Form Number 3351-812

Dingo® TX 413
Compact Utility Loader

Model No. 22308 - 240000201 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 - 2004
All Rights Reserved

Contents

Description	Page
Frame Assembly	3
Track and Traction Assembly	5
Engine and Drive Assembly	6
Loader Arm and Quick Attach Assembly	7
Loader Arm Hydraulic Assembly	8
Valve Assembly No. 106-9406	9
Traction Control Assembly	10
Control Panel Assembly	11
Hood and Brake Assembly	12
Electrical Assembly	14
Traction Hydraulic Assembly	15
Hydraulic Motor Assembly No. 104-8470	16
Hydraulic Pump Assembly No. 106-9470	17
Hydraulic Pump Assembly No. 106-9471	18
Principle Hydraulic Assembly	19
Spool Valve Assembly No. 106-9405	20
Fuel Tank Assembly	21
Cylinder Head Assembly	22
Cylinder Barrel Assembly	23
Crankcase Cover Assembly	24
Crankshaft Assembly	25
Piston Assembly	26
Camshaft Assembly	27
Fan Cover Assembly	28
Carburetor Assembly	29
Air Cleaner Assembly	31
Muffler Assembly	32
Flywheel Assembly	33
Ignition Coil Assembly	34
Starter Motor Assembly	35
Control Assembly	36
Miscellaneous Part Assembly	37

Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

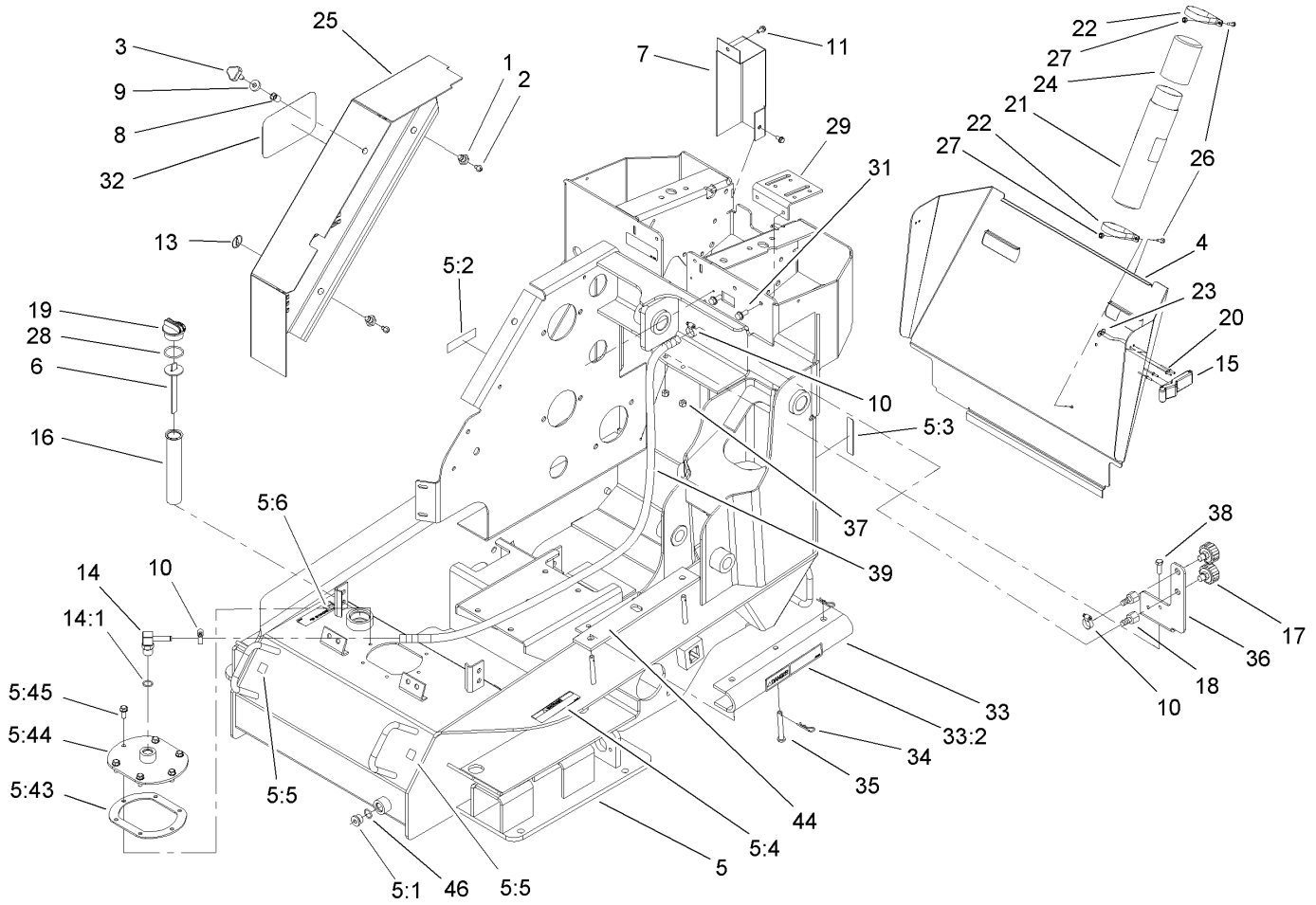
AR	as required
ASM	assembly
CARR	carriage
DEG	degrees
FH	flat head
GA	gauge
HF	hex flange
HH	hex head
HHF	hex head flange
HHFTF	hex head flange thread forming
HJ	hex jam
HLH	hex lag head
HOC	height-of-cut
HS	hex
HSBH	hex socket button head
HSFH	hex socket flat head
HSH	hex socket head
HWH	hex washer 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
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
WH	wing head

Footnotes

❶ Not illustrated

❷ Not serviced separately

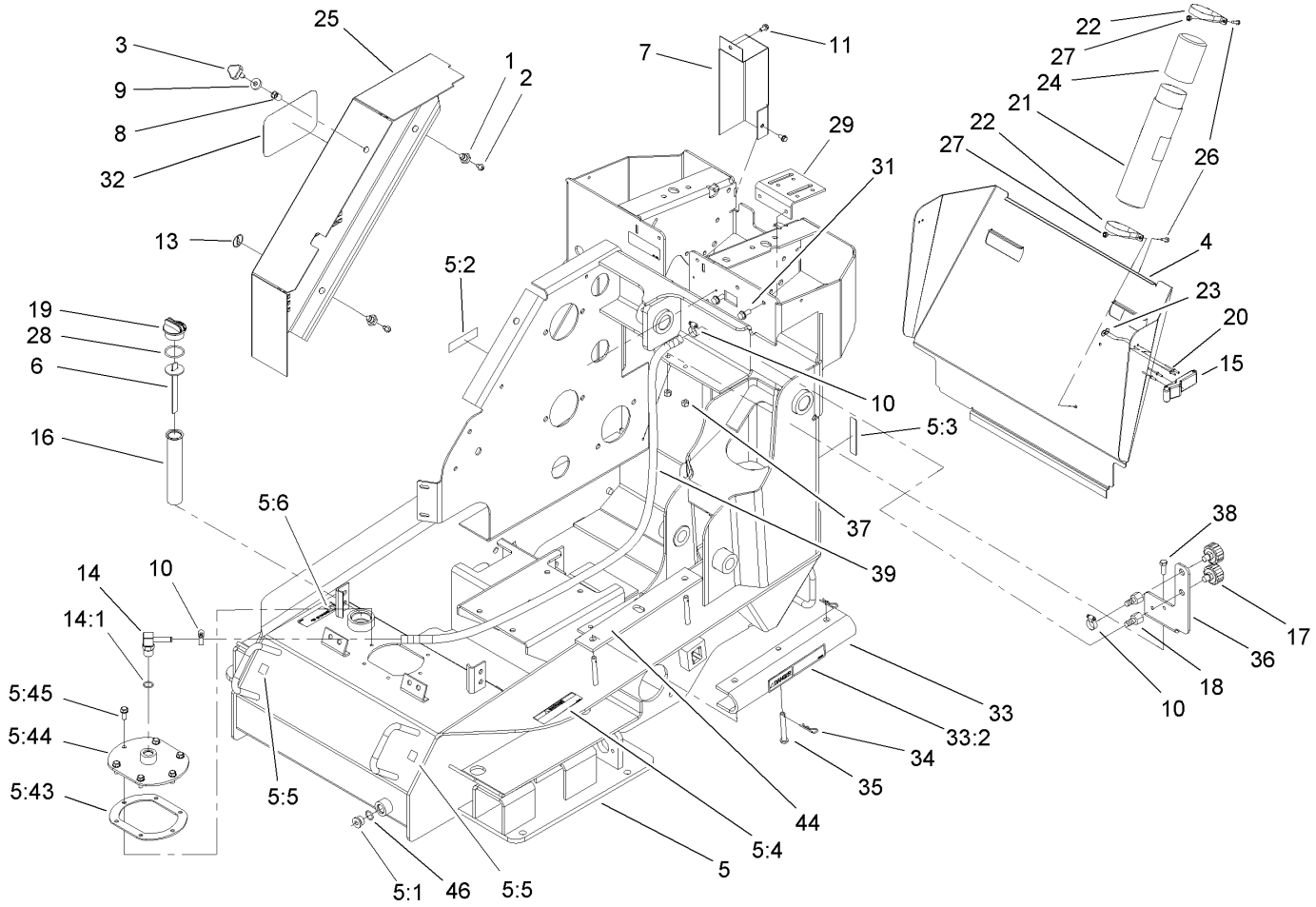
❸ Obtain Parts From Honda



Frame Assembly

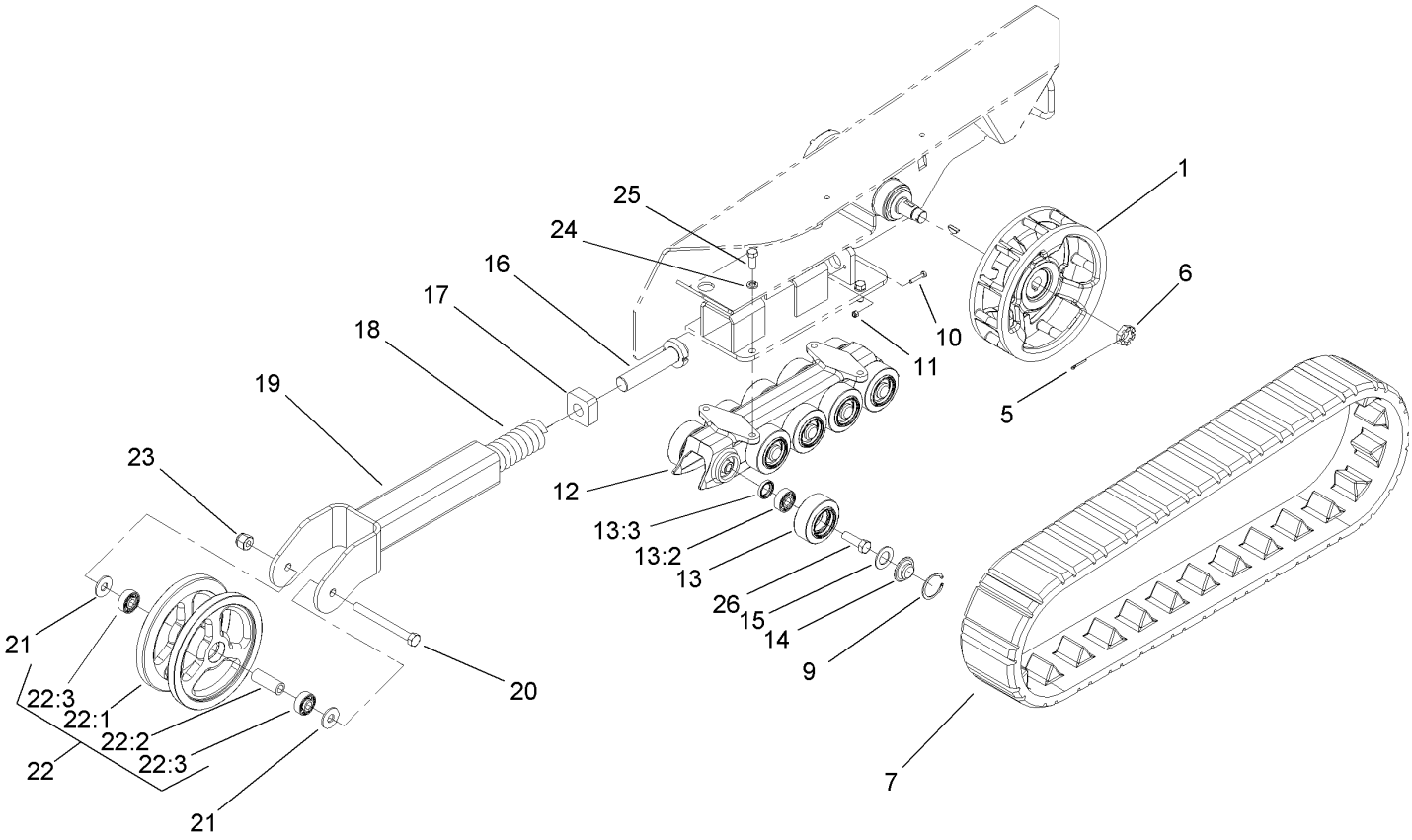
Ref	Part No.	Qty.	Description
1	95-3989	2	Mount-Sidepanel
2	46-8093	2	Screw-Plastite
3	95-9648	1	Knob
4	106-9472-01	1	Cover-Rear
5	105-9010	1	Frame ASM
5:1	353-550	1	Plug-HYD
5:2	98-5954	1	Decal-Missing, Cover
5:3	104-2838	1	Decal-Brake
5:4	100-6141	1	Decal-Pinch
5:5	93-9084	4	Decal-Point, Lift
5:6	105-8432	1	Decal-Oil, Hydraulic
5:43	107-3557	1	Gasket-Cover, Access
5:44	107-3559	1	Cover ASM
5:45	98-9940	6	Screw
6	100-2097	1	Dipstick-Oil
7	105-9043-03	1	Cover-Pulley
8	32148-9	1	Insert-Nut
9	106-0565	1	Washer-Rubber
10	2412-36	3	Clamp-Hose
11	32144-4	2	Screw-HWH
13	58-6520	1	Decal-Grease
14	354-134	1	Fitting-Hyd, 90 DEG
14:1	237-79	1	O-Ring
15	80-6980	2	Latch

Ref	Part No.	Qty.	Description
16	61-2790	1	Filter-Screen
17	68-6150	2	Breather
18	354-95	2	Fitting-Female, Barbed
19	93-7498	1	Plug-Plastic
20	3269-17	8	Rivet-Pop
21	104-7050	1	Housing-Manual
22	2412-120	2	R-Clamp
23	3269-10	8	Washer-Back
24	104-7048	1	Cap-Housing
25	106-9427-03	1	Cover-Belt
26	3290-500	2	Screw-PPH
27	3296-2	2	Nut-Lock
28	237-123	1	O-Ring
29	106-9447-01	1	Bracket-Mount, Throttle
31	32144-70	2	Screw-HH
32	105-1217	1	Decal-Toro
33	107-3552	1	Locking Arm ASM
33:2	100-6135	1	Decal-Danger
34	3290-467	3	Pin-Hair
35	283-52	1	Pin-Clevis
36	106-3132-01	1	Bracket-Filter
37	3296-29	2	Nut-Lock, NI
38	322-5	2	Screw-HH
39	103-1693	1	Hose-Fuel



Frame Assembly (continued)

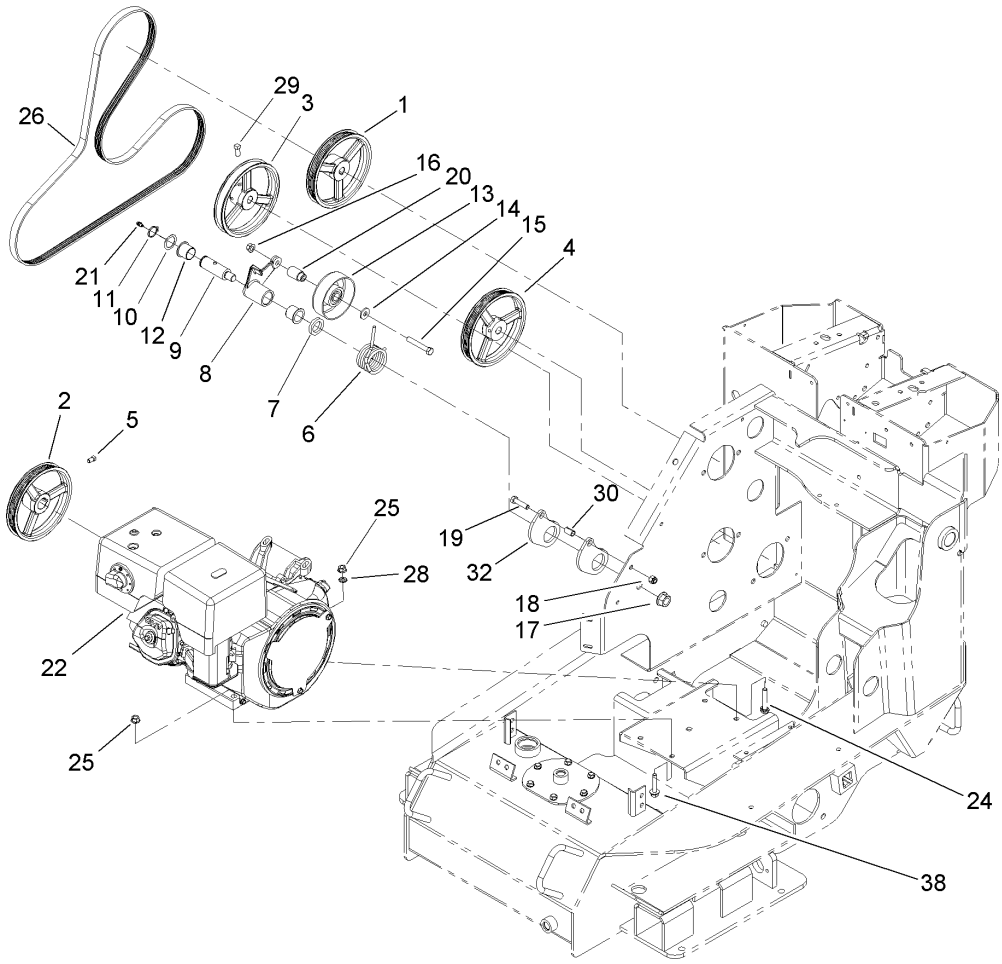
Ref	Part No.	Qty.	Description
44	106-9495	1	Pad-Rubber
46	237-79	1	O-Ring



Track and Traction Assembly

Ref	Part No.	Qty.	Description
1	105-9146-03	2	Wheel- Drive
5	3272-13	2	Pin-Cotter
6	99-3139	2	Nut
7	98-9800	2	Track
9	106-7595	20	Ring-Snap, Internal
10	321-13	2	Screw-HH
11	3296-42	2	Nut-Lock, NI
12	106-7590-03	2	Guide-Track
13	106-7621	20	Road Wheel ASM
13:2	93-4237	1	Bearing
13:3	253-118	1	Seal-Oil
14	106-7557	20	Cap-Wheel, Bearing
15	106-7585	20	Gasket-Bogie
16	98-9846	2	Bolt-Tensioner
17	95-3626	2	Block-Tensioning
18	95-3624	2	Spring-Compression
19	98-9801-03	2	Tensioner Arm ASM
20	327-17	2	Screw-HH
21	3256-7	4	Washer-Flat
22	104-5745	2	Tensioner Wheel ASM
22:1	104-5747-03	1	Wheel-Tensioner
22:2	98-9835	1	Spacer-Wheel, Tensioner
22:3	93-4237	2	Bearing
23	3296-24	2	Nut-Lock NI

