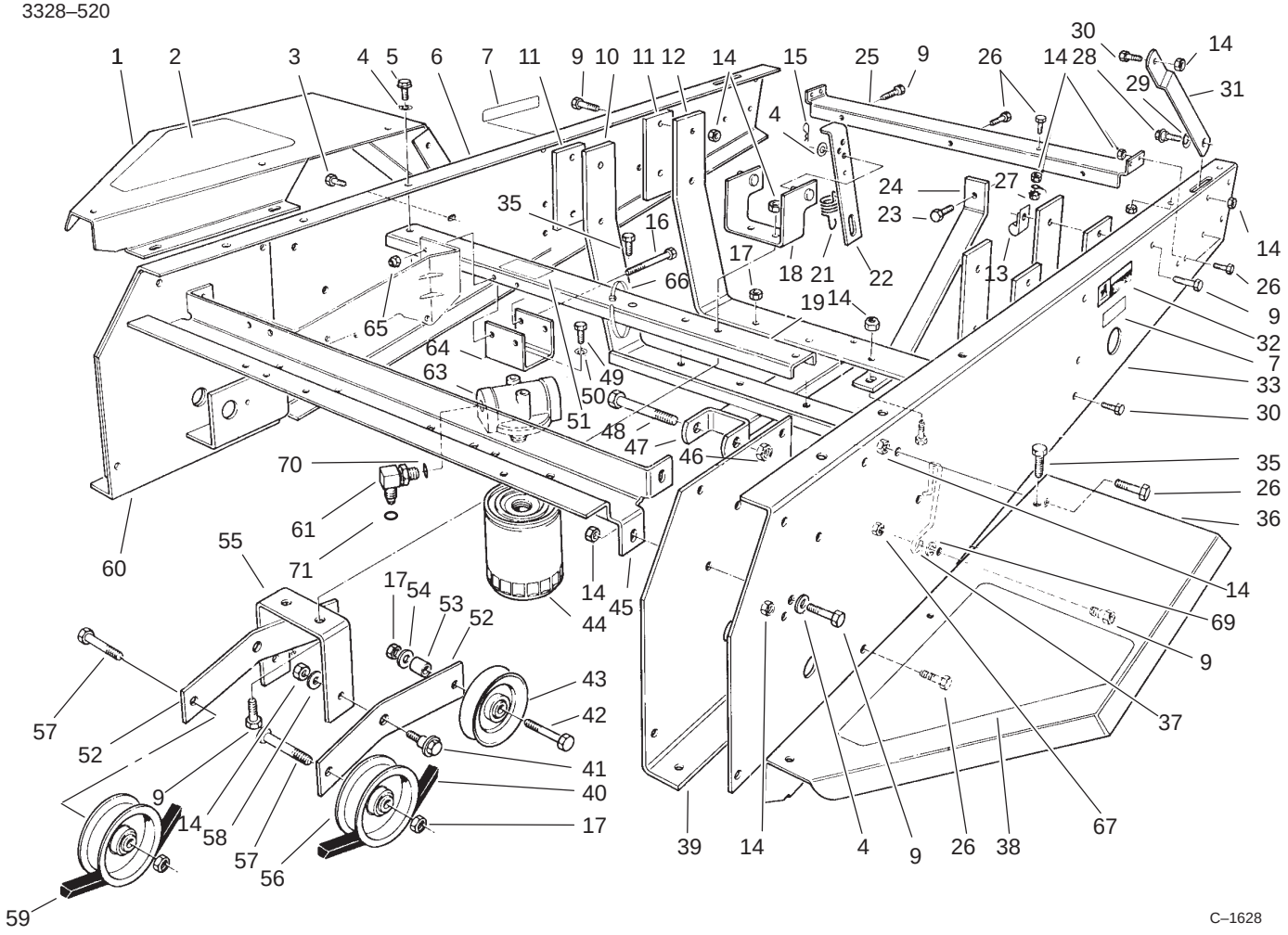
Ref. No.	Part No.	Qty.	Description
27	324–7	5	Screw
28	3220–4	3	Nut–Jam
29	54–1491	1	Rod–Steering, Rear
30	32121–51	1	Pin–Roll
31	27–9080	2	Bushing
32	62–4420	81	Spacer
33	251–304	2	End–Rod
34	3220–19	2	Nut–Jam
35	57–3100	2	Tie Rod–Steering
36	232–27	2	Valve Stem w/Cap
37	3272–12	2	Pin–Cotter
38	325–6	2	Screw
39	3253–7	2	Washer
40	3256–9	1	Washer



Front Wheel Assembly

Ref. No.	Part No.	Qty.	Description
1	242–71	8	Bolt–Wheel
2	54–0140	2	Hub–Wheel
3	3257–10	2	Key–Woodruff
4	3296–29	2	Nut–Lock
5	322–10	2	Screw
6	242–50	8	Nut
7	232–27	2	Valve Stem w/Cap
8	242–76	2	Rim
9	231–122	2	Tire

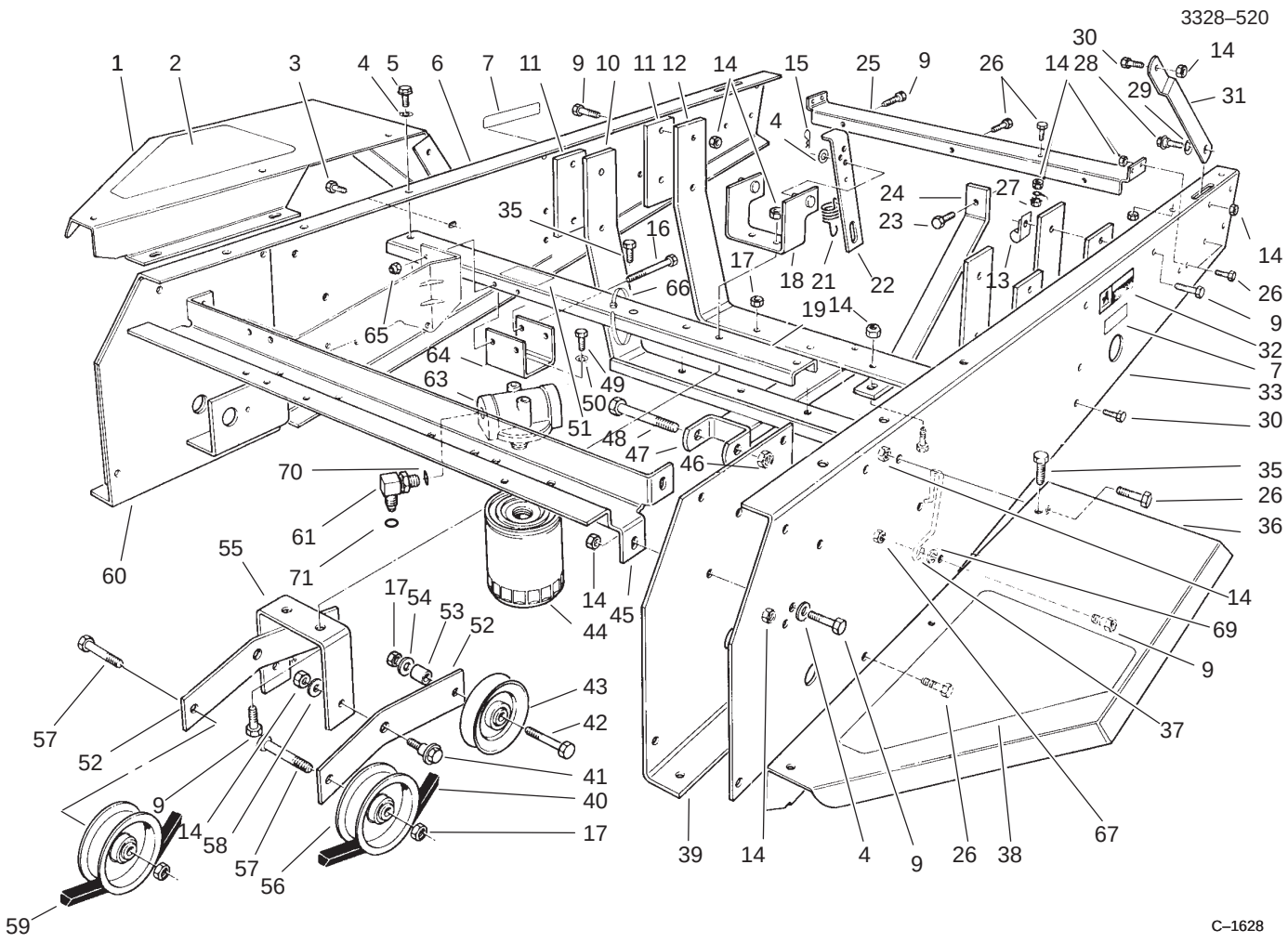
Ref. No.	Part No.	Qty.	Description



Frame and Jackshaft Assembly

Ref. No.	Part No.	Qty.	Description
1	54–1930	1	Fender–RH
2	92–6292	1	Pad–Fender, RH
3	3234–14	4	Screw
4	3256–23	8	Washer–Flat
5	32144–11	2	Screw–HWHTF
6	54–1910	1	Channel–Side, RH
7	77–3100	2	Decal–Caution
9	322–6	18	Screw
10	92–6250	1	Mount–Engine
11	54–1810	4	Plate–Engine, Rear
12	92–6251	1	Mount–Engine
13	2412–100	2	J–Clamp
14	3296–29	33	Nut
15	3290–250	2	Pin–Cotter
16	321–14	2	Screw
17	3296–44	4	Nut
18	54–2070	1	Anchor–Spring
19	98–0794	1	Channel–Middle
20	323–7	3	Screw
21	54–1410	2	Spring–Idler
22	54–1130	2	Link–Idler Anchor
24	92–6254	1	Bar–Tension
25	54–1830	1	Support–Shield
26	322–4	13	Screw
27	32149–1	1	Nut–Lock
28	27–0410	2	Bolt–Shoulder

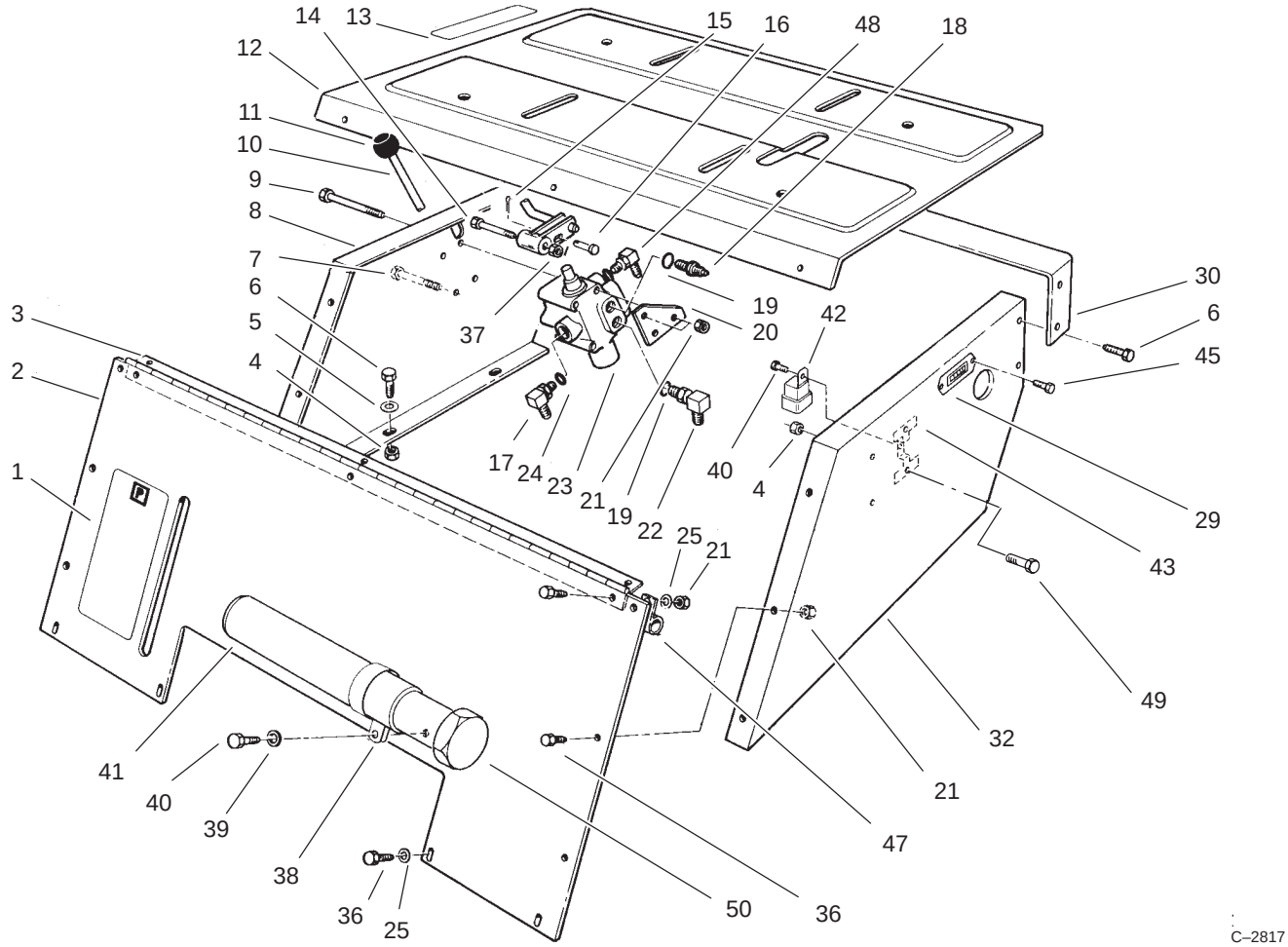
Ref. No.	Part No.	Qty.	Description
29	3290–211	2	Washer–Spring
30	322–3	2	Screw
31	54–1870	2	Stop–Hood, Lower
32	106–0698	1	Decal–Warning
33	54–1920	1	Channel–Side, LH
35	46–8560	7	Screw
36	54–1940	1	Fender–LH
37	55–4860	1	Guide–Belt
38	92–6293	1	Pad–Fender, LH
39	54–0460	1	Stand–Axle, LH
40	54–1380	1	V–Belt
41	19–1470	2	Bolt–Shoulder
42	323–11	2	Screw
43	62–4530	2	Idler
44	54–0110	1	Filter–Oil, Transmission
45	54–1010	1	Channel–Front
46	3296–61	1	Nut
47	92–6252	1	Mount–Cylinder
48	327–24	1	Screw
49	321–3	2	Screw
50	3253–3	2	Washer–Lock
51	53–4430	1	Decal–Oil
52	98–0795	2	Lever–Idler
53	37–7250	2	Spacer



Frame and Jackshaft Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
54	3256–3	2	Washer–Flat
55	98–0792	1	Bracket–Idler Mount
56	62–4540	2	Idler–Flat
57	323–9	2	Screw
58	23–1120	2	Washer–Flat
59	54–1390	1	V–Belt–Traction
60	54–0450	1	Stand–Axle, RH
61	340–3	2	Adapter
63	86–9080	1	Head–Filter
64	54–1120	1	Bracket–Head, Filter
65	3296–42	2	Nut–Lock
66	3290–379	7	Tie–Cable
67	32128–20	1	Nut–Lock, Flange
69	3255–8	1	Washer–Lock, Ext
70	237–22	1	O–Ring
71	237–79	1	O–Ring

