Form No. 3329–109

Dingo® 320–D

Compact Utility Loader

Model No. 22303—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.

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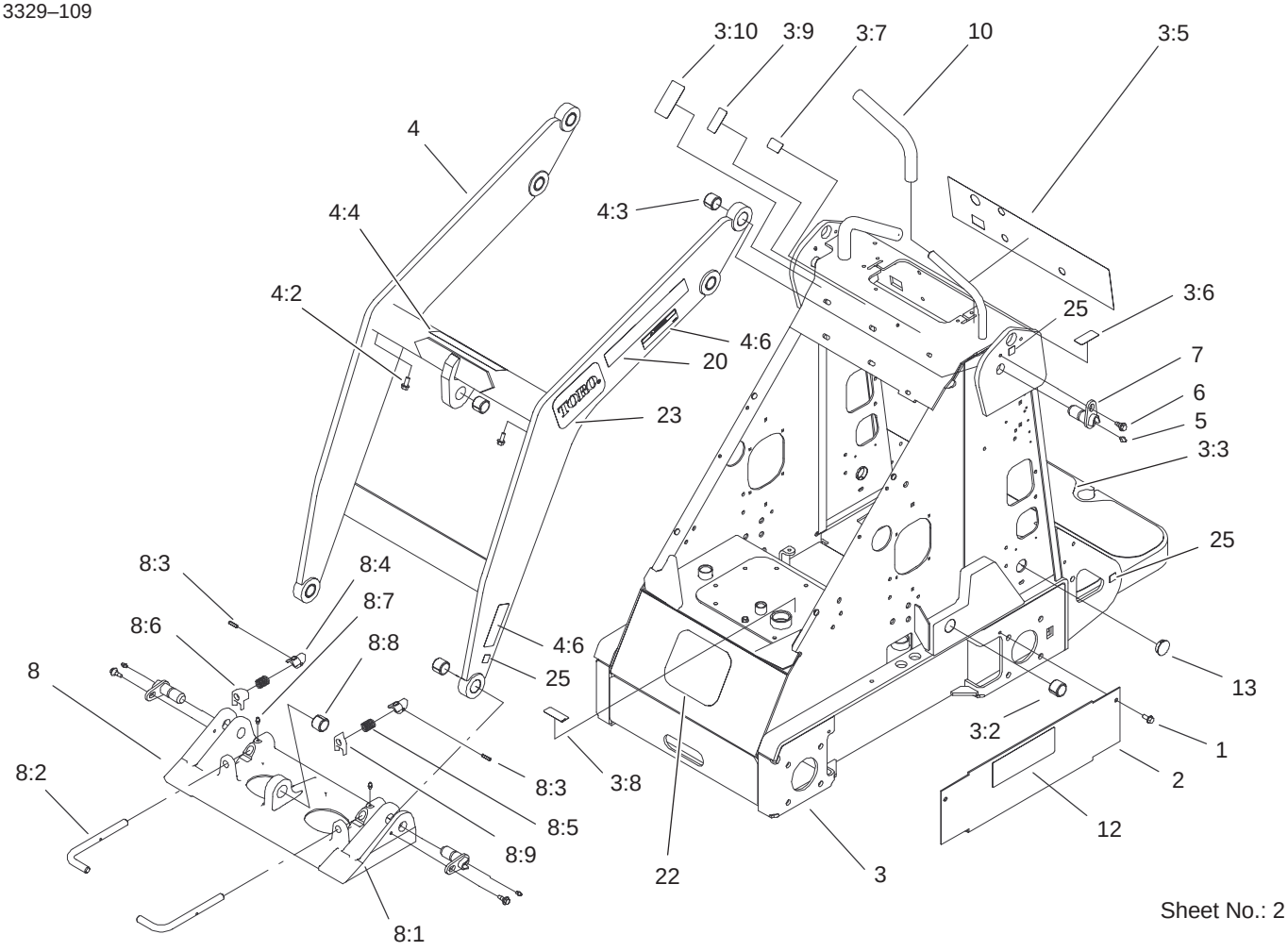
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Part Description Abbreviations

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

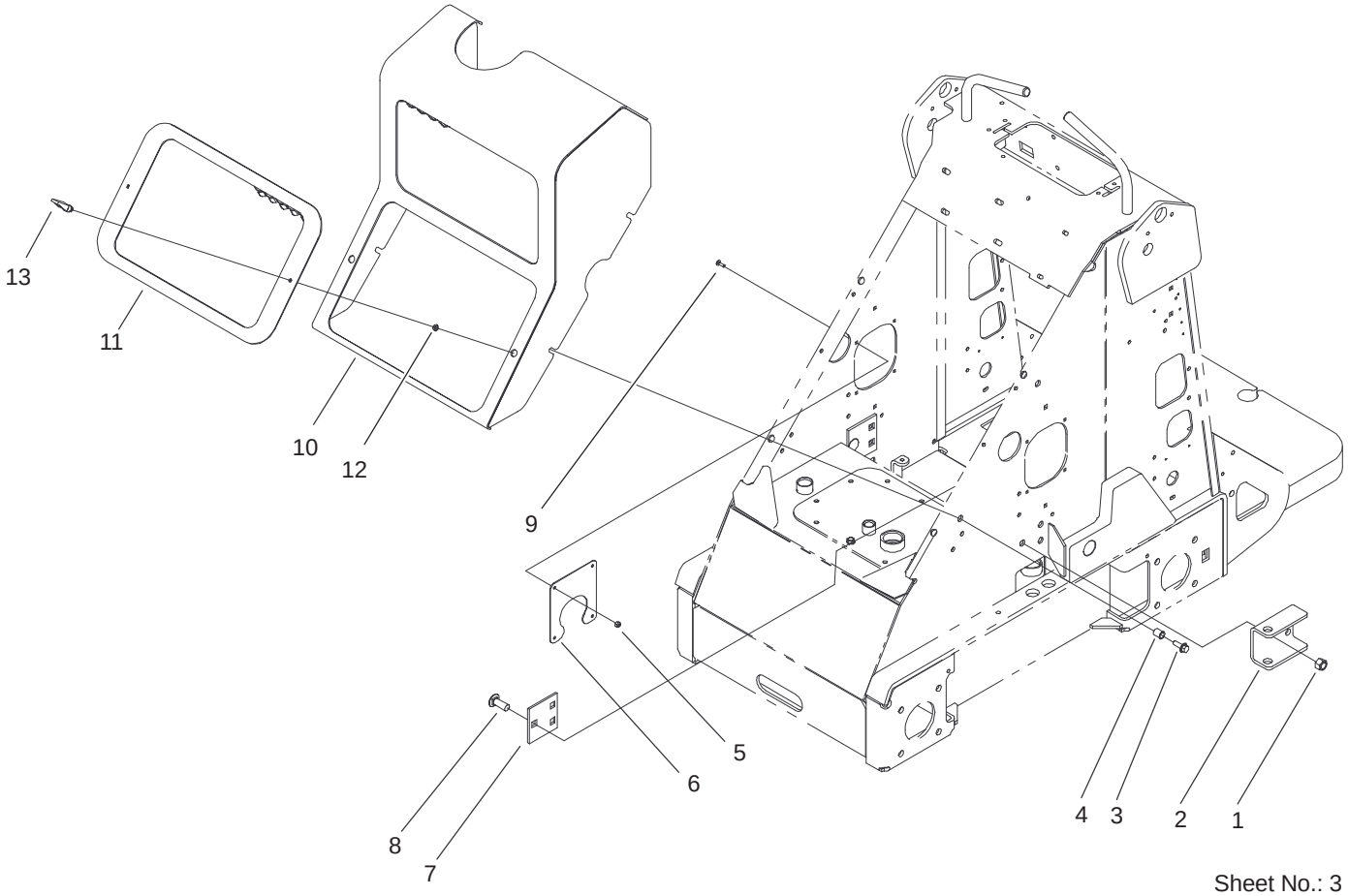


Sheet No.: 2

Frame and Loader Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	32144–70	6	Screw–HH
2	99–3020–01	2	Cover–Hose
3	105–8375	1	Frame ASM
3:2	98–4871	2	Bushing–Tension
3:3	98–9947	2	Tread–Foot
3:5	99–3157	1	Decal–Panel, Control
3:6	98–8219	1	Decal–Throttle
3:7	98–8220	1	Decal–Limiter, Speed
3:8	105–8432	1	Decal–Oil, Hydraulic
3:9	98–8235	1	Decal–Selector
3:10	98–4677	1	Decal–Power, Auxiliary
4	105–8366	1	Loader ASM
4:2	32144–70	2	Screw–HH
4:3	98–4871	7	Bushing–Tension
4:4	98–4682	1	Decal–Caution
4:6	100–6141	4	Decal–Pinch
5	302–5	4	Fitting–Grease
6	99–5105	4	Bolt–Shoulder
7	99–1414	4	Pin–Pivot
8	105–8364	1	Quick Attach ASM
8:1	105–0245–03	1	Mount–Attach, Quick
8:2	105–8367	2	Pin–Locking
8:3	3285–1	2	Pin–Grooved
8:4	105–0246	2	Cam
8:5	98–4694	2	Spring–Compression

Ref. No.	Part No.	Qty.	Description
8:6	104–5909	1	Stop–RH
8:7	302–5	2	Fitting–Grease
8:8	98–4871	1	Bushing–Tension
8:9	104–5903	1	Stop–LH
10	98–4845	2	Grip–Cushion
12	105–8429	2	Decal–4 Paw
13	94–1402	2	Plug–Hole
20	105–8428	2	Decal–Dingo 320d
22	62–5550	1	Decal
23	93–7340	2	Decal–Toro
25	93–9084	6	Decal–Point, Lift

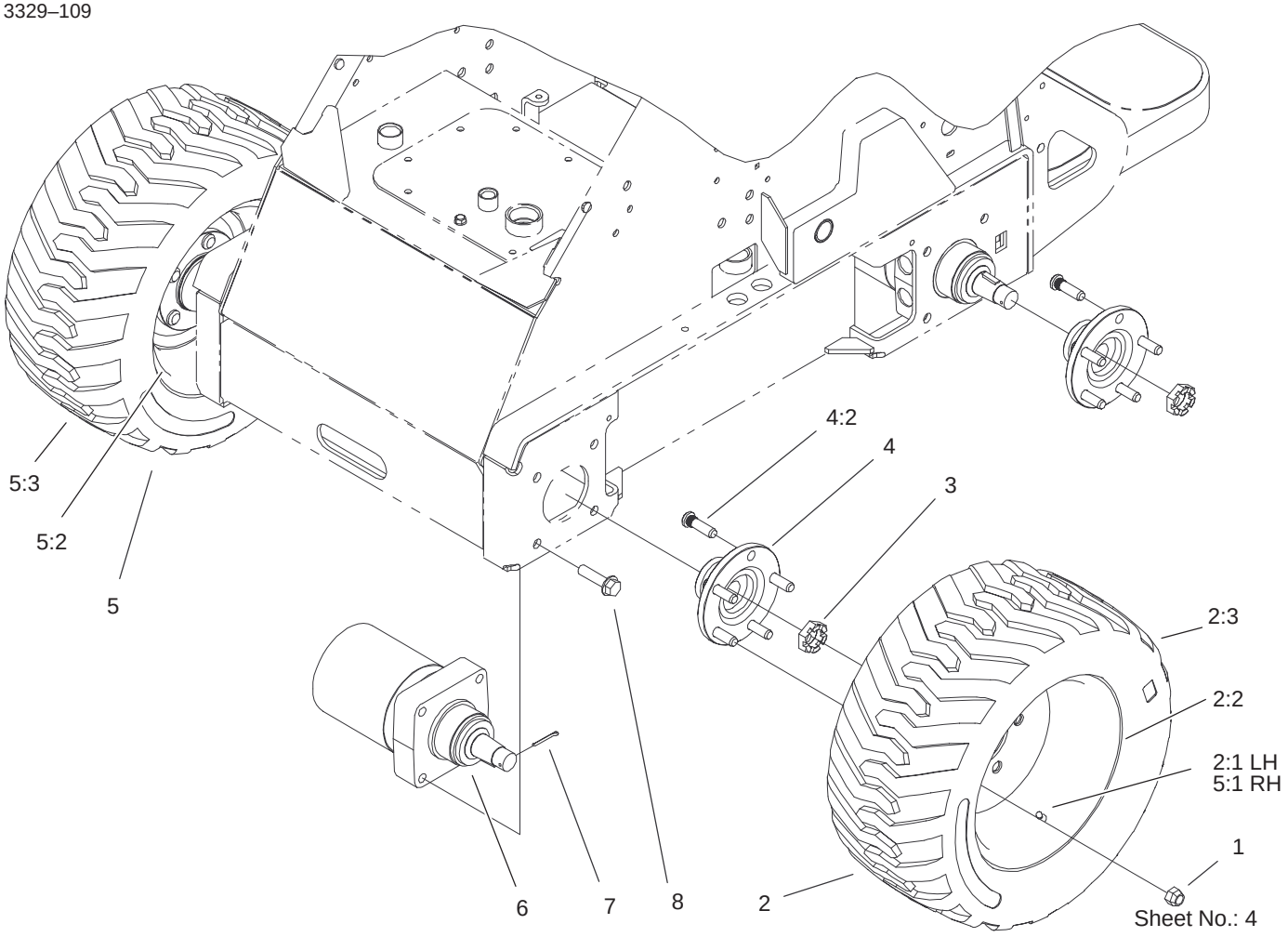


Sheet No.: 3

Hood and Screen Assembly

Ref. No.	Part No.	Qty.	Description
1	3296–23	6	Nut–Lock, NI
2	100–4122–01	2	Bracket–Anchor
3	3234–29	4	Screw–HHF
4	32148–8	4	Insert–Threaded
5	3296–2	4	Nut–Lock
6	99–1427–03	1	Guard–Muffler
7	100–4116–01	2	Plate–Anchor
8	3233–26	6	Screw–CARR
9	3229–34	4	Bolt–CARR
10	99–3120–03	1	Hood ASM
11	99–3118–03	1	Cover ASM
12	99–3058	2	Washer
13	74–5950	2	Latch–Swell

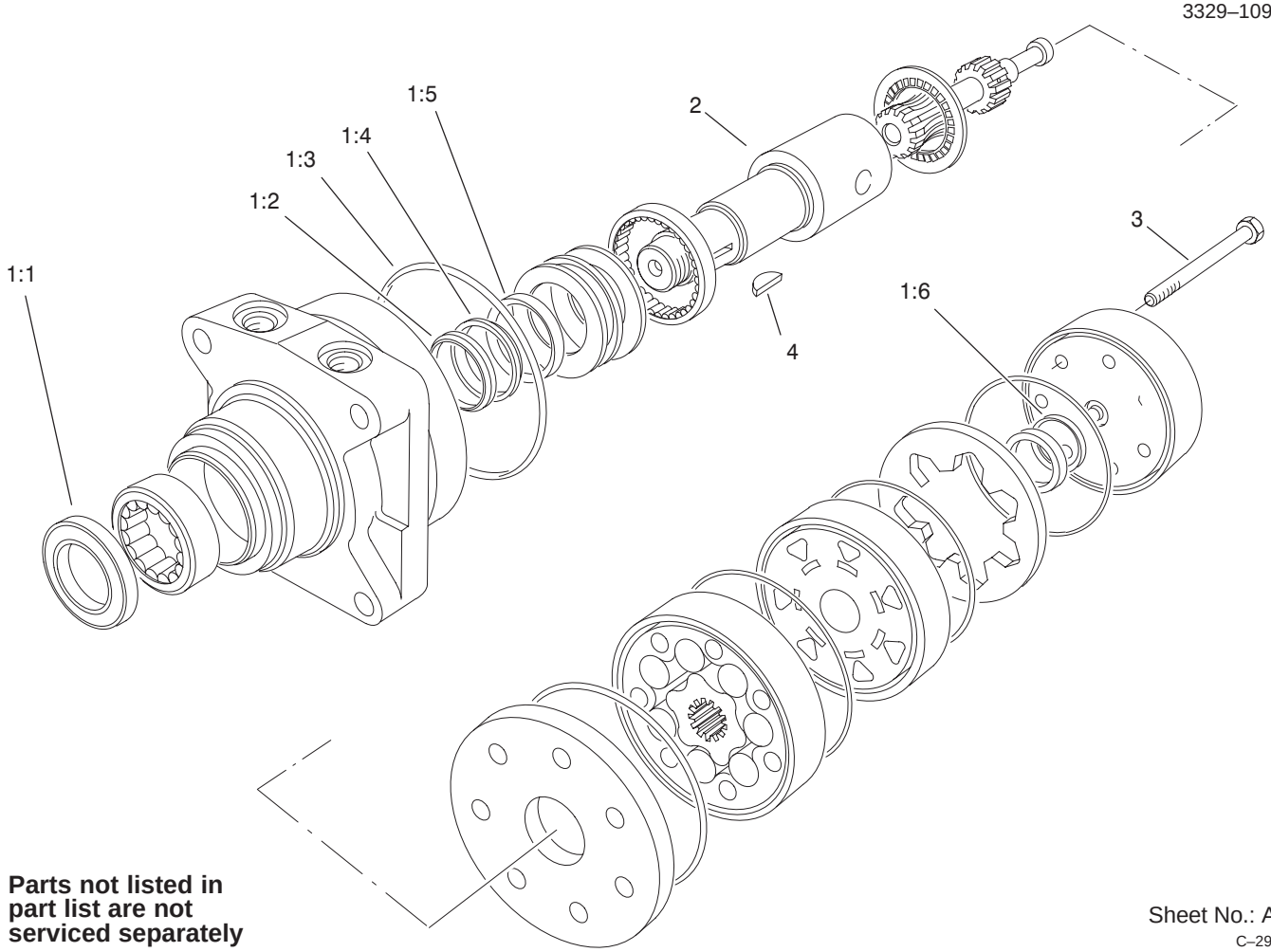
Ref. No.	Part No.	Qty.	Description



Wheel and Motor Assembly

Ref. No.	Part No.	Qty.	Description
1	242–50	20	Nut–Lug
2	98–2747	2	LH Wheel And Tire ASM
2:1	232–27	1	Stem–Valve
2:2	98–2748	1	Wheel
2:3	98–2749	1	Tire–Loader Style
3	99–3139	4	Nut
4	99–3064	4	Hub ASM
4:2	10–6830	5	Stud–Type, Drive
5	99–1447	2	RH Wheel And Tire ASM
5:1	232–27	1	Stem–Valve
5:2	98–2748	1	Wheel
5:3	98–2749	1	Tire–Loader Style
6	99–3052	4	Hydraulic Motor ASM
7	99–3171	4	Pin–Cotter
8	3234–27	16	Screw–Flange