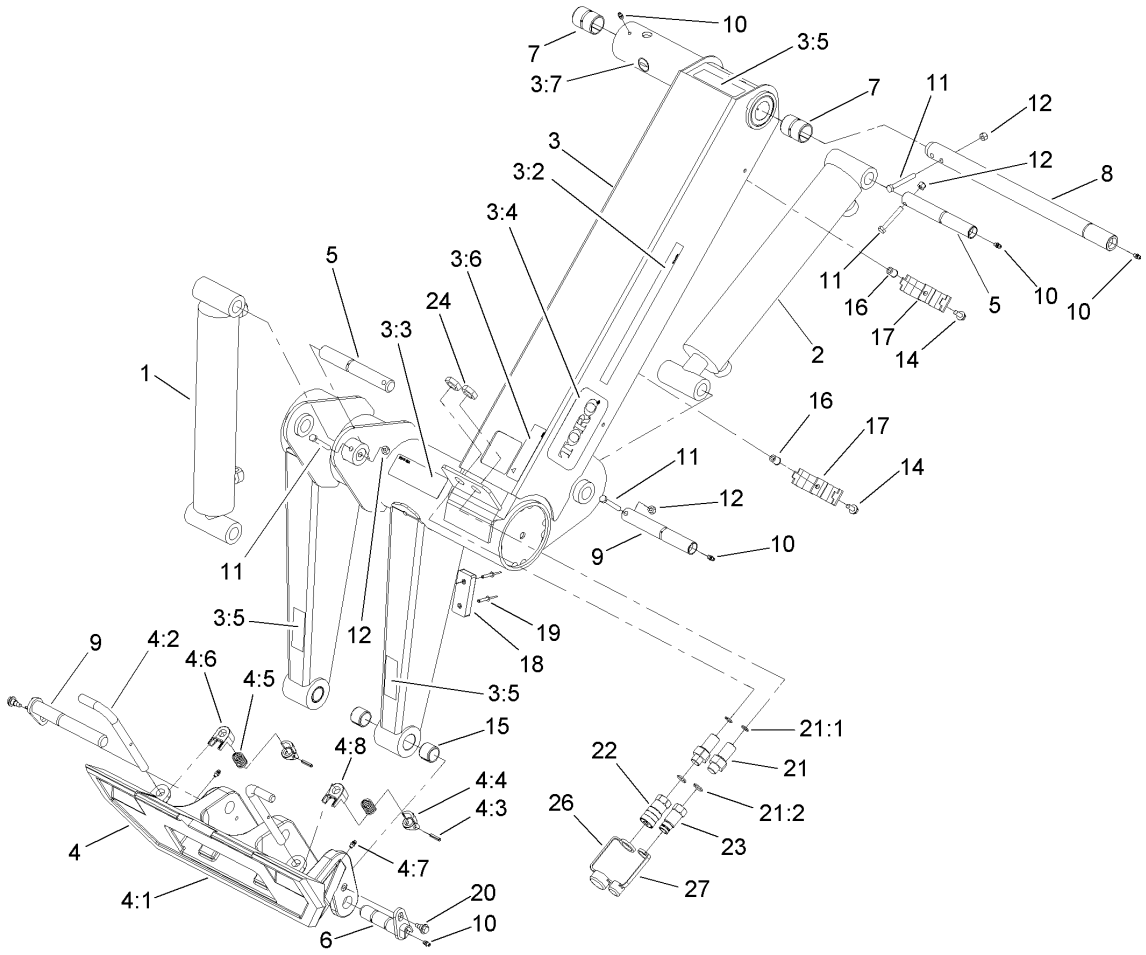
Ref	Part No.	Qty.	Description
24	3253-7	8	Washer-Lock
25	325-5	8	Screw-HH
26	327-4	20	Screw-HH



Engine and Drive Assembly

Ref	Part No.	Qty.	Description
1	104-8448	1	Pulley
2	104-8449	1	Pulley
3	104-8450	1	Pulley
4	105-9046	1	Pulley
5	3242-2	2	Screw-SQH
6	100-4844	1	Spring-Torsion
7	99-3625	1	Spacer-Arm, Idler
8	99-3623-03	1	Arm-Idler
9	99-3624	1	Shaft-Pivot, Idler
10	74-1810	1	Washer
11	32151-36	1	Ring-Retaining
12	99-3631	2	Bushing-Flange
13	95-8802	1	Pulley-Idler
14	80-6990	1	Washer-Hardened
15	323-12	1	Screw-HH
16	32128-21	1	Nut-HF
17	32128-54	1	Nut-Flange
18	3296-39	1	Nut-Lock, NI
19	323-8	1	Screw-HH
20	105-9035	1	Spacer-Idler
21	302-5	1	Fitting-Grease
❷22		1	Engine-Honda, Gx390k1 Qtr2
24	3234-19	3	Screw-HHF
25	32128-21	4	Nut-HF

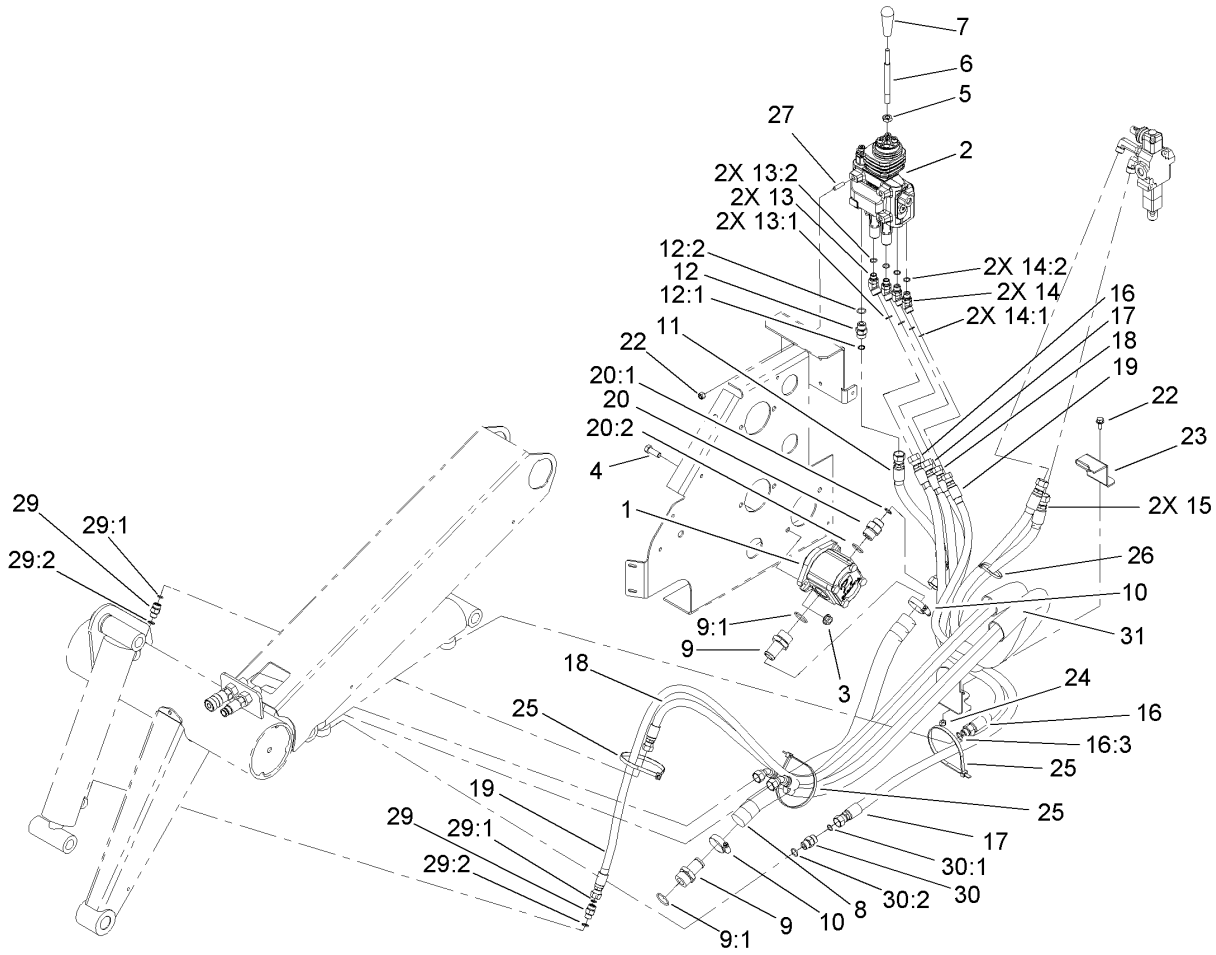
Ref	Part No.	Qty.	Description
26	106-9422	1	Belt-Poly-V
28	3255-9	1	Washer-Lock, Ext
29	3242-4	6	Screw-Set, SQH
30	106-4501	1	Scraper-Stop, Spacer
32	106-9480	2	Pad-Rubber
38	66-9302	1	Screw-HHF



Loader Arm and Quick Attach Assembly

Ref	Part No.	Qty.	Description
1	106-3161	1	Cylinder-Hydraulic
❶1:1	106-9466	1	Kit-Seal, Hydraulic Cylinder
2	106-3162	1	Cylinder-Hydraulic
❶2:1	106-9467	1	Kit-Seal, Hydraulic Cylinder
3	107-3565	1	Loader Arm ASM
3:2	106-9452	1	Decal-Model
3:3	106-9451	1	Decal-Caution
3:4	105-1217	1	Decal-Toro
3:5	100-6141	3	Decal-Pinch
3:6	100-6101	1	Decal-Caution
3:7	58-6520	1	Decal-Grease
4	106-9426	1	Quick Attach ASM
4:1	106-3156-03	1	Mount-Qtach
4:2	105-8367	2	Pin-Locking
4:3	3285-1	2	Pin-Grooved
4:4	105-0246	2	Cam
4:5	98-4694	2	Spring-Compression
4:6	104-5909	1	Stop-RH
4:7	302-5	2	Fitting-Grease
4:8	104-5903	1	Stop-LH
5	105-9075	3	Pin-Pivot .
6	106-3139	2	Pivot Pin ASM
7	106-3133	2	Bushing-Tension, Loader Arm
8	106-3164	1	Pin-Pivot, Loader Arm

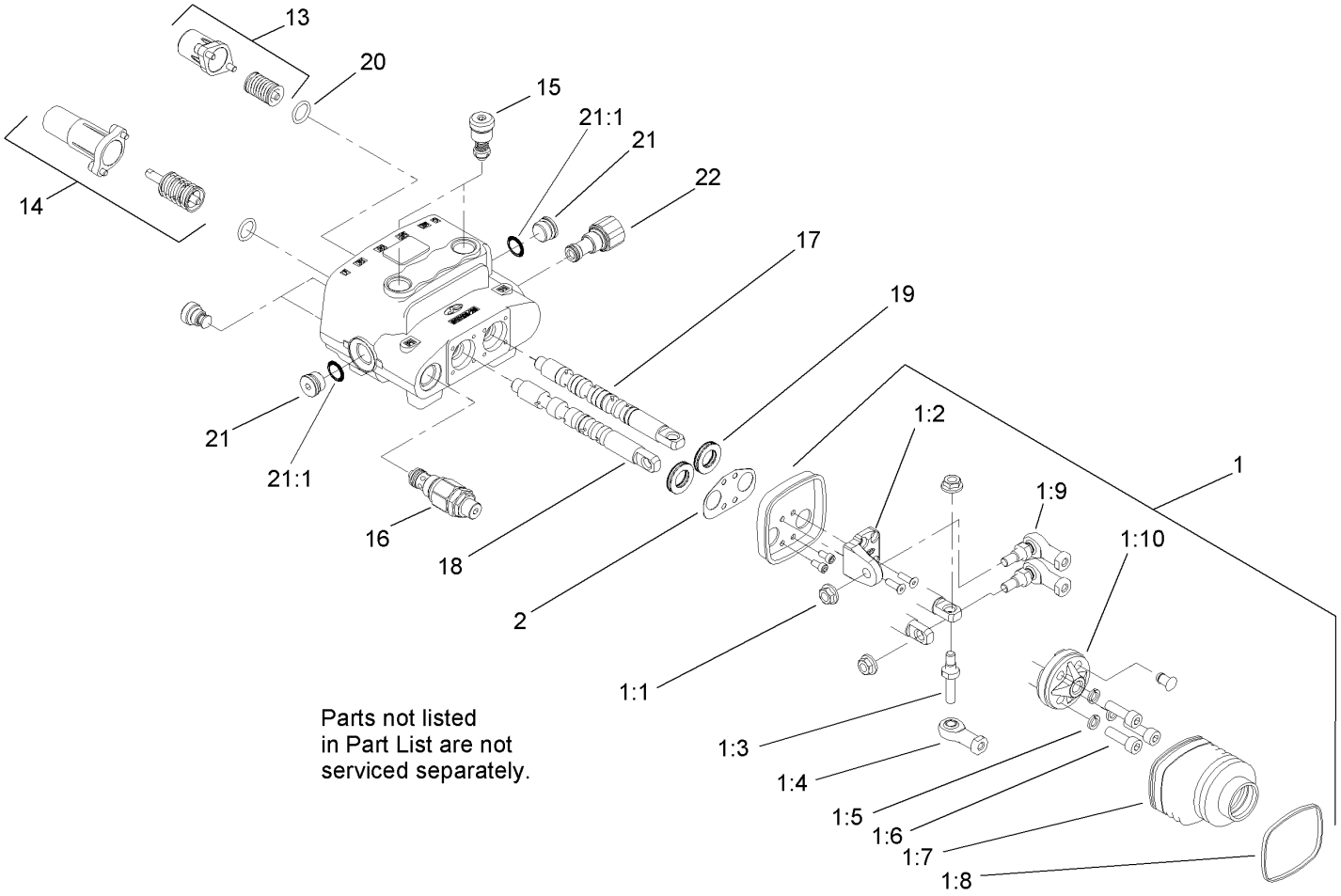
Ref	Part No.	Qty.	Description
9	106-3140	1	Pivot Pin ASM
10	302-5	8	Fitting-Grease
11	322-12	4	Screw-HH
12	3296-29	4	Nut-Lock, NI
14	322-5	2	Screw-HH
15	98-4871	4	Bushing-Tension
16	32148-7	2	Insert-Nut
17	107-3553-03	2	Clamp-Hose
18	86-5350	2	Bumper-Rubber
19	3269-11	4	Rivet
20	99-5105	3	Bolt-Shoulder
21	98-9907	2	Union-Bulkhead
21:1	237-30	1	O-Ring
21:2	237-79	1	O-Ring
22	104-6115	1	Coupler-Female
❶22:1	107-9300	1	Kit-Seal, Coupler
23	104-6114	1	Nipple-Connector
❶23:1	107-9301	1	Kit-Seal, Nipple
24	340-127	2	Nut-Bulkhead
26	105-5865	1	Cap-Dust
27	105-5866	1	Plug-Dust



Loader Arm Hydraulic Assembly

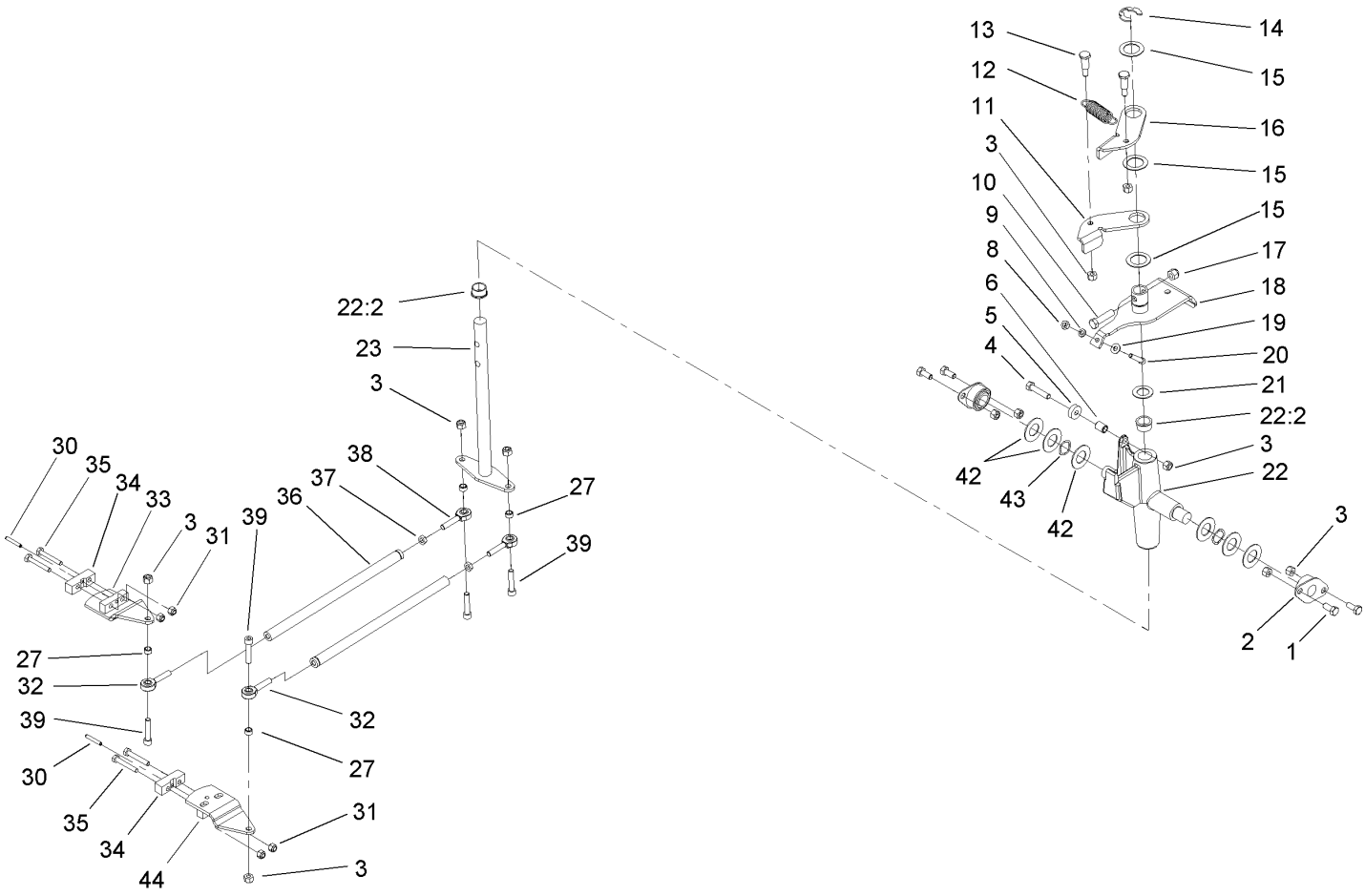
Ref	Part No.	Qty.	Description
1	104-8481	1	Pump-Gear
❶1:1	98-4700	1	Key-Square
❶1:2	107-3550	1	Kit-Seal, Pump
2	106-9406	1	Valve-Loader
3	32128-42	2	Nut-HF
4	324-5	2	Screw-HH
5	51-2070	1	Nut
6	95-3569	1	Shaft-Handle, Lift/tilt
7	98-0152	1	Knob-Tapered
8	106-9446	1	Hose-Hyd, Suction
9	354-78	2	Connector-Hose
9:1	237-146	1	O-Ring
10	2412-111	2	Clamp
11	106-3148	1	Hydraulic Hose ASM
12	340-4	1	Fitting-Hyd, Straight
12:1	237-30	1	O-Ring
12:2	237-79	1	O-Ring
13	340-96	2	Adapter
13:1	237-30	1	O-Ring
13:2	237-42	1	O-Ring
14	340-87	2	Fitting-Hyd, 45 DEG
14:1	237-22	1	O-Ring
14:2	237-42	1	O-Ring
15	106-3145	2	Hydraulic Hose ASM

Ref	Part No.	Qty.	Description
16	106-3147	1	Hydraulic Hose ASM
16:3	237-79	1	O-Ring
17	107-3593	1	Hose ASM-Hydraulic
18	107-3592	1	Hose ASM-Hydraulic
19	107-3591	1	Hose ASM-Hydraulic
20	340-8	1	Adapter
20:1	237-65	1	O-Ring
20:2	237-81	1	O-Ring
22	3296-29	4	Nut-Lock, NI
23	107-3555-01	1	Clamphalf-Hose
24	3296-29	1	Nut-Lock, NI
25	3334-945	6	Tie-Cable
26	3290-379	8	Tie-Cable
27	104-0430	4	Stud
29	340-2	2	Fitting-Hyd, Straight
29:1	237-22	1	O-Ring
29:2	237-42	1	O-Ring
30	340-4	1	Fitting-Hyd, Straight
30:1	237-30	1	O-Ring
30:2	237-79	1	O-Ring
31	107-3589	2	Sleeve-Hose