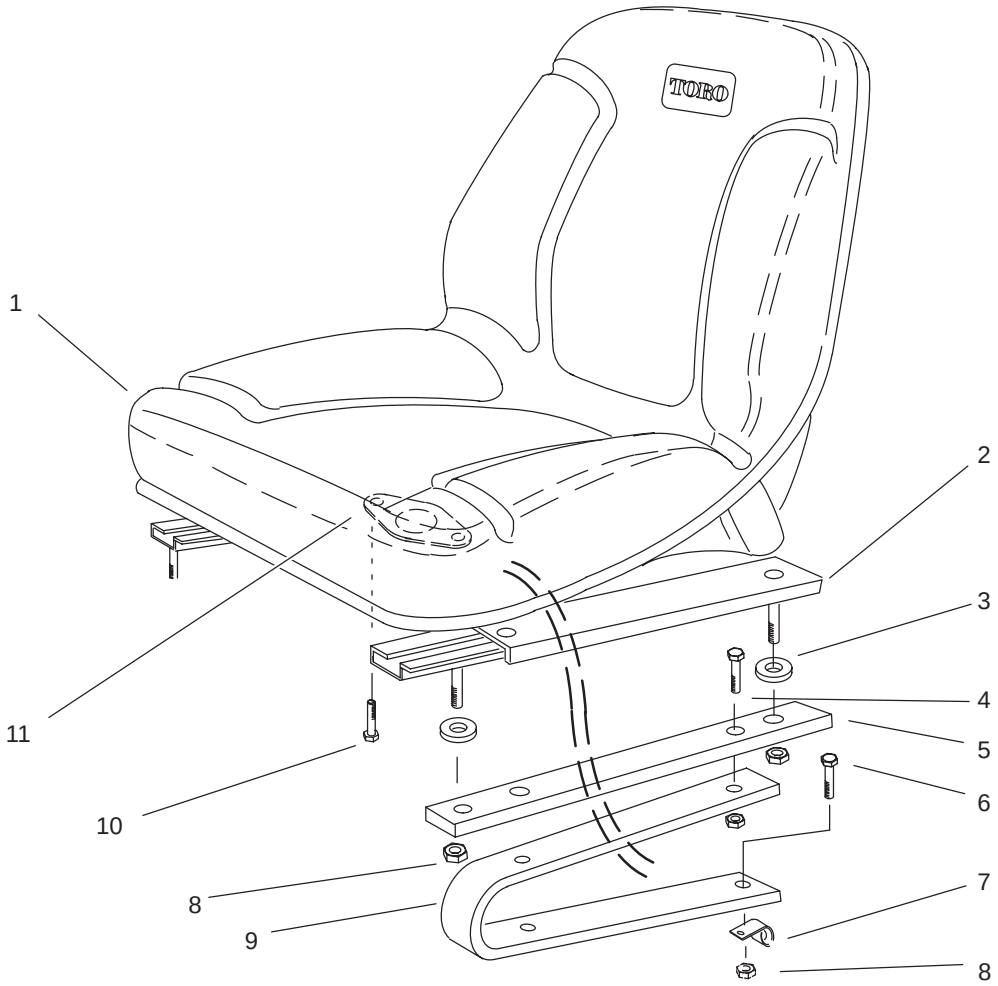
Ref. No.	Part No.	Qty.	Description



Seat Support Assembly

Ref. No.	Part No.	Qty.	Description
1	54–0920	2	Decal–Brake, Parking
2	80–3760	1	Support–Seat, Front
3	54–1310	1	Hinge–Seat
4	3296–29	12	Nut
5	3256–23	6	Washer–Flat
6	322–4	10	Screw
7	321–14	2	Screw
8	54–1220	1	Support–Seat, RH
9	321–23	2	Screw
10	82–4680	1	Lever–Valve
11	233–37	1	Knob
12	92–6281	1	Plate–Seat
13	54–0900	1	Decal–Lift Control
14	56–6590	1	Screw
15	3272–6	1	Pin–Cotter
16	283–17	1	Pin–Clevis
17	353–511	1	Fitting
18	353–545	1	Fitting
19	237–78	2	O–Ring
20	82–4700	1	Bracket–Lever, Valve
21	3296–42	19	Nut–Lock

Ref. No.	Part No.	Qty.	Description
22	353–375	1	Fitting–90°
23	54–0090	1	Valve Assembly
24	237–42	2	O–Ring
25	3256–1	11	Washer–Flat
29	75–6820	1	Meter–Hour
30	54–1550	1	Support–Hood
32	92–5435	1	Support–Seat, LH
36	321–4	14	Screw
37	3296–39	1	Nut
38	2412–120	2	R–Clamp
39	3256–51	2	Washer
40	32144–73	4	Screw
41	104–7050	1	Tube–Manual
42	63–7590	1	Relay
43	92–6259	1	Bracket
45	32144–18	2	Screw
47	2412–100	1	Clamp–Wire
48	340–98	1	Fitting
49	322–2	3	Screw–HH
50	104–7050	1	Cap



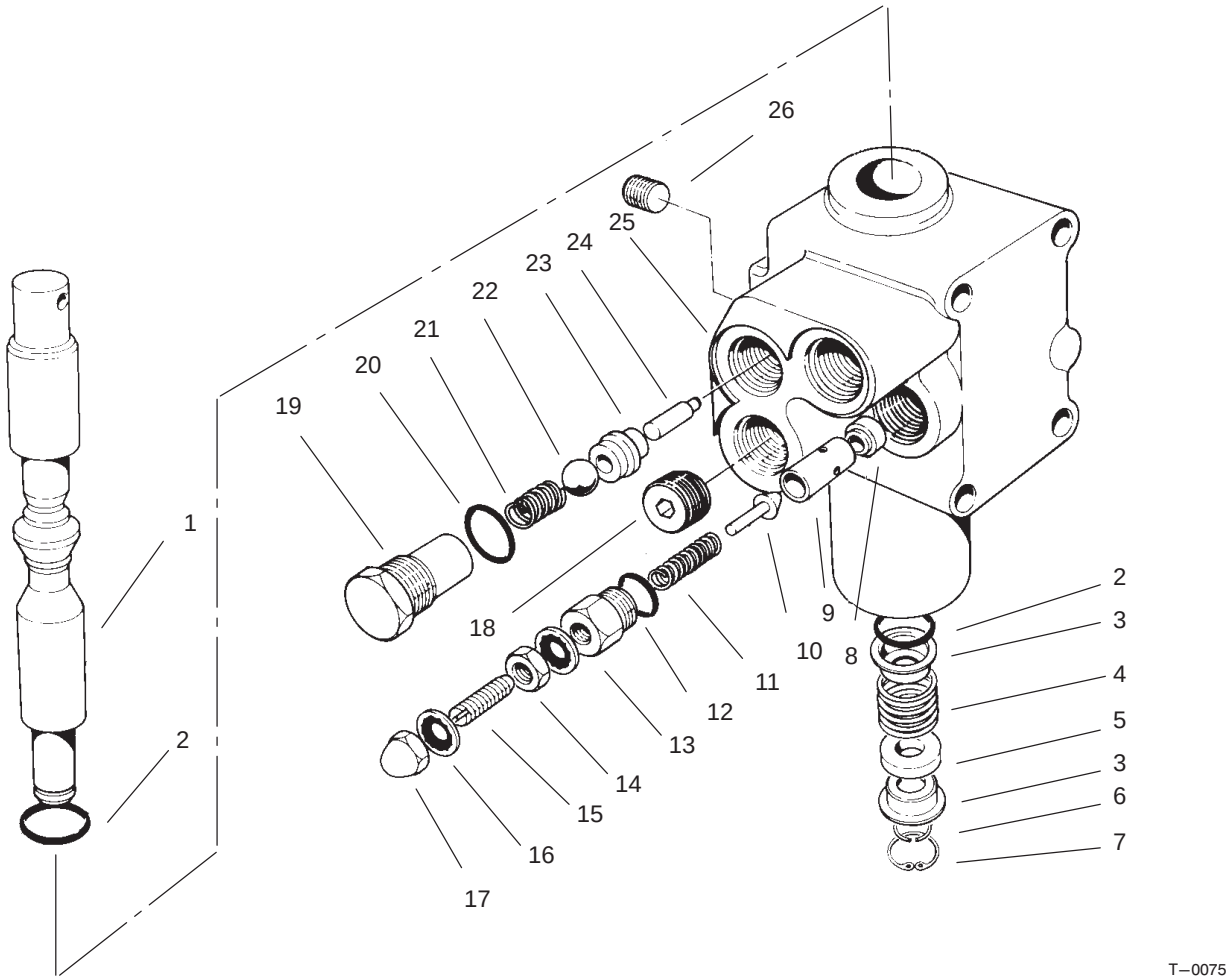
C–1603

Seat Assembly

Ref. No.	Part No.	Qty.	Description
1	92–6280	1	Seat
2	51–0790	1	Slide Seat Adjust Assembly
*	51–0780	1	RH Slide Seat ASM
3	109989	4	Spacer
4	322–4	4	Screw
5	92–6284	2	Plate–Adapter, Seat
6	322–5	4	Screw
7	2412–93	1	Clamp–Hose
8	3296–29	8	Nut–Lock
9	114263	2	Spring–Seat
10	321–3	2	Screw
11	92–6282	1	Switch–Seat
*	92–6533	1	Cushion Replacement

Ref. No.	Part No.	Qty.	Description

* Not illustrated



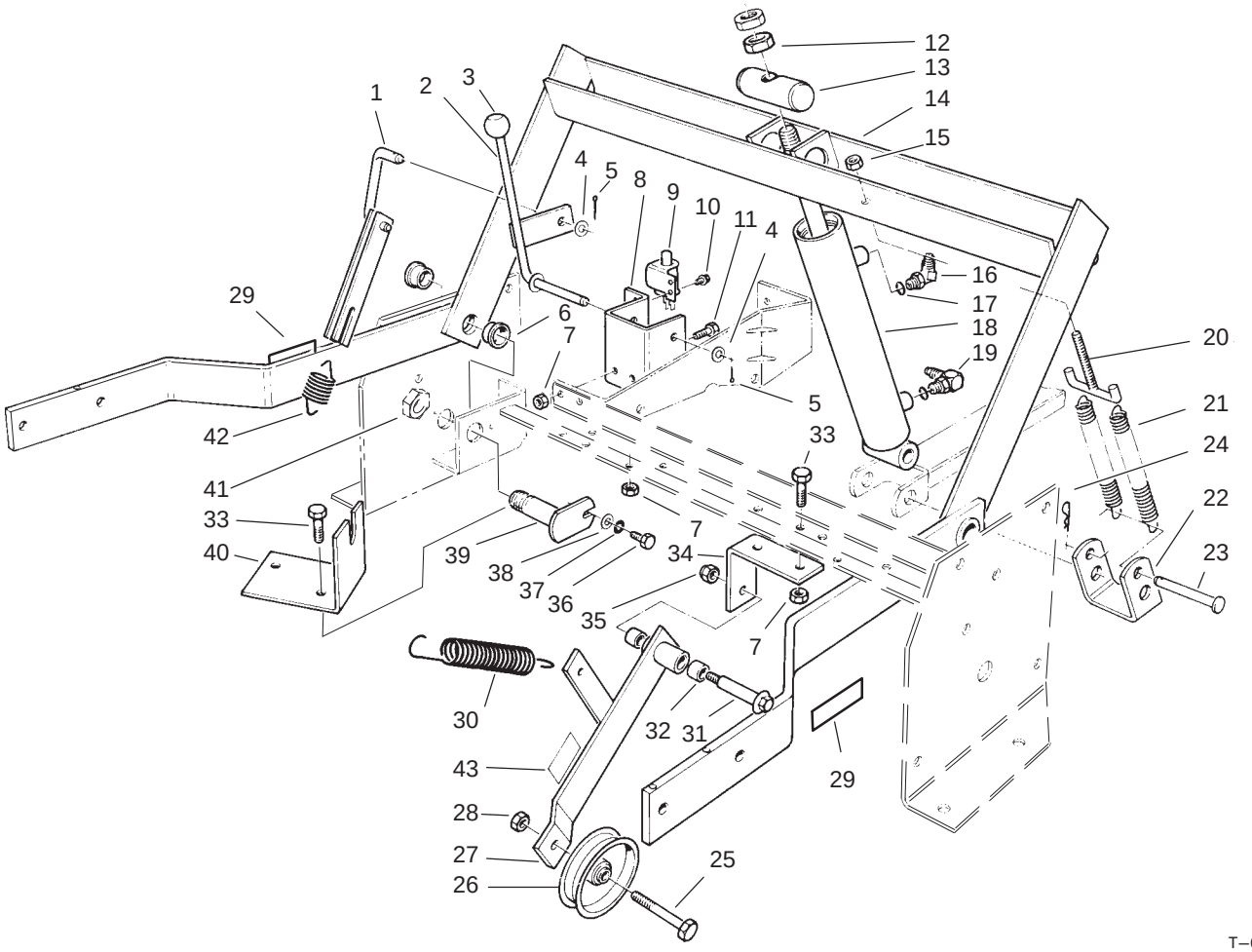
T–0075

Vavle Assembly No. 54–0090

Ref. No.	Part No.	Qty.	Description
1	54–0260	1	Spool
2	22–8500	2	O–Ring
3	22–8380	2	Retainer–Spring
4	22–8410	1	Spring
5	27–5200	1	Spacer
6	22–8480	1	Ring–Retaining
7	22–8490	1	Ring–Retaining
8	55–3640	1	Seat–Relief
☆9		1	Guide
☆10		1	Plunger
☆11		1	Spring
☆12		1	O–Ring
☆13		1	Cap–PV Adjustment
☆14		1	Nut
☆15		1	Screw–Set
☆16		1	Stat O Seal
☆17		1	Nut – Acorn
18	28–1120	1	Plug
19	22–8330	1	Plug
20	237–42	2	O–Ring
21	22–8340	1	Spring
22	22–8350	1	Ball
23	22–8370	1	Seat–Check Valve
24	22–8360	1	Pin–Cam
☆25		1	Body
26	55–3650	1	Plug

Ref. No.	Part No.	Qty.	Description
*	55–3630	1	Adjustable Relief Valve (Incl. Ref. #9–17)

* Not illustrated
☆ Not serviced separately

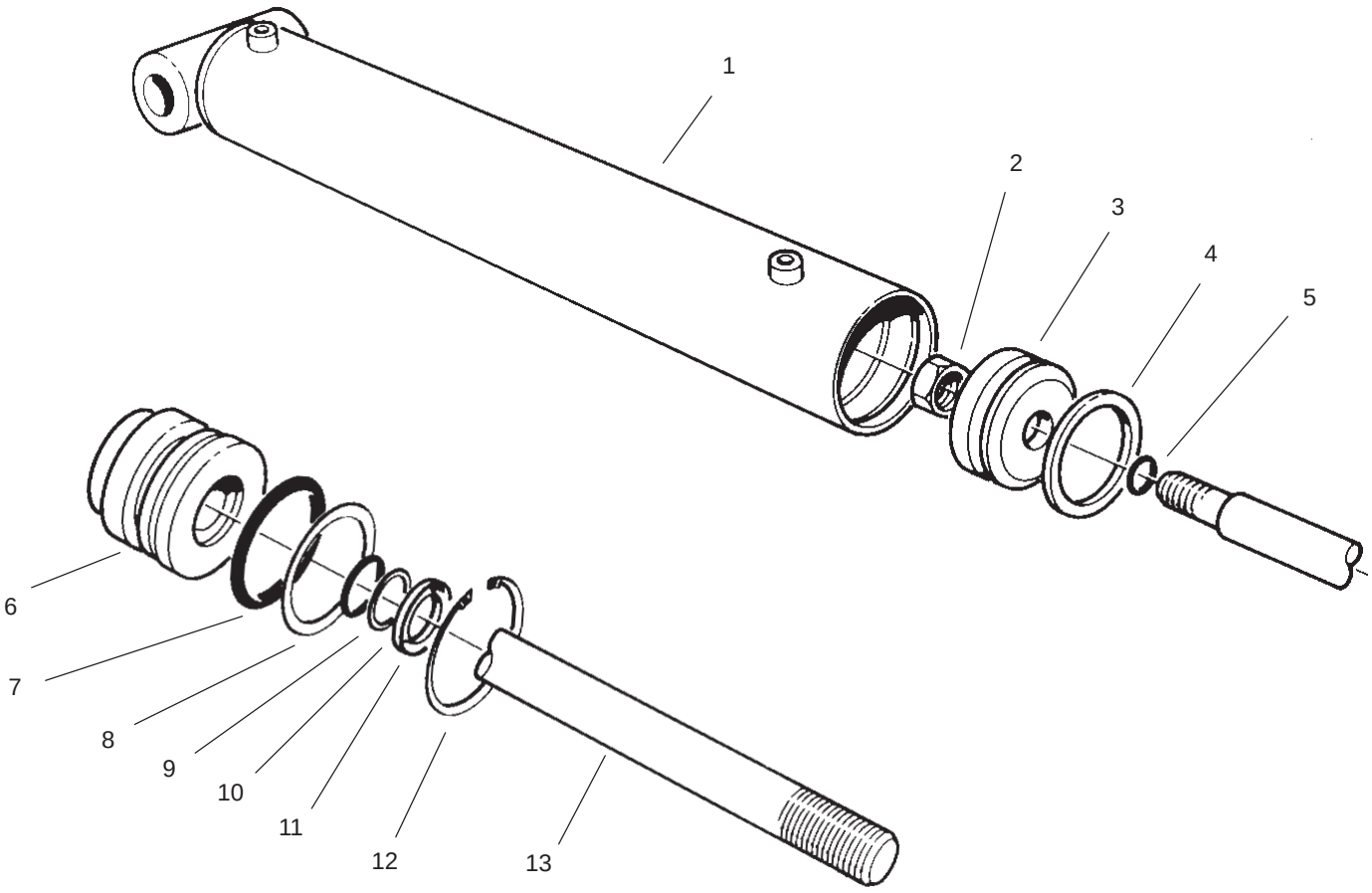


T–0076

Parking Brake and Lift Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	54–2120	1	Link–Parking Brake
2	54–2110	1	Lever–Brake
3	233–37	1	Knob
4	3256–24	2	Washer–Flat
5	3272–10	2	Pin–Cotter
6	27–9080	4	Bushing
7	3296–29	6	Nut
8	54–1270	1	Bracket–Parking Brake
9	55–7120	1	Switch–Brake
10	32144–1	2	Screw–HWHTF
11	322–6	2	Screw
12	3220–6	2	Nut–Jam
13	54–2000	1	Pin–Pivot
14	66–1570	1	Frame–Lift (Incl. Ref. #6)
15	32153–3	2	Nut
16	353–431	1	Fitting–45°
17	237–78	2	O–Ring
18	54–0150	1	Cylinder–Lift
19	353–375	1	Fitting–90°
20	56–3320	1	T–Hook
21	56–2760	2	Spring–Extension
22	56–3370	2	Bracket–Spring
23	283–55	1	Pin–Clevis
24	3290–355	1	Pin–Cotter