Ref. No.	Part No.	Qty.	Description



Parts not listed in part list are not serviced separately

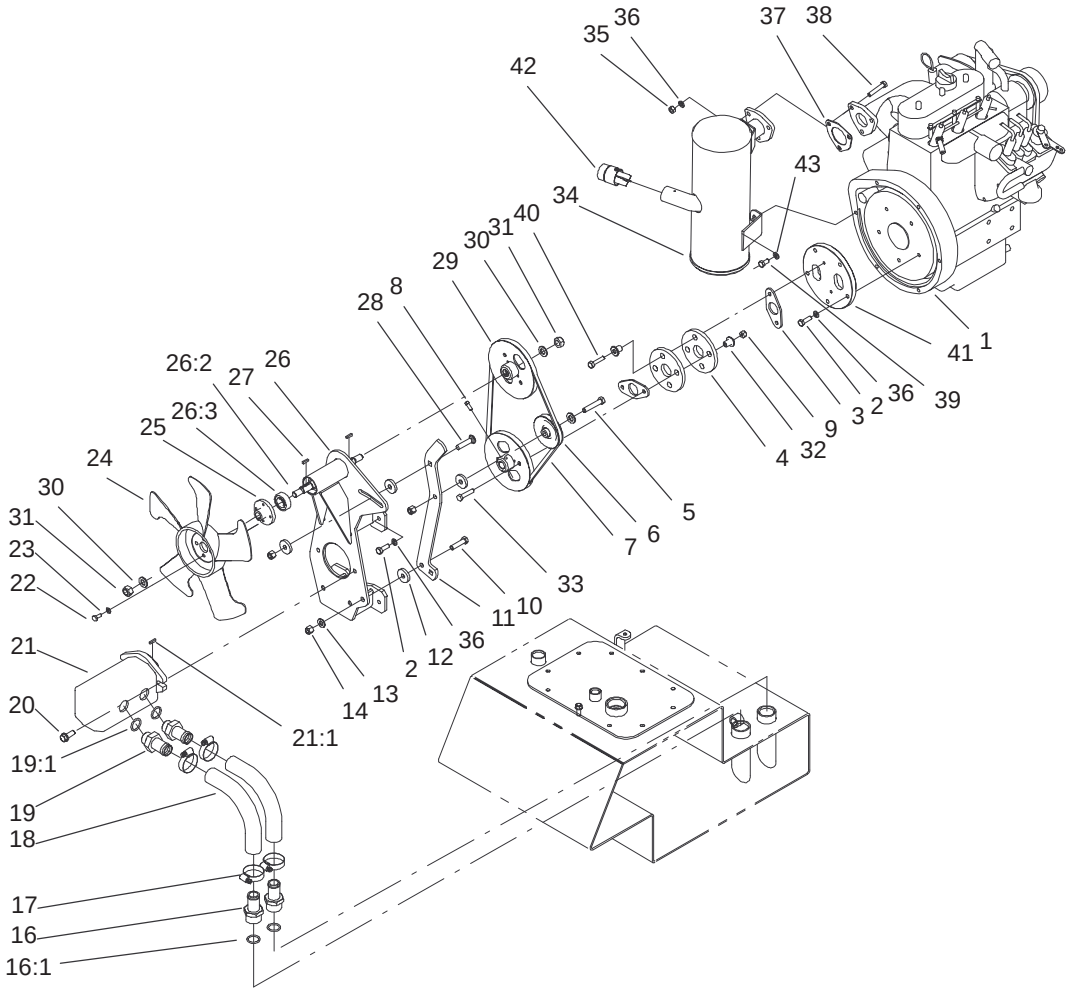
Sheet No.: A1
C–2980

Hydraulic Motor Assembly No. 99–3052

Ref. No.	Part No.	Qty.	Description
1	94–8178	1	Seal Kit
☆1:1		1	Seal–Dirt And Water
☆1:2		1	Washer–Backup
☆1:3		5	Seal–Ring
☆1:4		1	Washer–Backup
☆1:5		1	Seal–Inner
☆1:6		1	Seal–Commutator
2	99–3090	1	Coupling–Shaft
3	99–3091	7	Screw–Cap, HH
4	3257–42	1	Key–Woodruff

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately



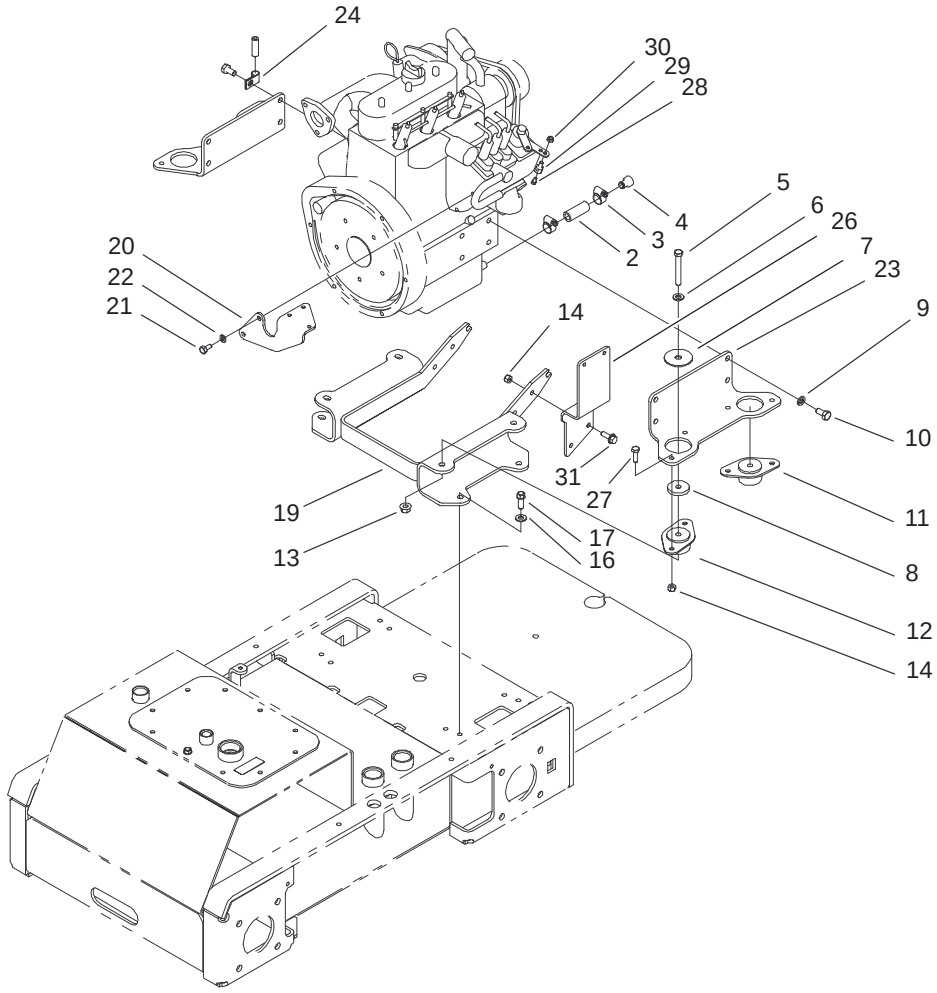
Sheet No.: 5

Engine Assembly

Ref. No.	Part No.	Qty.	Description
1	98–4661	1	Engine–Kubota, D722–E
2	99–5131	9	Bolt
3	99–1430	2	Spacer–Coupler
4	44–2230	2	Coupling–Rubber
5	323–10	1	Screw–HH
6	63–8140	1	Pulley–Idler
7	92–8876	1	V–Belt
8	3241–5	2	Screw–Set
9	104–9469	2	Nut–Lock
10	323–8	1	Screw–HH
11	100–1727–01	1	Mount–Tensioner
12	99–5121	4	Spacer
13	3256–24	2	Washer–Flat
14	3296–39	3	Nut–Lock, NI
16	354–78	2	Connector–Hose
16:1	237–146	1	O–Ring
17	2412–111	4	Clamp
18	99–3046	2	Hose–Suction, Formed
19	99–3017	2	Fitting
19:1	237–81	1	O–Ring
20	66–9300	2	Screw–HF
21	98–4702	1	Pump–Gear, Tandem
21:1	98–4700	1	Key–Square
*21:2	99–1353	1	Kit–Seal

Ref. No.	Part No.	Qty.	Description
22	321–2	4	Screw–HH
23	3253–3	4	Washer–Lock
24	43–1911	1	Fan
25	105–8383	1	Adapter–Fan
26	99–1449	1	Pump Mount ASM
26:2	98–0068	1	Shaft–Fan
26:3	38–7820	2	Bearing–Ball
27	100–1715	2	Key–Square
28	3231–5	1	Screw–CARR
29	99–5111	2	Pulley–Keyed
30	33096–00	2	Washer–Flat
31	98–8089	2	Nut–Lock
32	71–4411	4	Spacer
33	5–1470	2	Capscrew
34	105–8390	1	Muffler–Diesel
35	3217–6	3	Nut–Hex
36	3253–4	12	Washer–Lock
37	100–2238	1	Gasket–Muffler
38	322–9	3	Screw–HH
39	99–5132	1	Bolt
40	99–5133	2	Bolt
41	99–1431	1	Adapter–Flywheel
42	75–6880	1	Screen–Arrester, Spark
43	88–7200	1	Washer–Flat

* Not illustrated

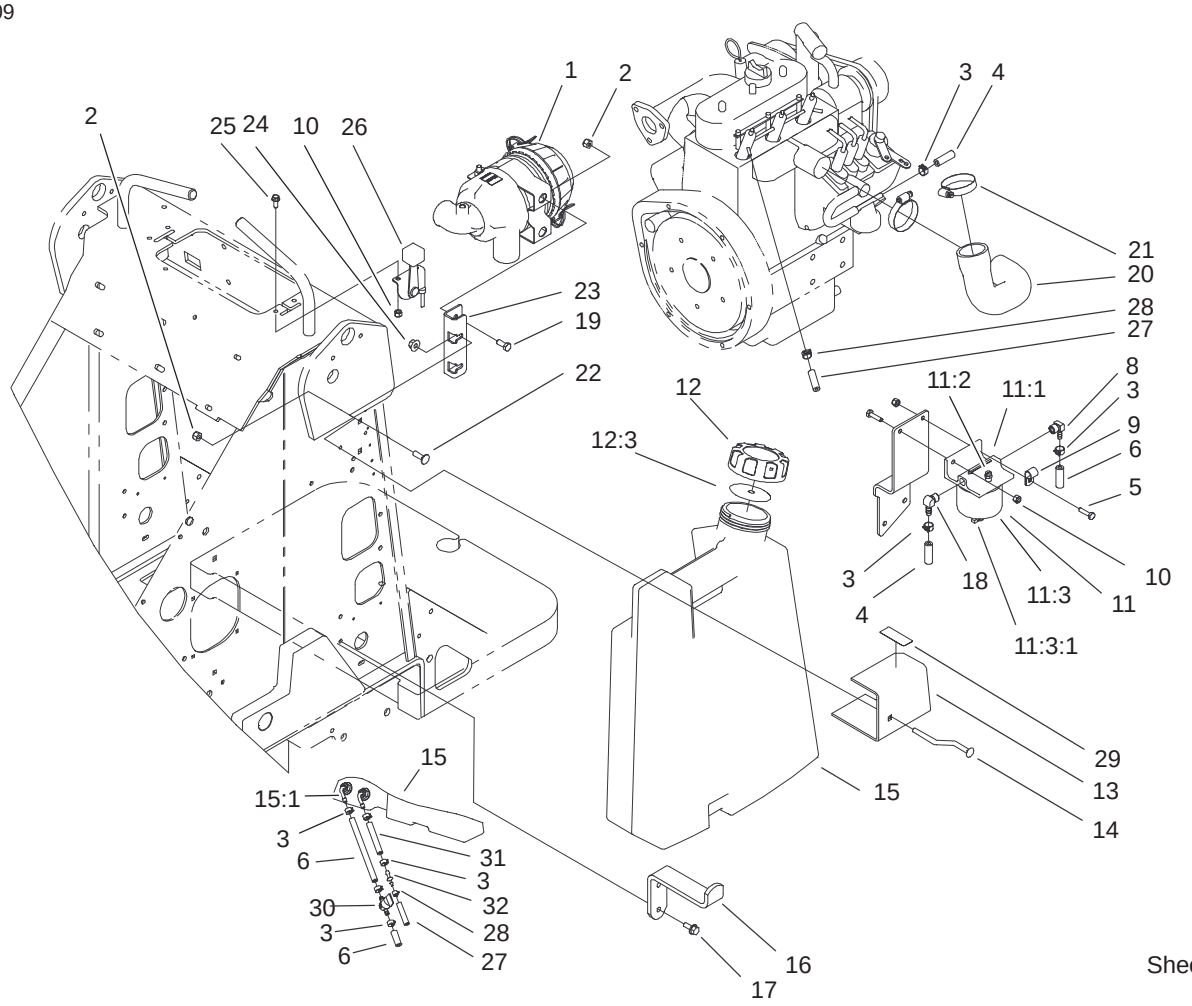


Sheet No.: 6

Engine Mount Assembly

Ref. No.	Part No.	Qty.	Description
2	56–2230	1	Hose–Fuel
3	2412–36	2	Clamp–Hose
4	99–1445	1	Plug–Oil
5	323–13	4	Screw–HH
6	3256–24	4	Washer–Flat
7	87–5100	4	Washer–Snubbing
8	98–4596	4	Washer–Mount, Engine
9	42–9600	6	Lockwasher–Spring
10	99–5130	8	Bolt
11	83–1030	2	Mount–Engine
12	93–5265	2	Mount–Engine
13	32128–29	4	Locknut–Flange
14	3296–29	10	Nut–Lock, NI
16	3256–80	4	Washer–Flat
17	95–1726	4	Screw–Taptite W/Patch
19	98–0066–01	1	Mount–Engine
20	105–4054–01	1	Mount–Solenoid
21	99–5132	2	Bolt
22	3253–4	2	Washer–Lock
23	98–0055–01	2	Plate–Mount, Engine
24	2412–138	1	R–Clamp
26	98–0059–01	1	Mount–Filter,Fuel
27	322–5	8	Screw–HH
28	25–8640	1	Screw–HH

Ref. No.	Part No.	Qty.	Description
29	93–0021	1	Swivel–Cable, Throttle
30	3296–13	1	Nut–Lock NI
31	3234–29	2	Screw–HHF