Valve Assembly No. 106-9406

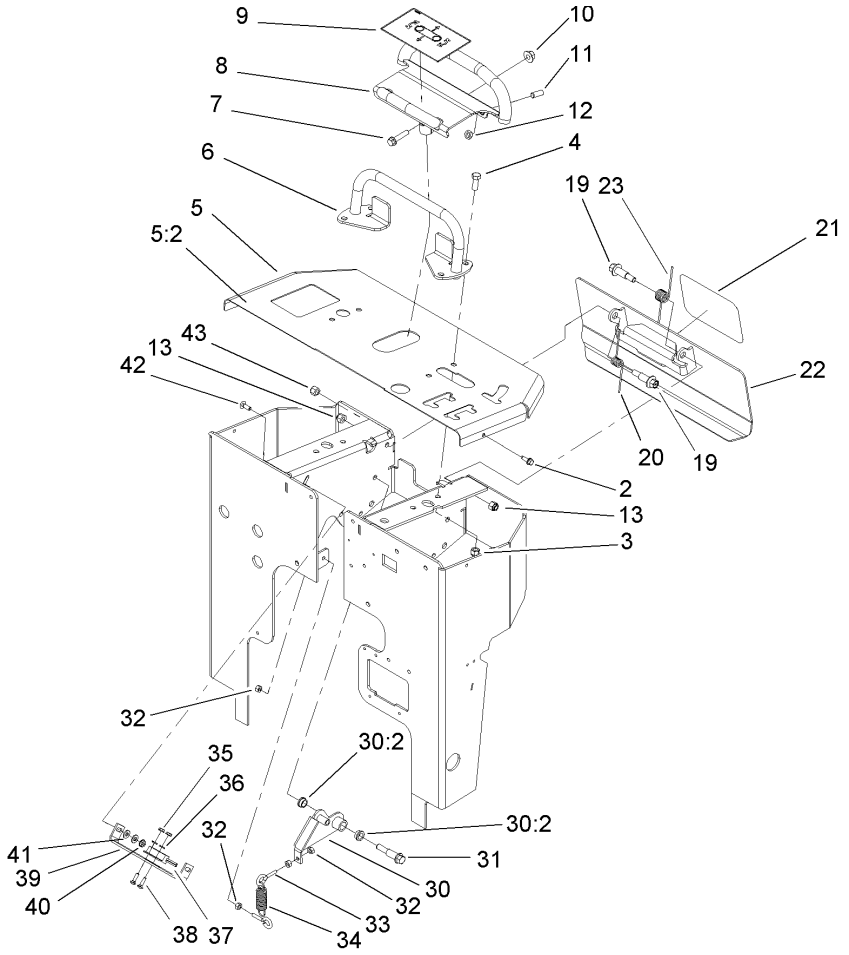
Ref	Part No.	Qty.	Description
1	106-7724	1	Kit-Joystick
1:1	98-0668	3	Nut
1:2	106-7726	1	Pivot-Joystick
1:3	106-7727	1	Pin-Joystick
1:4	106-7728	1	End-Rod
1:5	42-9850	3	Washer-Lock, Spring
1:6	98-5828	3	Screw-HSH
1:7	106-7729	1	Bellow-Rubber
1:8	3290-379	1	Tie-Cable
1:9	106-7730	2	Joint-Joystick
1:10	106-7731	1	Holder-Articulated
2	106-7725	1	Seal-Joystick
13	106-7732	1	Kit-Spring, Valve
14	106-7733	1	Kit-Spring, Detent
15	107-3561	2	Valve-Relief,port
16	106-7735	1	Valve-Relief, Main
17	106-7736	1	Spool-Valve
18	106-7737	1	Spool-Valve
19	106-7738	2	Seal-Valve, Spool
20	106-7719	2	Seal-Valve
21	353-988	2	Plug-Hex, Hollow
21:1	237-79	1	O-Ring
22	107-3562	1	Sleeve-Port, Power Beyond



Traction Control Assembly

Ref	Part No.	Qty.	Description
1	322-3	4	Screw-HH
2	68-2970	2	Bushing
3	3296-29	11	Nut-Lock, NI
4	322-7	1	Screw-HH
5	251-259	1	Bearing-Ball
6	88-7450	1	Spacer-Lever, Control
8	3217-5	1	Nut-Hex
9	3253-3	1	Washer-Lock
10	323-8	1	Screw-HH
11	98-8407	1	Lever-Return, RH
12	105-1210	1	Spring-Extension
13	63-2650	2	Screw-Shoulder
14	32151-91	1	Ring-Retaining
15	3256-42	3	Washer-Flat
16	98-8408	1	Lever-Return, LH
17	3296-39	1	Nut-Lock, NI
18	104-9968	1	Pivot Lever ASM
19	3256-22	1	Washer-Flat
20	3274-51	1	Screw-HSH
21	257-8	1	Washer-Thrust
22	106-5737	1	Control Support ASM
22:2	256-252	2	Bearing-Flange
23	106-5745	1	Drive Rod ASM
27	92-3133	4	Spacer-Lever, Traction

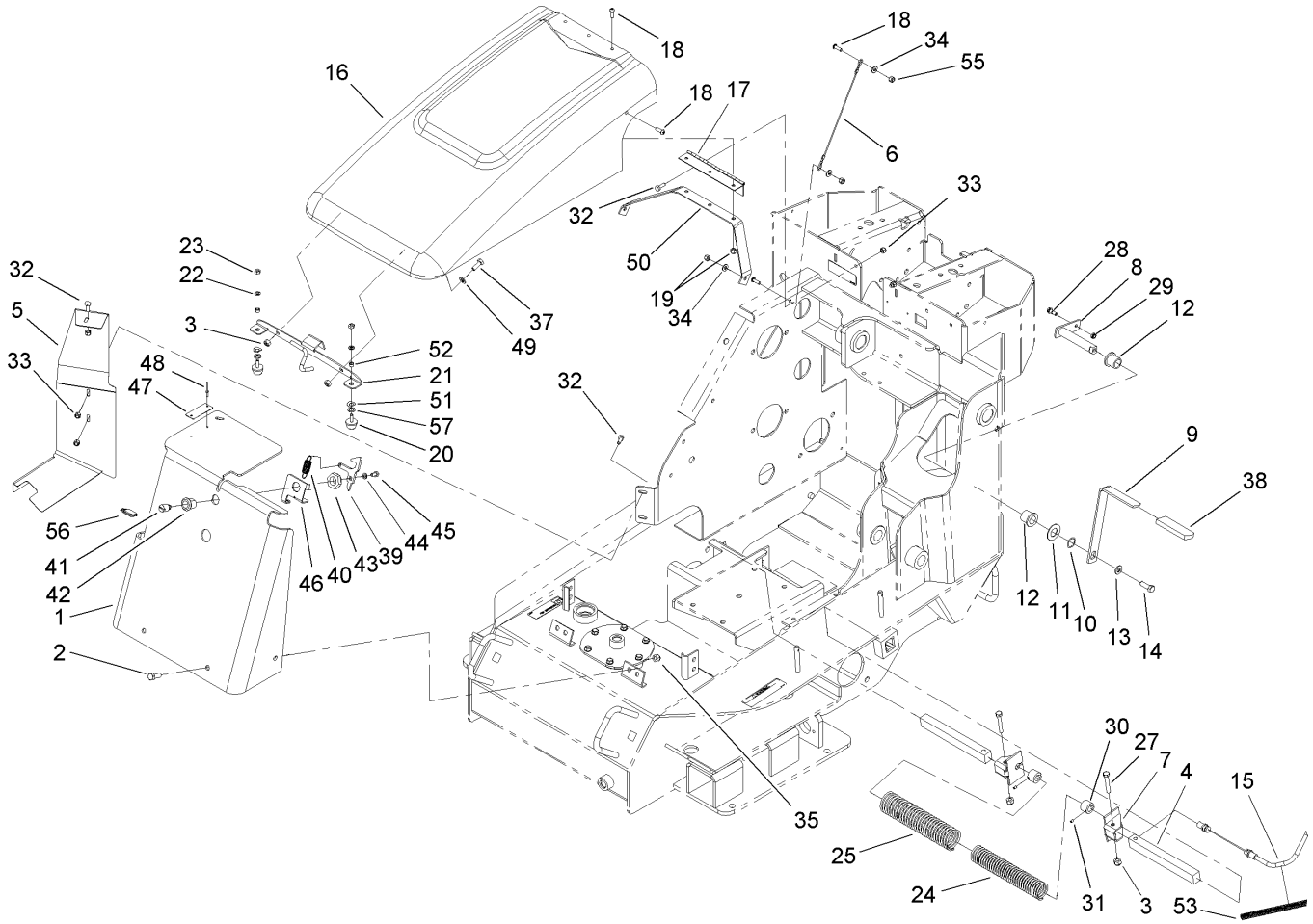
Ref	Part No.	Qty.	Description
30	32121-6	2	Pin-Roll
31	3296-42	4	Nut-Lock, NI
32	2411-53	2	Bearing-Rod End, LH
33	104-8475	1	Pump Lever ASM
34	105-0365	2	Clamp-Traction
35	321-10	4	Screw-HH
36	105-9030	2	Rod-Linkage
37	3220-2	2	Nut
38	2411-52	2	Bearing-Rod End, RH
39	3274-83	4	Screw-HSH
42	3256-39	6	Washer-Flat
43	95-3703	2	Washer-Spring, Wave
44	105-0362	1	Pump Lever ASM



Control Panel Assembly

Ref	Part No.	Qty.	Description
2	32144-44	2	Screw-HWH
3	3296-22	4	Nut-Lock, NI
4	323-6	4	Screw-HH
5	106-9508	1	Control Panel ASM
5:2	106-9450	1	Decal-Control Panel
6	98-8400-03	1	Reference Bar ASM
7	3234-18	1	Screw-HHF
8	104-9970-03	1	Control Handle ASM
9	106-9453	1	Decal-Traction
10	32128-43	1	Nut-Flange
11	3247-7	2	Set Screw
12	3218-3	2	Nut-Jam
13	3296-39	2	Nut-Lock, NI
19	62-1330	2	Bolt-Shoulder
20	98-8424	1	Spring-Torsion, RH
21	105-1217	1	Decal-Toro
22	105-9031-03	1	Reverse Plate ASM
23	98-8425	1	Spring-Torsion, LH
30	100-4203	1	Neutral Centering Lever ASM
30:2	256-156	2	Bushing-Flange
31	66-0560	1	Bolt-Shoulder
32	3217-5	4	Nut-Hex
33	71-2870	2	Bolt-Eye
34	105-1210	1	Spring-Extension

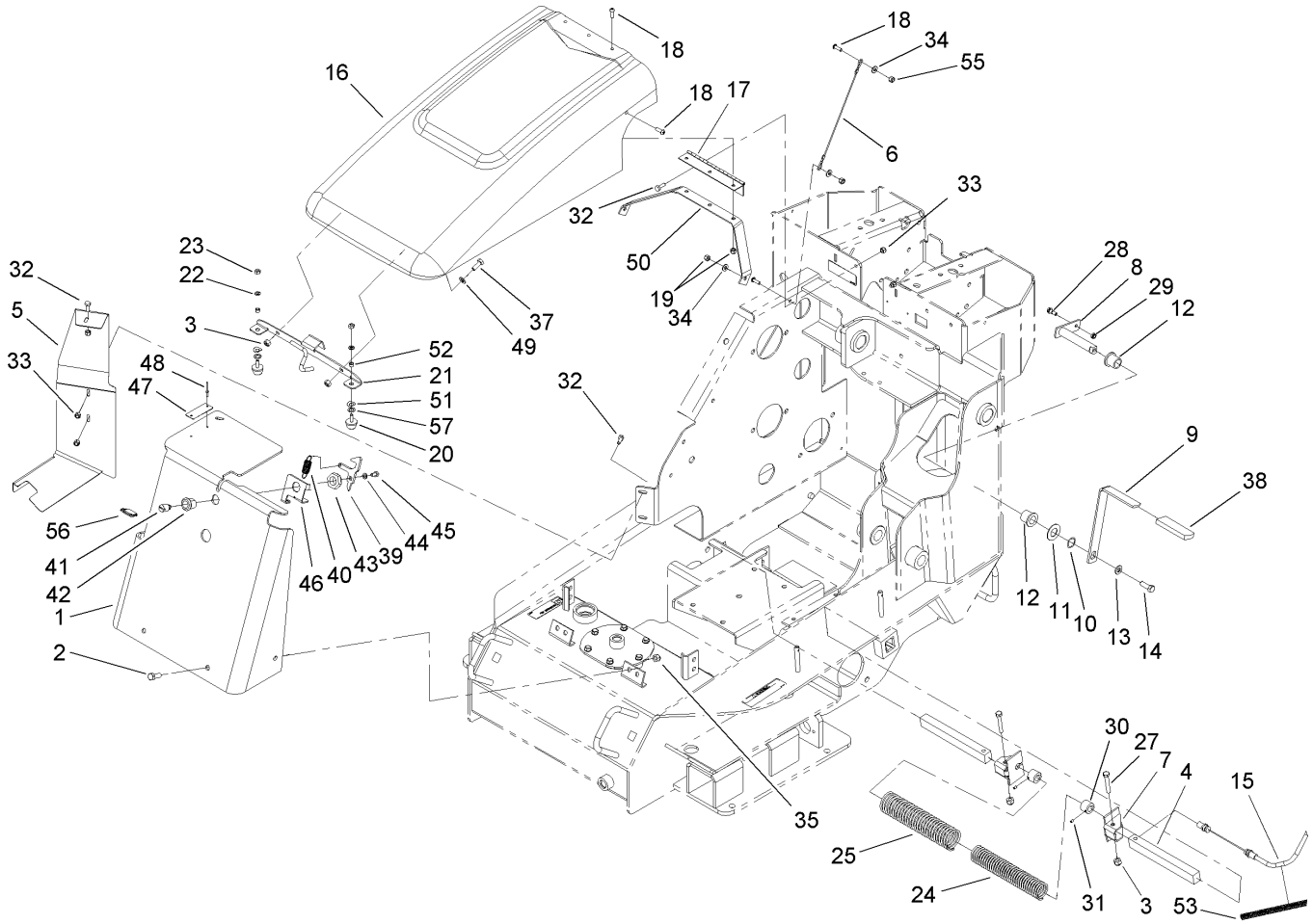
Ref	Part No.	Qty.	Description
35	32149-7	2	Nut-Keps
36	3256-51	2	Washer-Flat
37	100-1270	1	Switch-Proximity
38	3229-20	2	Screw-CARR
39	100-1263	1	Plate-Switch
40	32149-2	2	Nut
41	3256-22	4	Washer-Flat
42	3229-1	2	Screw-CARR
43	3296-6	1	Nut-Lock, NI



Hood and Brake Assembly

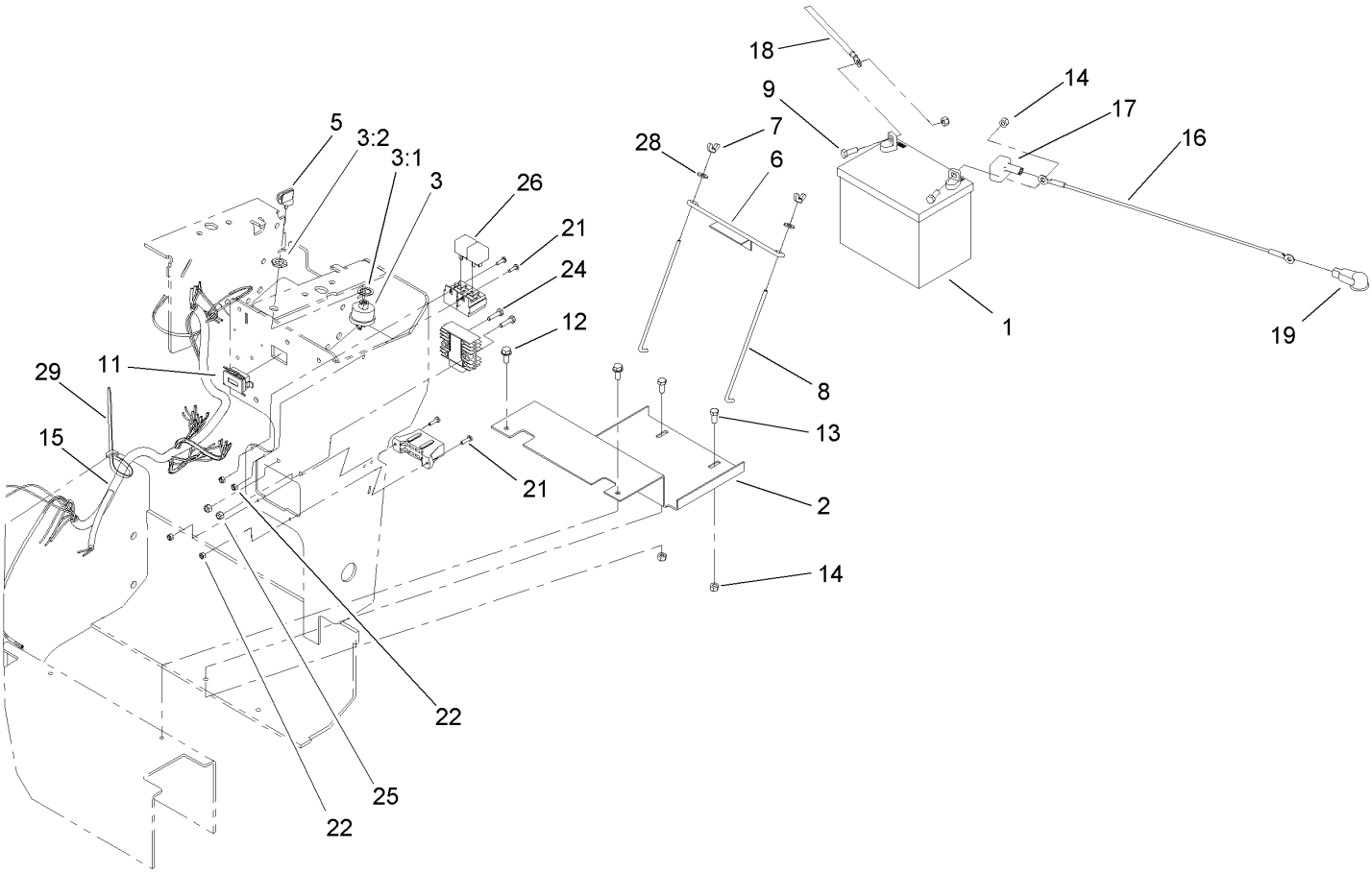
Ref	Part No.	Qty.	Description
1	105-9038-03	1	Grille
2	323-6	4	Screw-HH
3	3296-29	5	Nut-Lock, NI
4	106-9413-03	2	Bar-Brake
5	105-9144-03	1	Deflector-Exhaust
6	106-9418	1	Lanyard
7	106-9412-03	2	Bracket-Cable
8	106-9430	1	Brake Shaft ASM
9	105-9140-03	1	Handle-Brake
10	95-3703	1	Washer-Spring, Wave
11	3256-39	1	Washer-Flat
12	256-117	2	Bushing
13	3256-24	1	Washer-Flat
14	323-18	1	Screw-HH
15	106-9433	1	Cable-Brake
16	106-9420	1	Hood ASM
17	106-9408	1	Hinge-Hood
18	3258-166	6	Screw
19	3296-42	4	Nut-Lock, NI
20	1-523420	2	Bumper
21	106-9497-03	1	Rod Latch ASM
22	3253-3	2	Washer-Lock
23	3217-5	2	Nut-Hex
24	105-7055	1	Spring-Brake

Ref	Part No.	Qty.	Description
25	105-7054	1	Spring-Brake
27	322-10	2	Screw-HH
28	42-3560	1	Bolt-Shoulder
29	3296-56	1	Nut-Lock, NI
30	100-6274	2	Tube-Guide
31	3245-20	2	Screw-HSH
32	321-4	6	Screw-HH
33	3296-42	6	Nut-Lock, NI
34	3256-78	2	Washer-Flat
35	3296-39	4	Nut-Lock, NI
37	322-4	3	Screw-HH
38	62-9130	1	Grip-Handle
39	106-5728	1	Cam-Latch
40	104-0869	1	Spring-Brake
41	106-9335	1	Housing-Latch
42	106-9336	1	Insert-Latch
43	3296-60	1	Nut-Lock, NI
44	3253-3	1	Washer-Lock
45	321-2	1	Screw-HH
46	106-5729-03	1	Bracket-Latch
47	80-9350	1	Plate-Hot Surface
48	3269-13	2	Rivet-Pop
49	3256-23	3	Washer-Flat
50	106-9500-03	1	Support-Hood