Ref. No.	Part No.	Qty.	Description
25	323–10	1	Screw
26	36–3220	1	Pulley–Idler
27	12–1109	1	Lever–Idler (Incl. Ref. #43)
28	3296–44	1	Nut
29	106–0697	2	Decal–Warning
30	54–1170	1	Spring–Extension
31	27–6230	1	Bolt–Shoulder
32	256–154	2	Bushing
33	322–4	4	Screw
34	55–7310	1	Bracket–Idler
35	3296–6	1	Nut
36	321–2	2	Screw
37	3253–3	2	Washer
38	3256–1	2	Washer
39	54–2100	2	Pin–Pivot
40	56–6920	1	Bracket–Cable, Extension
41	3296–15	2	Nut
42	54–0960	1	Spring–Parking Brake
43	55–4300	1	Decal



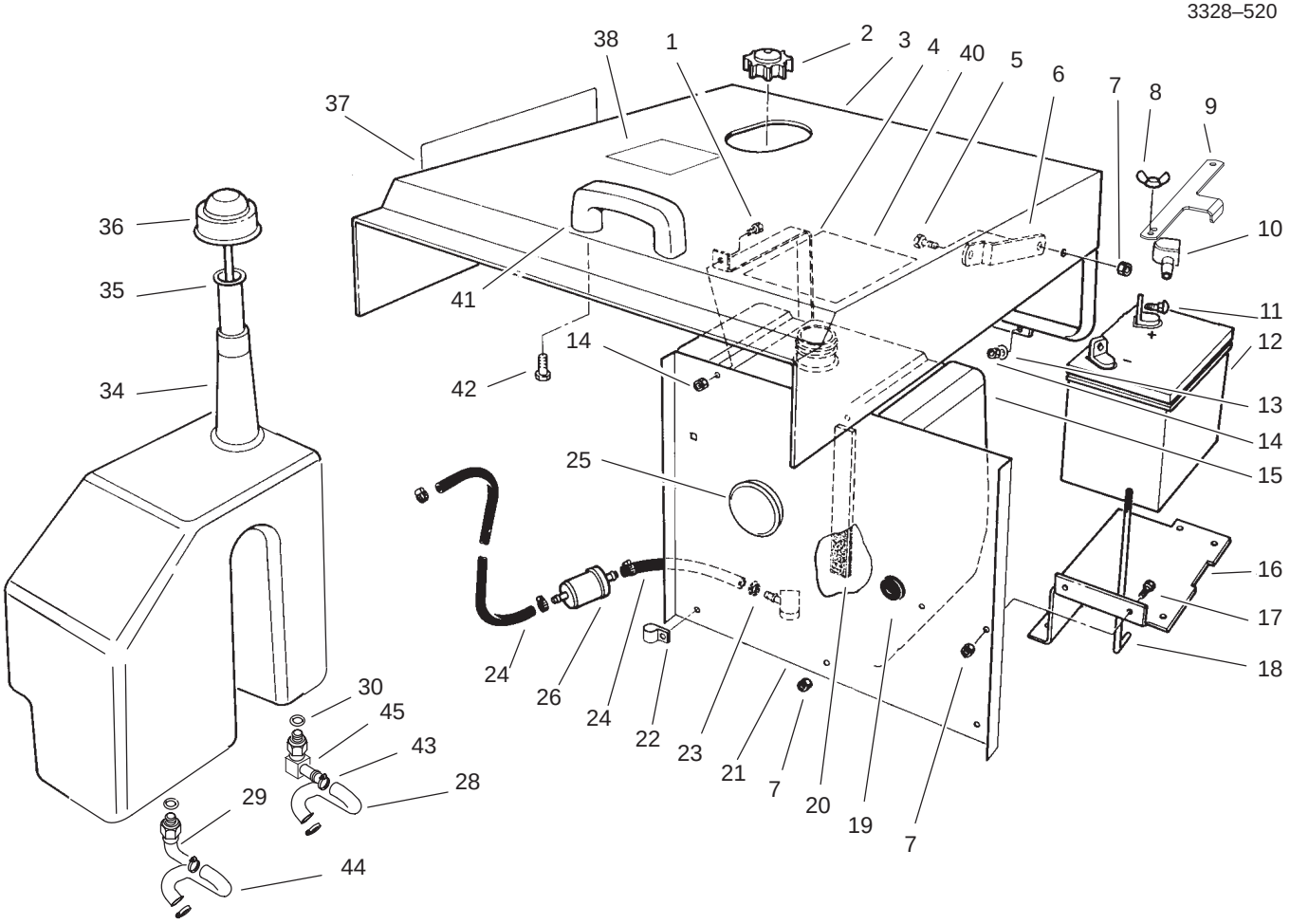
T–0077

Hydraulic Lift Cylinder Assembly 54–0150

Ref. No.	Part No.	Qty.	Description
☆1		1	Barrel
2	32152–10	1	Nut–Lock
3	54–0300	1	Piston
☆4		1	Uniring
☆5		1	O–Ring
6	54–0310	1	Head
☆7		1	O–Ring
☆8		1	Washer–Backup
☆9		1	O–Ring
☆10		1	Washer–Backup
☆11		1	Seal–Dust
12	43–5220	1	Ring–Retaining
13	54–0280	1	Shaft
*	54–0290	1	Seal Repair Kit (Incl. Ref. #4, 5 & 7–11)

Ref. No.	Part No.	Qty.	Description

* Not illustrated
☆ Not serviced separately



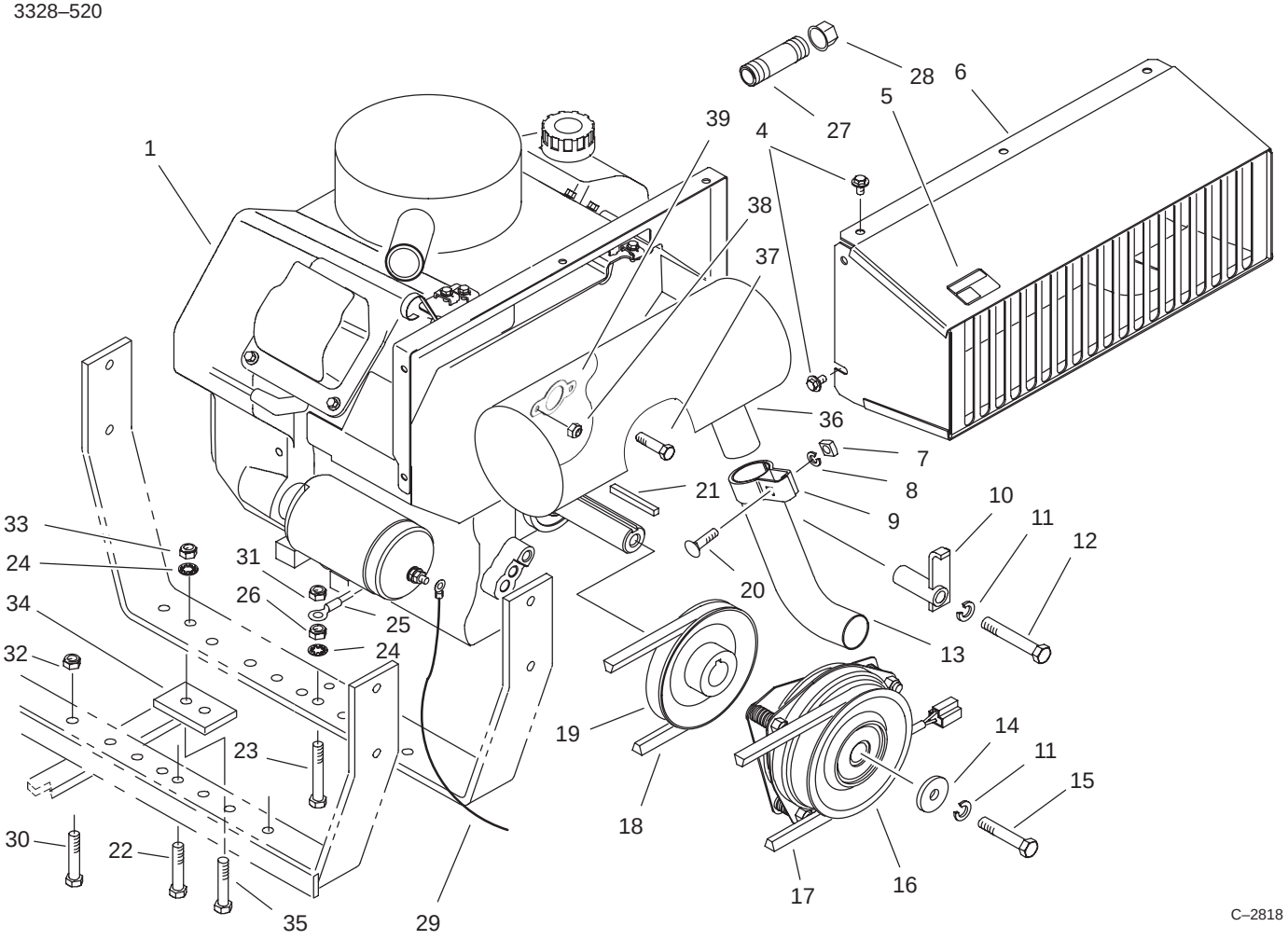
C–1630

Hood, Fuel Tank and Hydraulic Reservoir Assembly

Ref. No.	Part No.	Qty.	Description
1	321–3	2	Screw–HH
2	55–3570	1	Cap–Fuel
3	14–4109	1	Hood
4	54–1880	2	Strap–Tank, Fuel
5	322–3	2	Screw–HH
6	54–1860	2	Stop–Hood, Upper
7	3296–29	9	Nut–Hex
8	32103–22	3	Nut–Wing
9	54–1260	1	Clamp–Battery
10	77–0981	1	Boot–Terminal
11	3229–1	2	Bolt–Carriage
12	82–4640	1	Battery
13	3256–1	4	Washer
14	3296–42	8	Nut–Lock
15	62–4040	1	Tank–Fuel
16	54–1850	1	Support–Battery
17	322–4	2	Screw–HH
18	12–5950	1	Rod–Support, Battery
19	237–100	1	Grommet
20	54–1890	2	Foam–Tank
21	92–6267	1	Shield–Heat
22	2412–100	3	R–Clamp
23	2412–108	4	Clamp–Hose
24	92–6283	2	Hose–Fuel
25	92–6274	1	Plug–Cap
26	94–9695	1	Filter–Fuel

Ref. No.	Part No.	Qty.	Description
28	98–2853	1	Hose–Hydraulic
29	94–7691	1	Adapter–Hydraulic (Incl. Ref. #30)
30	237–80	2	O–Ring
34	98–0781	1	Reservoir–Hydraulic
35	29–0590	1	Screen
36	36–4950	1	Cap–Oil
37	106–0696	2	Decal–Groundsmaster 120
38	92–6291	1	Decal–Refueling
40	92–6288	1	Decal–Service
41	65–5100	1	Handle
42	46–8091	2	Screw
43	2412–129	4	Clamp–Hose
44	98–2852	1	Hose–Hydraulic
45	98–2876	1	Adapter–Hydraulic (Incl. Ref. #30)
*	68–7330	1	Decal–Danger

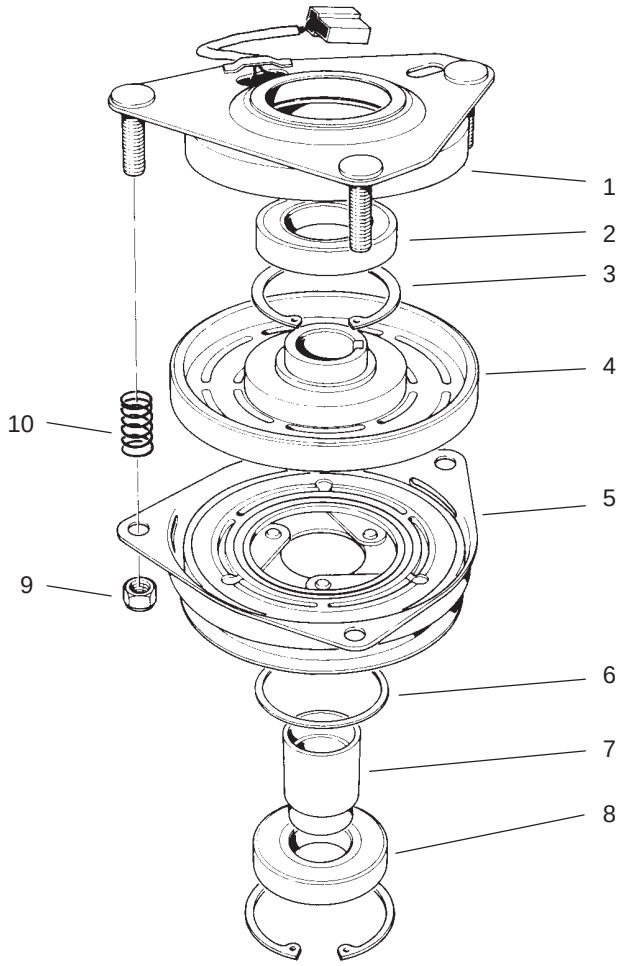
* Not illustrated



Engine Assembly

Ref. No.	Part No.	Qty.	Description
1	105–3106	1	Engine–Kohler CH20QS–64678
4	48–7610	5	Screw
5	106–0699	1	Decal–Surface, Hot
6	92–6260	1	Duct–Engine
7	3217–6	1	Nut–Square
8	3253–4	1	Washer–Lock
9	55–8660	1	Clamp Assembly (Incl. Ref. #7, 8 & 20)
10	54–2160	1	Bracket–Anchor
11	3253–6	2	Washer–Lock
12	324–11	1	Screw–HH
13	54–2290	1	Pipe–Exhaust
14	44–8160	1	Washer–Flat
15	3212–24	1	Screw–HH
16	54–0220	1	Assembly–Clutch
17	54–1380	1	V–Belt
18	54–1390	1	V–Belt
19	54–2330	1	Pulley–Engine
20	3230–3	1	Bolt–Carriage
21	5–0930	1	Key
22	323–10	1	Screw–HH
23	323–12	1	Screw–HH
24	3254–6	1	Washer–Lock, Int
25	92–6287	1	Wire–Ground
26	3296–39	2	Nut–Lock