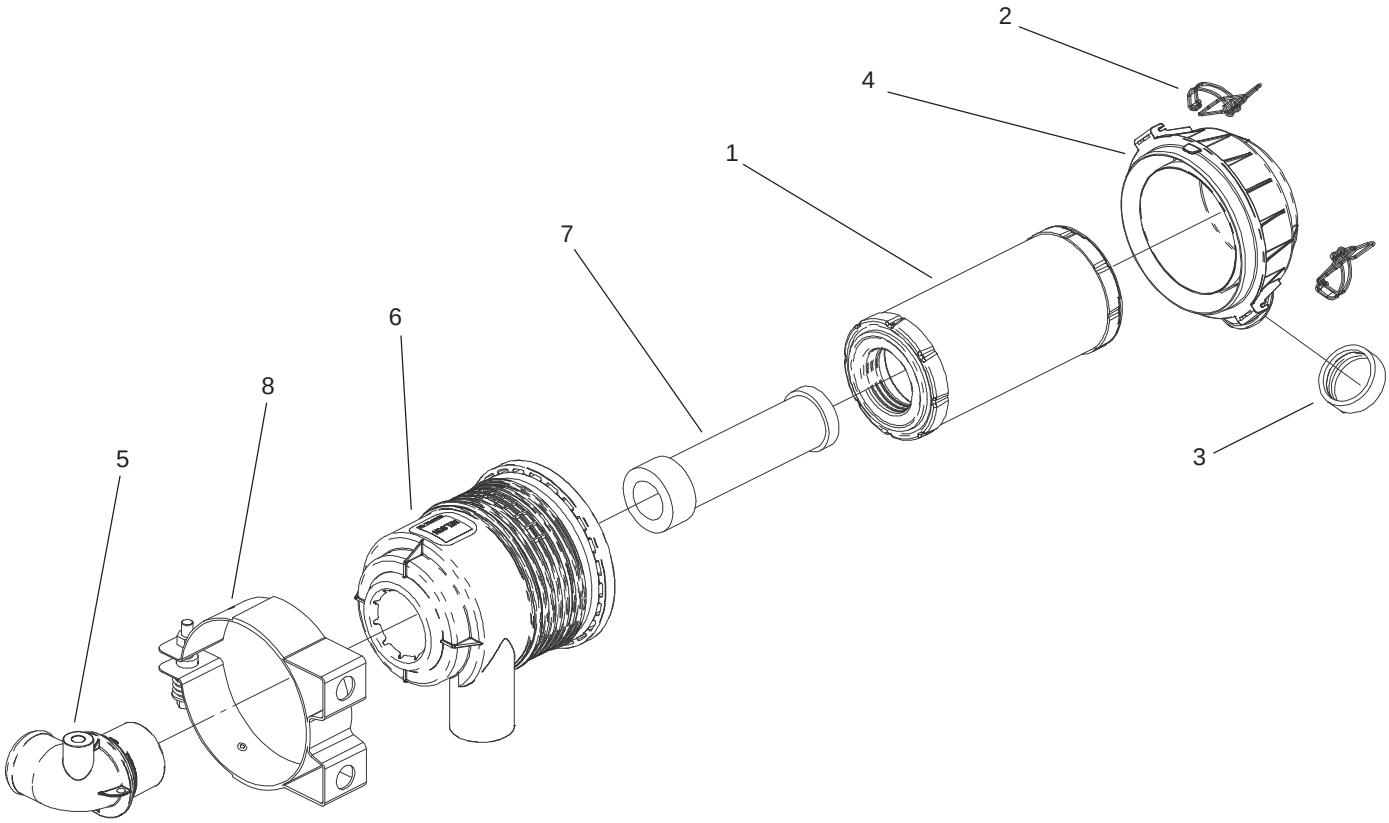


Sheet No.: 7

Fuel Tank and Air Filter Assembly

Ref. No.	Part No.	Qty.	Description
1	99–3160	1	Air Cleaner ASM
2	3296–29	3	Nut–Lock, NI
3	92–2379	8	Clamp–Hose
4	63–7627	1	Hose–Fuel
5	321–6	2	Screw–HH
6	47–2980	2	Hose–Fuel
8	304–96	1	Elbow
9	2412–73	1	Clamp–R
10	3296–42	4	Nut–Lock, NI
11	63–7650	1	Separator–Filter/Water
11:1	63–8280	1	Head ASM
11:2	63–8290	1	Vent–Air
11:3	63–8300	1	Element–Spin–On
11:3:1	63–8310	1	Valve–Drain
12	104–7419	1	Cap–Fuel, Diesel
12:3	104–7420	1	Gasket–Vented
13	99–1444–03	1	Plate–Mount, Left
14	98–4657	1	Bolt–Mount
15	105–8438	1	Fuel Tank ASM, Diesel LH
15:1	103–2615	2	Fitting–Fuel, Bulkhead
16	98–4656–03	1	Mount–Bottom, Tank
17	32144–70	2	Screw–HH
18	353–781	1	Fitting–Elbow
19	322–3	2	Screw–HH
20	99–5041	1	Hose–Cleaner, Air

Ref. No.	Part No.	Qty.	Description
21	2412–92	2	Clamp–Hose
22	3230–2	2	Bolt–CARR
23	99–3080–03	1	Mount–Cleaner, Air
24	32128–20	2	Nut–HF
25	3234–33	2	Screw–HHF
26	99–1422	1	Control–Throttle
27	99–3498	1	Return–Line, Fuel
28	2412–80	2	Clamp–Line, Fuel
29	93–6680	1	Decal–Diesel
30	1–603770	1	Valve–Fuel
31	99–5101	1	Hose–Fuel
32	106–8150	1	Fitting–Straight



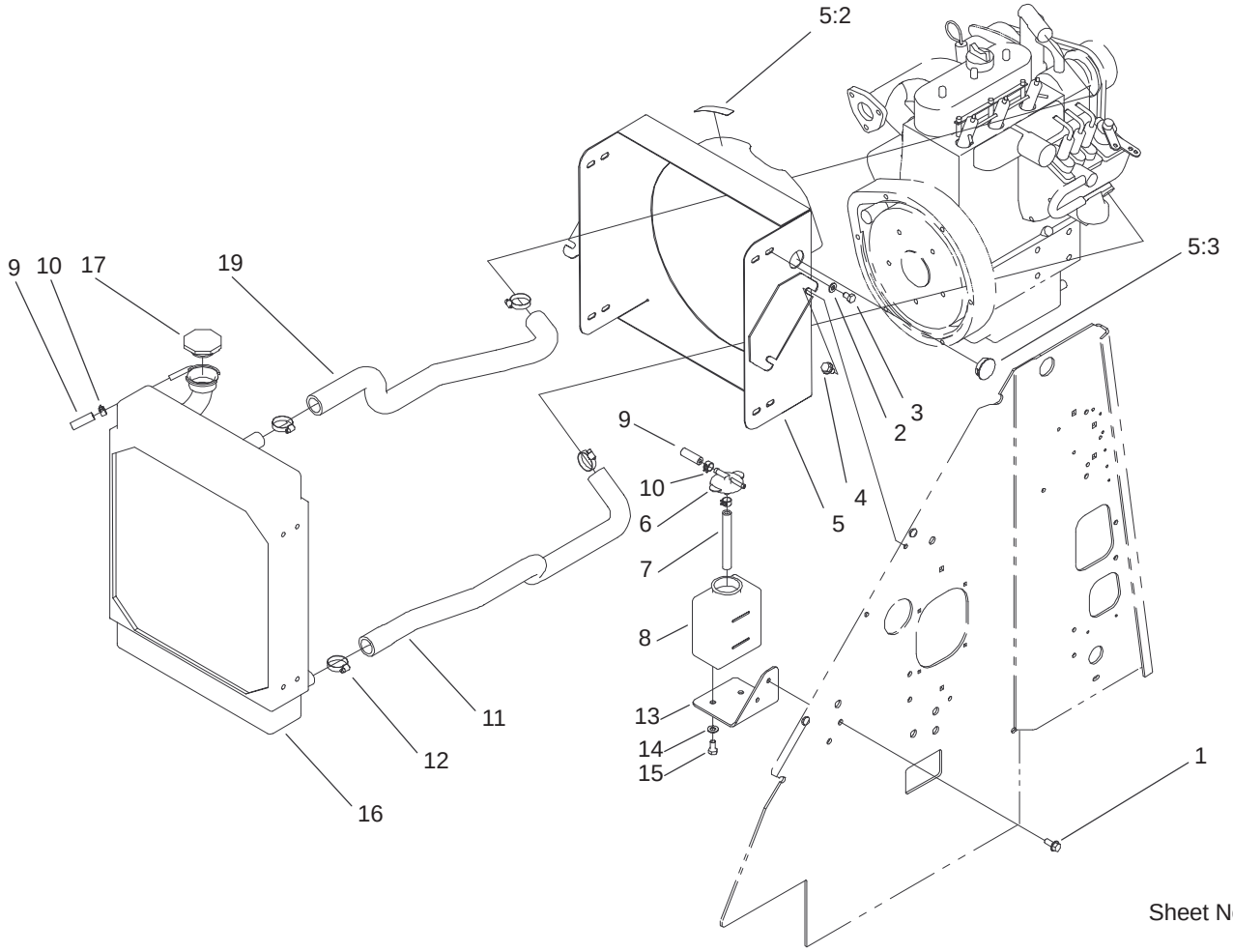
Sheet No.: A3

C–3006

Air Cleaner Assembly No. 99–3160

Ref. No.	Part No.	Qty.	Description
1	99–3173	1	Element–Filter, Air
2	99–3174	2	Clip–Cleaner, Air
3	99–3175	1	Valve–Ejector, Dust
4	99–3176	1	Cover
5	99–3183	1	Tube ASM
6	99–3184	1	Housing
7	99–3198	1	Filter–Safety
8	99–3197	1	Mounting Bracket ASM

Ref. No.	Part No.	Qty.	Description

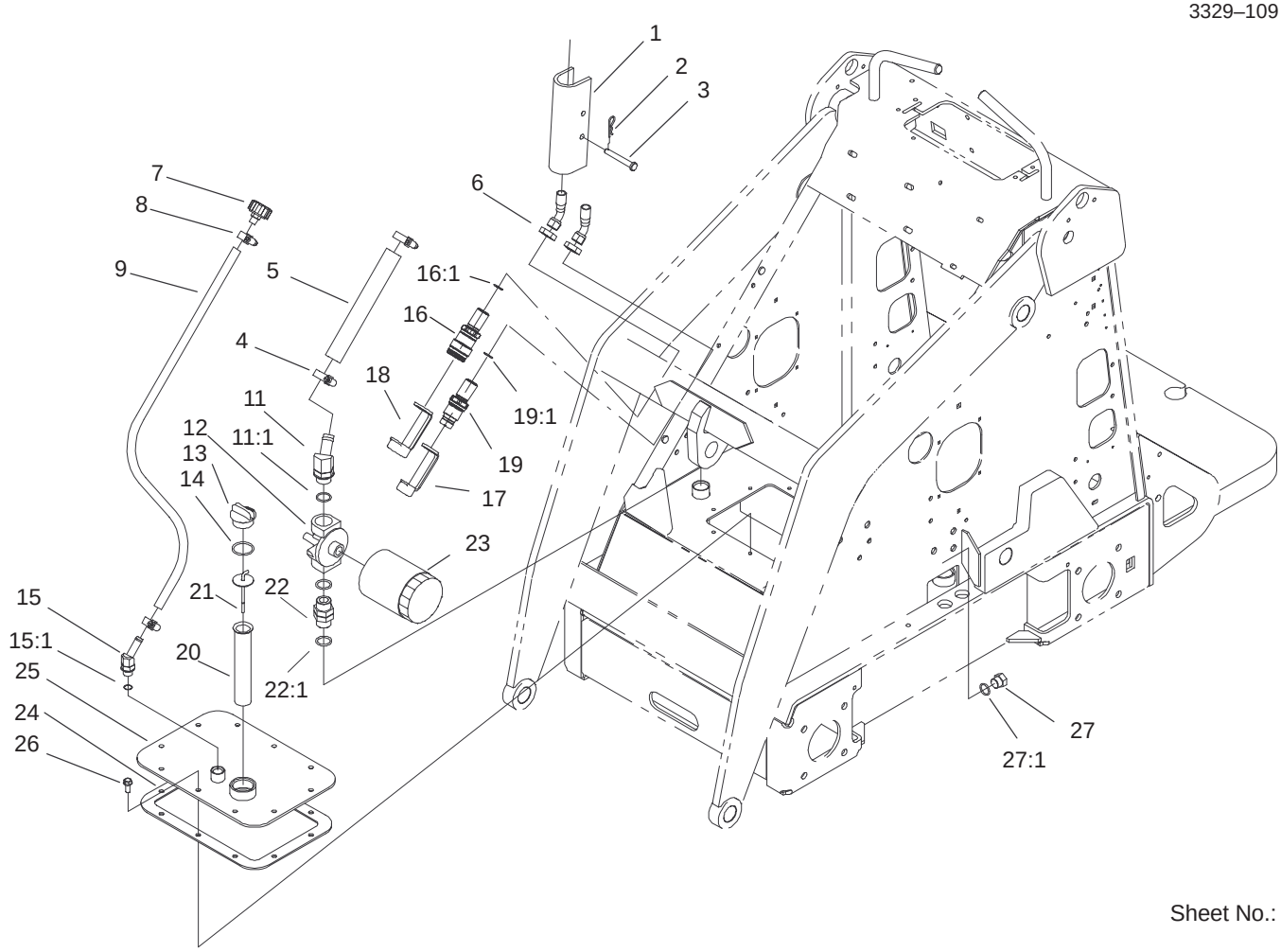


Sheet No.: 8

Radiator Mount Assembly

Ref. No.	Part No.	Qty.	Description
1	32144–70	6	Screw–HH
2	3256–82	8	Washer–Flat
3	322–1	8	Screw–HH
5	104–4648	1	Mount–Radiator
5:2	93–6681	1	Decal–Warning, Fan
5:3	94–1402	1	Plug–Hole
6	93–2048	1	Cap–Tank, Overflow
7	94–1348	1	Hose–Fuel
8	93–2049	1	Tank–Overflow
9	71–3383	1	Hose–Fuel
10	92–2379	3	Clamp–Hose
11	99–5042	1	Hose–Radiator, Lower
12	2412–34	4	Clamp–Hose
13	99–1446–01	1	Mount–Tank, Overflow
14	3256–23	2	Washer–Flat
15	99–5132	2	Bolt
16	99–5125	1	Radiator ASM
17	66–3240	1	Cap–Radiator
19	99–5043	1	Hose–Radiator, Upper

Ref. No.	Part No.	Qty.	Description



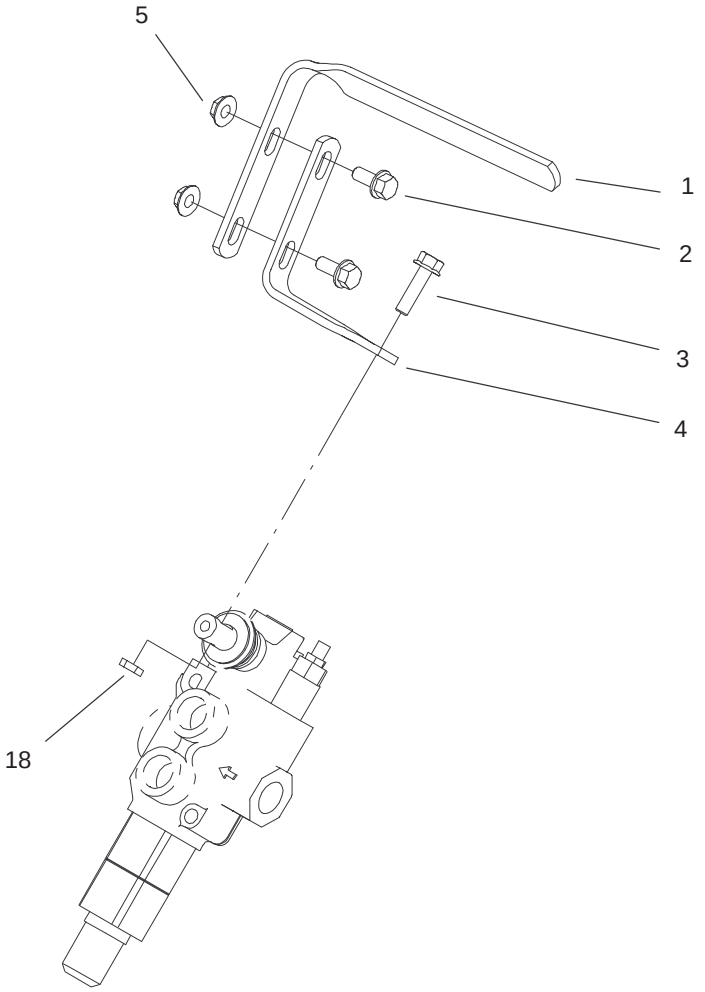
Sheet No.: 9

Hydraulic Tank and Filter Assembly

Ref. No.	Part No.	Qty.	Description
1	98–4675–01	2	Lock–Cylinder
2	3290–467	2	Pin–Hair
3	283–52	2	Pin–Clevis
4	2412–129	2	Clamp–Hose
5	98–2713	1	Hose–Suction, HYD
6	340–74	2	Locknut–Bulkhead
7	68–6150	1	Breather
8	2412–36	2	Clamp–Hose
9	100–1748	1	Hose–Vent
11	354–127	1	Elbow–45°
11:1	237–81	1	O–Ring
12	92–5821	1	Filter Head ASM
13	93–7498	1	Plug–Plastic
14	237–123	1	O–Ring
15	354–126	1	Fitting–HYD, 45°
15:1	237–79	1	O–Ring
16	105–8394	1	Bulkhead Coupler ASM
16:1	237–65	1	O–Ring
*16:2	105–8396	1	Seal Kit
17	100–8815	1	Cap–Dust, Nipple
18	100–8816	1	Cap–Dust, Coupler
19	105–8395	1	Bulkhead Nipple ASM
19:1	237–65	1	O–Ring
*19:2	100–6120	1	Seal Kit
20	61–2790	1	Filter–Screen