Hood and Brake Assembly (continued)

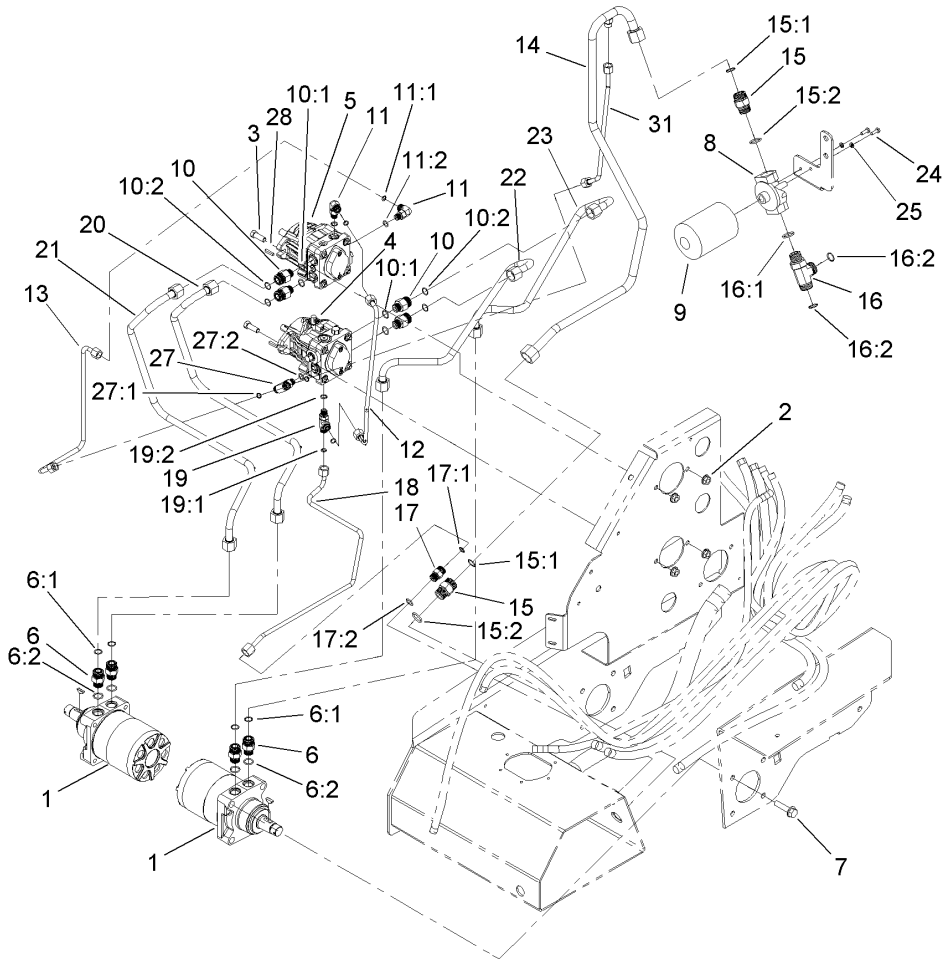
Ref	Part No.	Qty.	Description
51	3290-301	2	Washer-Spring
52	106-9308	2	Spacer
53	100-4697	1	Tube-Convoluted
55	3296-16	2	Nut-Lock, NI
56	99-8970	1	Key-Latch, Hood
57	3256-22	5	Washer-Flat



Electrical Assembly

Ref	Part No.	Qty.	Description
1	104-2492	1	Battery
2	104-8493-01	1	Bracket-Battery
3	88-9830	1	Key Switch ASM
3:1	3254-5	1	Washer-Tooth
3:2	218-461	1	Nut-HH
5	63-8360	2	Key-Ignition
6	113010	1	Holddown-Battery
7	32103-22	2	Nut-Wing
8	99-5027	2	Retainer-Battery
9	322-4	2	Screw-HH
11	104-8143	1	Hourmeter
12	32144-70	2	Screw-HH
13	322-3	2	Screw-HH
14	3296-29	4	Nut-Lock, NI
15	106-9436	1	Harness-Wire
16	99-7404	1	Cable-Positive
17	28-8080	1	Boot-Terminal
18	1-413540	1	Cable-Battery, Negative
19	93-3190	1	Boot-Insulator, Terminal
21	3250-13	4	Screw-PPH
22	3296-2	4	Nut-Lock
24	321-6	2	Screw-HH
25	3296-42	2	Nut-Lock, NI
26	98-7249	2	Relay

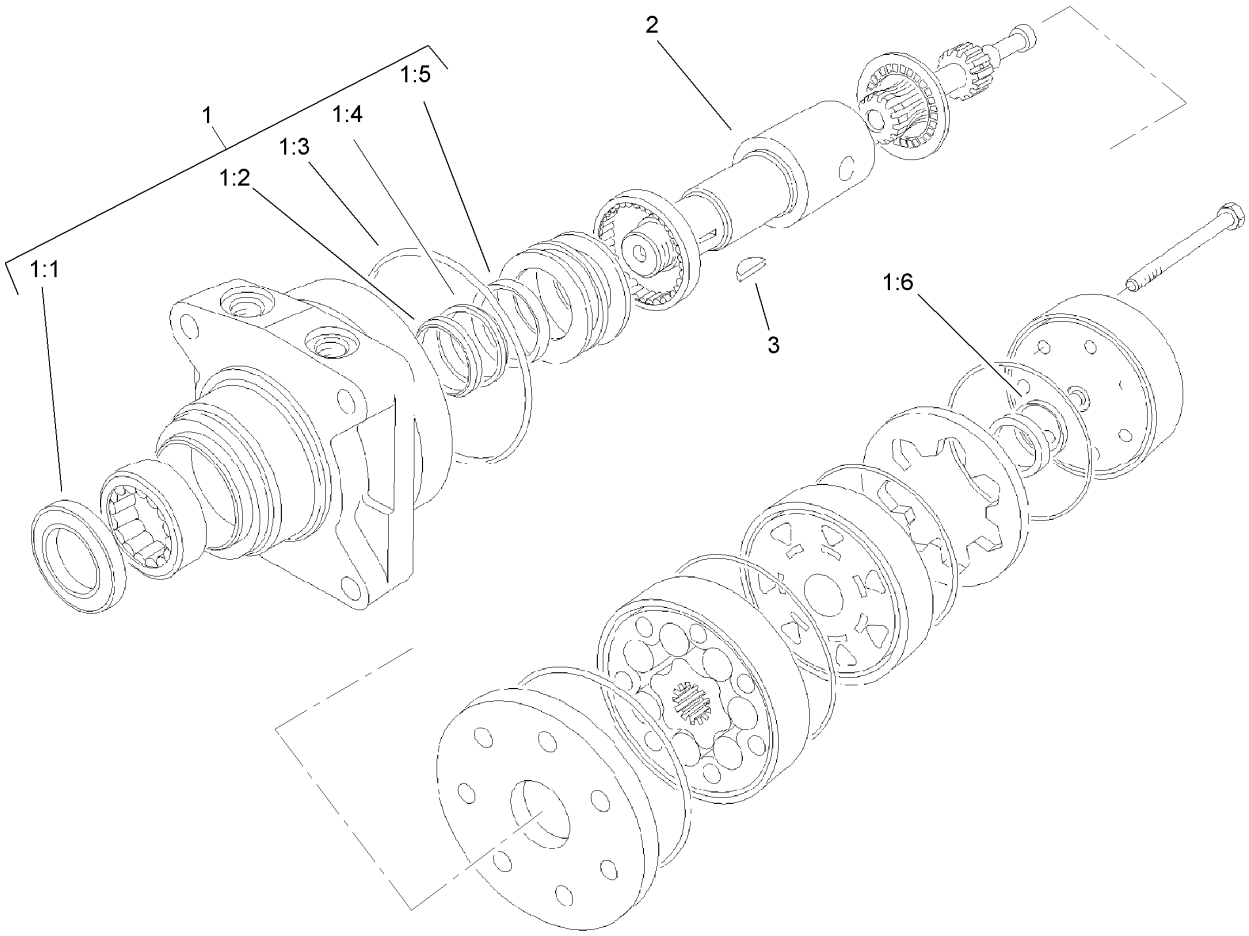
Ref	Part No.	Qty.	Description
28	3256-2	2	Washer-Flat
29	3290-378	2	Tie-Cable



Traction Hydraulic Assembly

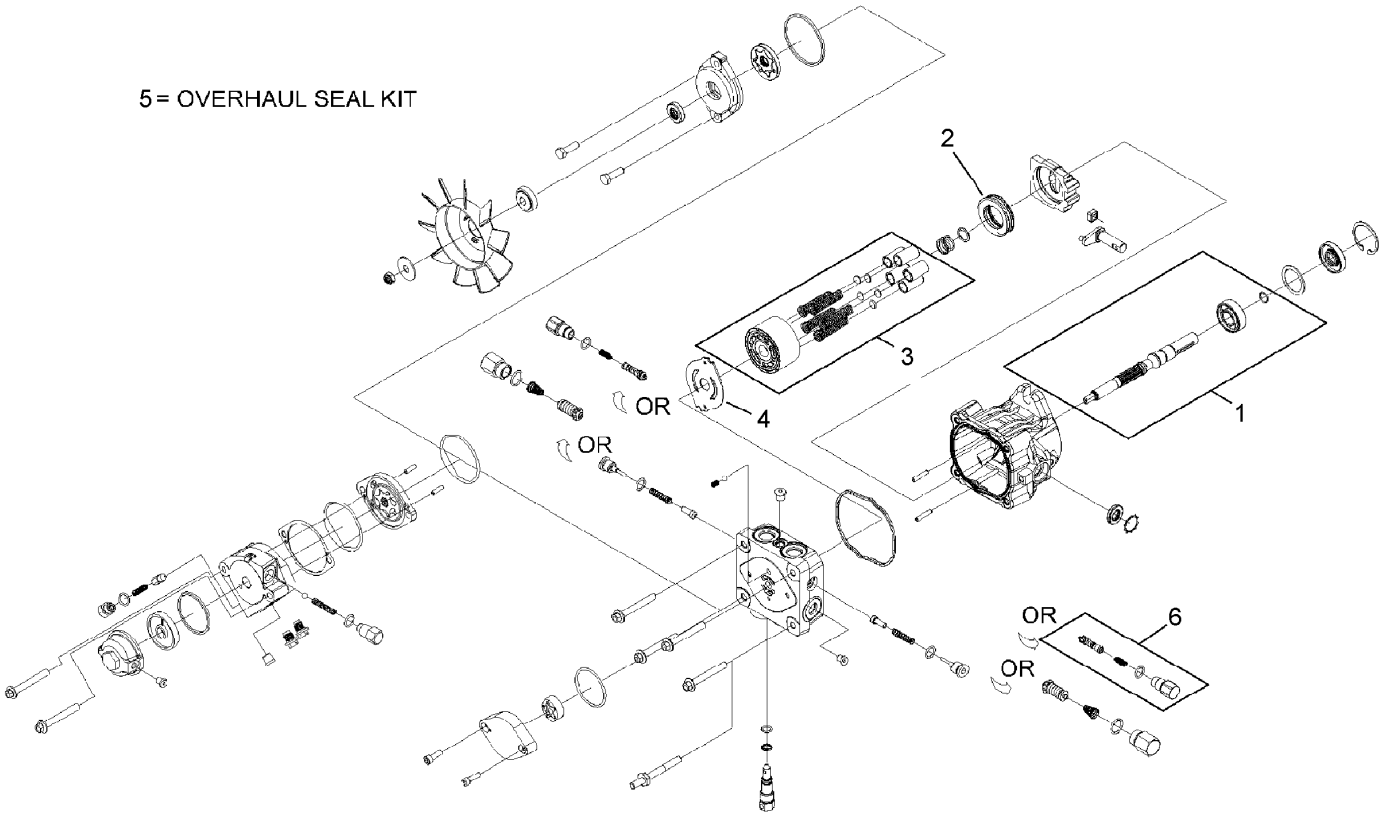
Ref	Part No.	Qty.	Description
1	104-8470	2	Motor-Wheel, HYD
2	32128-42	4	Nut-HF
3	324-5	4	Screw-HH
4	106-9470	1	Pump-HYD
5	106-9471	1	Pump-HYD
6	340-7	4	Adapter
6:1	237-65	1	O-Ring
6:2	237-80	1	O-Ring
7	3234-27	8	Screw-Flange
8	92-5821	1	Filter Head ASM
9	54-0110	2	Filter-Oil, Transmission
10	340-155	4	Fitting-Hyd, Straight
10:1	237-79	1	O-Ring
10:2	237-151	1	O-Ring
11	340-77	2	Fitting-Hyd, 90 DEG
11:1	237-22	1	O-Ring
11:2	237-42	1	O-Ring
12	106-9445	1	Hydraulic Tube ASM
13	106-9439	1	Hydraulic Tube ASM
14	106-9442	1	Hydraulic Tube ASM
15	340-9	2	Fitting-Hyd, Straight
15:1	237-58	1	O-Ring
15:2	237-81	1	O-Ring
16	340-148	1	Fitting-Tee

Ref	Part No.	Qty.	Description
16:1	237-81	1	O-Ring
16:2	237-58	2	O-Ring
17	340-4	1	Fitting-Hyd, Straight
17:1	237-30	1	O-Ring
17:2	237-79	1	O-Ring
18	106-9440	1	Hydraulic Tube ASM
19	340-86	1	Fitting-Hyd, Tee
19:1	237-22	2	O-Ring
19:2	237-42	1	O-Ring
20	106-9429	1	Hydraulic Tube ASM
21	106-9428	1	Hydraulic Tube ASM
22	106-9423	1	Hydraulic Tube ASM
23	106-9424	1	Hydraulic Tube ASM
24	321-4	2	Screw-HH
25	3253-3	2	Washer-Lock
27	340-94	1	Adapter
27:1	237-22	2	O-Ring
27:2	237-42	1	O-Ring
28	80-6090	2	Key-Pump
31	106-9441	1	Hydraulic Tube ASM



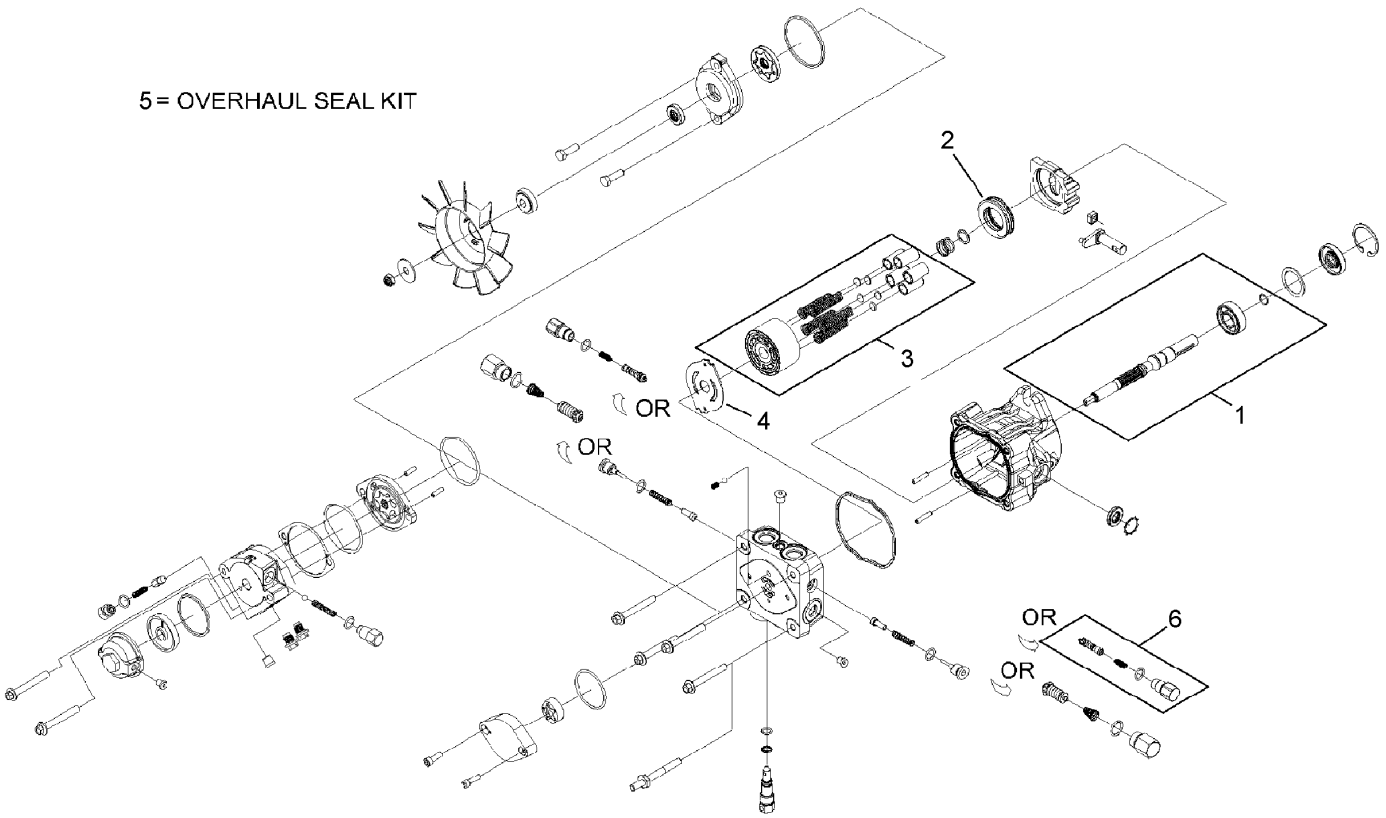
Hydraulic Motor Assembly No. 104-8470

Ref	Part No.	Qty.	Description
1	100-6131	1	Seal Kit
❷1:1		1	Seal-Dirt And Water
❷1:2		1	Washer-Backup
❷1:3		5	Seal-Ring
❷1:4		1	Washer-Backup
❷1:5		1	Seal-Inner
❷1:6		1	Seal-Commutator
2	99-3090	1	Shaft-Coupling
3	3257-42	1	Key-Woodruff



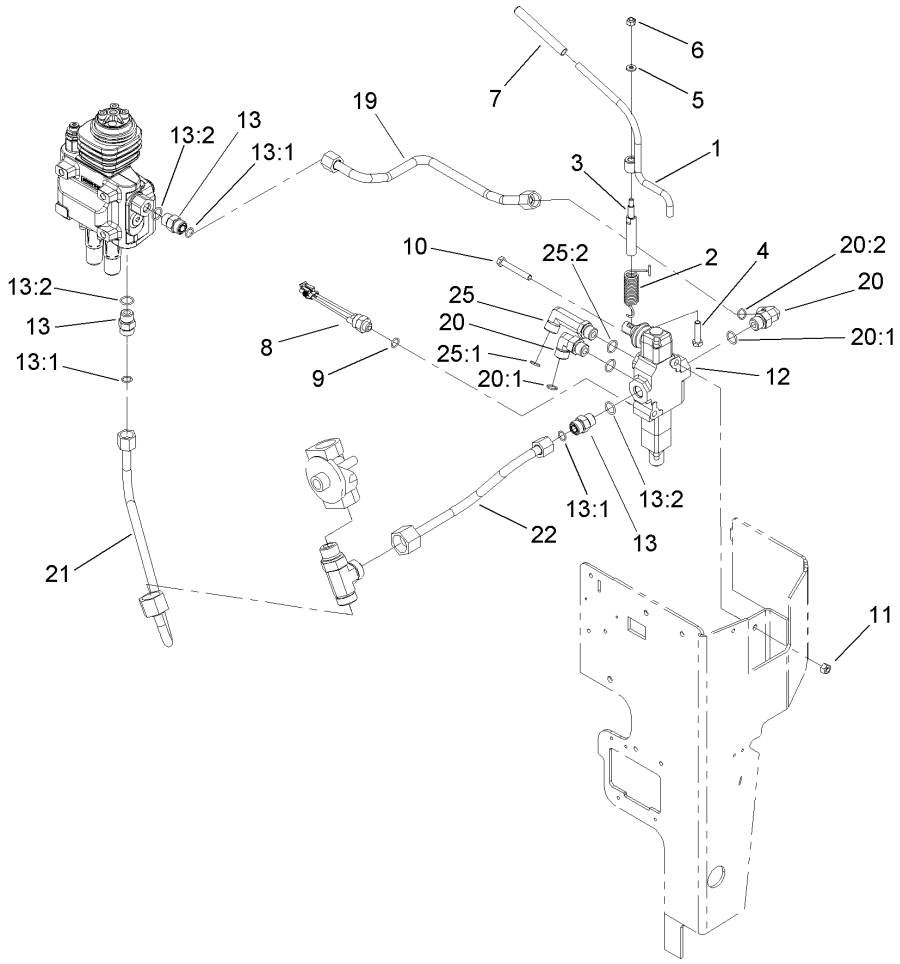
Hydraulic Pump Assembly No. 106-9470

Ref	Part No.	Qty.	Description
1	103-2664	1	Input Shaft Kit
2	103-2665	1	Thrust Bearing Kit
3	103-2666	1	Cylinder Block Kit
4	105-6185	1	Plate-Valve
5	105-6184	1	Seal Overhaul Kit
6	106-9498	1	Shock Valve Kit