Ref. No.	Part No.	Qty.	Description
27	289–48	1	Nipple–Pipe
28	288–10	1	Cap–Pipe
29	28–3894	1	Wire–Positive
30	323–9	2	Screw
31	3290–357	1	Nut–Wizz
32	32128–21	2	Nut–Lock
33	3256–4	1	Washer–Flat
34	98–8000	1	Guard–Tank
35	323–7	1	Screw–HH
36	105–3102	1	Muffler
37	33104–020	1	Screw
38	96–6780	4	Nut–Lock
39	93–0350	2	Gasket

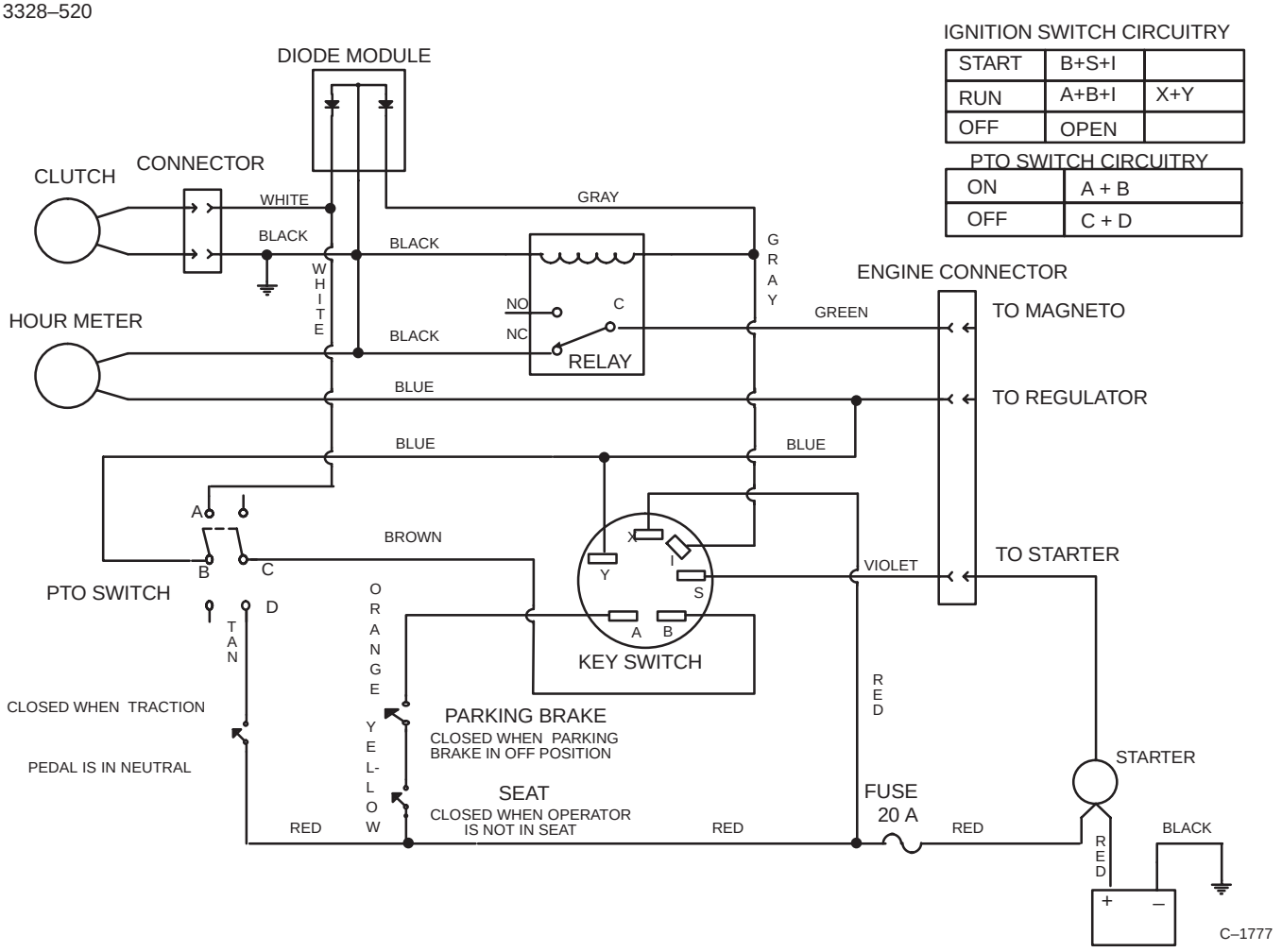


T–0080

Clutch Assembly No. 54–0220

Ref. No.	Part No.	Qty.	Description
1	54–0230	1	Field Assembly (Incl. Ref. #2 & 3)
2	251–292	1	Bearing–Field
3	44–8310	2	Ring–Retaining
4	44–8360	1	Field Coil–Rotor & Bearing (Incl. Ref. #1)
5	44–8370	1	Armature & Pulley Assembly (Incl. Ref. #3, 6, 7 & 8)
6	44–8330	1	Spacer–Bearing
7	44–8340	1	Collar–Bearing
8	251–291	1	Bearing–Pulley
9	3296–6	3	Nut–Lock
10	44–8320	3	Spring

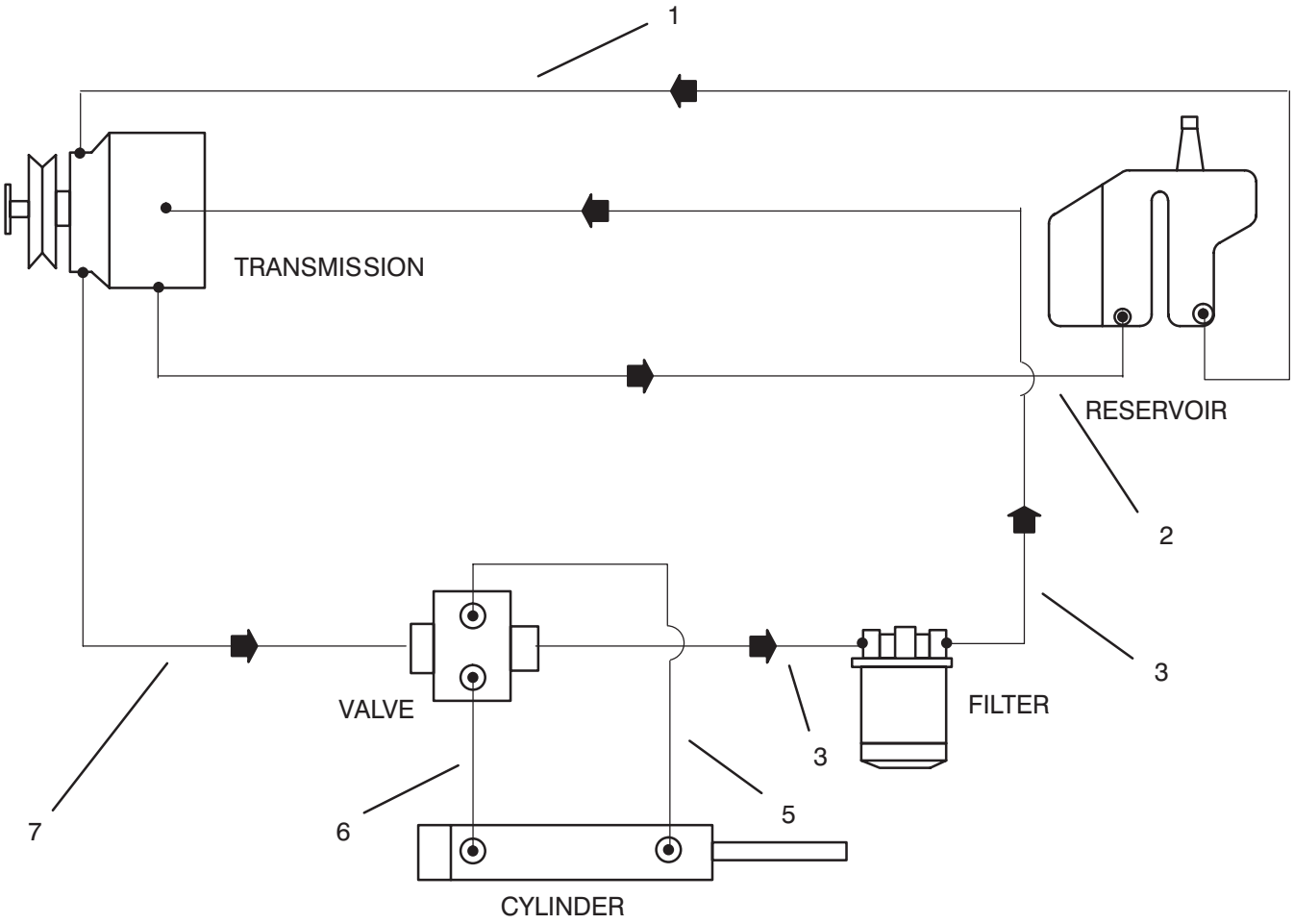
Ref. No.	Part No.	Qty.	Description



Electrical Schematic

Ref. No.	Part No.	Qty.	Description
*	94–5848	1	Harness–Wire
*	94–5849	1	Diode

Ref. No.	Part No.	Qty.	Description

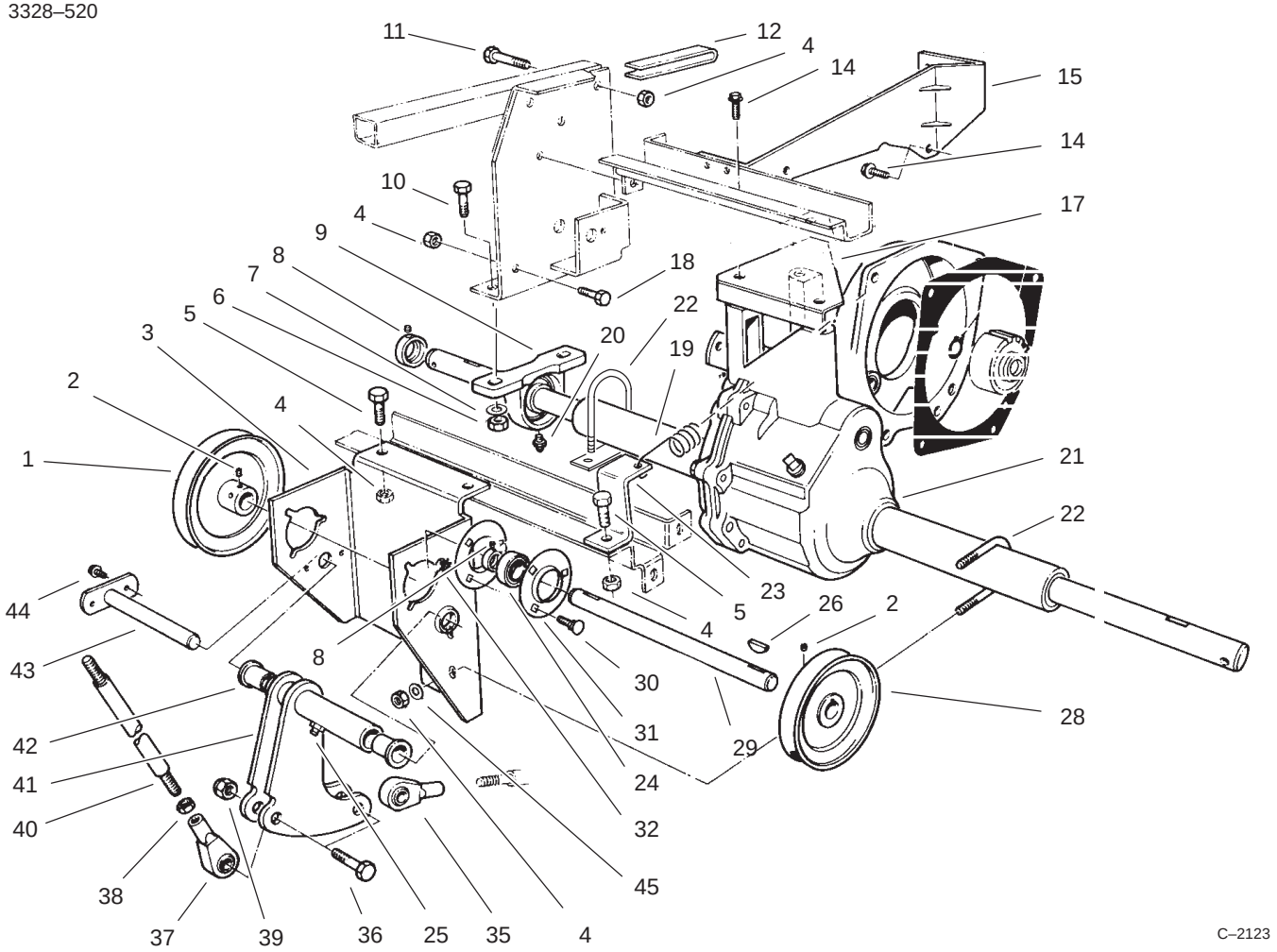


T–0084

Hydraulic Schematic

Ref. No.	Part No.	Qty.	Description
1	98–2852	1	Hydraulic Hose ASM (Reservoir to Transmission)
2	98–2853	1	Hydraulic Hose ASM
3	98–2851	2	Hydraulic Hose ASM (Filter to Transmission)
5	54–2610	1	Hydraulic Hose ASM (Cylinder to Valve)
6	54–2620	1	Hydraulic Hose ASM (Cylinder to Valve)
7	54–2590	1	Hydraulic Hose ASM (Transmission to Valve)