Ref. No.	Part No.	Qty.	Description
21	100–2097	1	Dipstick–Oil
22	98–9906	1	Fitting–Thread, Straight
22:1	237–81	2	O–Ring
23	54–0110	1	Filter–Oil, Transmission
24	98–9927	1	Gasket–Cover
25	100–1713–01	1	Cover ASM
26	98–9940	10	Screw
27	353–988	1	Plug–Hex, Hollow
27:1	237–79	1	O–Ring

* Not illustrated

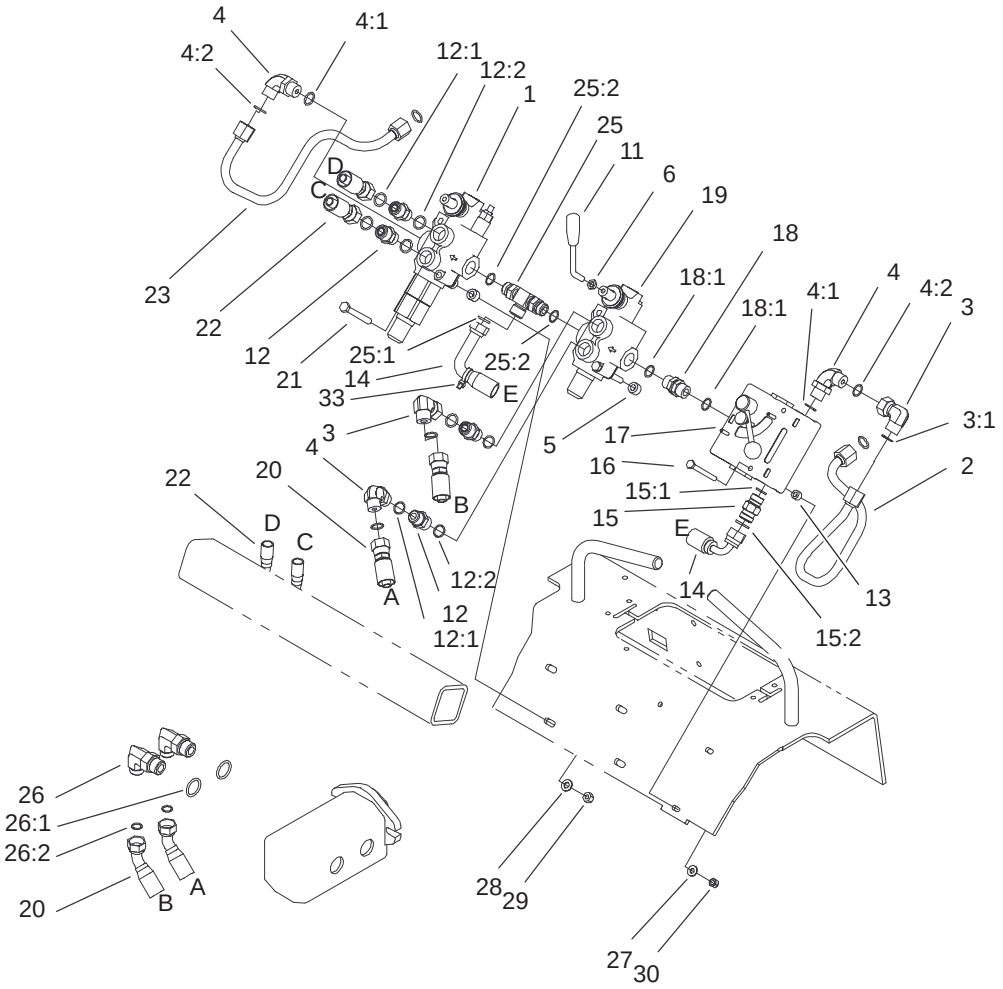


Sheet No.: 10

Auxiliary Control Lever Assembly

Ref. No.	Part No.	Qty.	Description
1	98–9090	1	Grip–Control
2	3234–5	2	Screw
3	33104–030	1	Screw–HHF
4	99–1376	1	Mount–Control
5	32128–44	2	Nut
18	42–9580	1	Nut–Hex

Ref. No.	Part No.	Qty.	Description

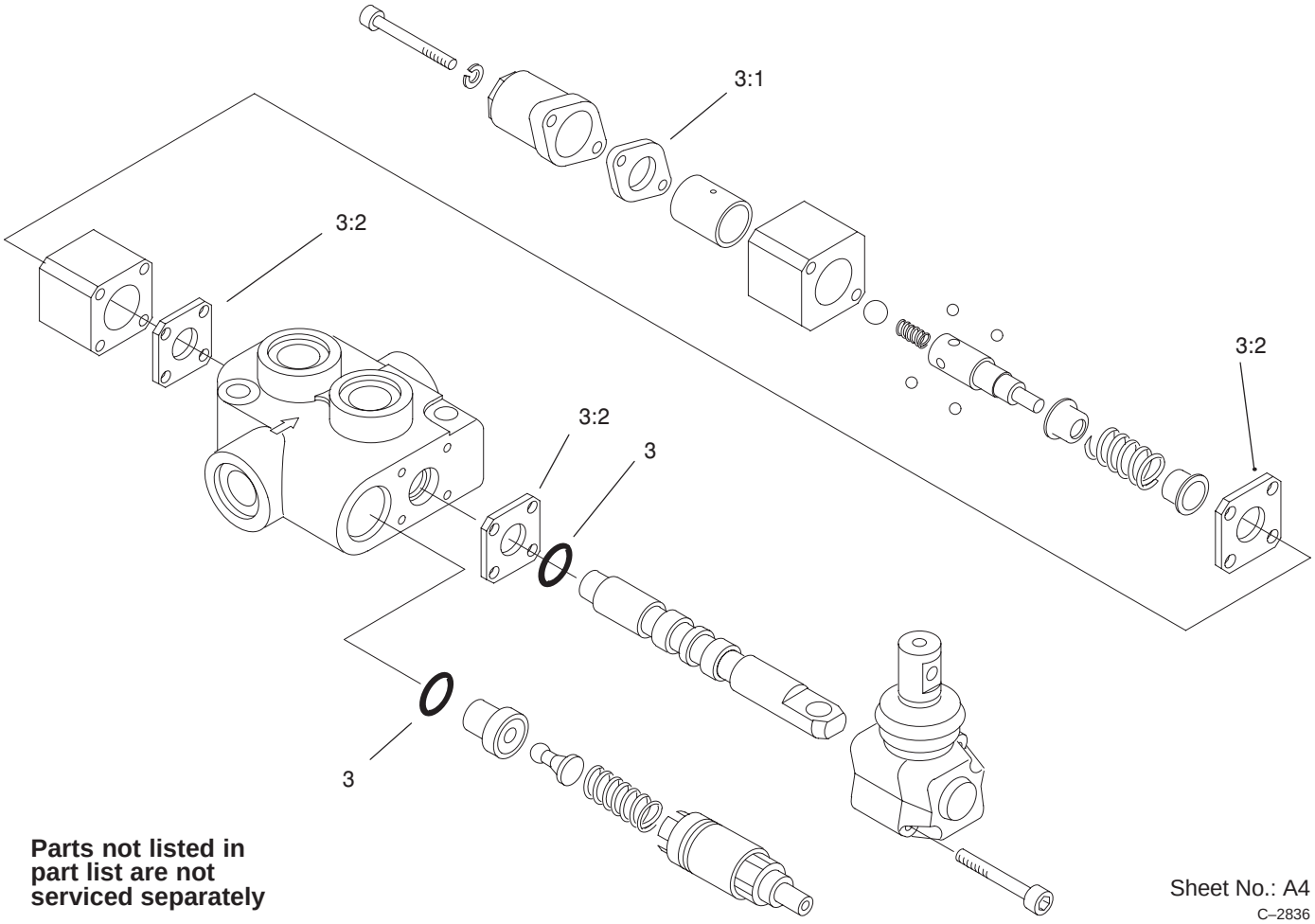


Sheet No.: 11

Hydraulic Valve Assembly

Ref. No.	Part No.	Qty.	Description
1	99–3077	1	Valve–HYD, Auxiliary
2	99–3030	1	HYD Tube ASM
3	94–6031	2	Fitting–HYD
3:1	237–30	1	O–Ring
4	340–98	3	Fitting–HYD, 90°
4:1	237–79	1	O–Ring
4:2	237–30	1	O–Ring
5	98–4695	4	Spacer
6	42–9580	1	Nut–Hex
11	98–4729	1	Lever–Valve
12	340–4	4	Adapter–HYD
12:1	237–30	1	O–Ring
12:2	237–79	1	O–Ring
13	98–4799	2	Tube–Spacer
14	100–2245	1	Hose ASM
15	98–4735	1	Valve–Check, HYD
15:1	237–30	1	O–Ring
15:2	237–79	1	O–Ring
16	321–14	2	Screw–HH
17	104–4221	1	Kit–Valve, HYD
18	95–3209	1	Fitting–Thread, Straight
18:1	237–79	2	O–Ring
19	99–3072	1	Valve–Selector
20	100–1730	2	Hose–Pump, HYD
21	322–13	4	Screw–HH

Ref. No.	Part No.	Qty.	Description
22	100–8817	2	HYD Hose ASM
23	98–4724	1	HYD Tube ASM
25	98–9079	1	Adapter–Tee, Adjustable
25:1	237–30	1	O–Ring
25:2	237–79	2	O–Ring
26	340–105	2	Fitting–HYD, 90°
26:1	237–80	1	O–Ring
26:2	237–30	1	O–Ring
27	3256–22	2	Washer–Flat
28	3256–23	4	Washer–Flat
29	3296–29	4	Nut–Lock, NI
30	3296–42	2	Nut–Lock, NI
33	3290–379	18	Tie–Cable



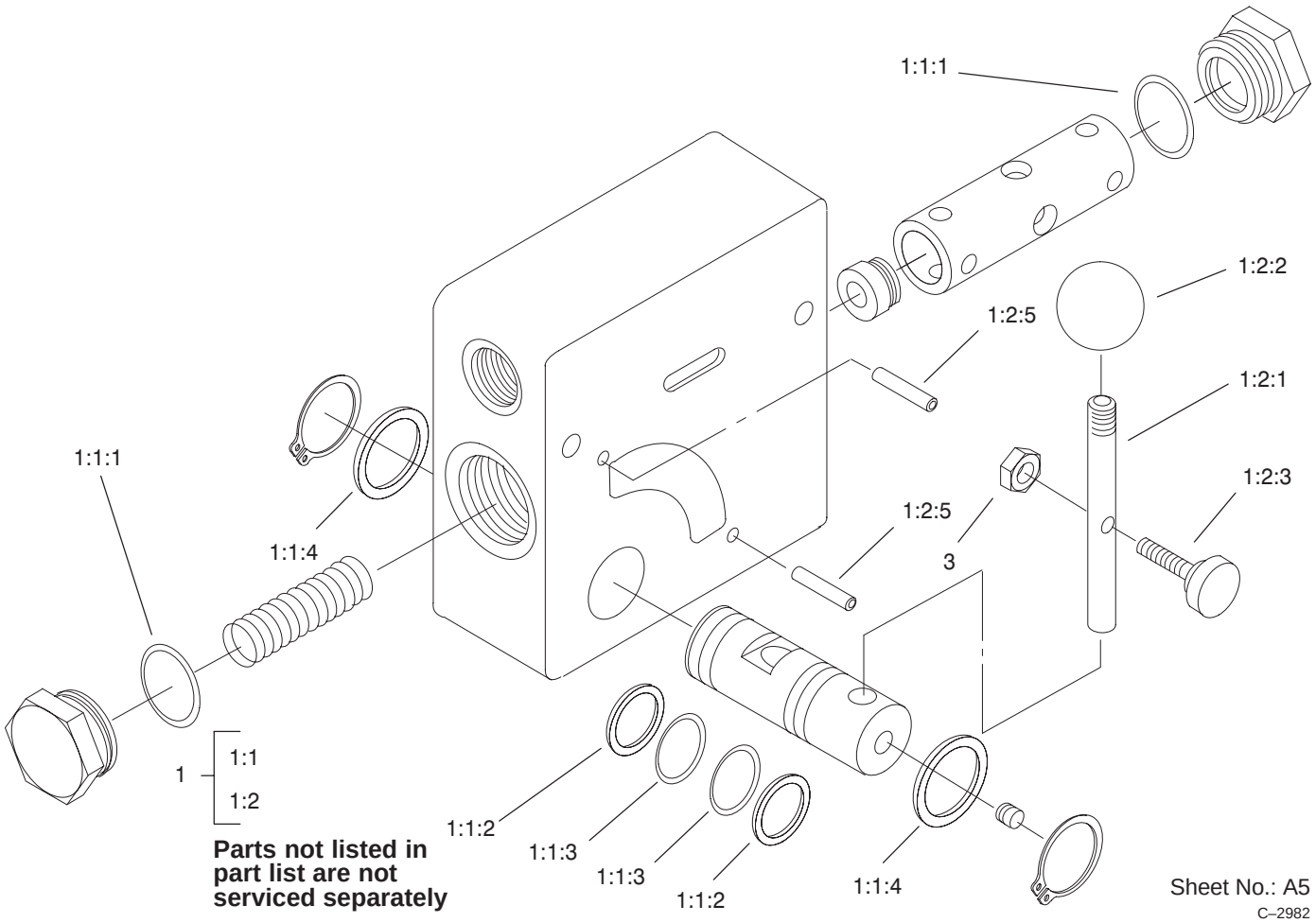
Parts not listed in part list are not serviced separately

Sheet No.: A4
C–2836

Hydraulic Valve Assembly No. 99–3077

Ref. No.	Part No.	Qty.	Description
3	99–4391	1	Seal Kit
3:1	99–3074	1	Gasket
3:2	99–3075	3	Gasket

Ref. No.	Part No.	Qty.	Description



Sheet No.: A5
C–2982

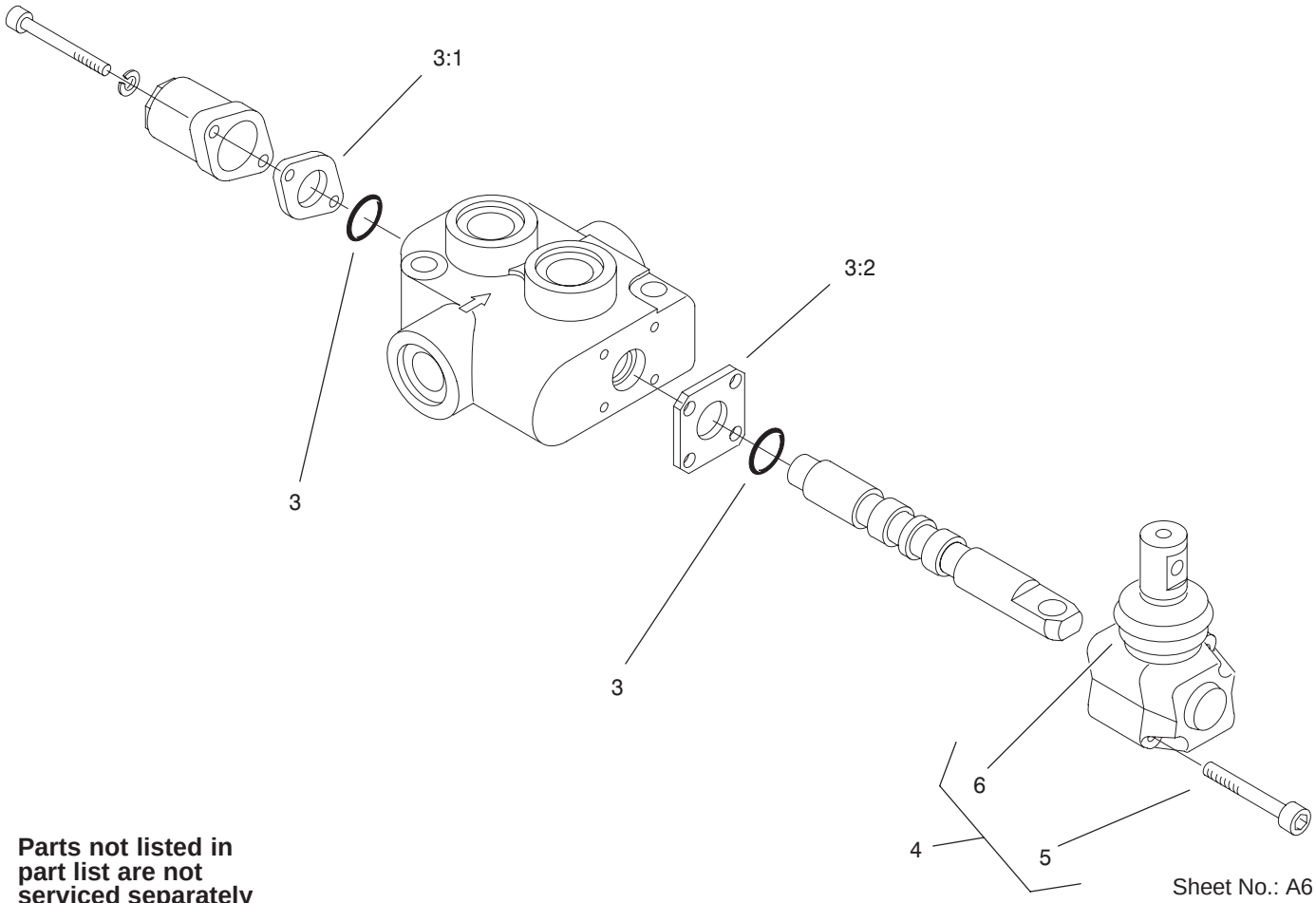
Hydraulic Valve Assembly No. 104–4221

Ref. No.	Part No.	Qty.	Description
☆1		1	Valve–Flow, Hydraulic
1:1	104–4231	1	Kit–Seal
☆1:1:1		2	O–Ring
☆1:1:2		2	Back–Up
☆1:1:3		2	O–Ring
☆1:1:4		2	Quad Ring
1:2	98–9098	1	Kit–Hardware, Handle
☆1:2:1		1	Handle
☆1:2:2		1	Knob
☆1:2:3		1	Screw–Thumb
☆1:2:5		2	Pin–Roll
3	3296–27	1	Nut–Lock NI