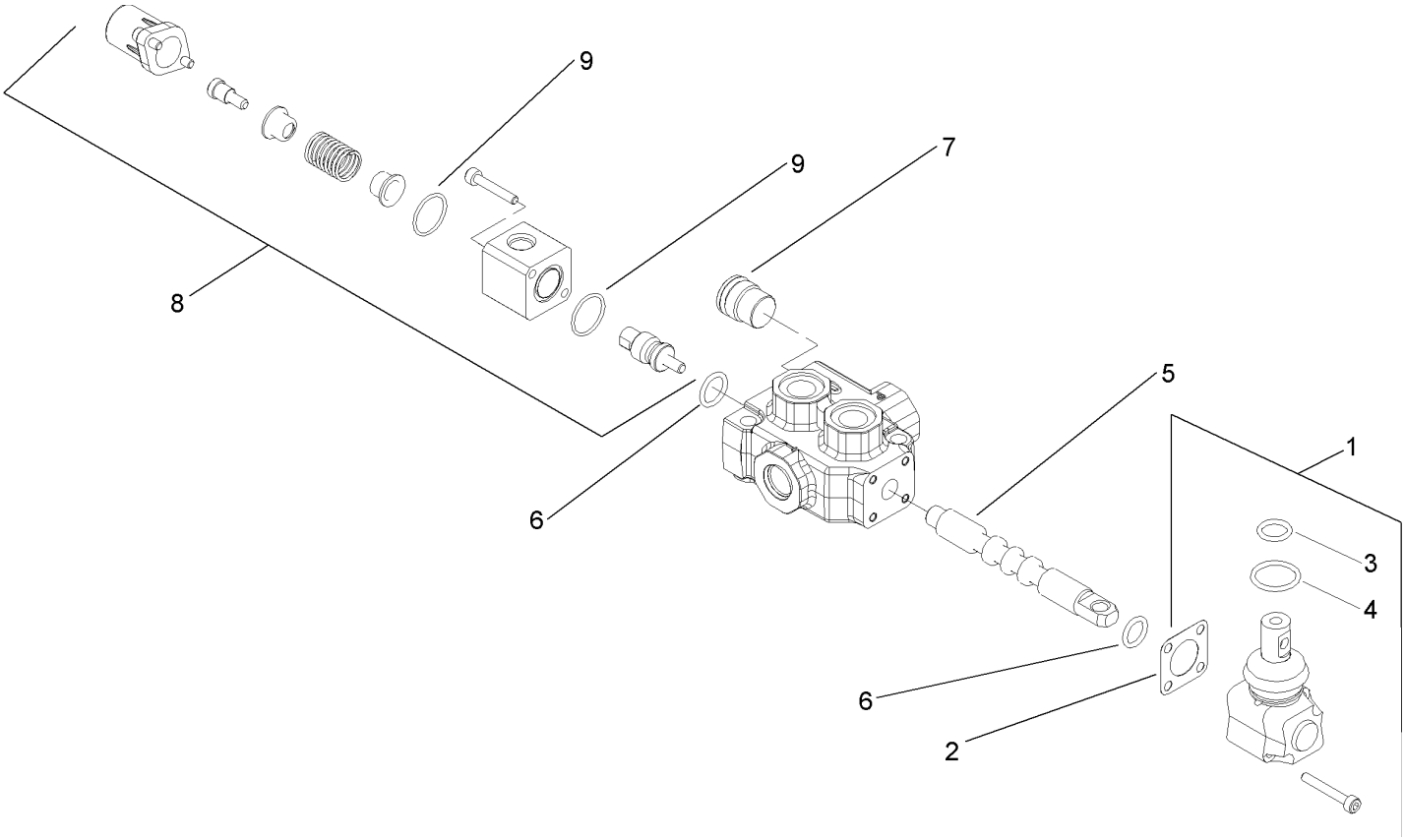
Hydraulic Pump Assembly No. 106-9471

Ref	Part No.	Qty.	Description
1	103-2664	1	Input Shaft Kit
2	103-2665	1	Thrust Bearing Kit
3	103-2666	1	Cylinder Block Kit
4	105-6185	1	Plate-Valve
5	105-6184	1	Seal Overhaul Kit
6	106-9498	1	Shock Valve Kit



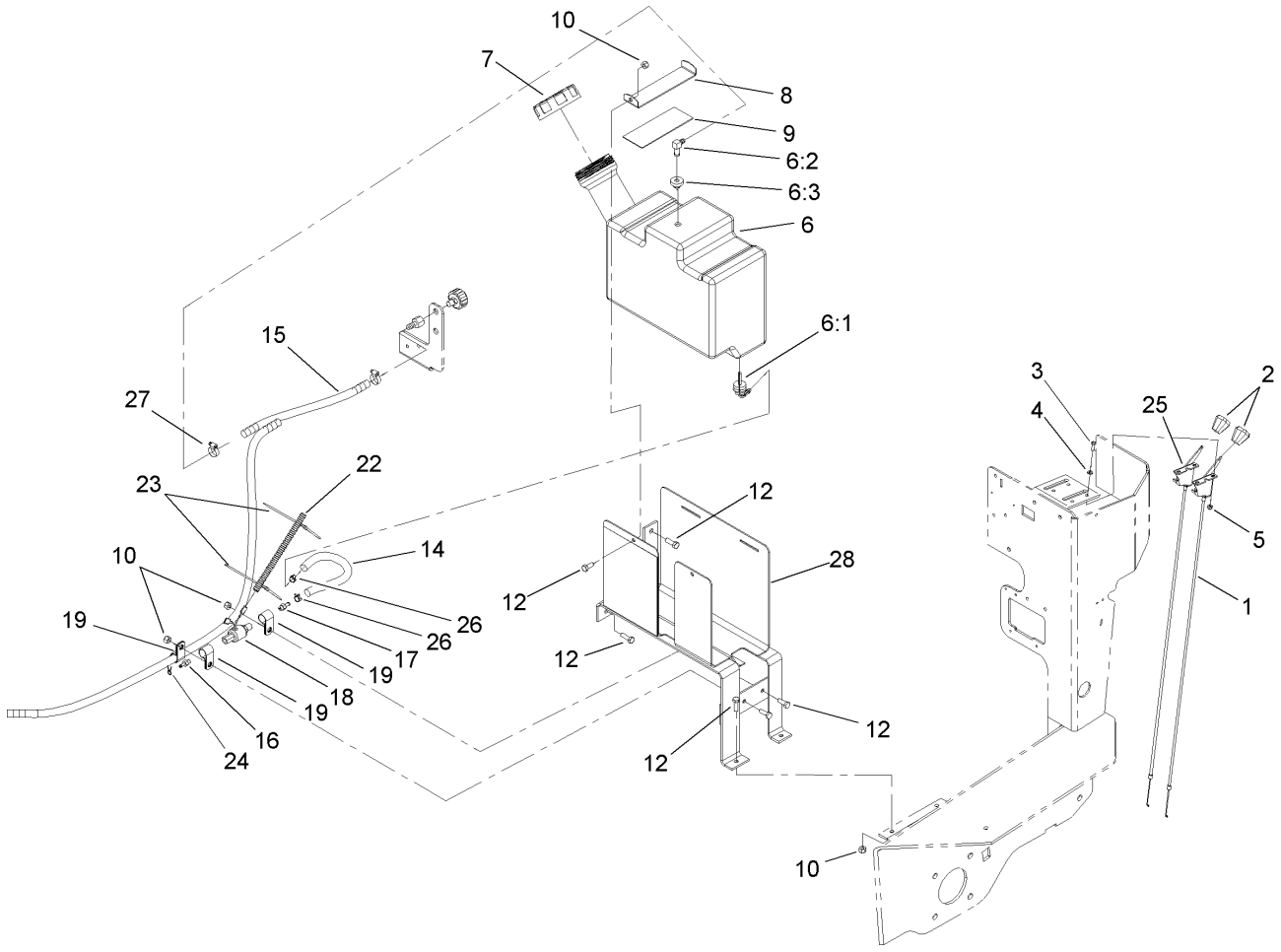
Principle Hydraulic Assembly

Ref	Part No.	Qty.	Description
1	100-4246	1	Auxiliary Lever ASM
2	100-6129	1	Spring-Torsion
3	104-2827	1	Spacer-Hiflo
4	48-7740	1	Screw
5	3256-16	1	Washer-Flat
6	3296-42	1	Nut-Lock, NI
7	92-6798	1	Cap-Rod, Tilt
8	72-4310	1	Switch-Ball
9	237-42	1	O-Ring
10	322-11	2	Screw-HH
11	3296-29	2	Nut-Lock, NI
12	106-9405	1	Valve-1 Spool
13	340-4	3	Fitting-Hyd, Straight
13:1	237-30	1	O-Ring
13:2	237-79	1	O-Ring
19	106-9437	1	Hydraulic Tube ASM
20	340-98	2	Fitting-Hyd, 90 DEG
20:1	237-79	1	O-Ring
20:2	237-30	1	O-Ring
21	106-9444	1	Hydraulic Tube ASM
22	106-9443	1	Hydraulic Tube ASM
25	99-6160	1	Fitting-Elbow, 90 DEG
25:1	237-30	1	O-Ring
25:2	237-79	1	O-Ring



Spool Valve Assembly No. 106-9405

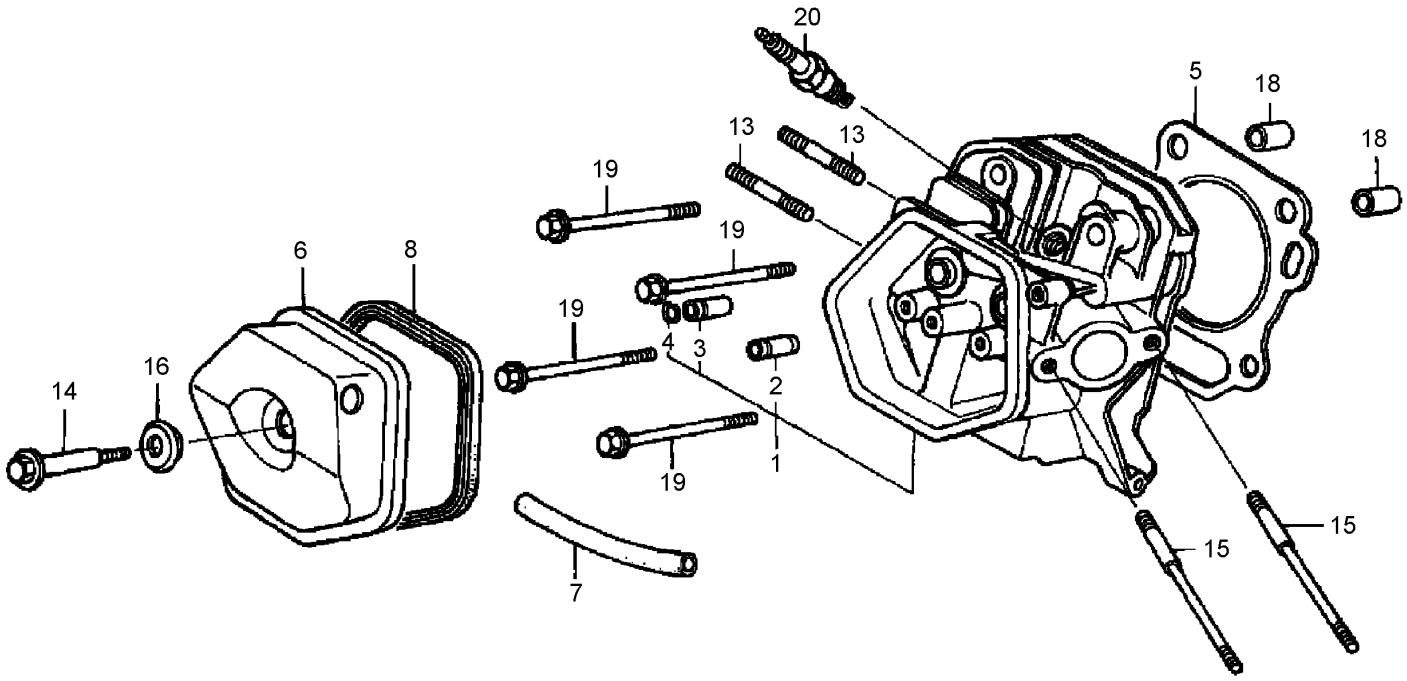
Ref	Part No.	Qty.	Description
1	100-7229	1	Kit-Lever ASM
2	99-3075	1	Gasket
3	107-3564	1	Seal-Lever
4	107-3566	1	Seal-Lever
5	107-3567	1	Spool-Valve
6	106-7719	2	Seal-Valve
7	107-3569	1	Plug-Cavity, Relief
8	107-3571	1	Kit-Spring, End Cap
9	107-3572	2	Seal-End Cap



Fuel Tank Assembly

Ref	Part No.	Qty.	Description
1	106-9435	1	Cable-Choke
2	66-0120	2	Knob
3	3290-134	4	Screw
4	3256-21	4	Washer-Flat
5	3296-2	4	Nut-Lock
6	106-9460	1	Fuel Tank ASM
6:1	103-2605	1	Fitting-Fuel, Bulkhead
6:2	100-1597	1	Fitting-90 Degree
6:3	46-6560	1	Bushing
7	95-4192	1	Unleaded Gas Cap ASM
8	106-9457-03	2	Strap-Tank
9	106-9488	2	Felt-Strap
10	3296-29	8	Nut-Lock, NI
12	322-5	8	Screw-HH
14	104-4119	1	Hose-Fuel
15	104-4848	1	Hose-Fuel
16	354-22	1	Fitting-Barb
17	304-73	1	Connector-Hose
18	106-9499	1	Valve-Shutoff, Fuel
19	2412-81	3	Clamp-R
22	106-9504	1	Cover-Brace
23	3290-381	2	Tie-Cable
24	2412-79	1	Clamp-Hose
25	106-9434	1	Cable-Throttle

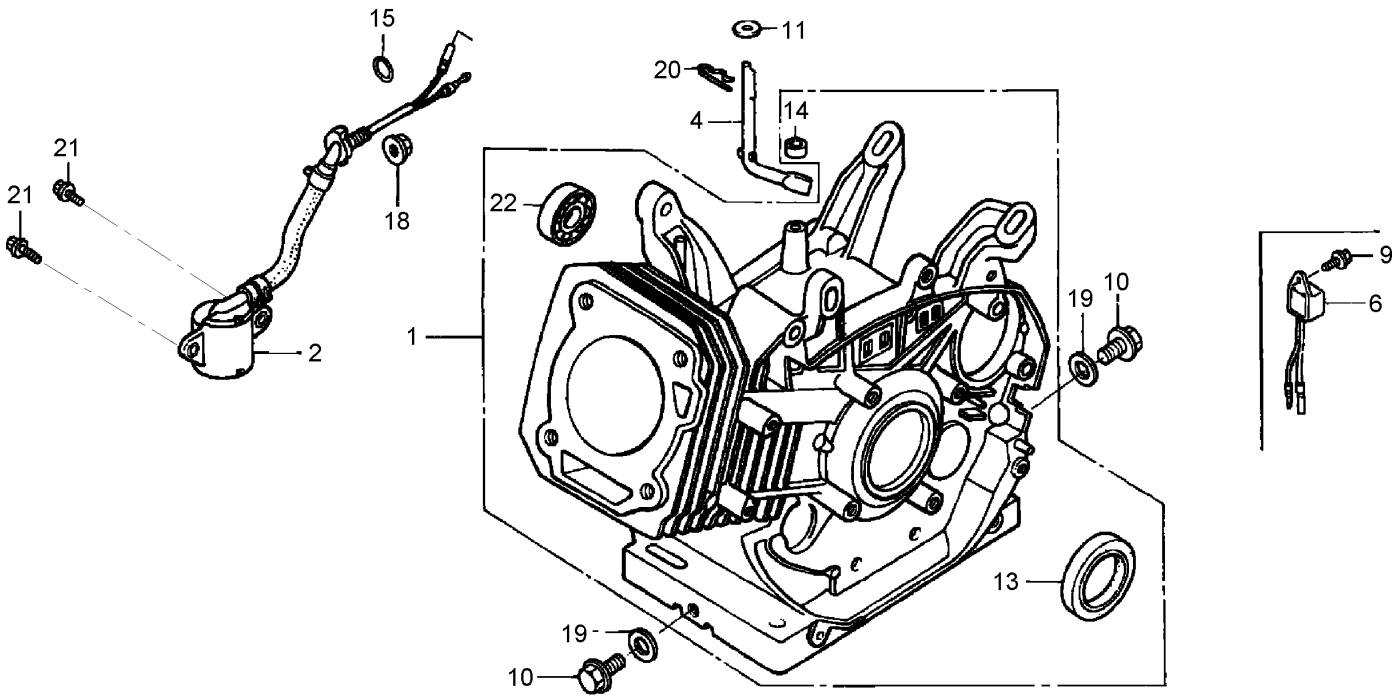
Ref	Part No.	Qty.	Description
26	2412-98	2	Clamp
27	2412-36	1	Clamp-Hose
28	106-9486	1	Tank Bracket ASM



Cylinder Head Assembly

Ref	Part No.	Qty.	Description
❸1	12200-ZF6-406	1	Cylinder Head
❸2	12204-ZE2-306	1	Guide-Valve
❸3	12205-ZE2-305	1	Guide-Valve, Exhaust
❸4	12216-ZE2-300	1	Clip-Guide, Valve
❸5	12251-ZF6-W00	1	Gasket-Cylinder Head
❸6	12310-ZE2-020	1	Cover-Head
❸7	95005-11001-30M	1	Bulk Hose-Vacuum
❸8	12391-ZE2-020	1	Gasket-Cylinder Head Cover
❸13	92900-08032-0E	2	Bolt 2-Stud
❸14	90014-ZE2-000	1	Bolt-Head Cover
❸15	90042-ZE8-000	2	Bolt-Stud
❸16	90441-ZE2-010	1	Washer-Head Cover
❸18	94301-12200	2	Pin A-Dowel
❸19	95701-10080-00	4	Bolt-Flange