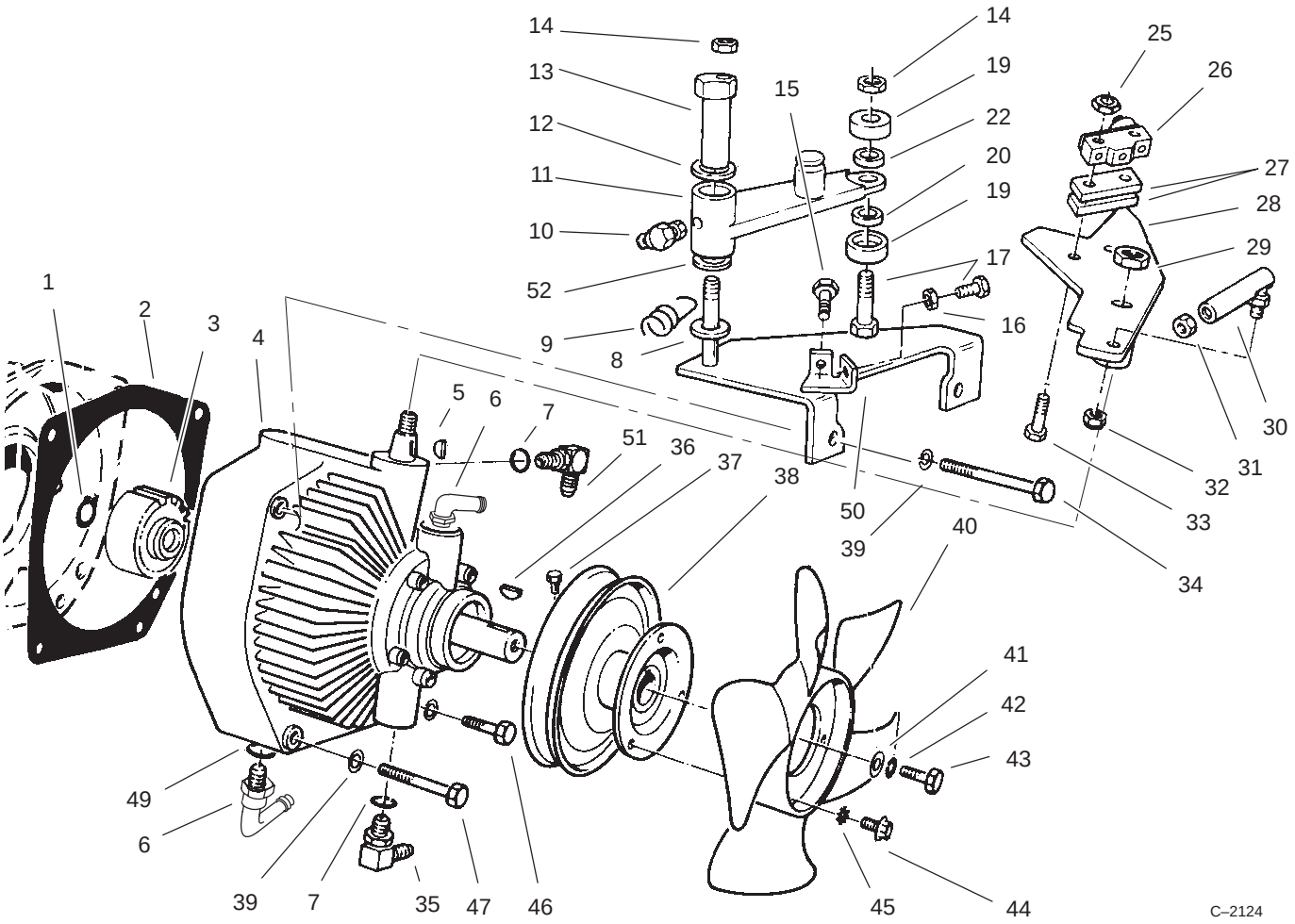
Ref. No.	Part No.	Qty.	Description



Differential Assembly

Ref. No.	Part No.	Qty.	Description
1	54–2390	1	Pulley–Output
2	3241–1	4	Screw–Set
3	60–9130	1	Bracket–Jackshaft
4	3296–29	A/R	Nut–Lock
5	322–4	6	Screw–HH
6	3296–44	4	Nut–Lock
7	3256–3	4	Washer–Flat
8	3245–35	4	Screw–Set
9	72–4060	2	Bearing Assembly
10	323–8	5	Screw–HH
11	322–10	4	Screw–HH
12	80–3750	2	Spacer
14	3234–1	5	Screw–HHF
15	59–1620	1	Bracket–Transaxle
17	60–8990	1	Plate–Transaxle
18	322–4	6	Screw–HH
19	76–9430	1	Spring–Extension
20	302–2	2	Fitting–Grease
21	98–2850	1	Differential Asm
22	54–8970	2	U–Bolt
23	92–6273	1	Bracket–Spring
24	251–288	2	Bearing w/Collar
25	302–49	1	Fitting–Grease
26	3257–5	3	Key–Woodruff
28	54–2380	1	Pulley–Input
29	54–1600	1	Jackshaft

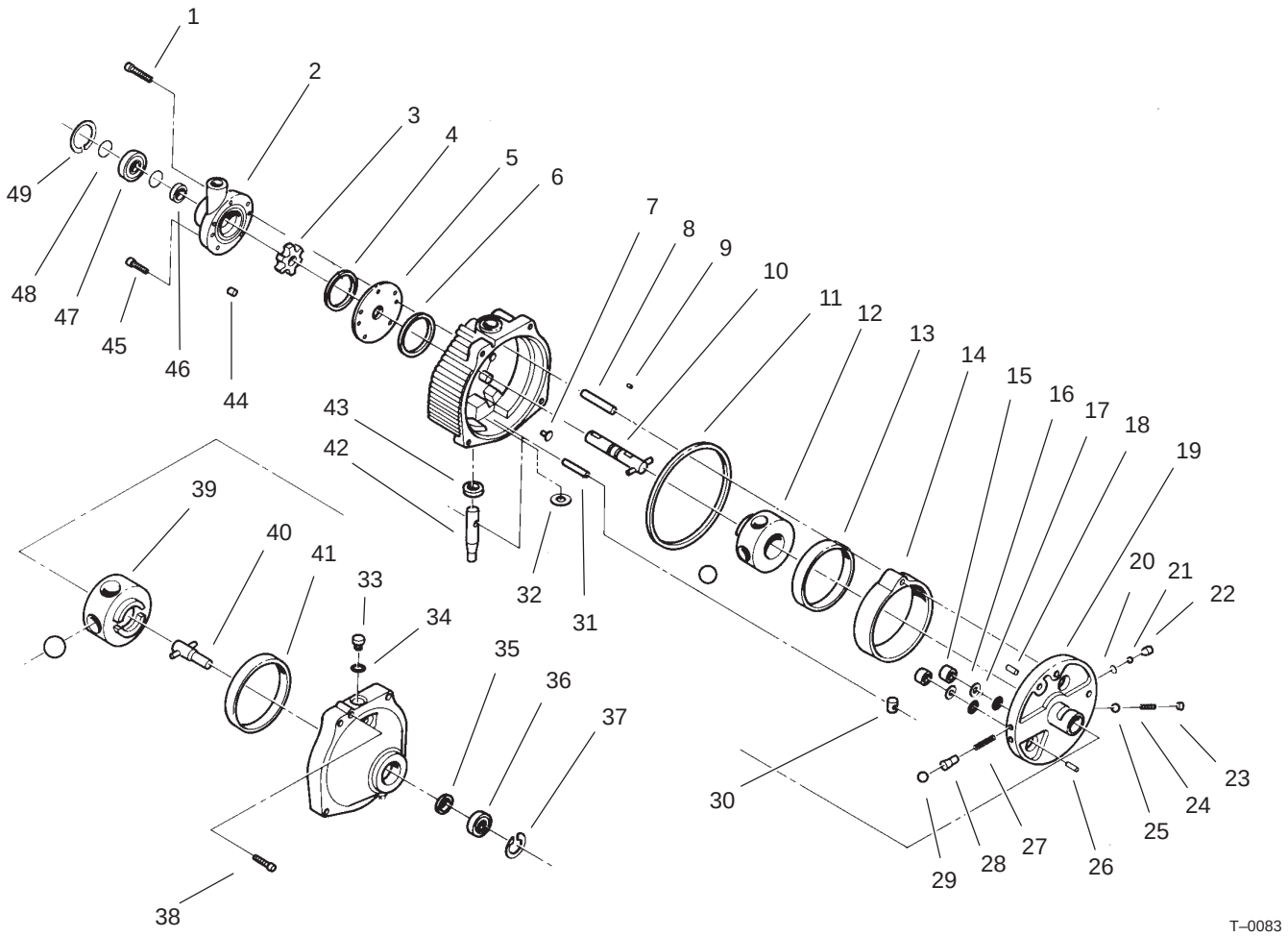
Ref. No.	Part No.	Qty.	Description
30	3230–1	6	Bolt–Carriage
31	251–341	4	Flange–Bearing
32	32149–1	6	Nut–Lock
35	251–304	1	End–Rod
36	324–7	2	Screw–HH
37	251–305	1	End–Rod
38	3220–4	2	Nut–HJ
39	3296–48	2	Nut–Lock
40	54–1490	1	Rod–Steering
41	54–2060	1	Bellcrank Assembly (Incl. Ref. 42)
42	46–6680	2	Bushing–Flanged
43	59–1470	1	Shaft–Bellcrank
44	46–8560	2	Screw–HWHTF
45	3256–23	2	Washer–Flat



Transmission Assembly

Ref. No.	Part No.	Qty.	Description
1	32120–64	1	Ring–Snap
2	55–4320		Gasket
3	54–0320	1	Gear
4	98–0777	1	Transmission–Hydrostatic
5	3257–24	1	Key–Woodruff
6	94–7691	2	Adapter
7	237–42	2	O–Ring
8	3256–68	1	Washer
9	76–9430	1	Spring–Extension (Ref.)
10	302–60		Fitting–Grease 90°
11	92–6289	1	Swing Arm Assembly (Incl. Ref. 10 & 52)
12	3–6498	1	Washer
13	76–8640	1	Stud–Traction
14	3296–29	A/R	Nut–Lock
15	322–6	2	Screw–HH
16	3217–6	4	Nut
17	322–7	1	Screw–HH
19	251–307	2	Bearing
20	92–6290	1	Spacer
22	75–5470	1	Spacer–Bearing
25	3296–9	2	Nut
26	29–6163	1	Switch
27	75–4130	2	Spacer

Ref. No.	Part No.	Qty.	Description
28	92–6269	2	Lever–Traction
29	3296–25	1	Nut
30	2411–34	1	Joint–Ball
31	3220–1	1	Nut–HJ
32	3296–3	1	Nut–Lock
33	3250–46	2	Screw
34	323–14	2	Screw–HH
35	353–511	1	Fitting–Hydraulic, 90° (Incl. Ref. #7)
36	3257–5	3	Key–Woodruff
37	3241–2	2	Screw–Set
38	54–0930	1	Pulley–Transmission
39	3253–5	4	Washer–Lock
40	54–0240	1	Fan
41	3256–55	1	Washer
42	3253–3	1	Washer–Lock
43	321–2	1	Screw–HH
44	32144–19	3	Screw
45	3255–5	3	Washer–Lock
46	323–13	1	Screw–HH
47	323–16	1	Screw–HH
49	237–80	2	O–Ring
50	92–6270	1	Plate–Traction
51	340–98	2	Fitting–Hydro
52	256–113	2	Bushing–Flange

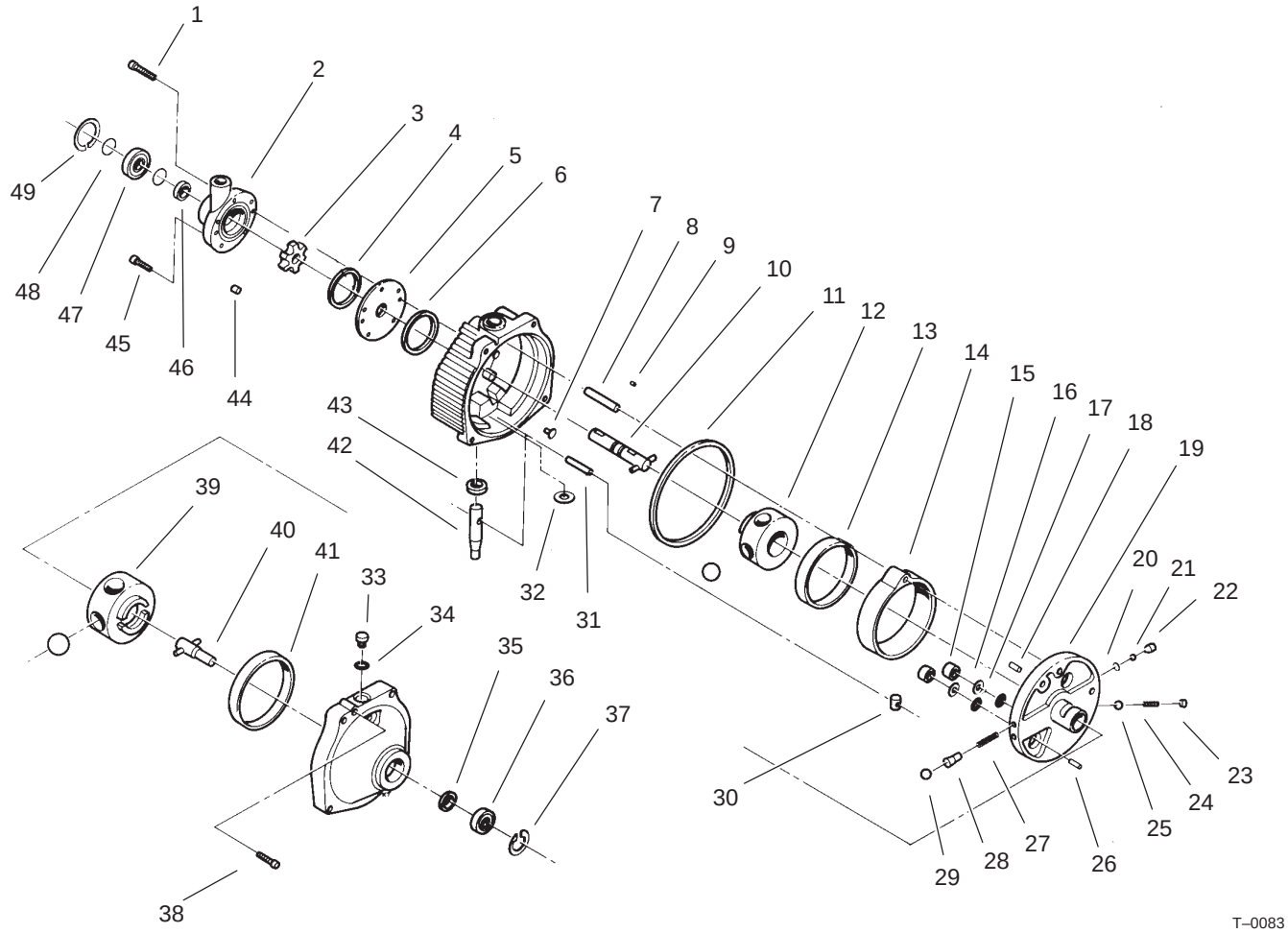


Hydrostatic Transmission Assembly

Ref. No.	Part No.	Qty.	Description
1	56–2800	1	Screw–HSH
2	56–2830	1	Charge Pump Assembly (Incl. Ref. #1)
3	56–3120	1	Carrier
4	56–2850	1	Ring–Seal
5	56–2860	1	Plate–Pump
6	56–2870	1	Ring–Seal
7	56–2880	2	Button
8	56–2890	1	Pin–Dowel
9	56–2900	1	Pin–Drive
10	56–2910	1	Input Shaft Assembly
11	56–2920	1	Ring–Seal
12	56–2930	1	Pump Rotor & Ball Assembly
☆13		1	Race–Pump
14	56–2940	1	Cam Ring Assembly (Incl. Ref. #13)
15	56–2950	2	Piston
16	56–2960	2	Ring–Backup
17	56–2970	2	O–Ring
18	56–2980	1	Pin–Coil
19	56–2990	1	Pintle Assembly (Incl. Ref. #15–18, 20 22–29)
20	56–3000	2	Ring–Retaining

Ref. No.	Part No.	Qty.	Description
21	56–3010	2	Ball
22	56–3020	2	Body–Valve, Check
23	56–3050	1	Plug–Valve, Relief
24	56–3040	1	Spring–Valve, Relief
25	56–3030	1	Ball
26	56–3060	1	Pin–Dowel
27	56–3180	2	Spring–Valve
28	56–3200	2	Body–Valve
29	56–3210	2	Ball
30	56–3170	1	Insert–Ring, Cam
☆31		1	Dowel
☆32		1	Washer–Shaft, Control
33	56–3250	1	Plug Assembly (Incl. Ref. #34)
34	56–3260	1	O–Ring
35	56–3270	1	Seal–Oil
36	56–3280	1	Bearing–Output
37	56–3290	1	Ring–Retaining
38	56–3300	2	Screw–HSH
39	56–3220	1	Motor Rotor & Ball Assembly
40	56–3230	1	Output Shaft Assembly
41	56–3240	1	Race – Motor
42	56–3140	1	Control Shaft Kit (Incl. Ref. #31 & 32)