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

3329–109



Parts not listed in part list are not serviced separately

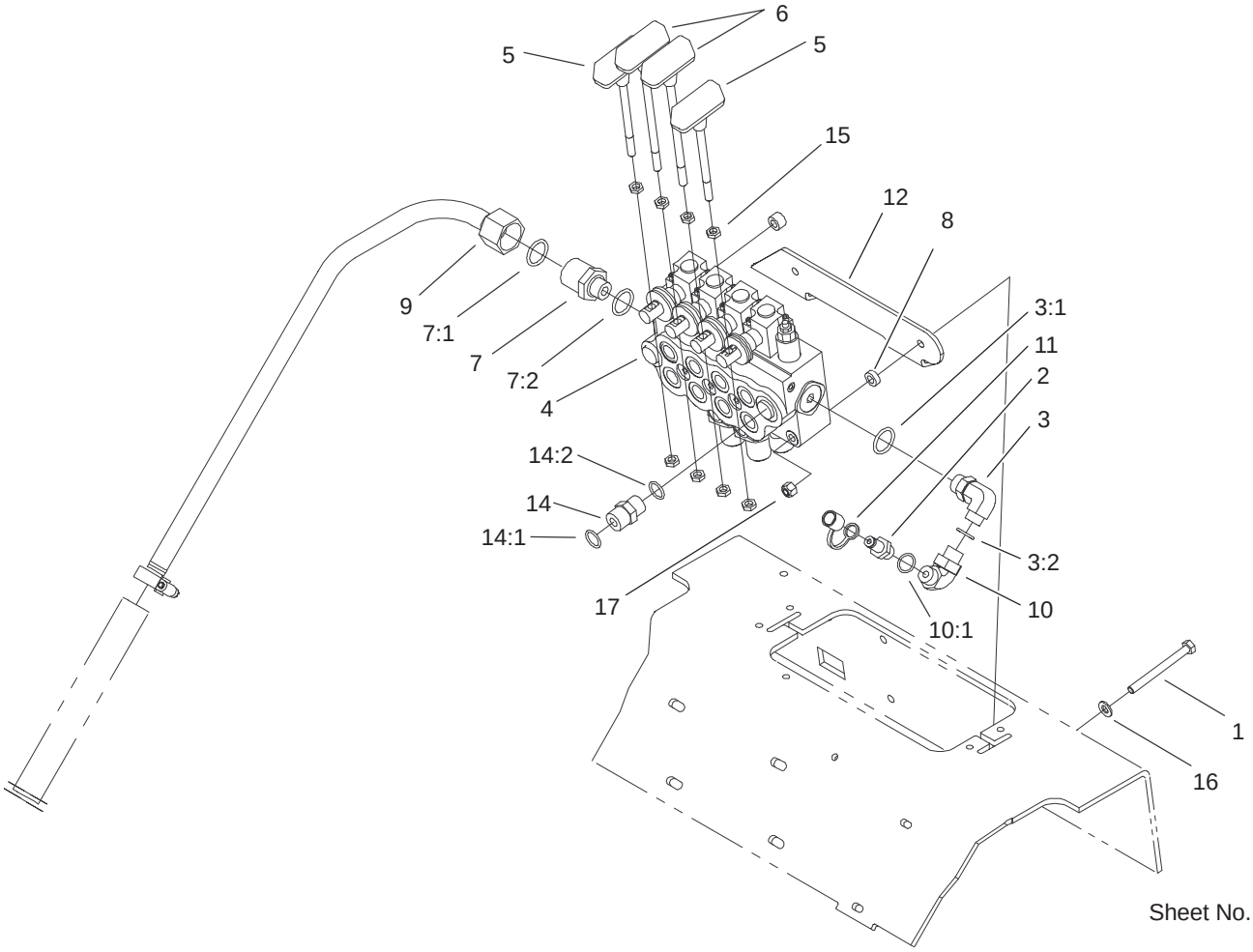
Sheet No.: A6

C–2983

Hydraulic Valve Assembly No. 99–3072

Ref. No.	Part No.	Qty.	Description
3	99–4391	1	Seal Kit
3:1	99–3074	1	Gasket
3:2	99–3075	3	Gasket

Ref. No.	Part No.	Qty.	Description



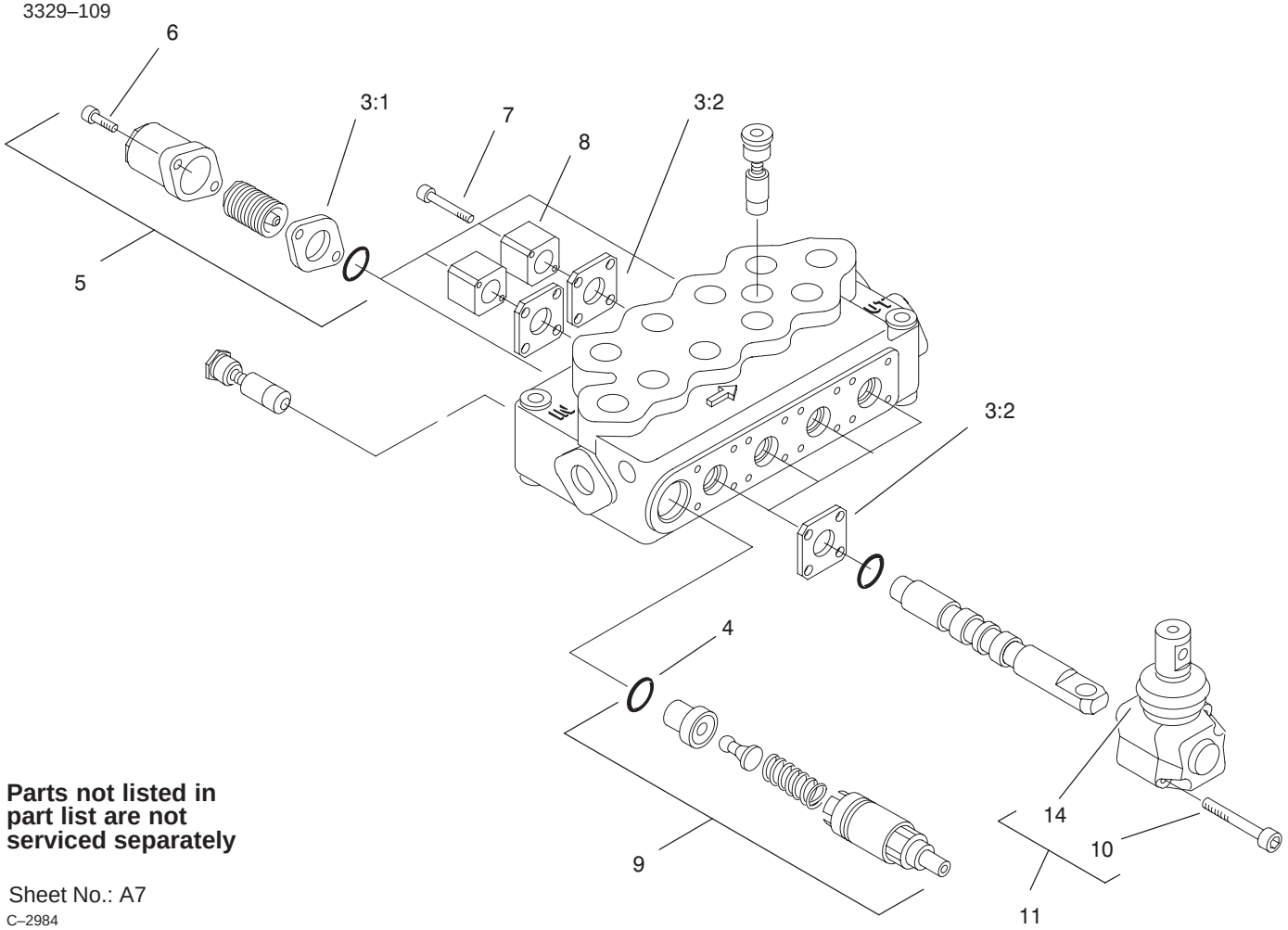
Sheet No.: 12

4–Spool Valve Assembly

Ref. No.	Part No.	Qty.	Description
1	322–20	3	Screw–HH
2	86–5480	1	Nipple–Test
3	340–18	1	Fitting–HYD, 90°
3:1	237–79	1	O–Ring
3:2	237–22	1	O–Ring
4	99–3070	1	Valve–HYD, 4–Spool
5	98–4671	2	Cylinder Handle ASM
6	98–4670	2	Drive Handle ASM
7	98–9921	1	Fitting–Thread, Straight
7:1	237–145	1	O–Ring
7:2	237–79	1	O–Ring
8	99–3078	2	Spacer
9	99–3021	1	HYD Tube ASM
10	340–159	1	Fitting–HYD, 90°
10:1	237–22	2	O–Ring
11	354–79	1	Cap–Dust
12	104–4222–03	1	Bracket–Cover, Mount
14	340–4	2	Adapter–HYD
14:1	237–30	1	O–Ring
14:2	237–79	1	O–Ring
15	42–9580	8	Nut–Hex
16	3256–23	3	Washer–Flat
17	3296–29	3	Nut–Lock, NI
18	98–4695	1	Spacer

Ref. No.	Part No.	Qty.	Description

3329–109



Parts not listed in part list are not serviced separately

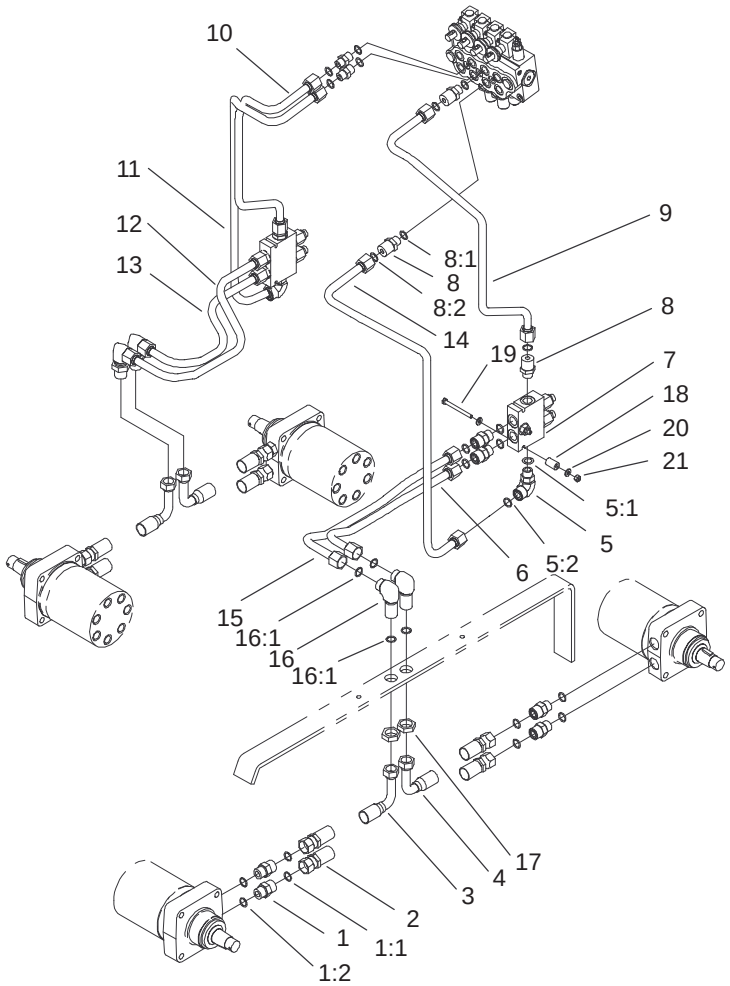
Sheet No.: A7

C–2984

Hydraulic Valve Assembly No. 99–3070

Ref. No.	Part No.	Qty.	Description
3	99–4390	1	Kit–Seal
3:1	99–3074	4	Gasket
3:2	99–3075	8	Gasket
5	100–8801	4	Kit–Spring, High Force
6	100–8802	8	Screw–Cap, End
7	100–8803	4	Screw
8	100–8804	2	Block–Mount, Switch
9	100–8805	1	Valve–Relief
10	100–8806	8	Screw
11	100–8807	4	Operator ASM
14	100–8829	4	Boot

Ref. No.	Part No.	Qty.	Description

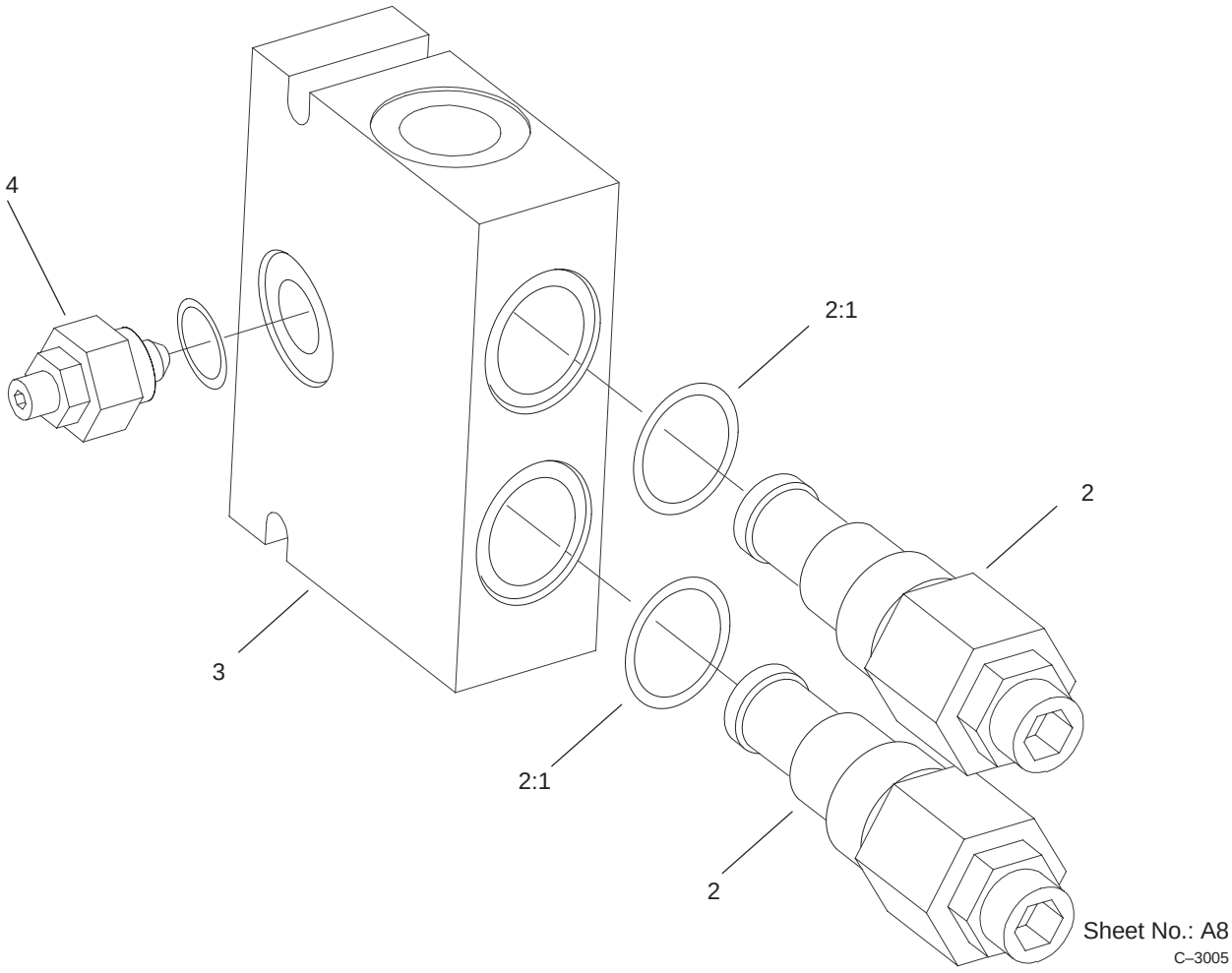


Sheet No.: 13

Hydraulic Motor Assembly

Ref. No.	Part No.	Qty.	Description
1	340–7	8	Adapter
1:1	237–65	1	O–Ring
1:2	237–80	1	O–Ring
2	99–3012	2	HYD Hose ASM
3	99–3010	2	HYD Hose ASM
4	99–3011	2	HYD Hose ASM
5	340–153	2	Fitting–HYD
5:1	237–79	1	O–Ring
5:2	237–151	1	O–Ring
6	99–3022	1	HYD Tube ASM
7	99–3040	2	Valve–Counterbalance
8	340–155	10	Fitting–HYD
8:1	237–79	1	O–Ring
8:2	237–151	1	O–Ring
9	99–3027	1	HYD Tube ASM
10	99–3024	1	HYD Tube ASM
11	99–3029	1	HYD Tube ASM
12	99–3025	1	HYD Tube ASM
13	99–3028	1	HYD Tube ASM
14	99–3023	1	HYD Tube ASM
15	99–3026	1	HYD Tube ASM
16	340–72	4	Fitting–HYD, Bulkhead, 90°
16:1	237–65	2	O–Ring
17	340–74	4	Locknut–Bulkhead
18	99–3057	2	Spacer–Valve