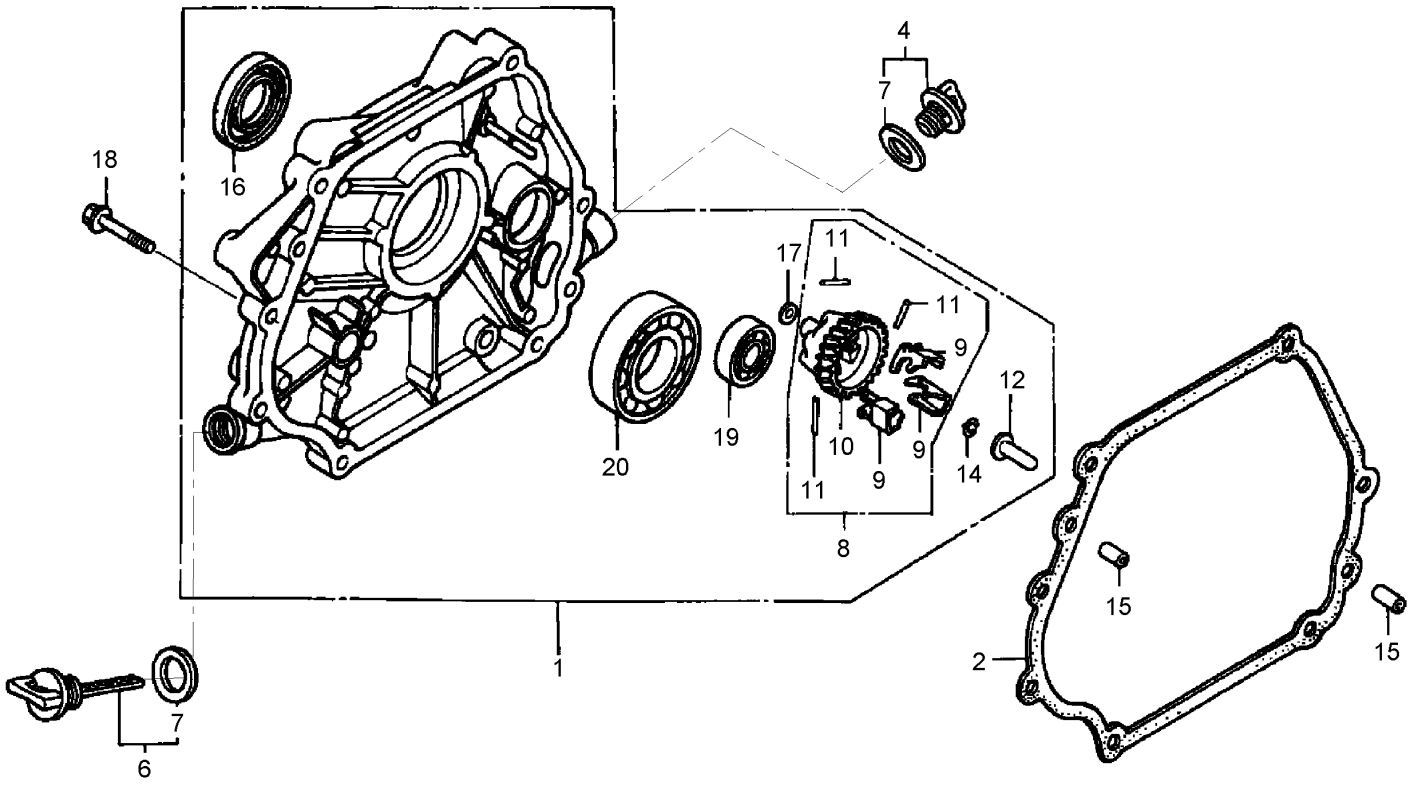
Ref	Part No.	Qty.	Description
❸20	98079-55846	1	Spark Plug (Bpr5es) (Ngk)
❸20	98079-55855	1	Spark Plug (W16epr-u) (Denso)
❸20	98079-56846	1	Spark Plug (Bpr6es) (Ngk)



Cylinder Barrel Assembly

Ref	Part No.	Qty.	Description
❸1	12000-ZF6-425	1	Cylinder ASM
❸2	15510-ZE2-043	1	Switch ASM-Oil Level
❸4	16541-ZE3-010	1	Shaft-Governor Arm
❸6	34150-ZH7-003	1	Alert Unit-Oil
❸9	90013-883-000	1	Bolt-Flange
❸10	90131-883-000	2	Bolt-Drain Plug
❸10	90131-896-650	2	Bolt-Drain Plug
❸11	90446-KE1-000	1	Washer
❸13	91201-ZE3-004	1	Oil Seal
❸14	91201-ZE9-003	1	Oil Seal
❸14	91203-952-771	1	Oil Seal
❸15	91353-671-003	1	O-Ring
❸18	94050-10000	1	Nut-Flange
❸19	94109-12000	2	Washer-Drain Plug
❸20	94251-10000	1	Pin-Lock

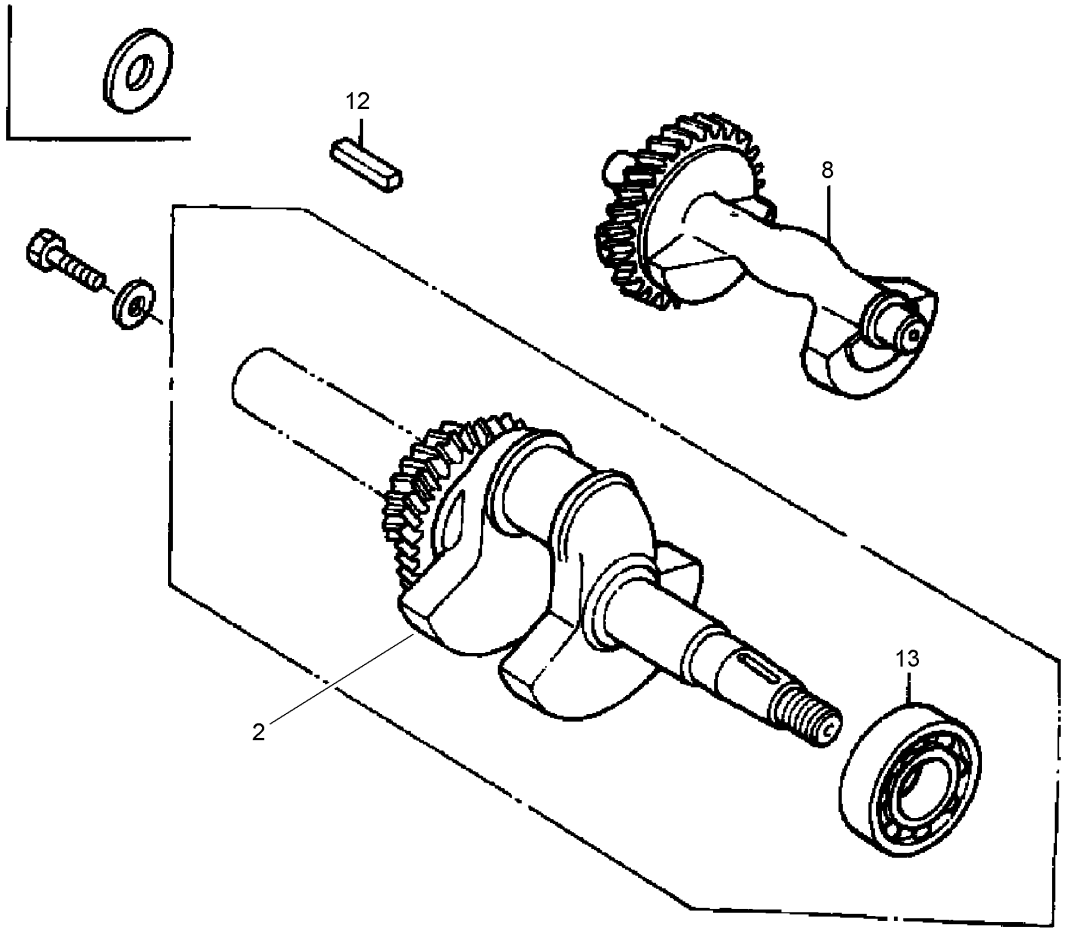
Ref	Part No.	Qty.	Description
❸21	95701-06012-00	2	Bolt, Flange
❸22	96100-62020-00	1	Bearing-Radial Ball



Crankcase Cover Assembly

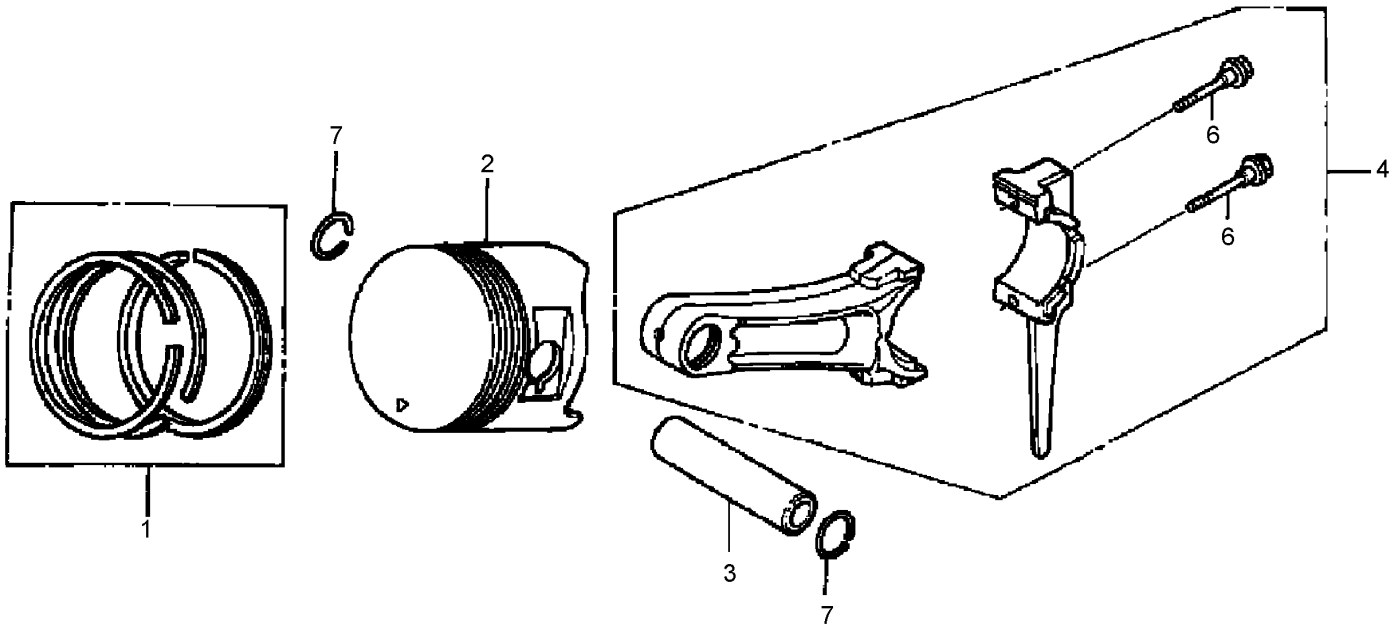
Ref	Part No.	Qty.	Description
❸1	11300-ZE3-604	1	Cover ASM-Crankcase
❸2	11381-ZE3-801	1	Gasket-Case Cover
❸4	15600-ZG4-003	1	Cap ASM-Oil Filler
❸6	15600-735-003	1	Cap ASM-Oil Filler
❸7	15625-ZE1-003	2	Gasket-Oil Filler Cap
❸8	16510-ZE3-000	1	Governor ASM
❸9	16511-ZE8-000	3	Weight-Governor
❸10	16512-ZE3-000	1	Holder-Governor Weight
❸11	16513-ZE2-000	3	Pin-Governor Weight
❸12	16531-Z0A-000	1	Slider-Governor
❸14	90602-ZE1-000	1	Clip-Governor Holder
❸15	90701-HC4-000	2	Pin-Dowel
❸16	91201-ZE3-004	1	Oil Seal
❸17	94101-06800	1	Washer

Ref	Part No.	Qty.	Description
❸18	95701-08040-00	7	Bolt-Flange
❸19	96100-62020-00	1	Bearing-Radial Ball
❸20	96100-62070-00	1	Bearing-Radial Ball



Crankshaft Assembly

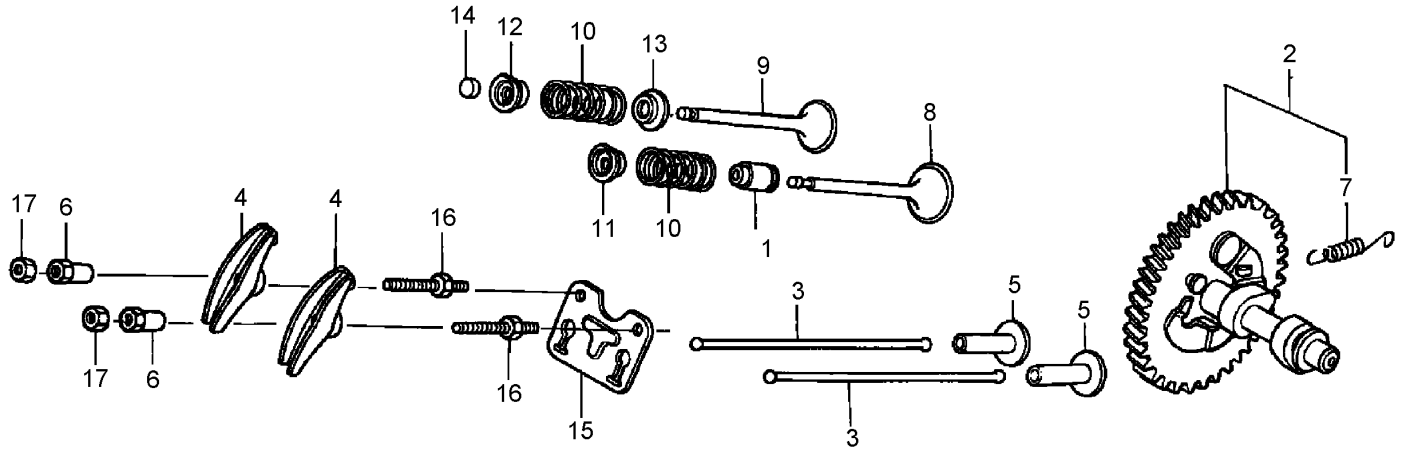
Ref	Part No.	Qty.	Description
❸2	13310-ZF6-W10	1	Crankshaft (Q-type)
❸8	13351-ZE3-010	1	Weight-Balancer
❸12	90745-ZE2-600	1	Key
❸13	91001-ZF6-003	1	Bearing-Radial Ball (6207s)



Piston Assembly

Ref	Part No.	Qty.	Description
❸1	13010-ZF6-003	1	Ring Set, Piston (Std)
❸1	13011-ZF6-003	1	Ring Set, Piston (Os 0.25)
❸1	13012-ZF6-003	1	Ring Set, Piston (Os 0.50)
❸1	13012-ZF6-005	1	Ring Set, Piston (Os 0.50)
❸1	13013-ZF6-003	1	Ring Set, Piston (0.75) (Nippon)
❸2	13101-ZF6-W00	1	Piston (Std)
❸2	13102-ZF6-W00	1	Piston (Os 0.25)
❸2	13103-ZF6-W00	1	Piston (Os 0.50)
❸2	13104-ZF6-W00	1	Piston (0.75)
❸3	13111-ZF6-W00	1	Pin, Piston
❸4	13200-ZE3-020	1	Rod ASM-Connecting (Std)
❸4	13200-ZE3-315	1	Rod ASM-Connecting (Us 0.25)
❸6	90001-ZE8-000	2	Bolt-Connecting Rod

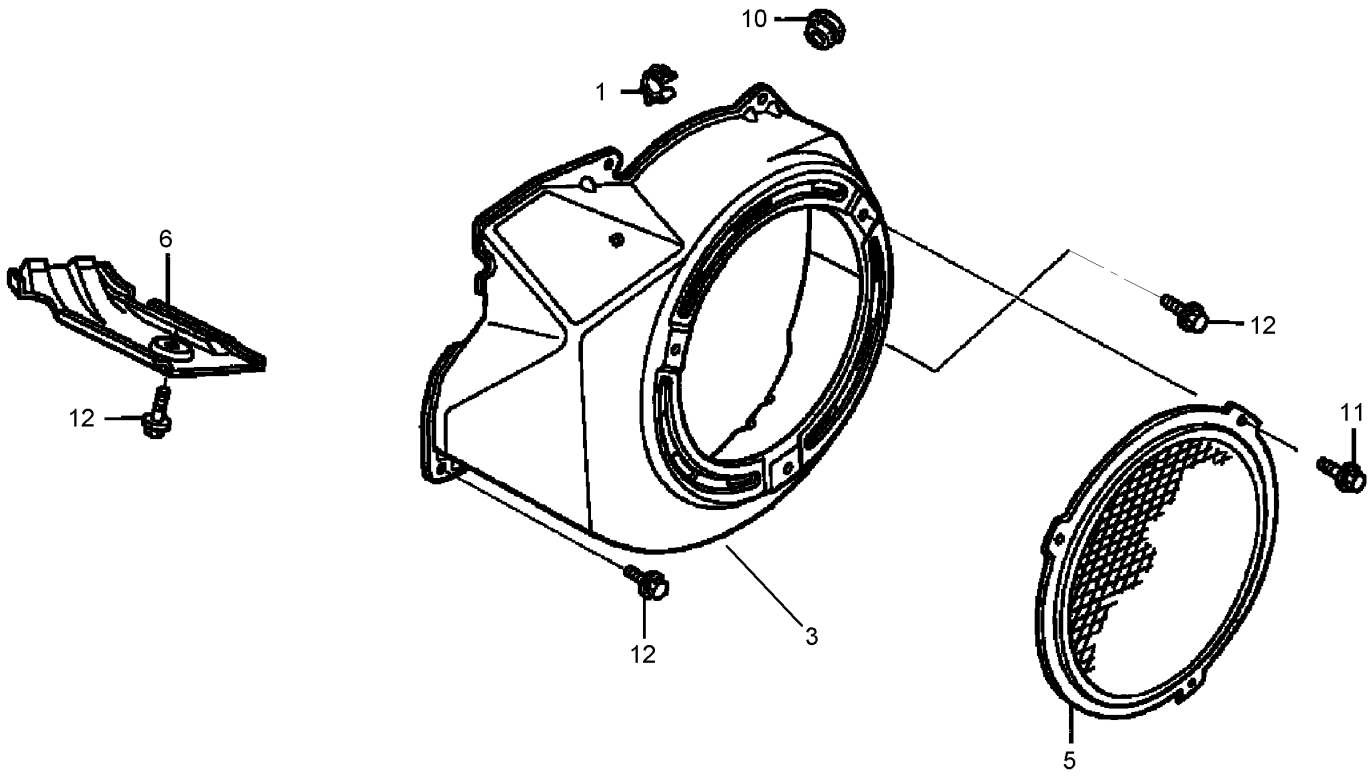
Ref	Part No.	Qty.	Description
❸7	90601-ZE3-000	2	Clip-Piston Pin (20mm)



Camshaft Assembly

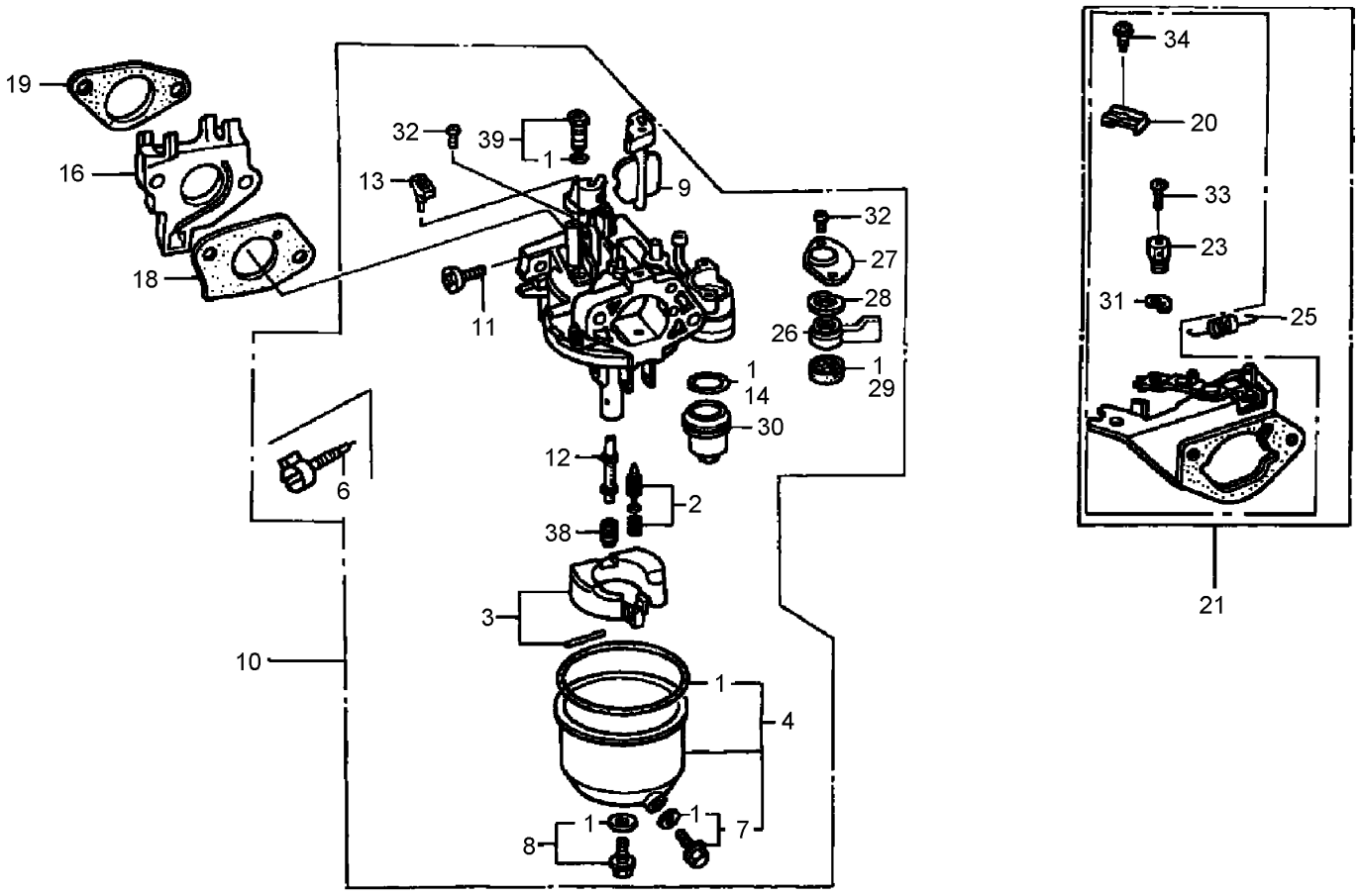
Ref	Part No.	Qty.	Description
❸1	12209-ZE8-003	1	Seal, Valve Stem
❸2	14100-ZF6-W01	1	Camshaft ASM
❸3	14410-ZE3-013	2	Rod, Push
❸4	14431-ZE2-010	2	Arm, Valve Rocker
❸5	14441-ZE2-000	2	Lifter, Valve
❸6	14451-ZE1-013	2	Pivot, Rocker Arm
❸7	14568-ZE1-000	1	Spring, Weight Return
❸8	14711-ZE3-000	1	Valve-Intake
❸9	14721-ZE3-000	1	Valve-Exhaust
❸10	14751-ZE2-003	2	Spring-Valve
❸11	14771-ZE2-000	1	Retainer, In. Valve
❸12	14773-ZE2-000	1	Retainer, Ex. Valve
❸13	14775-ZE2-010	1	Seat-Valve Spring