☆ Not serviced separately

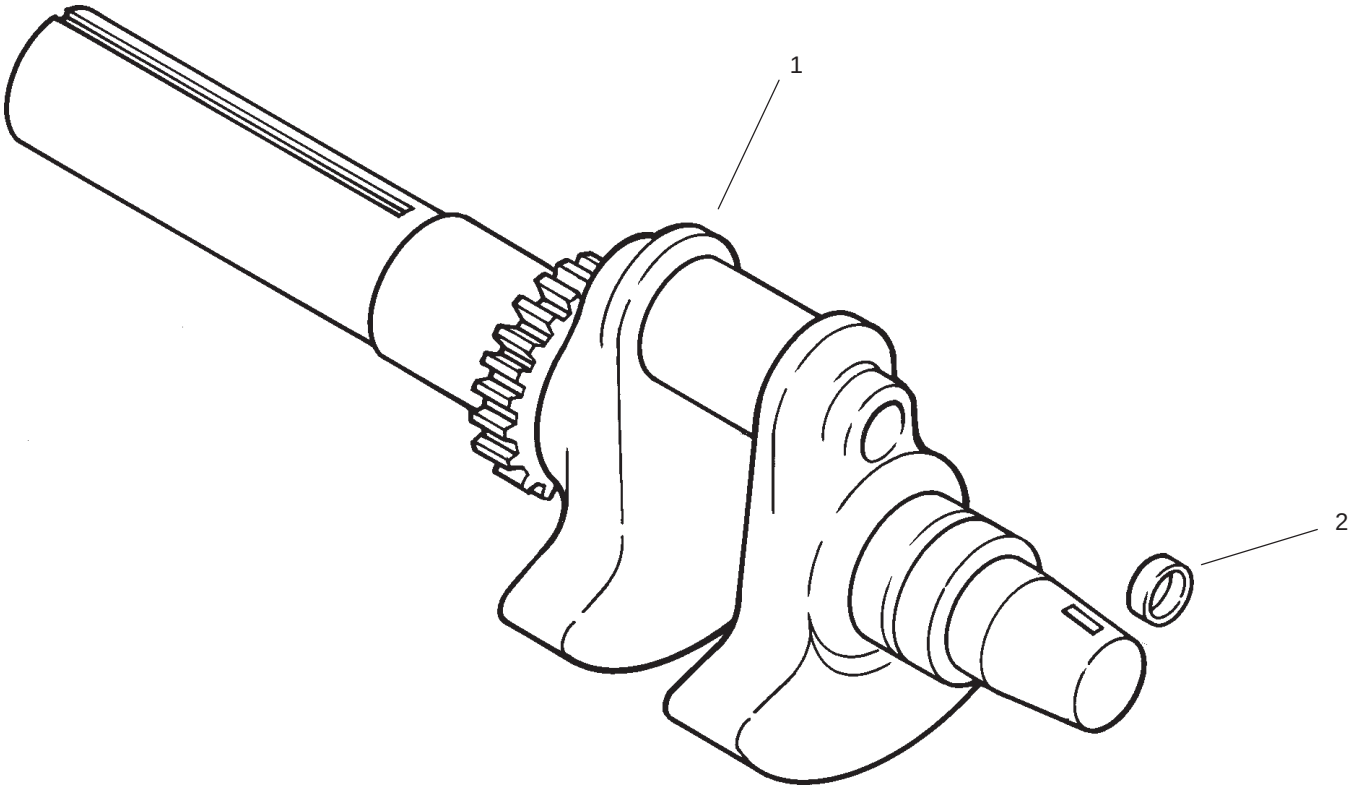


Hydrostatic Transmission Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
43	56–3130	1	Seal–Oil
44	56–3110	6	Pin–Roll
45	56–3100	4	Screw–HSH
46	56–2820	1	Seal–Oil
47	56–2810	1	Bearing–Input
48	56–3090	2	Ring–Retaining
49	56–3080	1	Ring–Retaining
*	56–3310	1	Kit–Overhaul Seal (Incl. Ref. #4, 6, 11, 16,17, 34, 35, 43 & 46)

Ref. No.	Part No.	Qty.	Description

* Not illustrated

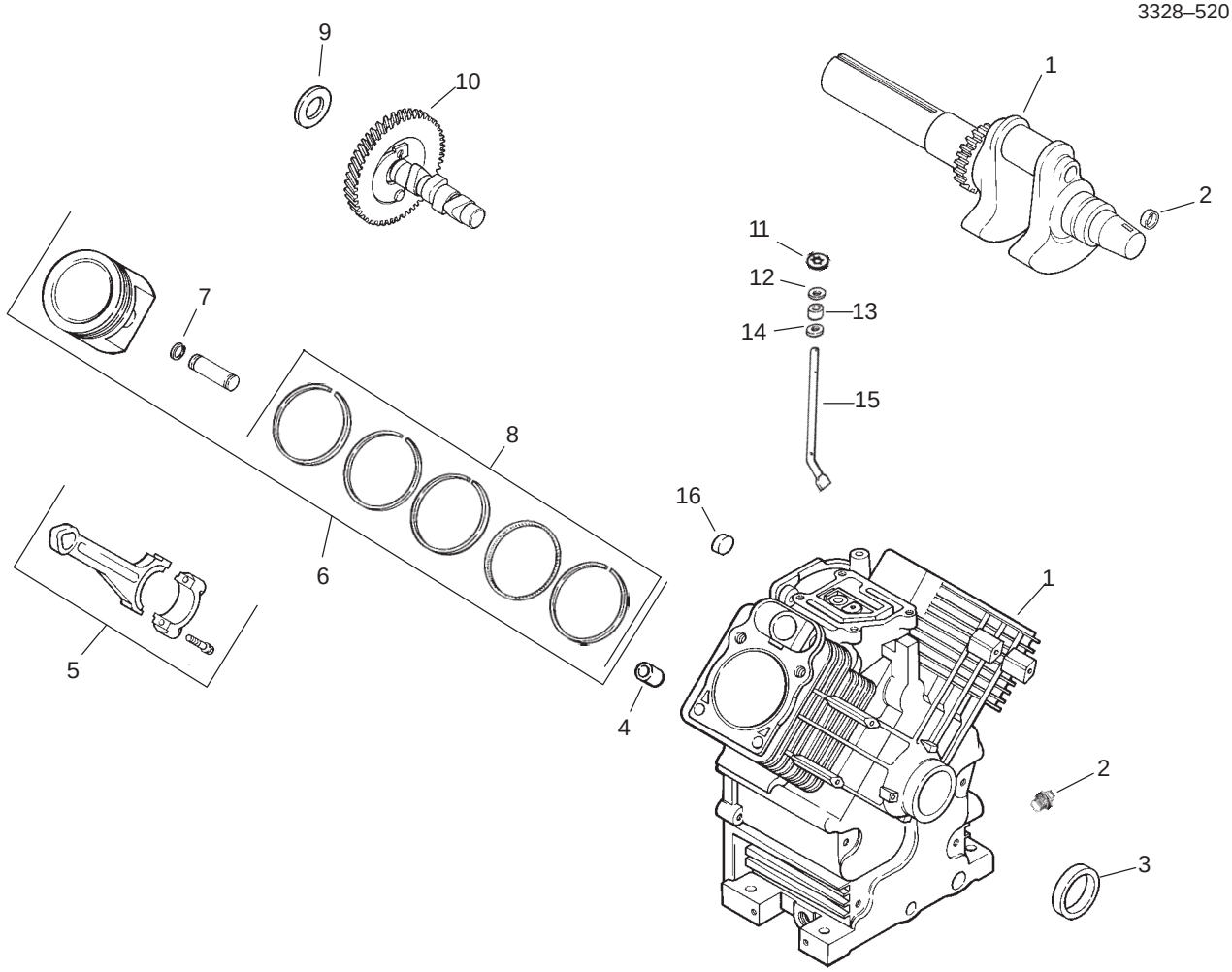


Crankshaft Assembly
Kohler Engine CH20QS–64678

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

Ref. No.	Part No.	Qty.	Description

Obtain Parts From Kohler

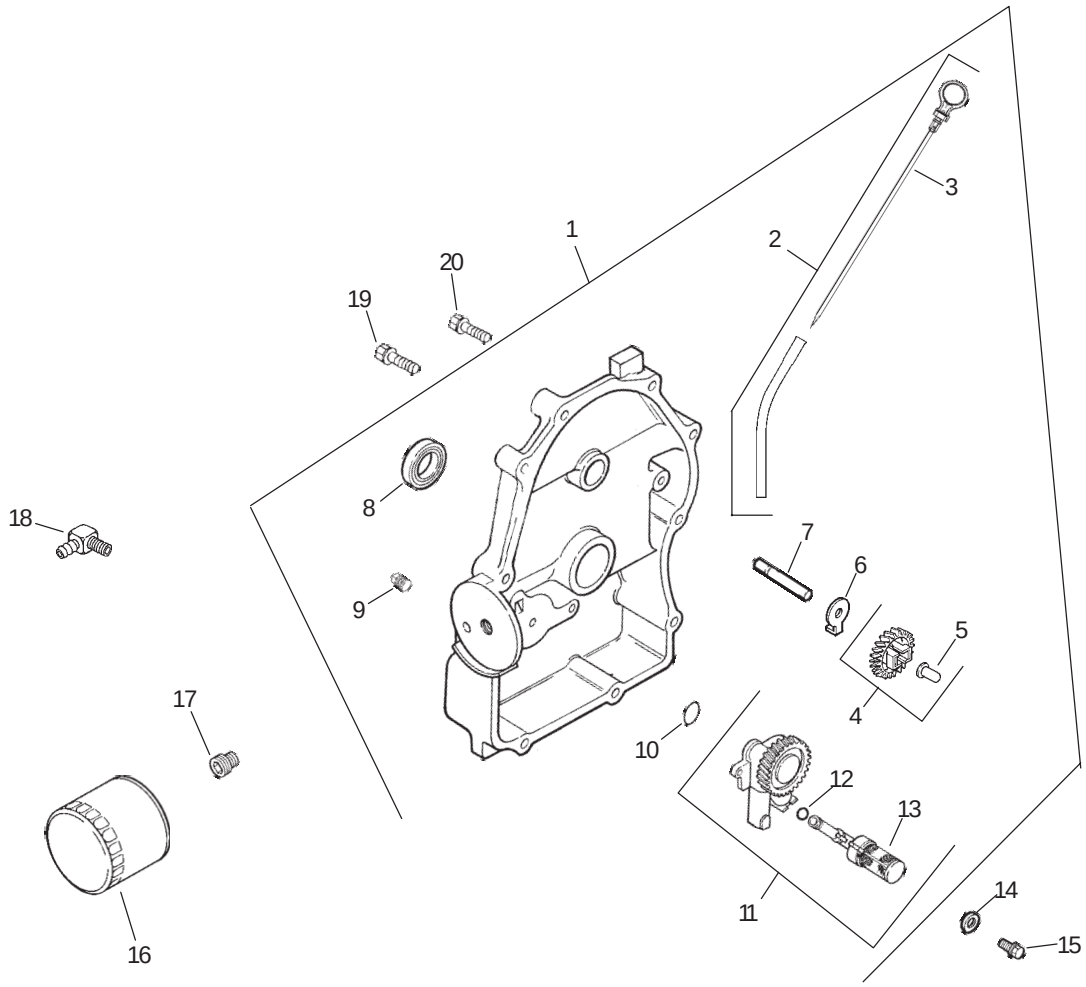


Crankcase Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1		1	Crankcase (Use: Miniblock 24 782 15)
2	25 139 57–S	2	Plug–SQH
3	24 032 01–S	1	Seal–Front, Oil
4	24 380 13–S	6	Dowel–Locating
5	24 067 13–S	2	Rod–Connecting (STD)
5	24 067 14–S	2	Rod–Connecting (.025)
6	24 874 17–S	2	Set–Piston w/ Ring (STD) (Incl. Ref.#7&8)
6	24 874 14–S	2	Set–Piston w/ Ring (.08)
6	24 874 18–S	2	Set–Piston w/ Ring (.25)
6	24 874 19–S	2	Set–Piston w/ Ring (.50)
7	24 018 01–S	4	Retainer–Pin, Piston
8	24 108 11–S	2	Set–Ring (STD & .08)
8	24 108 12–S	2	Set–Ring (.25)
8	24 108 13–S	2	Set–Ring (.50)
9	12 422 09–S	A/R	Shim–Camshaft, Red
9	12 422 13–S	A/R	Shim–Camshaft, Black
9	12 422 07–S	A/R	Shim–Camshaft, White
9	12 422 08–S	A/R	Shim–Camshaft, Blue

Ref. No.	Part No.	Qty.	Description
9	12 422 10–S	1	Shim–Camshaft, Yellow
9	12 422 11–S	A/R	Shim–Camshaft, Green
9	12 422 12–S	A/R	Shim–Camshaft, Gray
10	24 012 10–S	1	Camshaft
11	24 018 09–S	1	Retainer–Ring
12	M–931010–S	1	Washer–Nylon (top)
13	28 032 09–S	1	Seal–Cross Shaft, Governor
14	24 468 15–S	1	Washer (bottom)
15	24 144 33–S	1	Shaft–Cross, Governor
16	52 139 09–S	1	Plug–Cup

Obtain Parts From Kohler

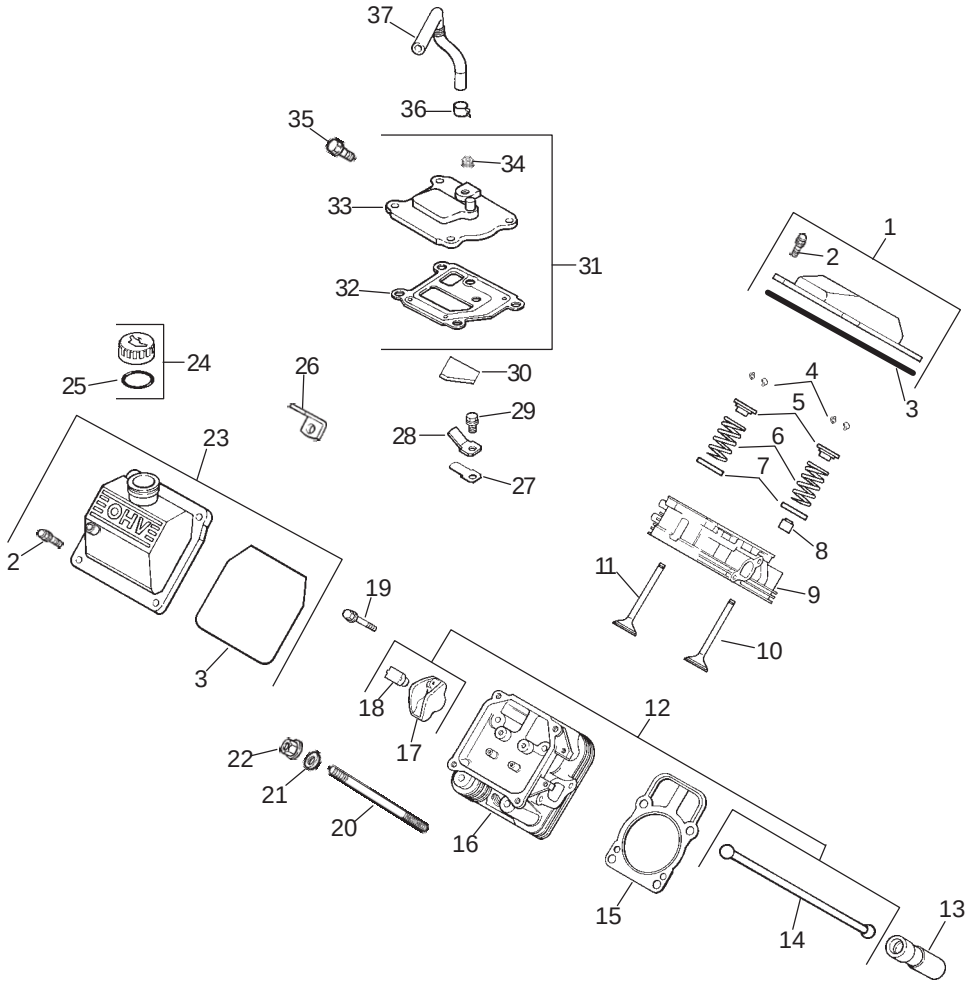


Oil Pan/Lubrication Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	24 009 83–S	1	Kit–Plate, Closure (Incl. Ref.# 2–13)
2	24 755 121–S	1	Kit–Dipstick and Tube (Incl. Ref. # 3)
3	24 038 10–S	1	Dipstick
4	24 043 12–S	1	Kit–governor gear w/ pin (Incl. Ref. # 5)
5	12 380 01–S	1	Pin–Regulating, Governor
6	52 448 02–S	1	Tab–Locking
7	12 144 02–S	1	Shaft–Gear, Governor
8	52 032 08–S	1	Seal–Oil (PTO end)
9	25 139 60–S	1	Plug–Pipe, Allen Head
10	24 153 08–S	1	O–Ring
11	24 393 10–S	1	Oil Pump ASM (Incl. Ref. # 12 & 13)
12	24 153 01–S	1	O–Ring–Pick–Up, Oil
13	24 381 04–S	1	Pick–up–Oil
14	M–631005–S	2	Washer–Plain
15	M–645025–S	2	Screw–HF
16	52 050 02–S	1	Filter–Oil
17	24 136 01–S	1	Nipple–Oil Filter
18	25 155 02–S	2	Connector–Hose