Ref. No.	Part No.	Qty.	Description
19	321–23	2	Screw–HH
20	3256–22	4	Washer–Flat
21	3296–42	2	Nut–Lock, NI



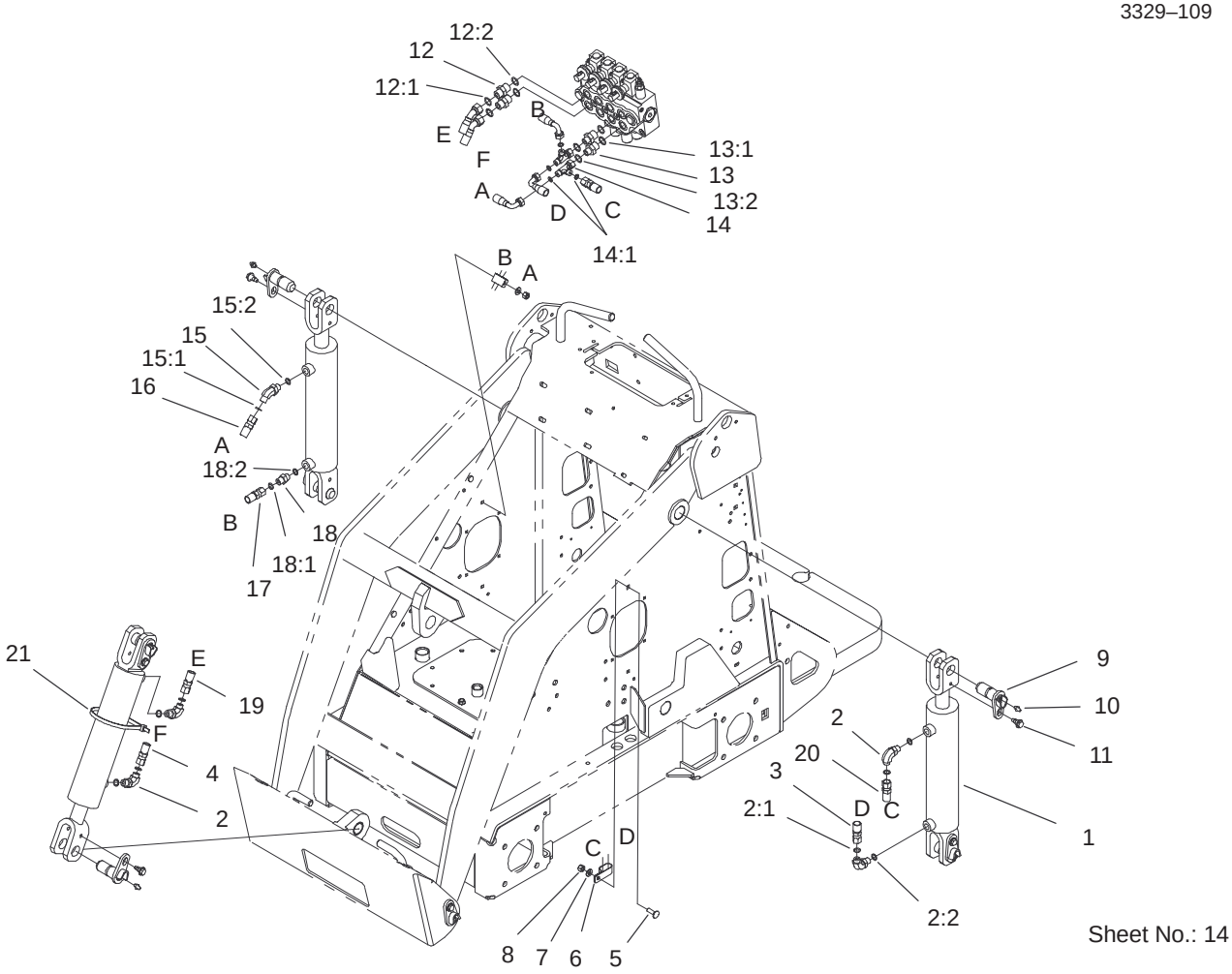
Sheet No.: A8
C–3005

Counterbalance Valve Assembly No. 99–3040

Ref. No.	Part No.	Qty.	Description
*1	105–4099	1	Kit–Seal
2	99–3271	2	Valve–Cartridge
2:1	98–2712	1	Kit–Seal
3	100–8864	1	Manifold ASM
4	100–8865	1	Needle Valve ASM

Ref. No.	Part No.	Qty.	Description

* Not illustrated

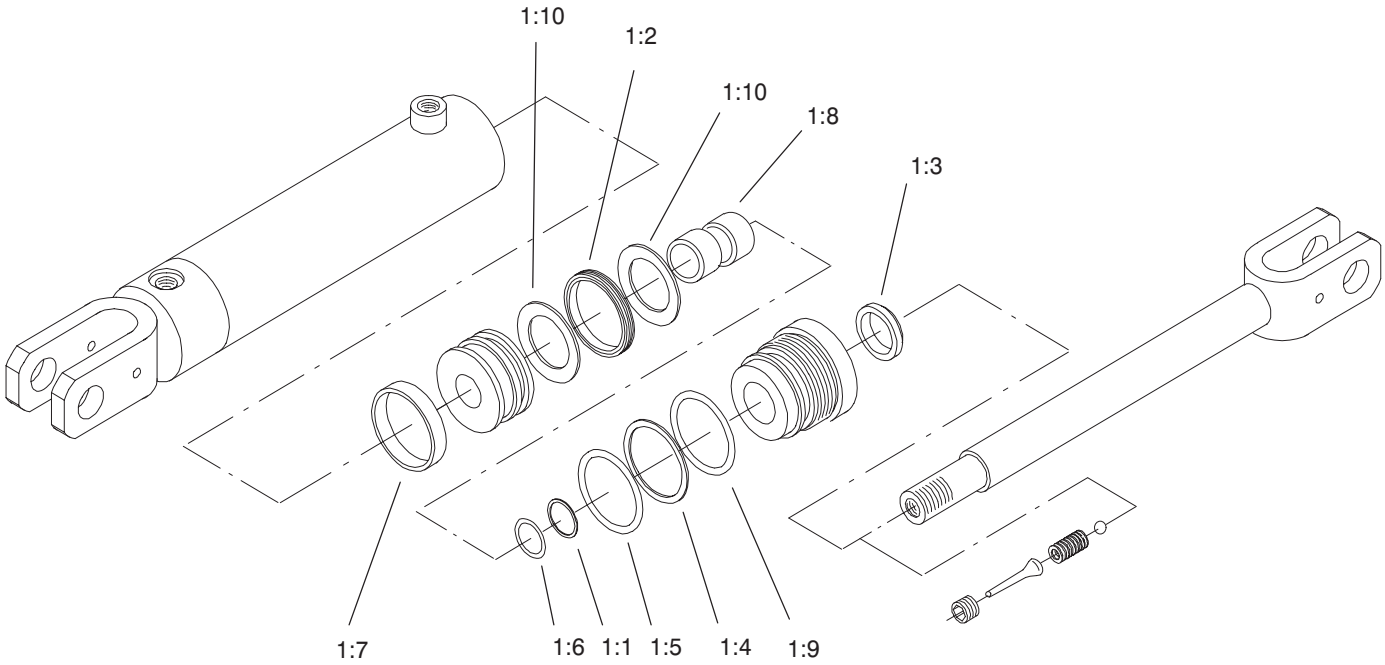


Sheet No.: 14

Hydraulic Cylinder Assembly

Ref. No.	Part No.	Qty.	Description
1	100–4163	3	Kit–Cylinder
2	340–82	4	Adapter
2:1	237–42	1	O–Ring
2:2	237–21	1	O–Ring
3	98–4748	1	HYD Hose ASM
4	98–4726	1	Hose–HYD
5	3230–2	2	Bolt–CARR
6	2412–137	2	Clamp–Tube
7	3256–23	2	Washer–Flat
8	3296–29	2	Nut–Lock, NI
9	99–1414	6	Pin–Pivot
10	302–5	6	Fitting–Grease
11	99–5105	6	Bolt–Shoulder
12	340–3	2	Adapter
12:1	237–22	1	O–Ring
12:2	237–79	1	O–Ring
13	340–133	2	Adapter
13:1	237–79	1	O–Ring
13:2	237–21	1	O–Ring
14	340–151	2	Fitting
14:1	237–75	3	O–Ring
15	340–137	1	Fitting
15:1	237–21	1	O–Ring
15:2	237–42	1	O–Ring
16	98–4725	1	HYD Hose ASM
17	100–1731	1	Hose–HYD, Right

Ref. No.	Part No.	Qty.	Description
18	340–1	1	Adapter
18:1	237–35	1	O–Ring
18:2	237–42	1	O–Ring
19	98–4727	1	Hose–HYD
20	99–3109	1	HYD Hose ASM
21	3334–945	1	Tie–Cable



Parts not listed in part list are not serviced separately

Sheet No.: A9

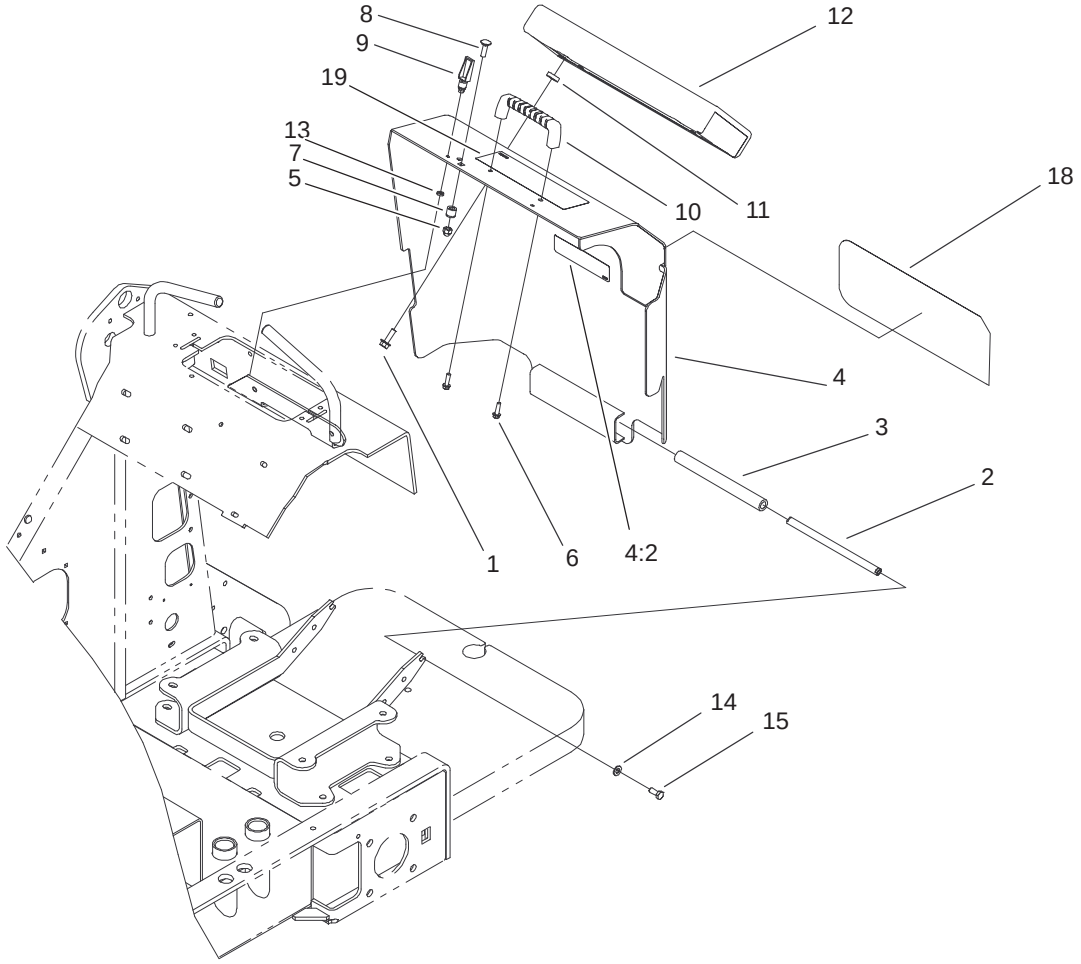
C–2985

Hydraulic Cylinder Assembly No. 100–4163

Ref. No.	Part No.	Qty.	Description
1	99–3065	1	Kit–Seal
☆1:1		1	Washer–Backup
☆1:2		1	Psp Seal
☆1:3		1	Rod–Wiper
☆1:4		1	Washer–Backup
☆1:5		1	O–Ring
☆1:6		1	Polypack
☆1:7		1	Wear Ring
☆1:8		1	Wear Ring
☆1:9		1	O–Ring
☆1:10		1	Washer–Backup

Ref. No.	Part No.	Qty.	Description

☆ Not serviced separately

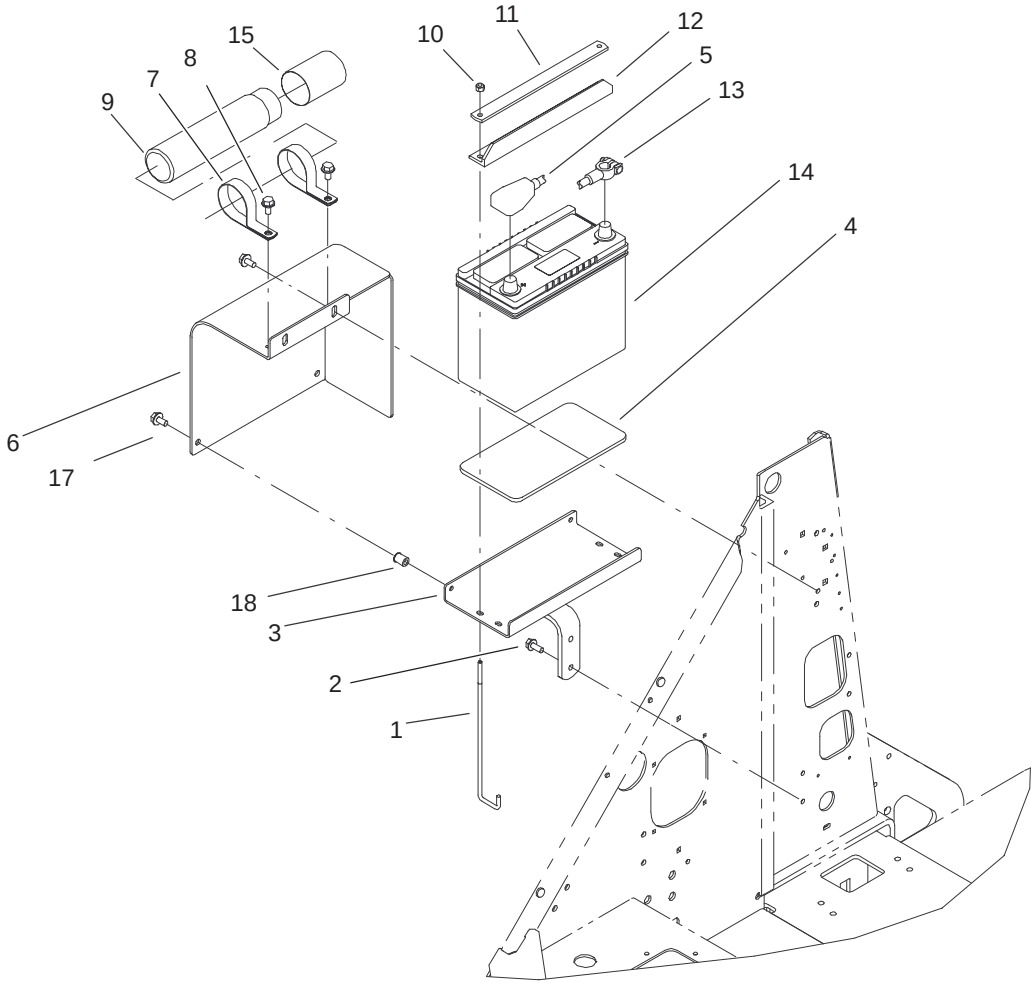


Sheet No.: 15

Rear Cover Assembly

Ref. No.	Part No.	Qty.	Description
1	3234–29	4	Screw–HHF
2	99–3083	1	Bar–Hinge
3	99–3085	1	Hose–Hinge
4	104–9450	1	Cover ASM
4:2	93–7814	1	Decal–Danger
5	32111–8	1	Locknut–Acorn
6	46–8091	2	Screw–HWH
7	99–3035	1	Spacer–Guide
8	3230–22	1	Screw–CARR
9	74–5950	2	Latch–Swell
10	65–5100	1	Handle–Door
11	26–4840	4	Spacer–Pin, Mounting
12	99–3101	1	Cover–Pad
13	99–3058	2	Washer
14	3256–23	2	Washer–Flat
15	322–3	2	Screw–HH
18	93–7340	1	Decal–Toro
19	98–9051	1	Decal–Danger