Ref	Part No.	Qty.	Description
❸14	14781-ZE2-000	1	Rotator-Valve
❸15	14791-ZE2-010	1	Plate-Push Rod
❸16	90012-ZE0-010	2	Bolt, Pivot (8mm)
❸17	90206-ZE1-000	2	Nut-Pivot Adj



Fan Cover Assembly

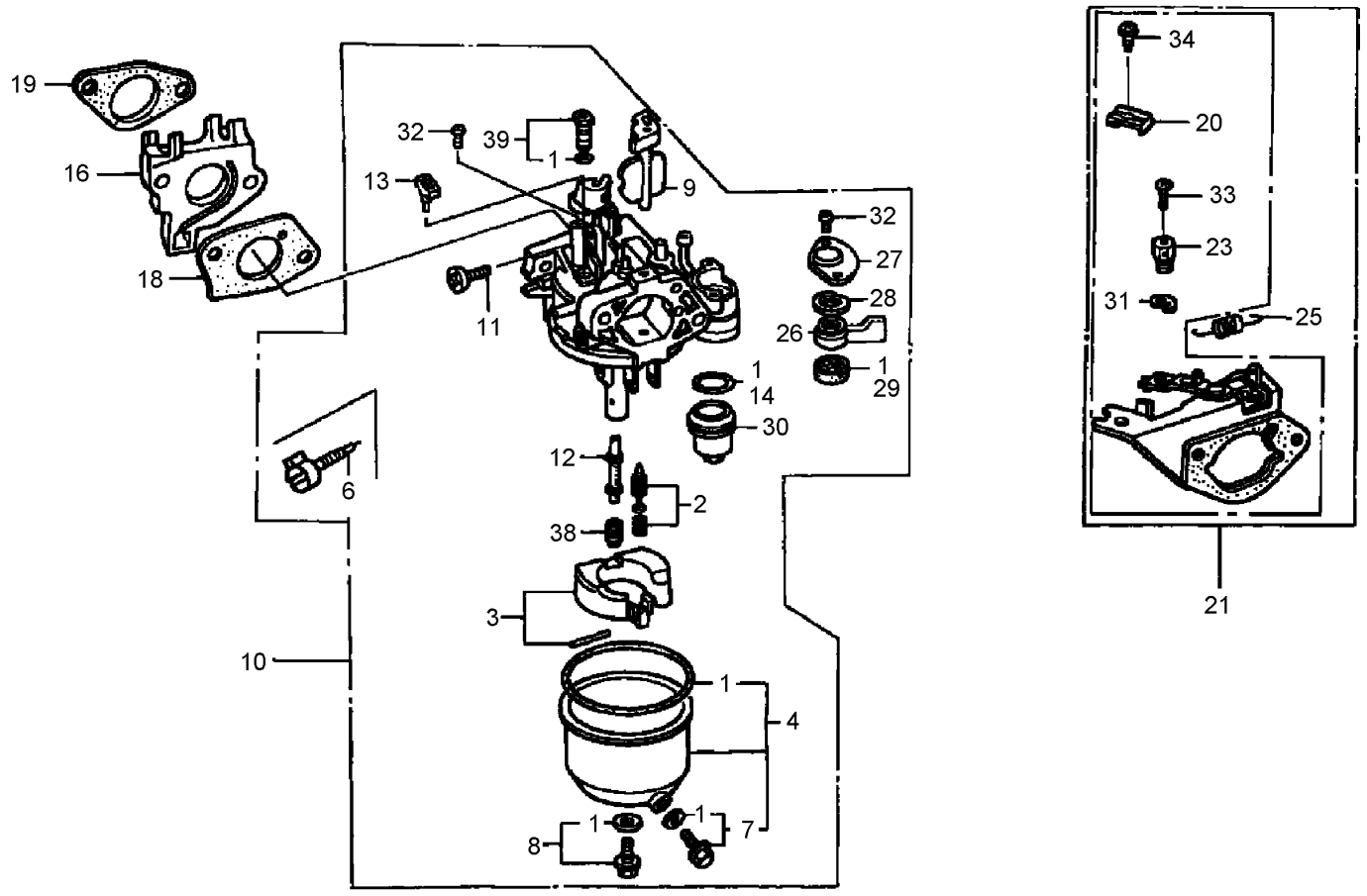
Ref	Part No.	Qty.	Description
❸1	16731-ZE2-003	1	Clip-Tube
❸3	19610-ZE3-010ZL	1	Cover-Fan R280 (Power)
❸5	19620-ZE3-811	1	Protector-Fan Cover
❸6	19631-ZE3-W00	1	Shroud
❸10	81329-567-020	1	Grommet-Drain Hole
❸11	90008-ZE2-003	3	Bolt-Flange
❸12	90013-883-000	6	Bolt-Flange



Carburetor Assembly

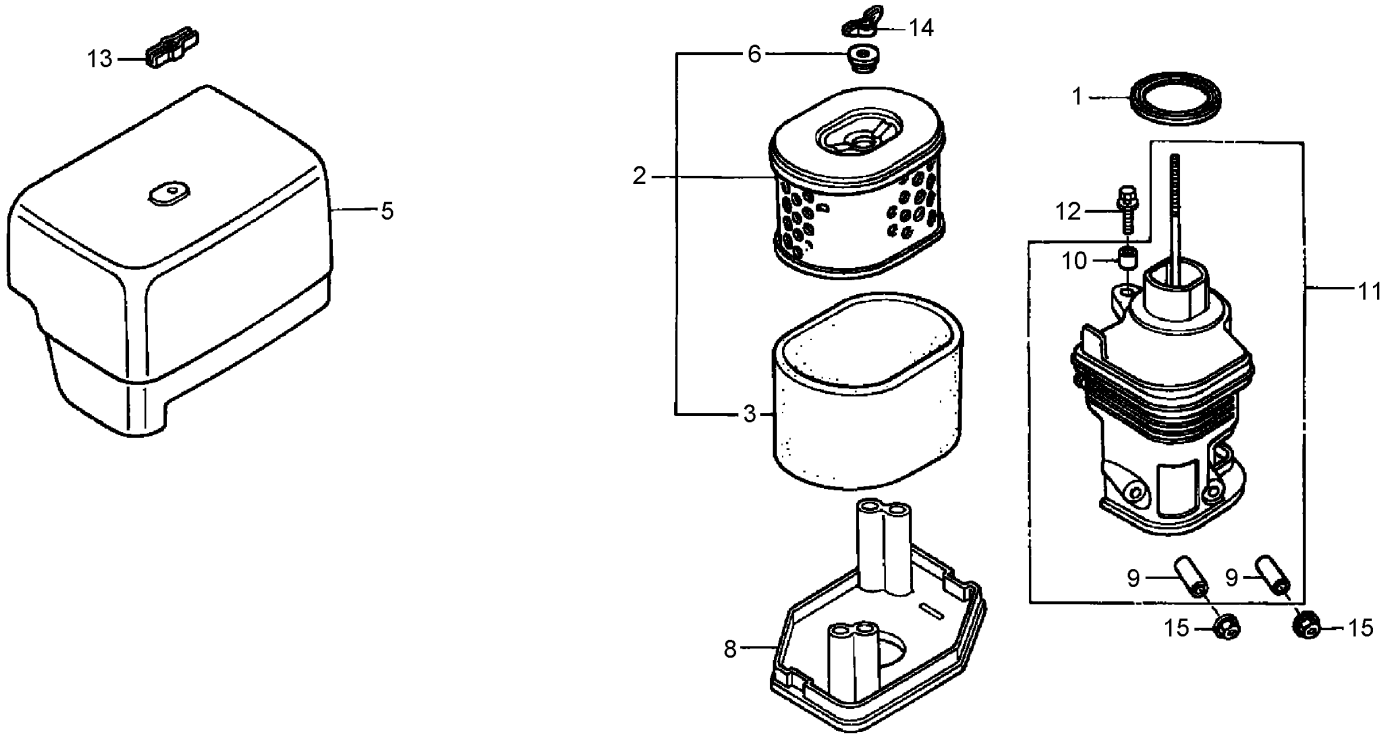
Ref	Part No.	Qty.	Description
❸1	16010-ZE2-812	1	Gasket Set
❸2	16011-ZA0-931	1	Valve Set-Float
❸3	16013-ZA0-931	1	Float Set
❸4	16015-ZE8-005	1	Chamber Set-Float
❸6	16016-ZH7-W01	1	Screw Set
❸7	16024-ZE1-811	1	Screw Set-Drain
❸8	16028-ZE0-005	1	Screw Set B
❸9	16044-ZE3-W20	1	Choke Set
❸10	16100-ZF6-V01	1	Carburetor ASM (Be85b)
❸11	16124-ZE0-005	1	Screw-Throttle Stop
❸12	16166-ZF6-V00	1	Nozzle-Main
❸13	16172-ZE3-W10	1	Collar-Set
❸14	16173-001-004	1	Gasket-Fuel Strainer

Ref	Part No.	Qty.	Description
❸16	16211-ZF6-000	1	Insulator-Carburetor
❸18	16221-ZF6-800	1	Gasket-Carburetor
❸19	16223-ZE3-W00	1	Gasket-Insulator
❸20	16576-891-000	1	Holder-Cable
❸21	16590-ZE2-812	1	Stay ASM-Choke (Remote)
❸23	16594-883-010	1	Holder-Wire
❸25	16615-ZE2-810	1	Spring-Return
❸26	16953-ZE1-812	1	Lever-Valve
❸27	16954-ZE1-812	1	Plate-Lever Setting
❸28	16956-ZE1-811	1	Spring-Valve Lever
❸29	16957-ZE1-812	1	Gasket-Valve
❸30	16967-ZE0-811	1	Cup-Fuel Strainer
❸31	90605-230-000	1	Circlip (5mm)
❸32	93500-03006-	2	Screw-Pan (3x6)



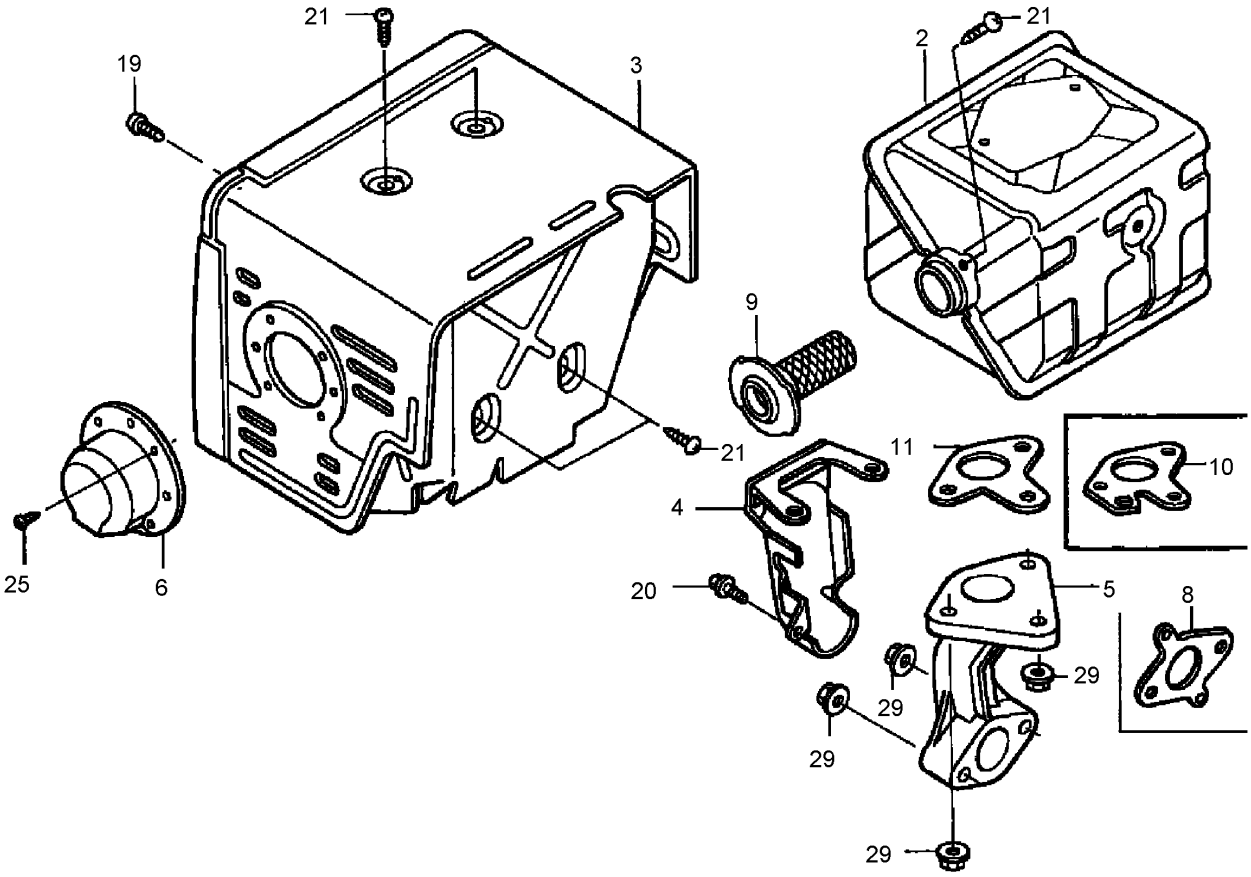
Carburetor Assembly (continued)

Ref	Part No.	Qty.	Description
❸33	93500-04006-	1	Screw-Pan (4x6)
❸34	93893-05016-	1	Screw-Washer
❸38	99101-ZH8-0880	1	Jet-Main (#88)
❸38	99101-ZH8-0900	1	Jet-Main (#90)
❸38	99101-ZH8-0920	1	Jet-Main (#92)
❸39	99204-ZA0-0450	1	Jet Set, Pilot (#45)



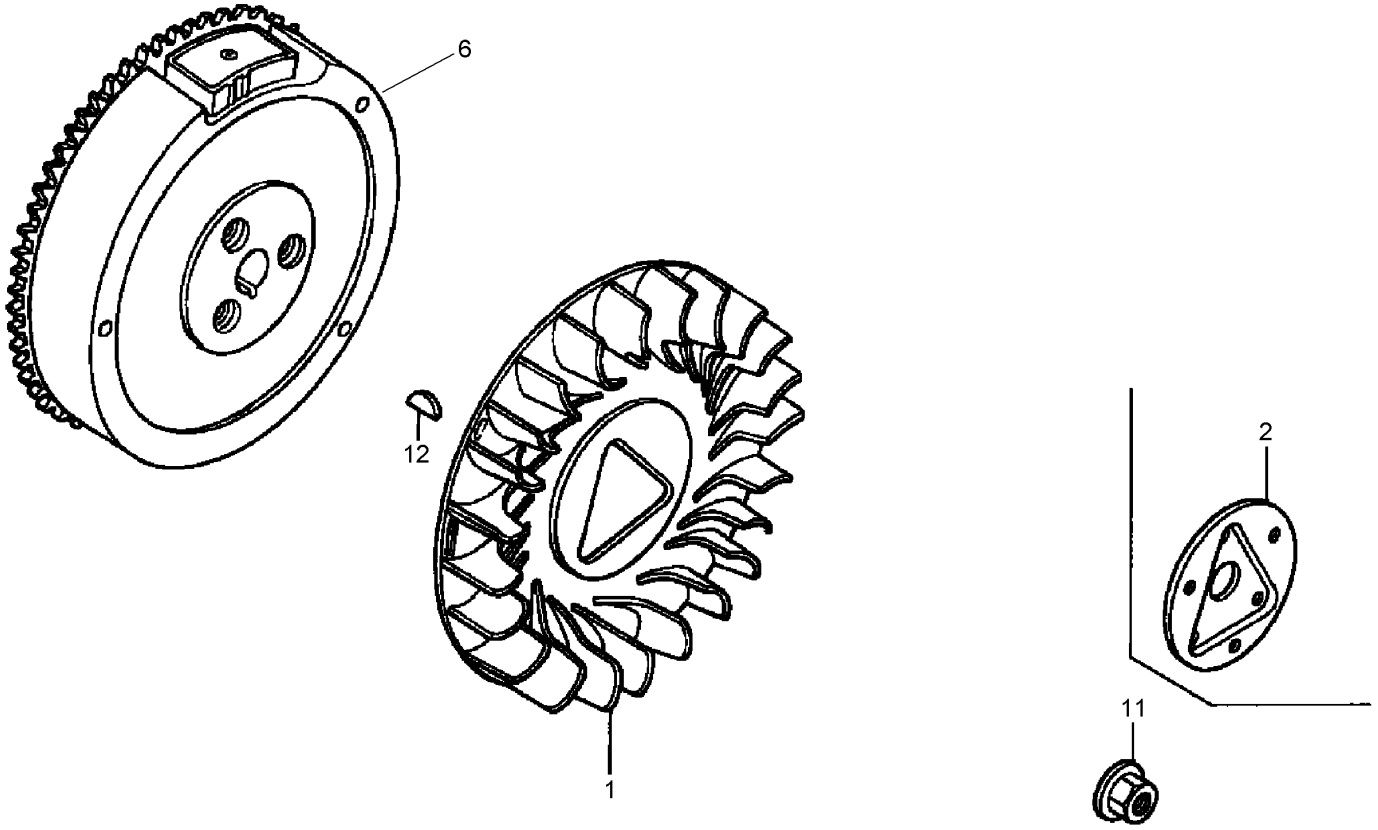
Air Cleaner Assembly

Ref	Part No.	Qty.	Description
❸1	16271-ZE2-010	1	Gasket-Elbow
❸2	17210-ZE3-505	1	Element-Air Cleaner
❸3	17218-ZE3-000	1	Filter (Outer)
❸5	17231-ZE3-W01	1	Cover-Air Cleaner
❸6	17232-891-000	1	Grommet-Air Cleaner
❸8	17235-ZH9-N00	1	Nose-Muffler
❸9	17238-ZE2-310	2	Collar-Air Cleaner
❸10	17239-ZE1-000	1	Collar B-Air Cleaner
❸11	17410-ZH9-N00	1	Elbow-Air Cleaner
❸12	90009-ZE2-003	1	Bolt-Washer (6x22)
❸13	90203-ZA0-800	1	Wingnut (6mm)
❸14	90325-044-000	1	Wingnut-Tool Box Setting
❸15	94050-06000	2	Nut-Flange (6mm)