Ref. No.	Part No.	Qty.	Description
19	24 086 16–S	9	Screw–HF
20	24 086 17–S	1	Screw–HF

Obtain Parts From Kohler

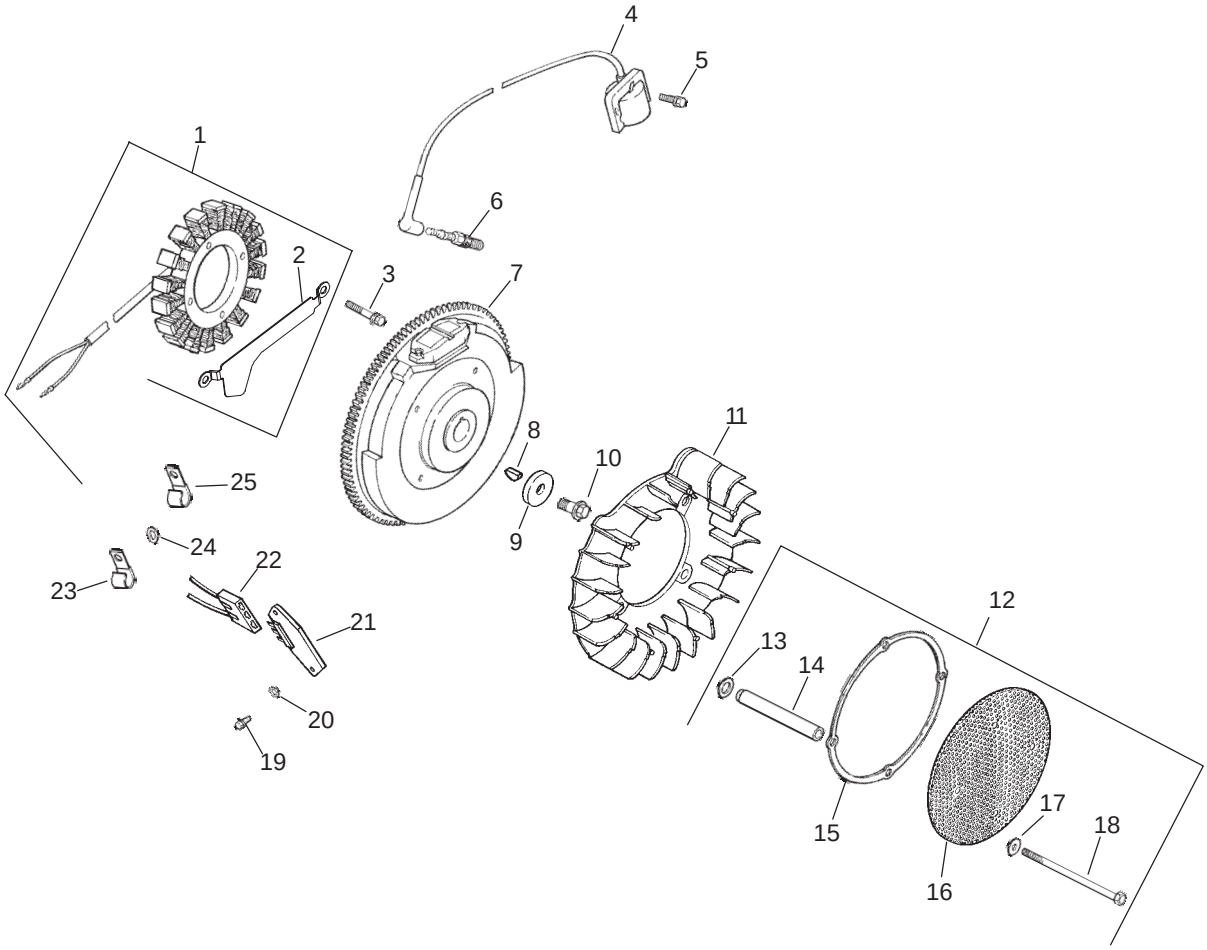


Head/Valve/Breather Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	24 755 74–S	1	Kit–Valve Cover, Plain (Incl. Ref. # 2 & 3)
2	24 086 32–S	4	Screw–Shoulder
3	24 153 16–S	1	O–Ring–Cover, Valve
4	12 755 03–S	4	Kit–Retainer
5	12 173 01–S	4	Cap–Spring, Valve
6	24 089 02–S	4	Spring–Valve
7	235011–S	4	Retainer–Spring
8	66 032 05–S	2	Seal–Stem, Valve
9	24 318 68–S	1	#1 Cylinder Head ASM
10	24 017 01–S	2	Valve–Intake (STD)
10	24 017 02–S	2	Valve–Intake (.25)
11	24 016 01–S	2	Valve–Exhaust (STD)
11	24 016 02–S	2	Valve–Exhaust (.25)
12	24 755 66–S	1	Kit–Train, Valve (Incl. Ref. #14, 17, 18)
13	25 351 01–S	4	Lifter–Valve
14	24 411 05–S	4	Rod–Push
15	24 041 08–S	2	Gasket–Head, Cylinder
16	24 318 71–S	1	#2 Cylinder Head ASM
17	25 186 01–S	4	Arm–Rocker
18	24 599 01–S	4	Pivot–Arm, Rocker
19	M–640034–S	4	Screw–HF
20	24 072 09–S	8	Stud–Head, Cylinder

Ref. No.	Part No.	Qty.	Description
21	24 468 16–S	8	Washer–Flat
22	24 100 10–S	8	Nut–HF
23	24 755 75–S	1	Kit–Oil Fill, Valve Cover (Incl. Ref. #2, 3, & 24)
24	24 755 13–S	1	Kit–Cap, Oil Fill (Incl. Ref. # 25)
25	12 153 03–S	1	O–Ring–Cap, Oil Fill
26	24 445 01–S	1	Strap–Lifting
27	24 402 03–S	1	Reed–Breather
28	12 018 01–S	1	Retainer–Reed, Breather
29	M–545010–S	1	Screw–HF
30	24 050 01–S	1	Filter–Breather
31	24 033 01–S	1	Kit–Breather (Incl. Ref. # 34–34)
32	24 041 23–S	1	Gasket–Breather
33	24 096 58–S	1	Cover–Breather
34	25 139 60–S	1	Plug–Pipe
35	M–645020–S	4	Screw–HF
36	25–237–14–S	1	Clamp–Breather
37	24 326 26–S	1	Hose–Breather

Obtain Parts From Kohler



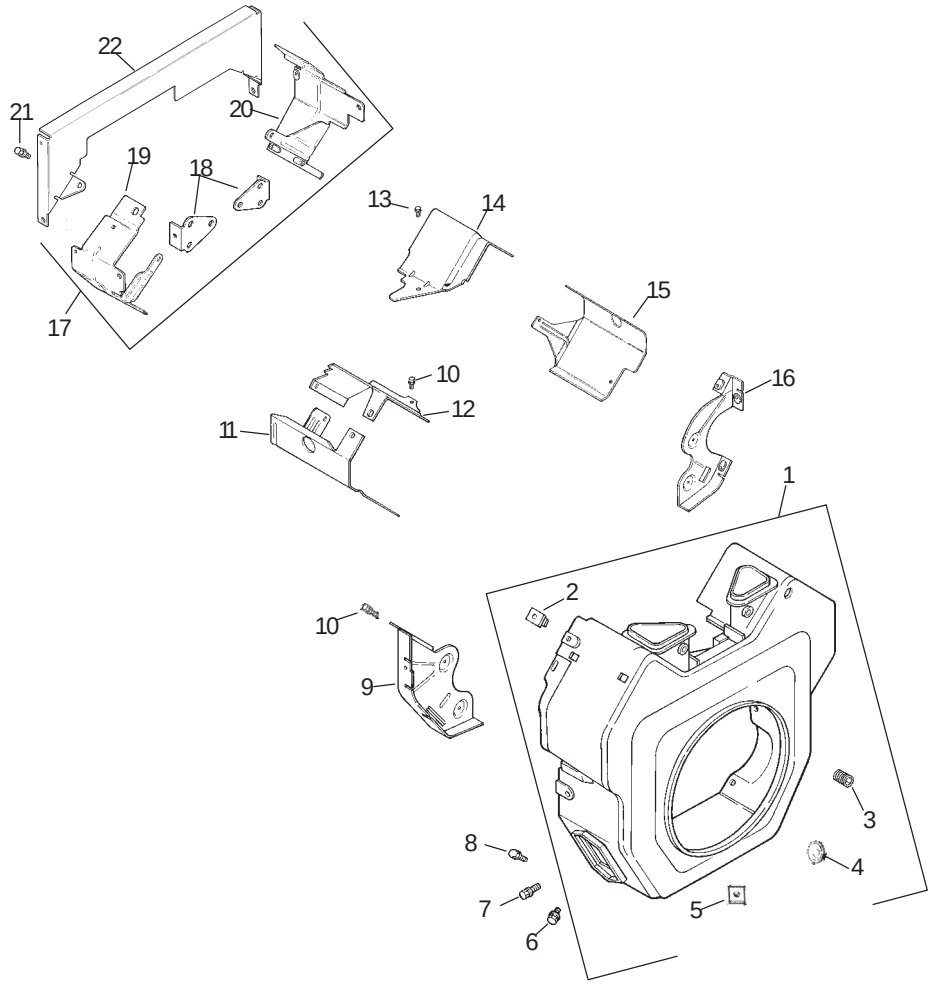
Ignition/Electrical Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	54 755 09–S	1	Kit–Stator, 15 amp (Incl. Ref. # 2)
2	24 126 71–S	1	Bracket–Wire, Stator
3	M–548025–S	2	Screw–Cap, Hex
4	24 584 01–S	2	Module–Ignition
5	M–545020–S	4	Screw–HF
6	12 132 06–S	2	Plug–Spark
7	24 025 04–S	1	Flywheel
8	X–42–15–S	1	Key
9	12 468 03–S	1	Washer–Plain
10	12 086 14–S	1	Screw–HF
11	24 157 03–S	2	Fan
12	24 755 79–S	1	Kit–Screen, Chopper (Incl. Ref. # 13–18 & 41 037 10–S)
13	24 468 11–S	4	Washer–Spring
14	24 112 14–S	4	Spacer
14	X–25–53–S	4	Washer–Plain
15	24 141 06–S	1	Ring–Support
16	24 162 25–S	1	Screen–Grass
17	X–25–53–S	2	Washer–Plain
18	M–603100–S	4	Screw–HH
19	24 086 18–S	2	Screw–Head, Phillips
20	X–25–92–S	2	Washer–Plain

Ref. No.	Part No.	Qty.	Description
21	25 403 03–S	1	Rectifier–Regulator (15 amp)
22	236602–S	1	Connector–3 Contact
23	235173–S	1	Clip–Cable
24	X–25–63–S	1	Washer–Plain
25	48 154 02–S	1	Clip–Cable
*	24 518 12–S	1	Lead–Black (5” – 12 gauge – insulated grip barrel eyelet terminals)
*	24 176 40–S	1	Harness–Wiring
*	25 454 03–S	2	Tie–Cable
*	25 086 43–S	1	Screw–Set
*	X–22–11–S	1	Washer–Lock
*	41 037 10–S	1	Nameplate–Service

* Not illustrated

Obtain Parts From Kohler



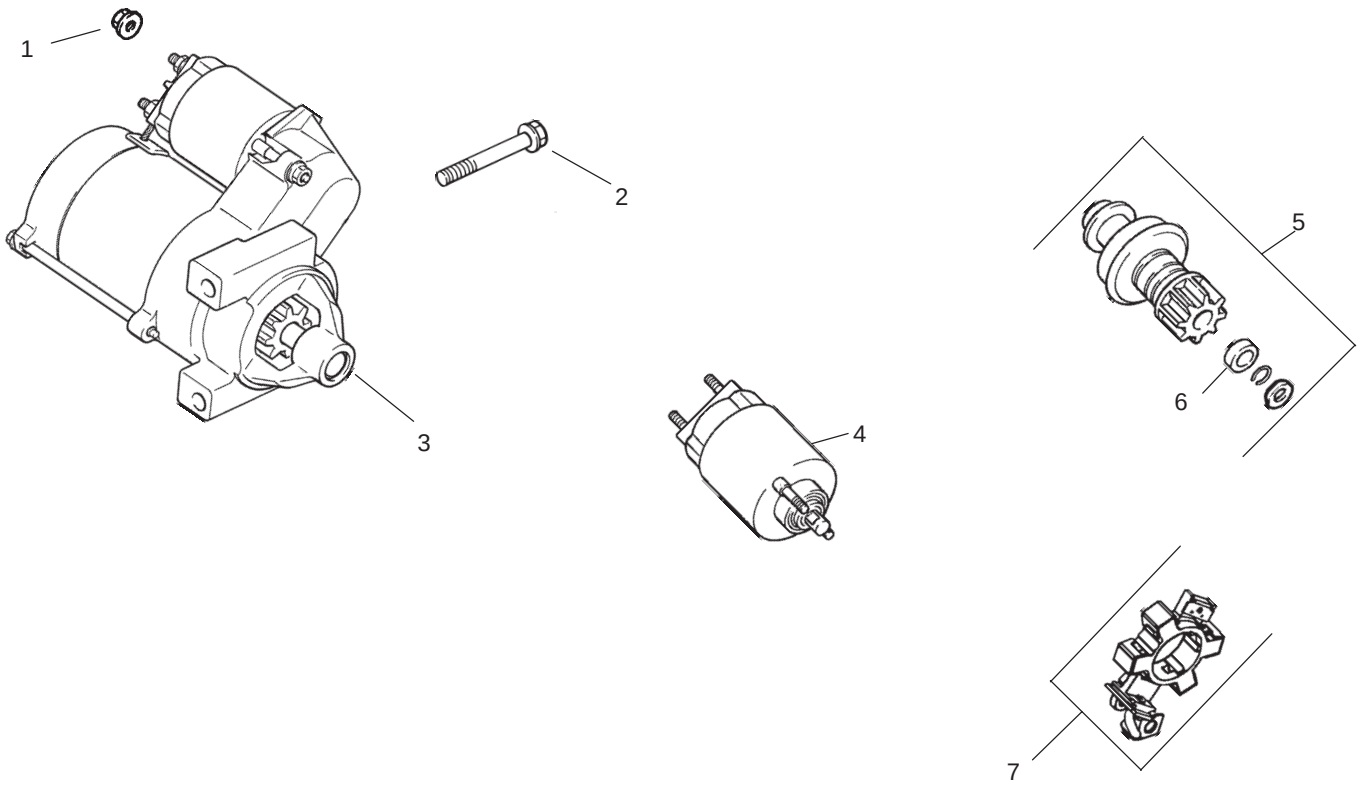
Blower Housing and Baffles Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	24 027 83–S	1	Blower Housing ASM (Incl. Ref. # 2–5 & 24 755 90–S)
2	24 100 01–S	4	Nut–Plastic
3	25 086 43–S	1	Screw–Set
4	25 139 16–S	1	Plug–Button
5	24 100 02–S	2	Nut–Plastic
6	M–551016–S	1	Screw–HF
7	M–545016–S	2	Screw–HF
8	M–545020–S	4	Screw–HF
9	24 146 16–S	1	Plate–Backing, #2 Side
10	M–645016–S	6	Screw–HF
11	24 063 20–S	1	Baffle–Cylinder Barrel, #2 Side
12	24 063 17–S	1	Baffle–Valley, #2 Side
13	M–545010–S	2	Screw–HF
14	24 063 59–S	1	Baffle–Valley, #1 Side
15	24 063 58–S	1	Baffle–Cylinder Barrel, #1 Side
16	24 146 20–S	1	Plate–Backing, #1 Side
17	24 755 14–S	1	Q–duct Kit (Incl. Ref. # 18–22)
20	24 063 12–S	1	Baffle–Ducted Air, Right

Ref. No.	Part No.	Qty.	Description
21	M–639010–S	8	Screw–HF
22	24 146 04–S	1	Plate–Ducted Air Backing
28	24 126 04	2	Bracket–Support
29	24 063 13–S	1	Baffle–Ducted Air, Left
*	24 755 90–S	1	Access Hole Plug Kit
*	24 113 95–S	1	Decal–HP