Ref. No.	Part No.	Qty.	Description

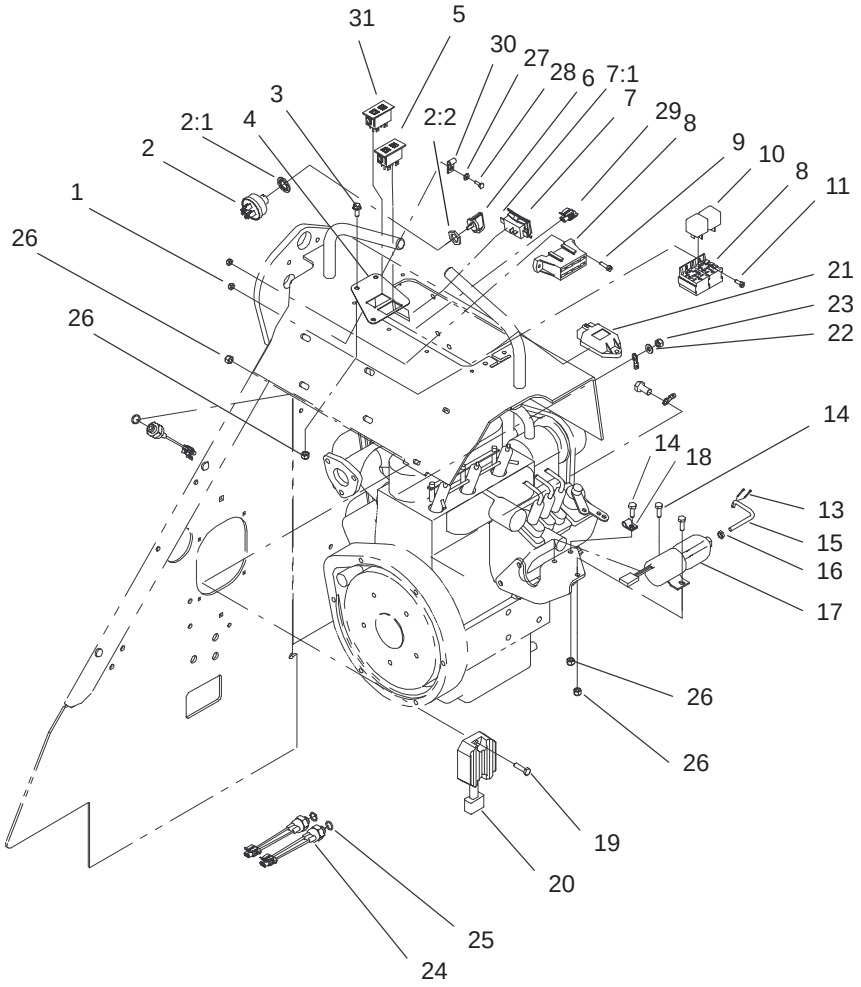


Sheet No.: 17

Battery Mount Assembly

Ref. No.	Part No.	Qty.	Description
1	99–5035	2	Retainer–Battery
2	32144–70	2	Screw–HH
3	98–2665–03	1	Battery Mount
4	99–5030	1	Pad–Battery
5	100–1708	1	Cable–Battery, Positive
6	98–2670–03	1	Cover–Battery
7	2412–133	2	R–Clamp
8	32144–14	4	Screw–HWH
9	104–7050	1	Housing–Manual
10	3296–42	2	Nut–Lock, NI
11	99–5008–01	1	Retainer–Battery
12	99–5039	1	Retainer–Battery
13	100–1709	1	Cable–Battery, Negative
14	99–1441	1	Battery
15	104–7048	1	Cap–Housing
17	3234–29	2	Screw–HHF
18	32148–7	2	Insert–Nut

Ref. No.	Part No.	Qty.	Description



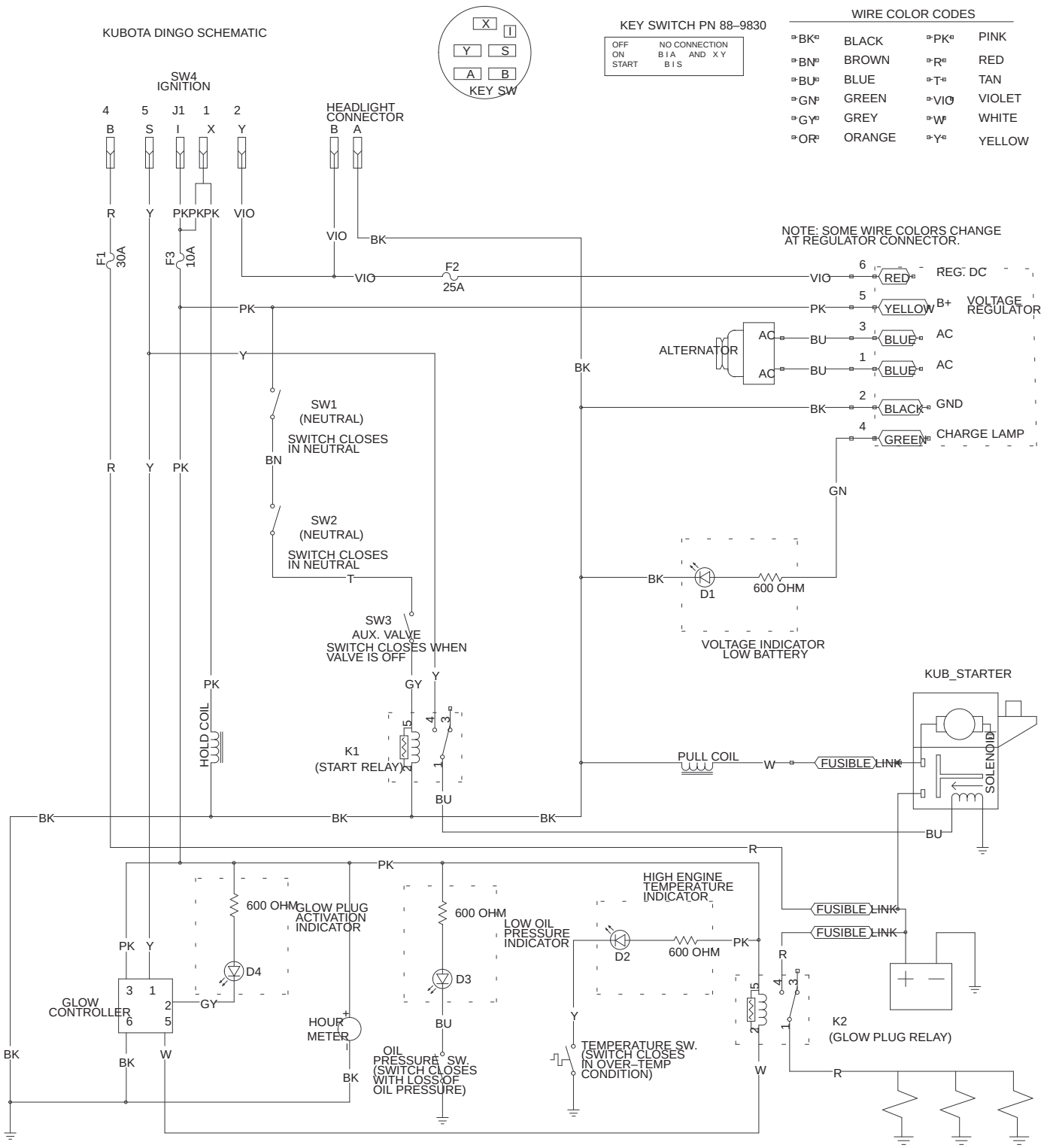
Sheet No.: 18

Electrical Components Assembly

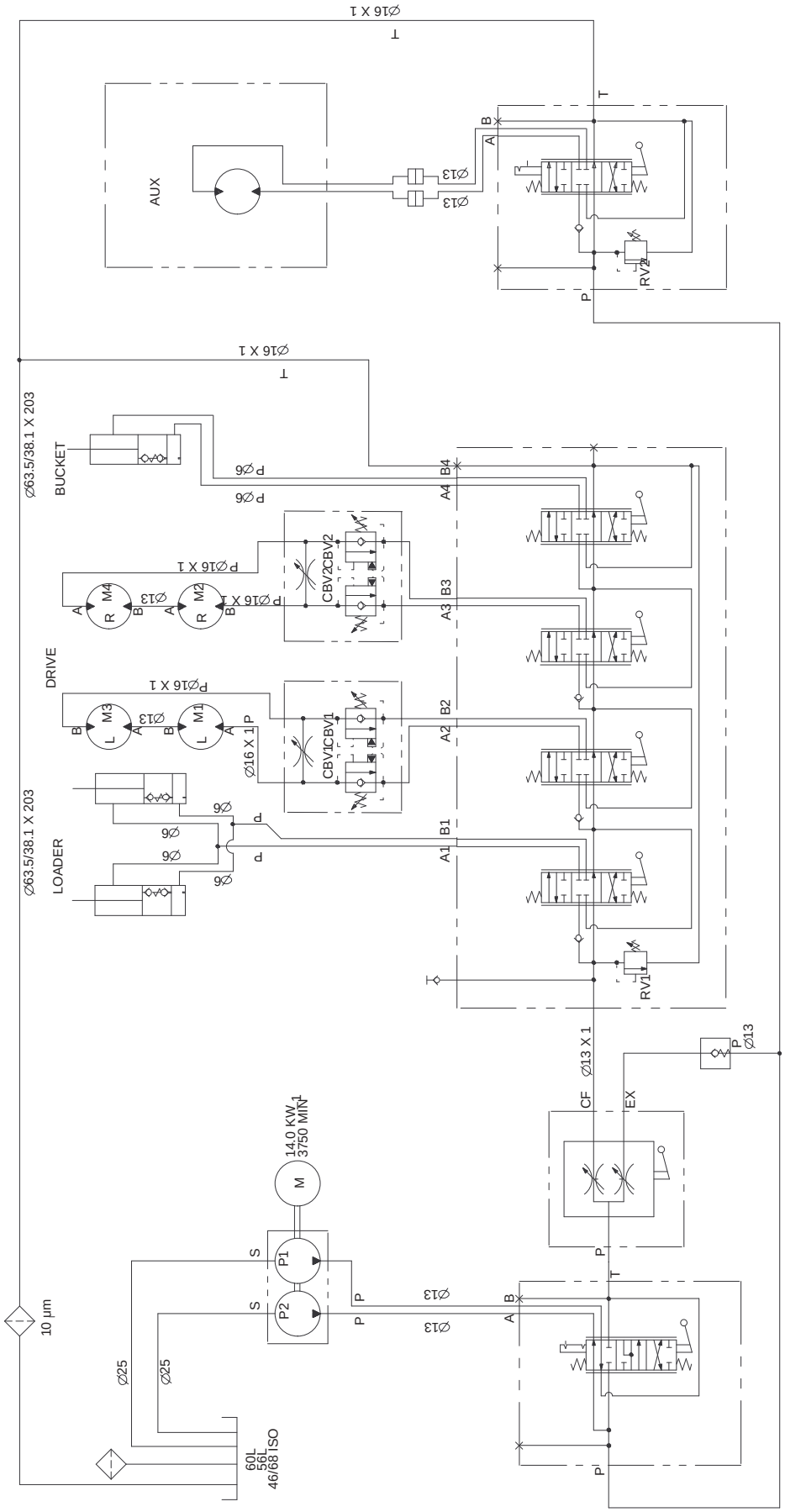
Ref. No.	Part No.	Qty.	Description
1	3296–12	4	Nut–Lock
2	88–9830	1	Key Switch ASM
2:1	3254–5	1	Washer–Tooth
2:2	218–461	1	Nut–HH
3	3234–33	3	Screw–HHF
4	105–1249–01	1	Mount–Lamp, Warning
5	100–8070	1	Lamp–Warning
6	63–8360	2	Key–Ignition
7	104–7429	1	Meter–Hour
7:1	104–4234	1	Clip–Mounting
8	105–4069	1	Harness–Wire
9	32105–13	2	Screw–SHH
10	98–7249	2	Relay
11	32105–8	1	Screw
13	3272–1	2	Pin–Cotter
14	321–4	3	Screw–HH
15	105–6243	1	Rod–Linkage
16	3220–1	1	Nut–Jam
17	99–5006	1	Solenoid
18	2412–31	1	Clamp–Boden
19	321–6	3	Screw–HH
20	100–2057	1	Regulator ASM
21	98–7611	1	Controller–Glow
22	100–2215	1	Washer–Spring
23	100–2171	1	Nut–Hexagon
24	72–4310	3	Switch–Ball

Ref. No.	Part No.	Qty.	Description
25	237–42	3	O–Ring
26	3296–42	9	Nut–Lock, NI
27	3256–21	1	Washer–Flat
28	32144–87	1	Screw–Forming, Thread
29	99–1433	2	Connector–Female
30	2412–72	1	Clip–Closed, Insulated
31	100–8071	1	Lamp–Warning

Electrical Schematic

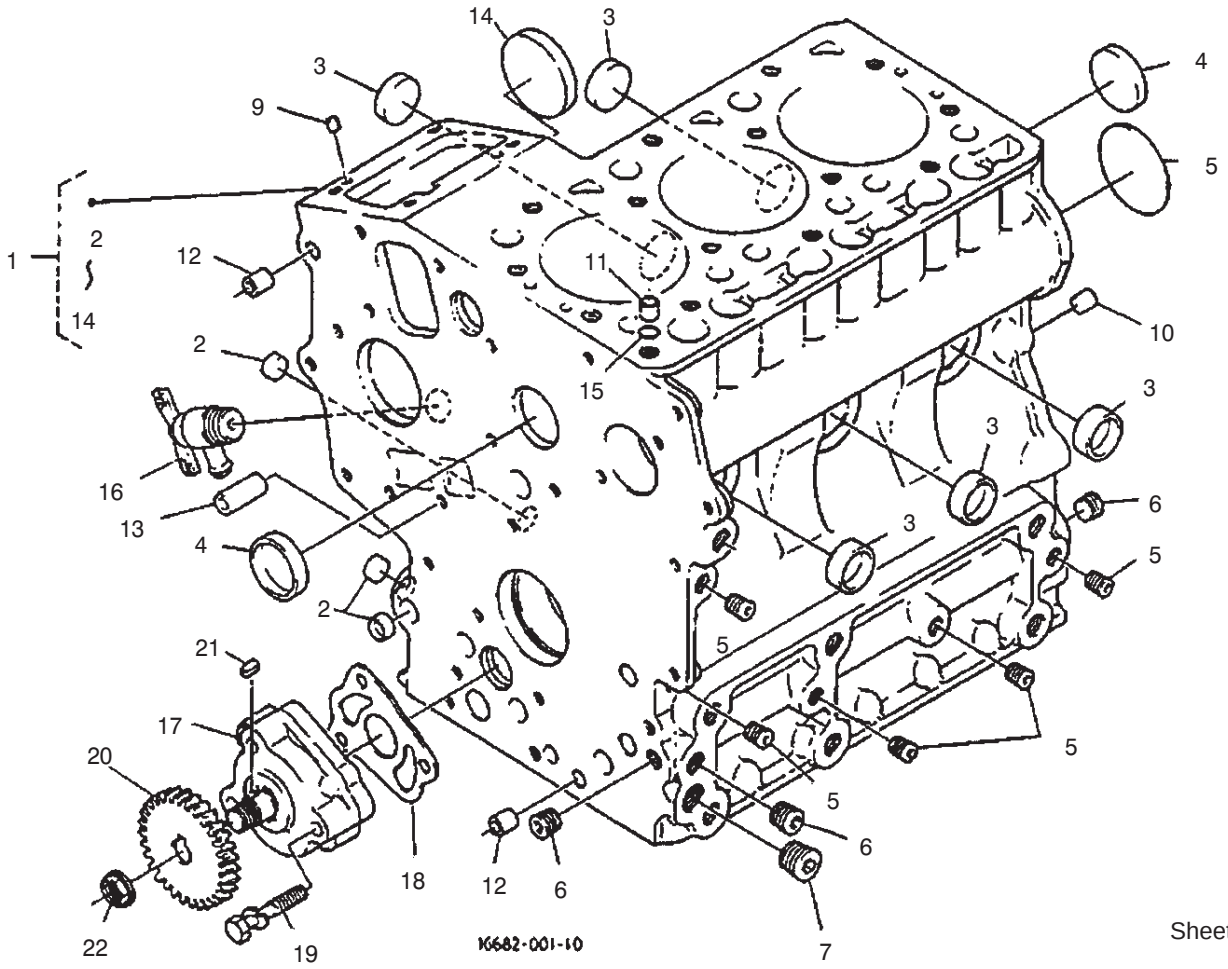


Hydraulic Schematic



DISPLACEMENT A		ND PRESSURE CHART				
COMPONENT	DISPLACEMENT		PRESSURE		FLOWRATE*	
COMPONENT	CU IN/REV	CU CM/REV	PSI	BARS	GPM	LPM
P1	0.55 CU IN	9 CC			8.5	32.1
P2	0.24 CU IN	4 CC			3.7	14.0
M1, M3	29.1 CU IN	476 CC				
M2, M4	29.1 CU IN	476 CC				
RV1			3225 PSI	222 BARS		
RV2			3000 PSI	207 BARS		
CBV1			1000 PSI	69 BARS		
CBV2			1000 PSI	69 BARS		

* FLOWRATE CALCULATED AT 3750 RPM AN D 95% EFFICIENCY.