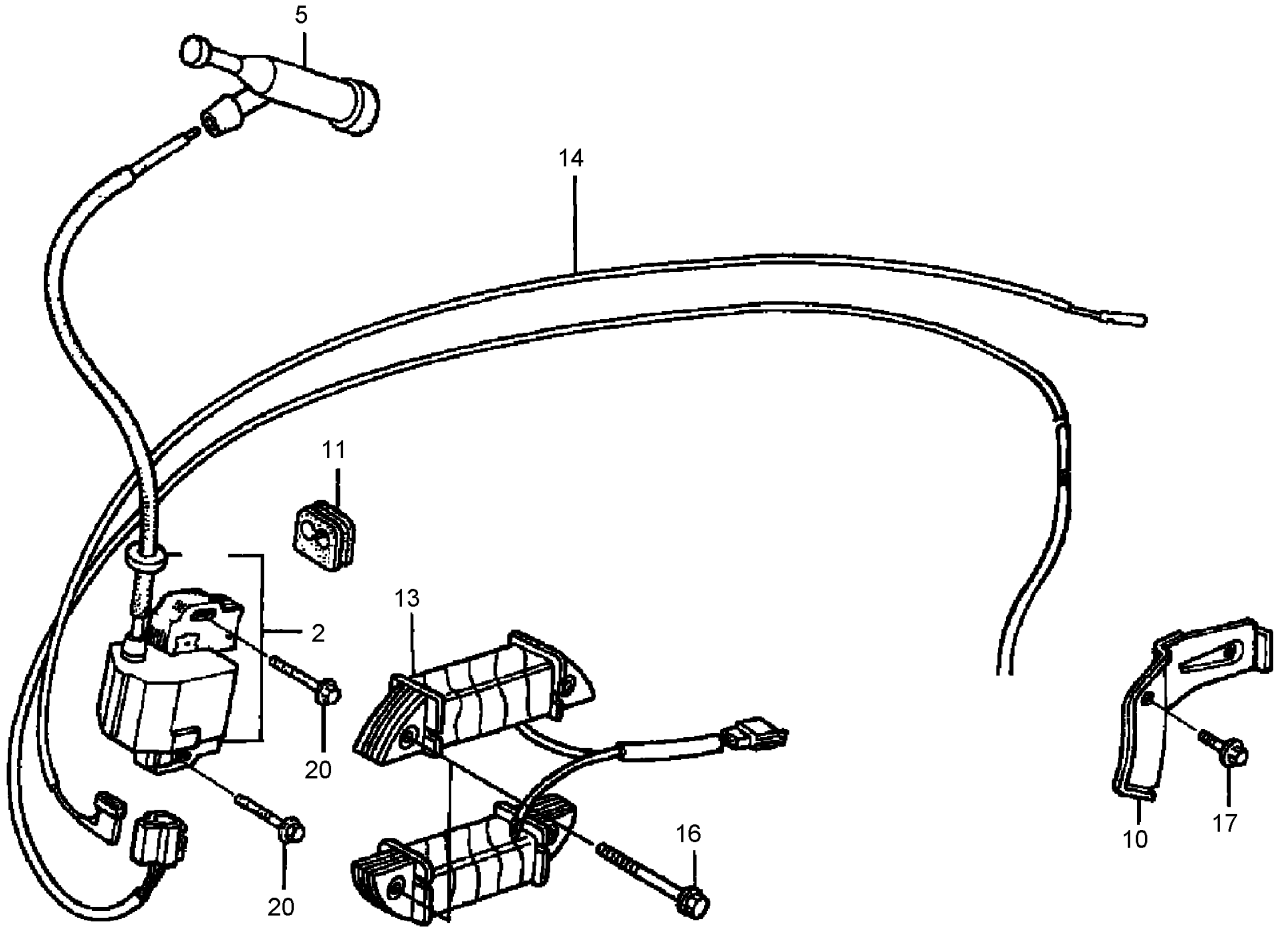
Muffler Assembly

Ref	Part No.	Qty.	Description
❸2	18310-ZE2-W61	1	Muffler (100db)
❸3	18320-ZE2-W61	1	Protector-Muffler
❸4	18323-ZE3-W40	1	Protector-Exhaust Pipe
❸5	18330-ZE2-W00	1	Pipe-Exhaust
❸6	18331-ZE3-810	1	Cap-Muffler
❸8	18333-ZF6-W01	1	Gasket-Exhaust Pipe
❸9	18355-ZE2-W00	1	Arrester-Spark
❸10	18381-ZE2-W10	1	Gasket-Muffler (Arrester)
❸11	18381-ZE2-800	1	Gasket-Muffler
❸19	90006-ZE2-000	1	Screw-Tapping (6x10)
❸20	90013-883-000	1	Bolt-Flange
❸21	90050-ZE1-000	4	Screw-Tapping (5x8)
❸25	90055-ZE1-000	3	Screw-Tapping (4x6)
❸29	94050-08000	5	Nut-Flange (8mm)



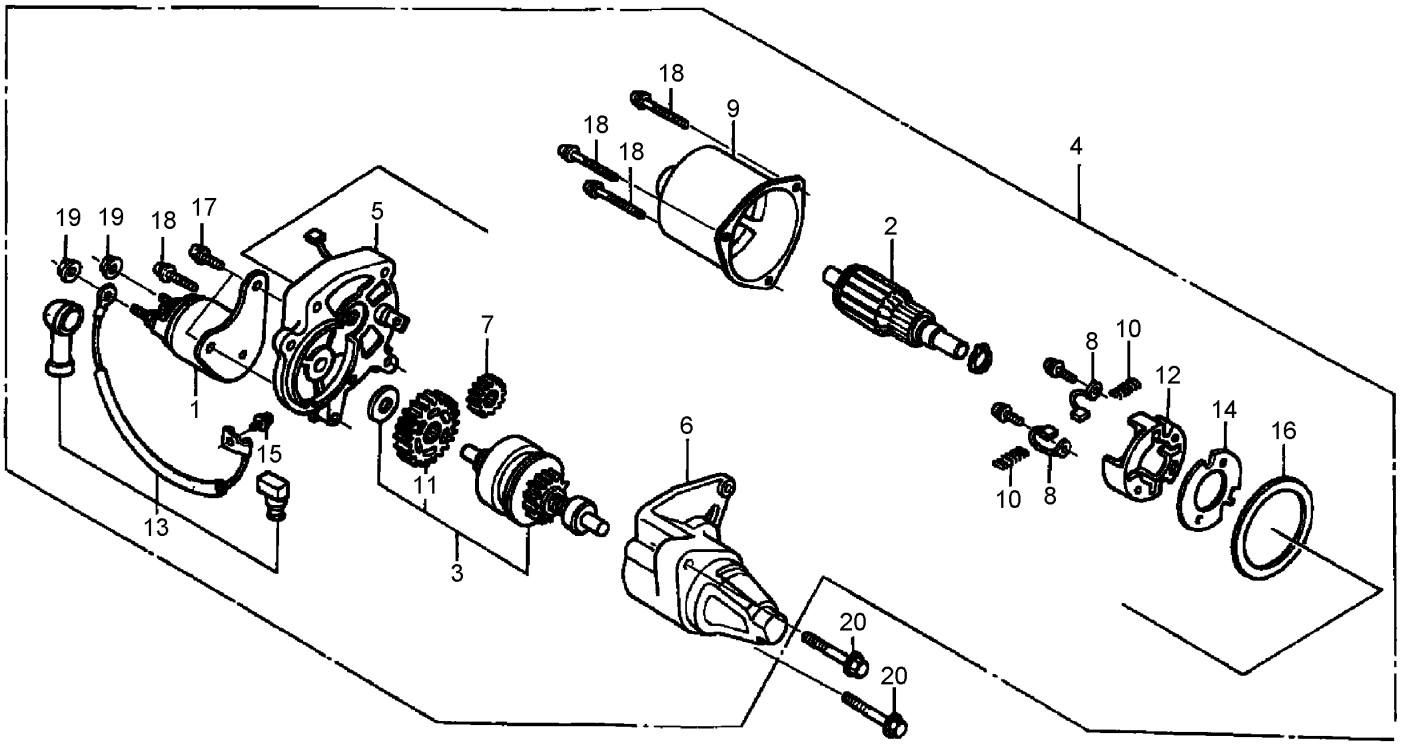
Flywheel Assembly

Ref	Part No.	Qty.	Description
❸1	19511-ZE3-000	1	Fan-Cooling
❸2	19512-ZE2-000	1	Plate-Cooling Fan Setting
❸6	31100-ZE3-W01	1	Flywheel (4 Pole)
❸11	90201-ZE3-V00	1	Nut-Special (16mm) (1)
❸12	90741-ZE2-000	1	Key-Woodruff (25x18)



Ignition Coil Assembly

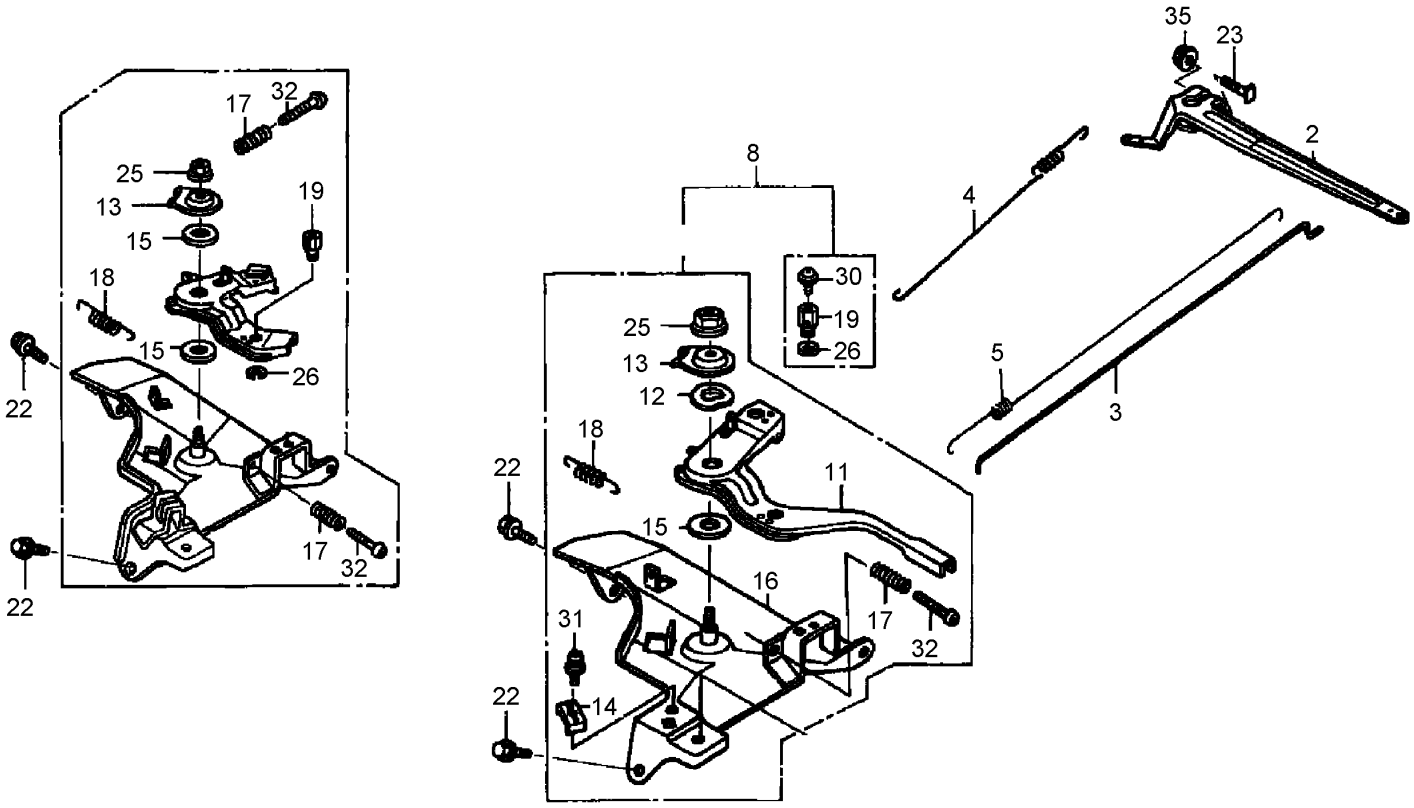
Ref	Part No.	Qty.	Description
❸2	30500-ZF6-W02	1	Coil ASM-Ignition
❸5	30700-ZE1-013	1	Cap ASM- Noise Suppressor
❸10	31511-ZE3-000	1	Clamp-Wire
❸11	31512-ZE2-000	1	Grommet-Wire
❸13	31630-ZE2-861	1	Coil ASM-Charge (10a)
❸14	36101-ZE2-701	1	Wire-Stop Switch (430mm)
❸16	90012-888-000	4	Bolt-Flange (6x40)
❸17	90013-883-000	1	Bolt-Flange
❸20	90015-883-000	2	Bolt-Flange (6x28)



Starter Motor Assembly

Ref	Part No.	Qty.	Description
❸1	31204-ZA0-003	1	Contactor ASM
❸2	31206-ZE3-003	1	Armature
❸3	31207-ZE3-003	1	Clutch-Overrunning
❸4	31210-ZE3-013	1	Motor Unit-Starter
❸5	31211-ZE2-003	1	Bracket-Center
❸6	31212-ZE3-003	1	Bracket-Fr
❸7	31213-ZE2-003	1	Gear-Drive Pinion
❸8	31215-ZE2-003	2	Brush
❸9	31218-ZE3-003	1	Yoke
❸10	31219-ZE2-003	4	Spring-Brush Return
❸11	31222-ZE3-791	1	Gear-Reduction
❸12	31231-ZE2-003	1	Holder-Brush
❸13	31232-ZE3-003	1	Wire-Water Cover

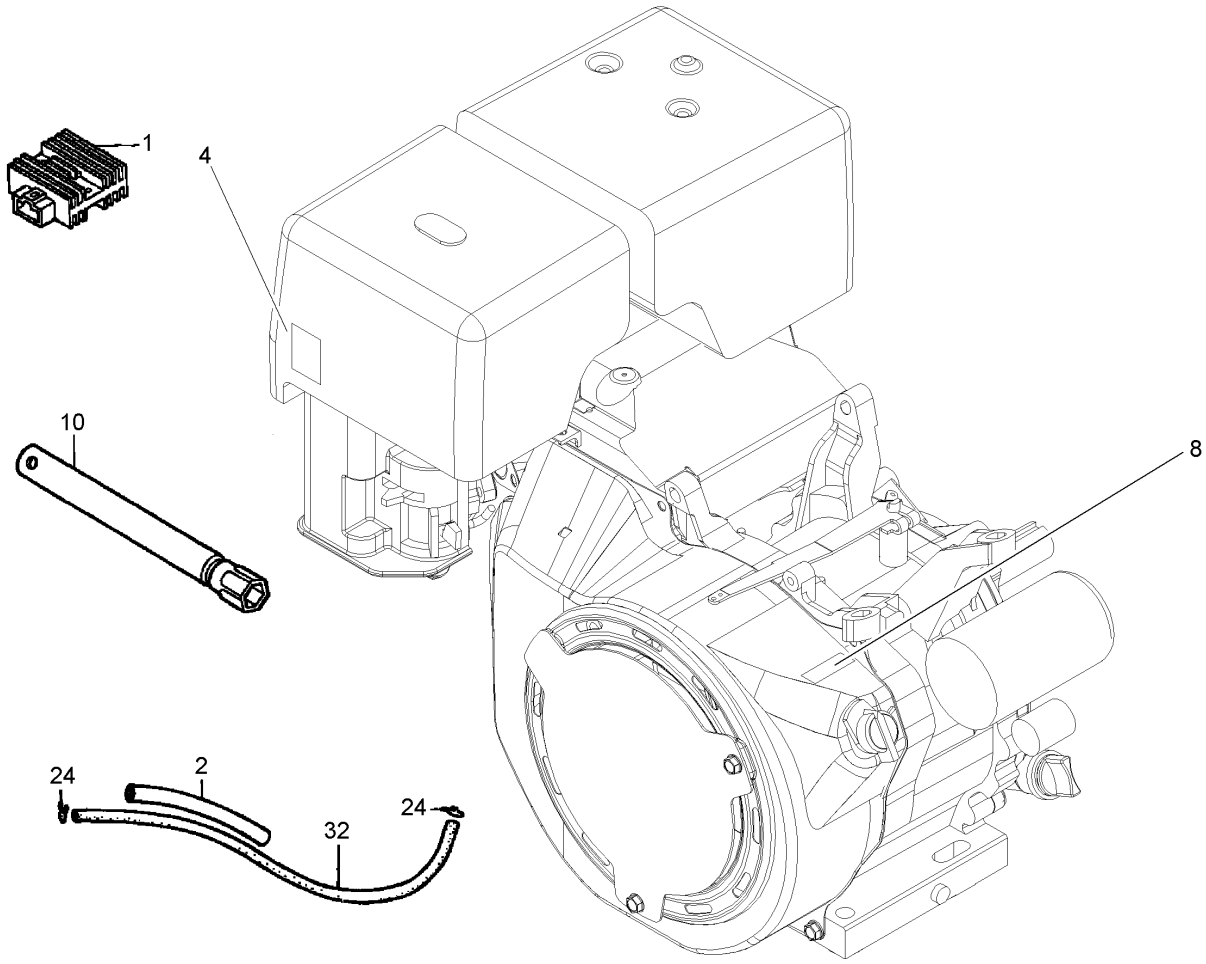
Ref	Part No.	Qty.	Description
❸14	31233-ZE2-003	1	Insulator
❸15	90110-ZE2-003	1	Screw-Washer (4x6)
❸16	91601-ZE2-003	1	Gasket
❸17	90007-ZE2-003	2	Bolt-Washer (5x14)
❸18	93892-05032-08	4	Screw-Washer (5x3)
❸19	94070-06080	2	Nut-Washer (6mm)
❸20	95701-08035-08	2	Bolt-Flange (8x35)



Control Assembly

Ref	Part No.	Qty.	Description
❸2	16551-ZE3-000	1	Arm-Governor
❸3	16555-ZE3-000	1	Rod-Governor
❸4	16561-ZE3-000	1	Spring-Governor
❸5	16562-ZE3-000	1	Spring-Throttle Return
❸8	16570-ZE3-W10	1	Control ASM (Remote)
❸11	16571-ZE3-W00	1	Lever-Control
❸12	16574-ZE1-000	1	Spring-Lever
❸13	16575-ZE2-W00	1	Washer-Control Lever
❸14	16576-891-000	1	Holder-Cable
❸15	16578-ZE1-000	1	Spacer-Control Lever
❸16	16581-ZE3-W00	1	Base-Control
❸17	16584-883-300	1	Spring-Control Adjusting
❸18	16592-883-310	1	Spring-Cable Return

Ref	Part No.	Qty.	Description
❸19	16594-883-010	1	Holder-Wire
❸22	90013-883-000	2	Bolt-Flange
❸23	90015-ZE5-010	1	Bolt-Governor Arm
❸25	90114-SA0-000	1	Nut-Self-Lock (6mm)
❸26	90605-230-000	1	Circlip (5mm)
❸30	93500-04006-0H	1	Screw-Pan (4x6)
❸31	93500-05016-0A	1	Screw-Pan (5x16)
❸32	93893-05016-00	1	Screw-Washer (5x16)
❸32	93500-05032-0A	1	Screw-Pan (5x32)
❸35	94050-06000	1	Nut-Flange (6mm)



Miscellaneous Part Assembly

Ref	Part No.	Qty.	Description
❸1	31600-ZE2-861	1	Rectifier ASM-Regulator
❸2	16854-ZH8-000	1	Rubber-Supporter (107mm)
❸4	87528-ZE2-810	1	Mark-Choke (External)
❸8	87532-ZH8-810	1	Mark, Oil Alert (E)
❸10	89218-ZE1-000	1	Wrench-Spark Plug
❸24	95002-02080	2	Clip-Tube (B8)
❸32	95001-45003-60M	1	Hose-Fuel (4.5x3000) (4.5x235)

NOTES

NOTES


TORO®