* Not illustrated

Obtain Parts From Kohler

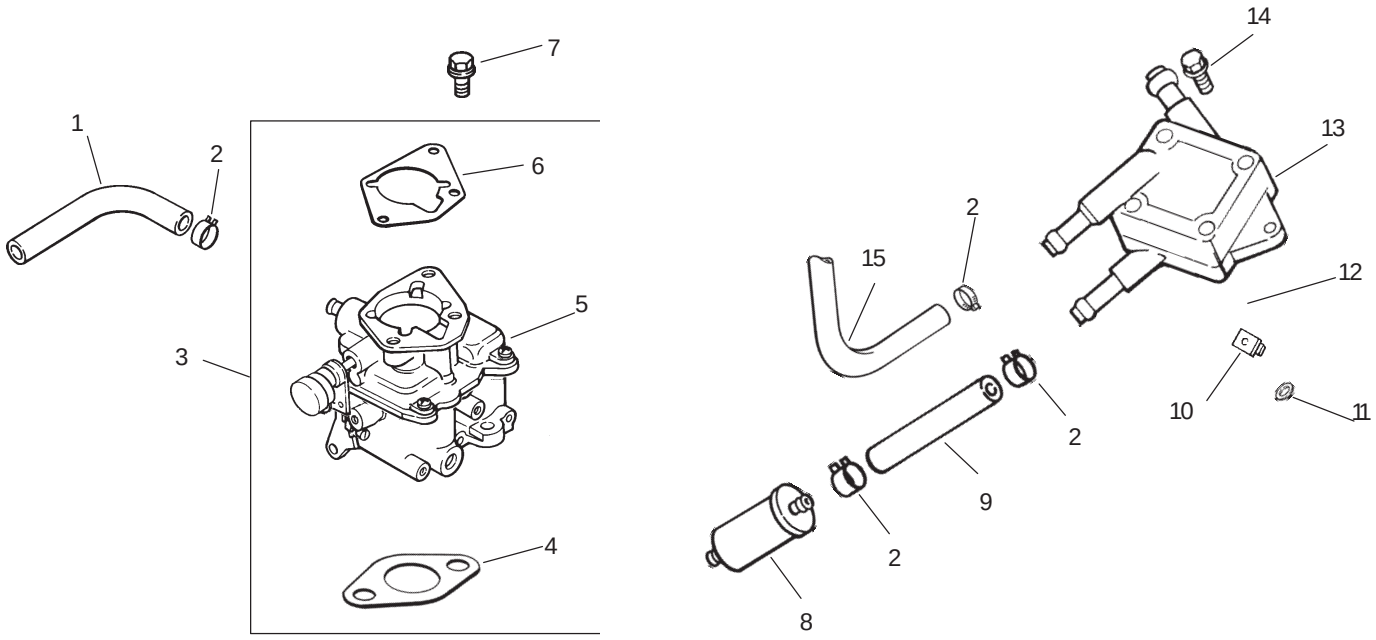


Starting System
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	M–841080–S	1	Nut–HF
2	M–839080–S	2	Screw–HF
3	25 098 08–S	1	Solenoid Shift Starter
4	25 435 04–S	1	Kit–Solenoid ASM (service w/ kits listed below)
5	25 755 33–S	1	Kit–Drive, Pinion (Includes Ref # 6)
6	25 141 05–S	1	Ring
7	25 221 01–S	1	Kit–Brush

Ref. No.	Part No.	Qty.	Description

Obtain Parts From Kohler



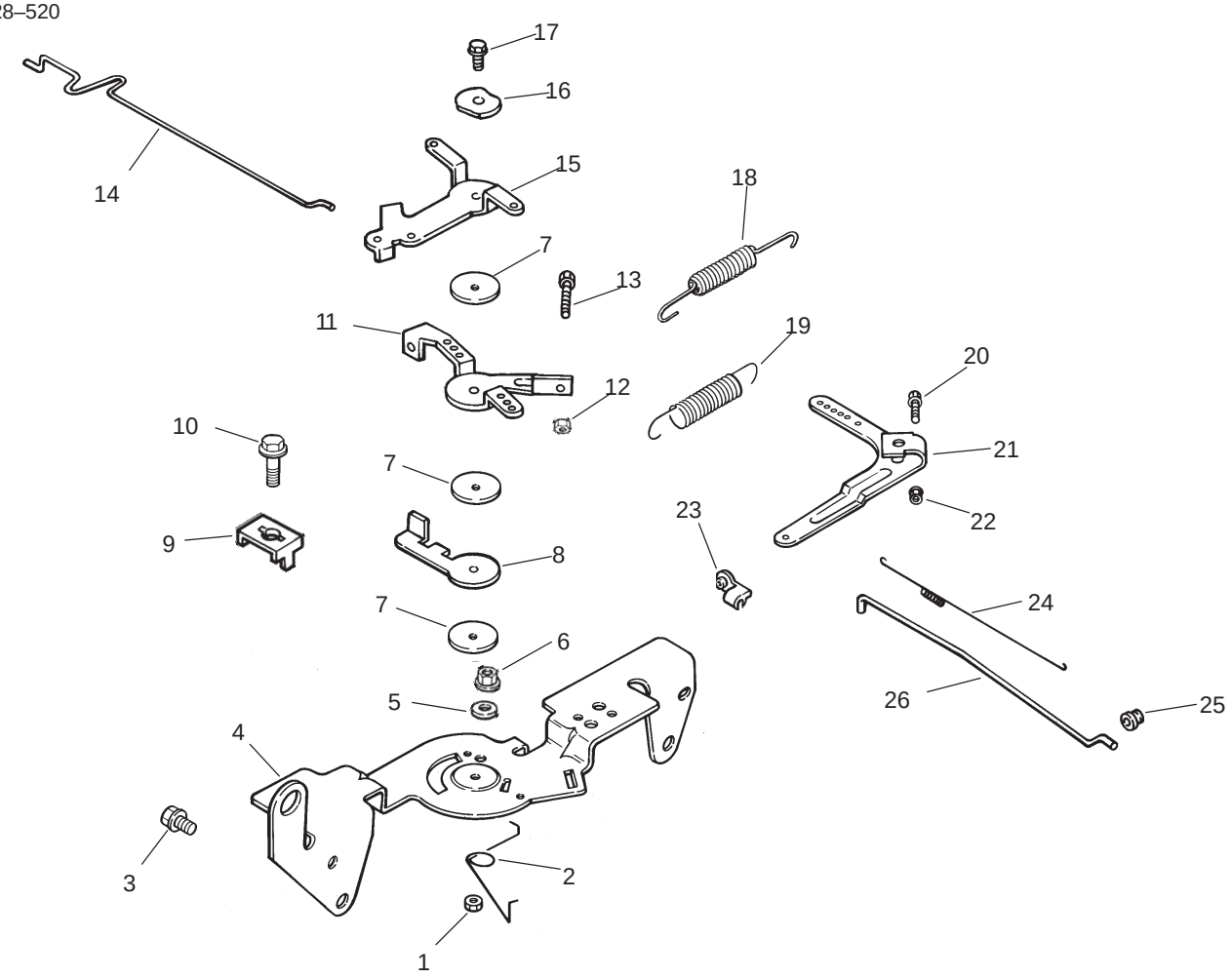
Fuel System Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	25 353 32–S	2	Line–Fuel
2	25 237 14–S	6	Clamp–Hose
3	24 853 32–S	1	Kit–Carburetor w/ Gasket (Incl. Ref. # 4–6)
4	24 041 06–S	1	Gasket–Base, Air Cleaner
5		1	Carburetor ASM (For information only, not available separately. Service with kits 24 757 01–S, 24 757 02–S, 24 757 03–S & 24 757 07–S)
6	24 041 17–S	1	Gasket–Carburetor
7	M–651030–S	2	Screw–HF
8	24 050 02–S	1	Filter–Fuel
9	41 353 14–S	1	Line–Fuel
10	24 100 01–S	2	Nut–Plastic
10	24 393 16–S	1	Pump–Fuel–Pulse
11	52 112 13–S	2	Spacer
12	X–25–52–S	2	Washer–Plain
13	24 393 16–S	1	Pump–Fuel, Pulse

Ref. No.	Part No.	Qty.	Description
14	24 086 31–S	2	Screw–Tap
15	24 353 02–S	1	Line–Fuel
*	24 757 01–S	1	Kit–Solenoid
*	24 757 02–S	1	Kit–Float
*	24 757 03–S	1	Kit–Repair, Carburetor
*	24 757 07–S	1	Kit–Repair, Choke
*	24 755 125–S	1	Kit–High Altitude with Gaskets

* Not illustrated

Obtain Parts From Kohler

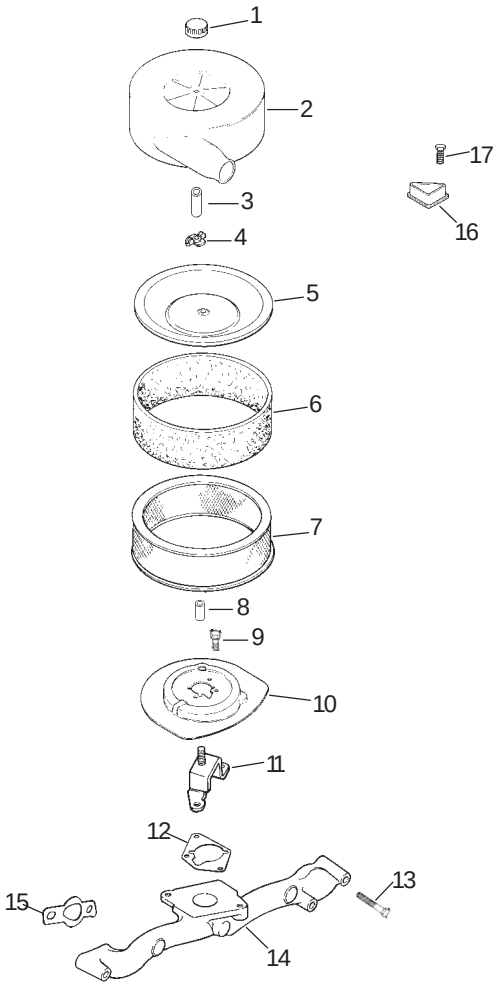


Engine Controls Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	M–547050–S	1	Nut–Hex
2	24 089 03–S	1	Spring–Return, Choke
3	M–645016–S	4	Screw–HF
4	24 126 56–S	1	Bracket–Control
5	X–20–1–S	1	Washer–Lock
6	M–541050–S	1	Nut–HF
7	24 468 01–S	3	Washer–Plain
8	24 090 07–S	1	Lever–Actuator, Throttle
9	12 237 01–S	2	Clamp–Cable
10	M–545016–S	3	Screw–HF
11	24 090 03–S	1	Lever–Control, Throttle
12	M–446030–S	1	Nut–HF
13	M–401030–S	1	Screw–HF
14	24 079 02–S	1	Linkage–Choke
15	24 090 05–S	1	Lever–Choke
16	41 468 03–S	1	Washer–Spring
17	M–545020–S	1	Screw–HF
18	24 089 51–S	1	Spring–Limiter, Throttle
19	24 089 49–S	1	Spring–Governor
20	24 211 03–S	1	Bolt
21	24 090 33–S	1	Lever–Governor
22	M–641060–S	1	Nut–HF

Ref. No.	Part No.	Qty.	Description
23	25 158 11–S	1	Bushing–Retaining, Linkage
24	24 089 01–S	1	Spring–Linkage
25	25 158 08–S	1	Busing–Linkage, Throttle
26	24 079 01–S	1	Linkage–Throttle

Obtain Parts From Kohler



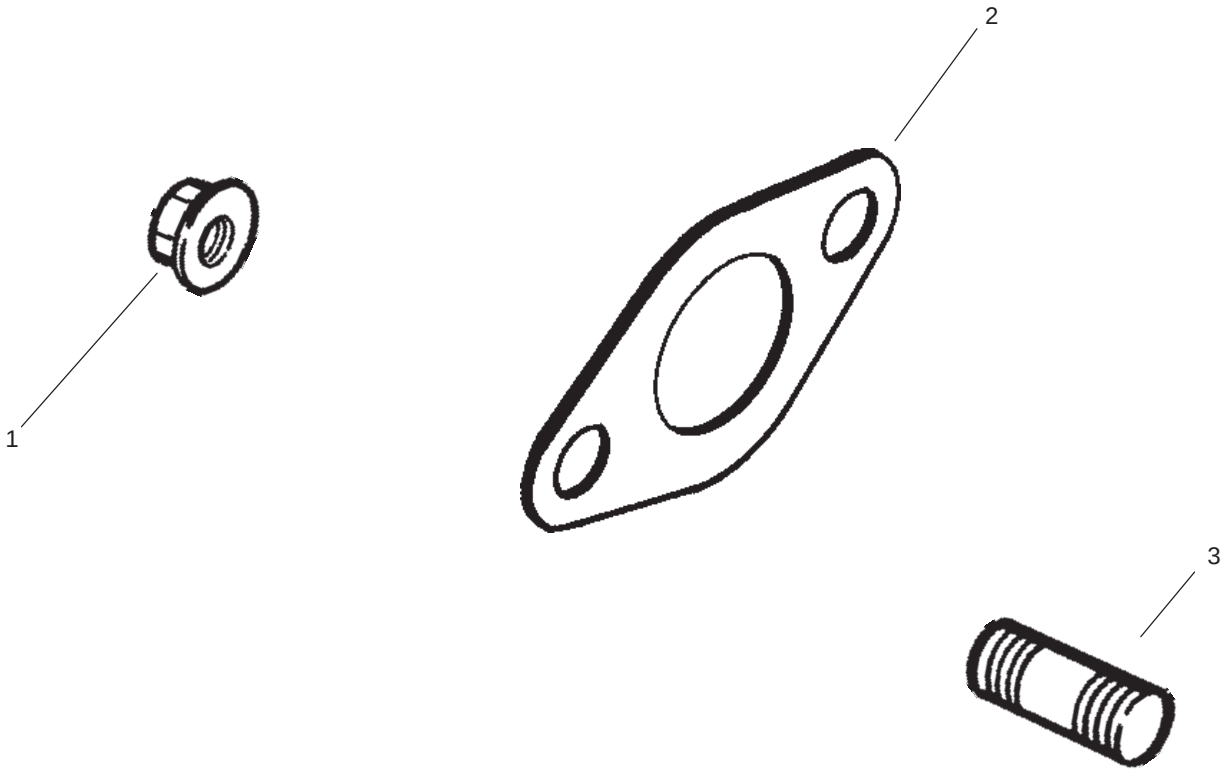
Air Intake/Filtration Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	12 341 01–S	1	Knob–Cover,Air Cleaner
2	24 096 54–S	1	Cover–Cleaner, Air
3	231032–S	1	Seal–Breather
4	24 100 01–S	1	Nut–Wing
5	24 096 01–S	1	Cover–Cleaner, Inner Air
6	24 083 02–S	1	Element–Precleaner
7	47 083 03–S	1	Element–Cleaner, Air
8	230046–S	1	Seal–Breather
9	M–639016–S	3	Screw–HF
10	24 126 54–S	1	Bracket–Cleaner, Air
11	24 094 05–S	1	Base–Cleaner, Air
12	24 041 06–S	1	Gasket–Base, Air Cleaner
13	25 086 84–S	4	Screw–HF Intake
14	24 164 14–S	1	Manifold–Intake
15	24 041 01–S	2	Gasket–Manifold, Intake
16	24 096 17–S	2	Cover–Housing, Blower
17	25 086 91–S	2	Screw–Tapping
*	24 431 01–S	1	Sleeve–Insulating

Ref. No.	Part No.	Qty.	Description
*	24 113 14–S	1	Decal–Maintenance, Engine

* Not illustrated

Obtain Parts From Kohler



Exaust Assembly
Kohler Engine CH20QS–64678

Ref. No.	Part No.	Qty.	Description
1	M–841080–S	4	Nut–HF
2	24 041 02–S	2	Gasket–Exhaust
3	25 072 04–S	4	Stud
*	24 755 107–S	1	Gasket Set
*	24 522 146	1	Short Block

Ref. No.	Part No.	Qty.	Description

* Not illustrated

Obtain Parts From Kohler

Maintenance Record

Date								

TORO®