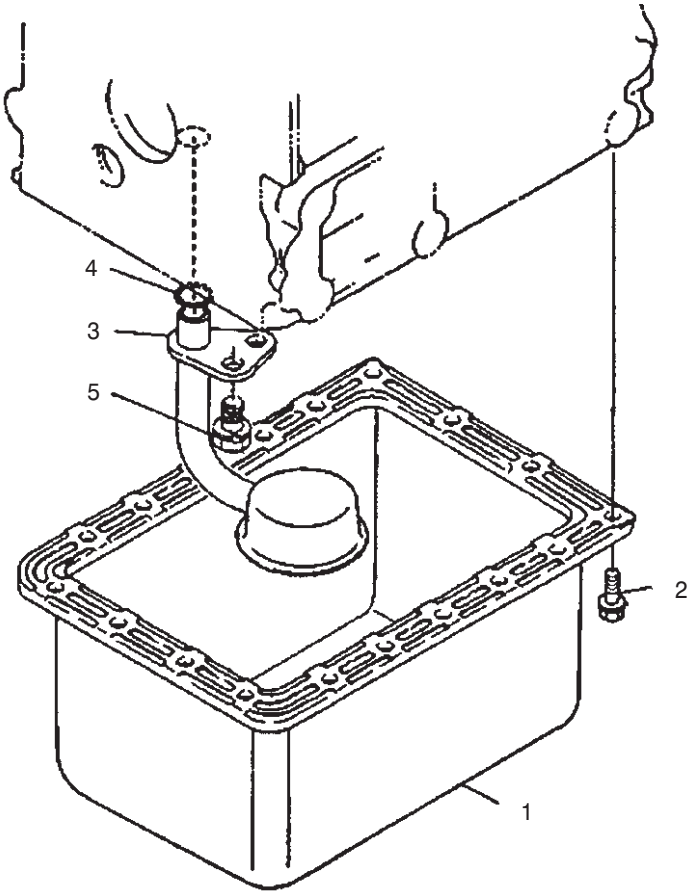


Sheet No.:2

Crankcase Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2167	1	Crankcase–Comp.
2	100–2019	3	Cap–Sealing
3	100–2020	5	Cap–Sealing
4	98–9398	2	Cap–Sealing
5	98–7540	5	Cap–Sealing
6	98–7487	3	Plug
7	98–7488	1	Plug
8	100–1851	1	Plug
9	98–9375	2	Pin–Straight
10	98–9377	2	Pin–Straight
11	98–7506	1	Pin–Pipe
12	98–9387	2	Pin–Pipe
13	100–2051	2	Pin–Pipe
14	100–1991	1	Cover–Fuel, Camshaft
15	98–7509	1	O–Ring
16	98–9436	1	Drain Cock ASM
17	100–2002	1	Oil Pump ASM
18	100–2003	1	Gasket–Pump, Oil
19	100–1923	3	Bolt
20	100–1893	1	Gear–Drive, Oil Pump
21	98–7658	1	Key–Feather
22	100–1779	1	Nut–Flange

Ref. No.	Part No.	Qty.	Description



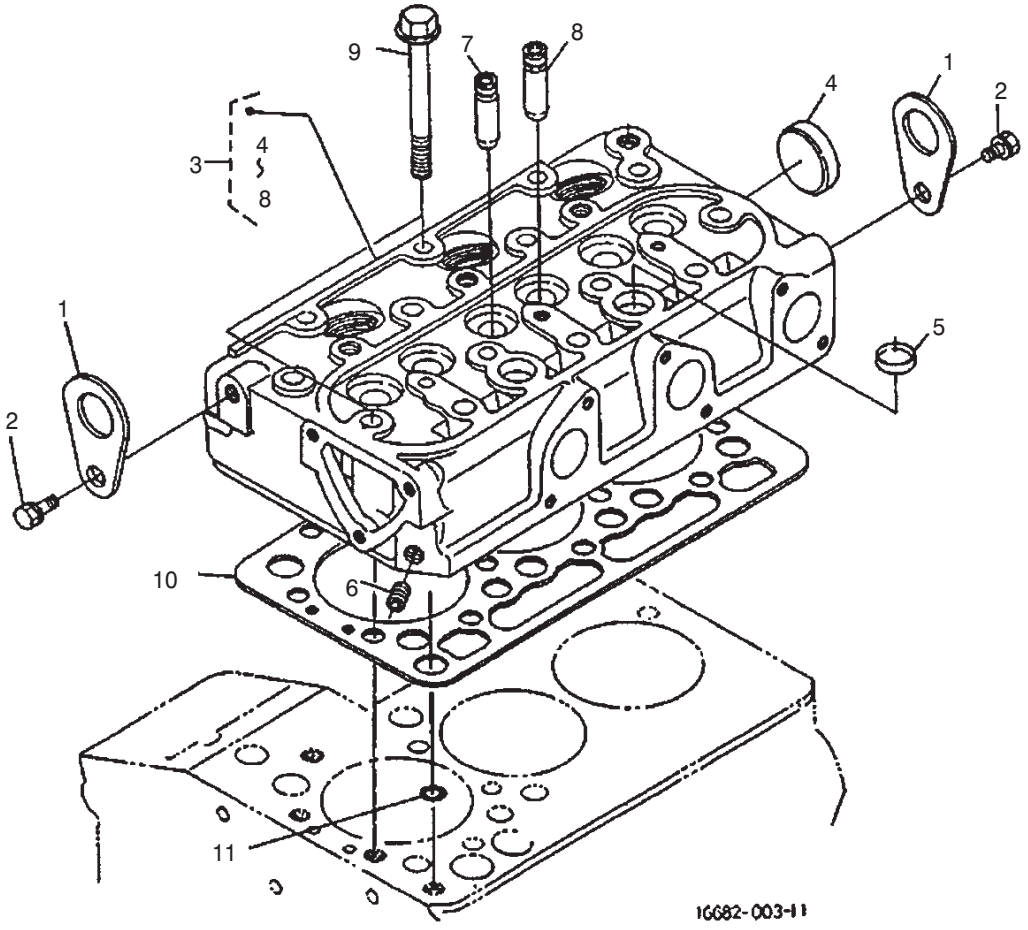
16682-002-10

Sheet No.:3

Oil Pan Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2239	1	Pan–Oil, Comp.
2	98–9350	18	Bolt
3	100–2001	1	Filter–Oil
4	100–2205	1	O–Ring
5	98–7585	1	Bolt

Ref. No.	Part No.	Qty.	Description

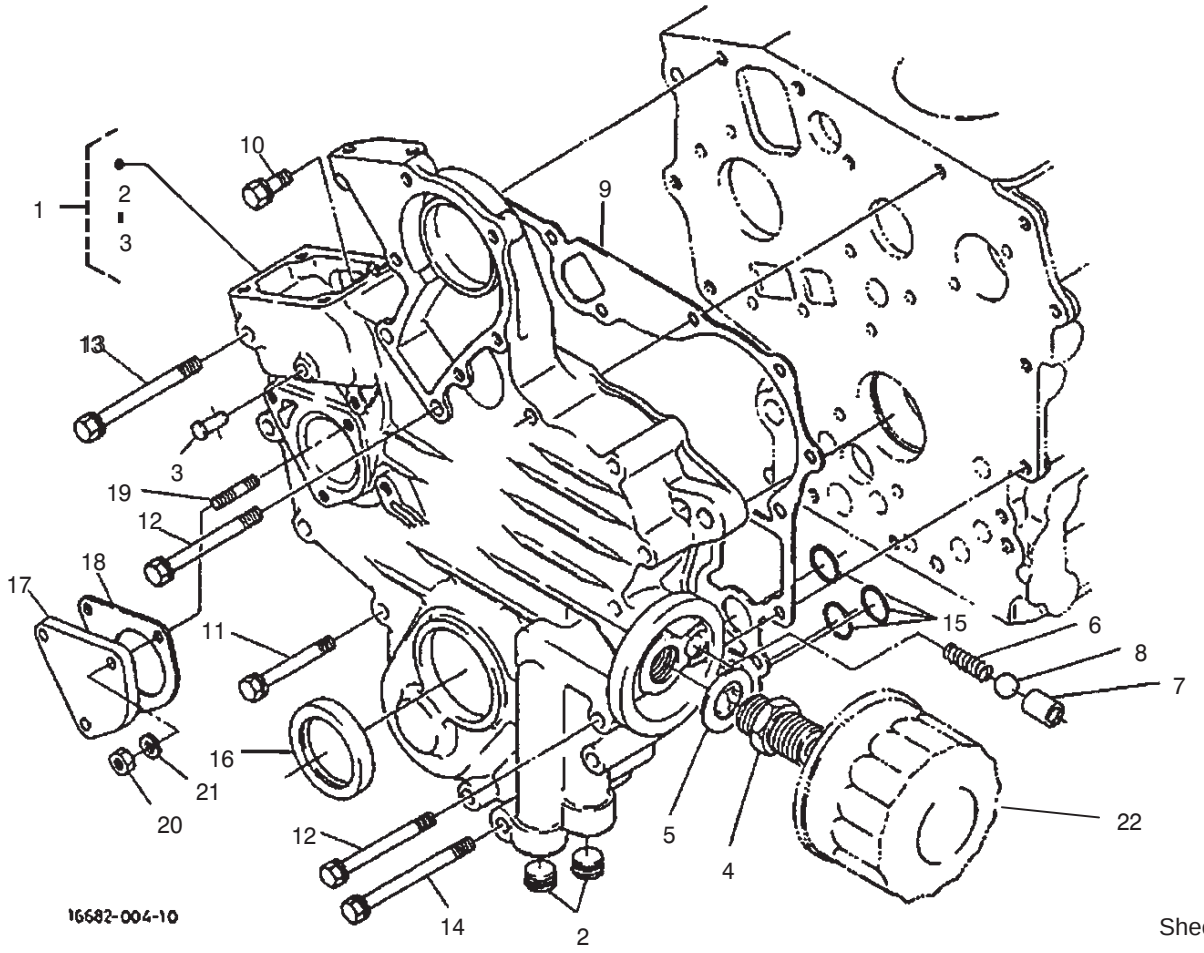


Sheet No.:4

Cylinder Head Assembly

Ref. No.	Part No.	Qty.	Description
1	98–7531	2	Hook–Engine
2	98–7526	2	Bolt
3	100–2246	1	Head–Cylinder, Comp.
4	98–9395	1	Cap–Sealing
5	98–9389	2	Cap–Sealing
6	98–7540	1	Cap–Sealing
7	100–1882	3	Guide–Valve, Inlet
8	100–1883	3	Guide–Valve, Exhaust
9	100–1820	14	Bolt–Head, Cylinder
10	100–2043	1	Gasket–Head, Cylinder
11	98–7509	1	O–Ring

Ref. No.	Part No.	Qty.	Description

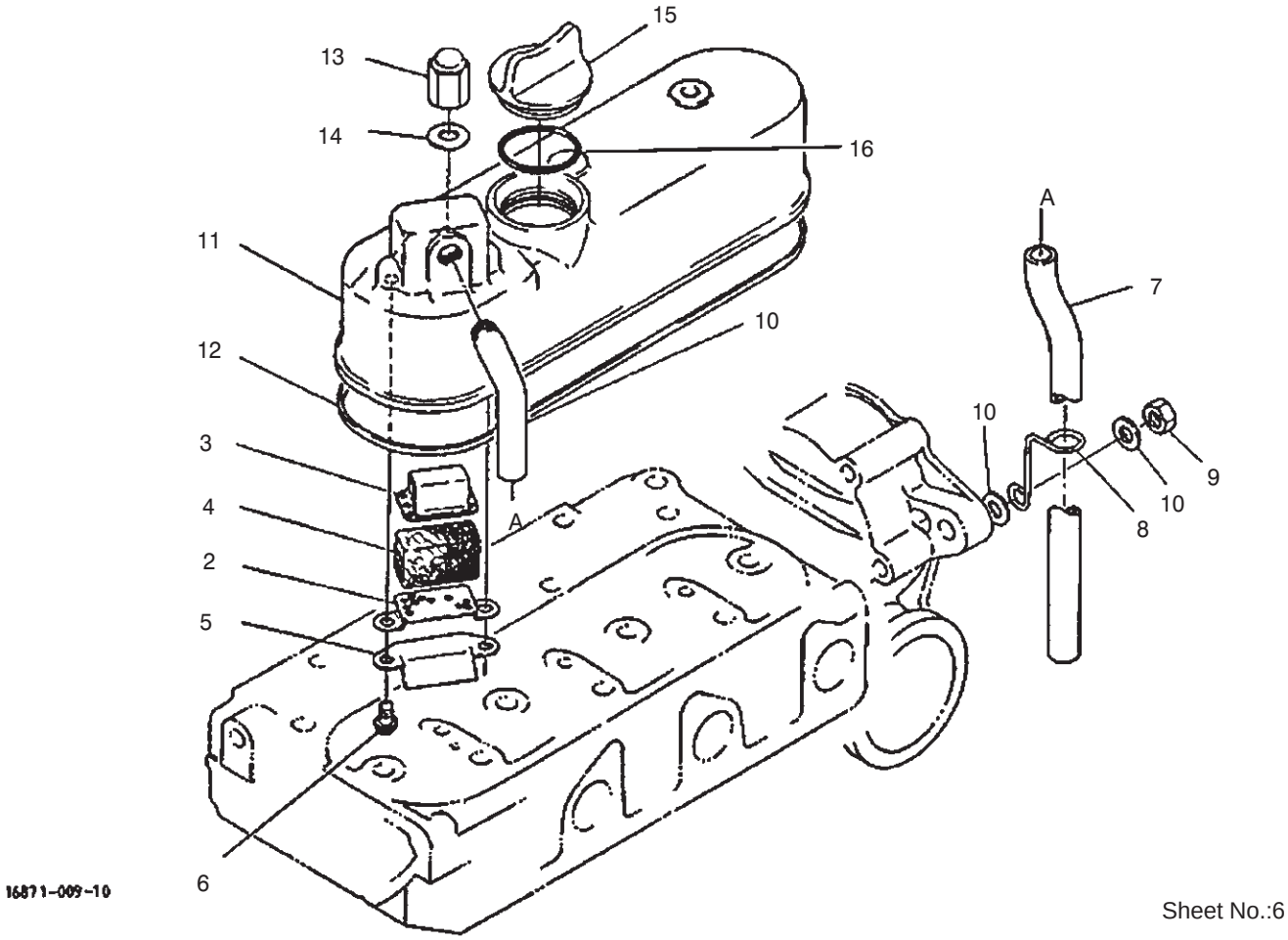


Sheet No.:5

Gear Case Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2048	1	Case–Gear, Comp.
2	98–7546	2	Plug
3	100–1910	1	Pin–Spring, Start
4	98–9388	1	Joint–Pipe
5	100–1926	1	Washer–Plain
6	100–2004	1	Spring
7	100–1894	1	Seat–Valve
8	100–1792	1	Ball
9	100–1954	1	Gasket–Case, Gear
10	98–7605	1	Bolt
11	100–2201	8	Bolt
12	100–1922	5	Bolt
13	100–1766	1	Bolt
14	100–1767	1	Bolt
15	100–2206	3	O–Ring
16	100–1971	1	Seal–Oil
17	100–2060	1	Cover
18	100–2061	1	Gasket–Gearcase, H/M
19	98–7571	3	Stud
20	98–7572	3	Nut
21	98–9367	3	Washer–Spring
22	100–1892	1	Cartridge–Filter, Oil

Ref. No.	Part No.	Qty.	Description

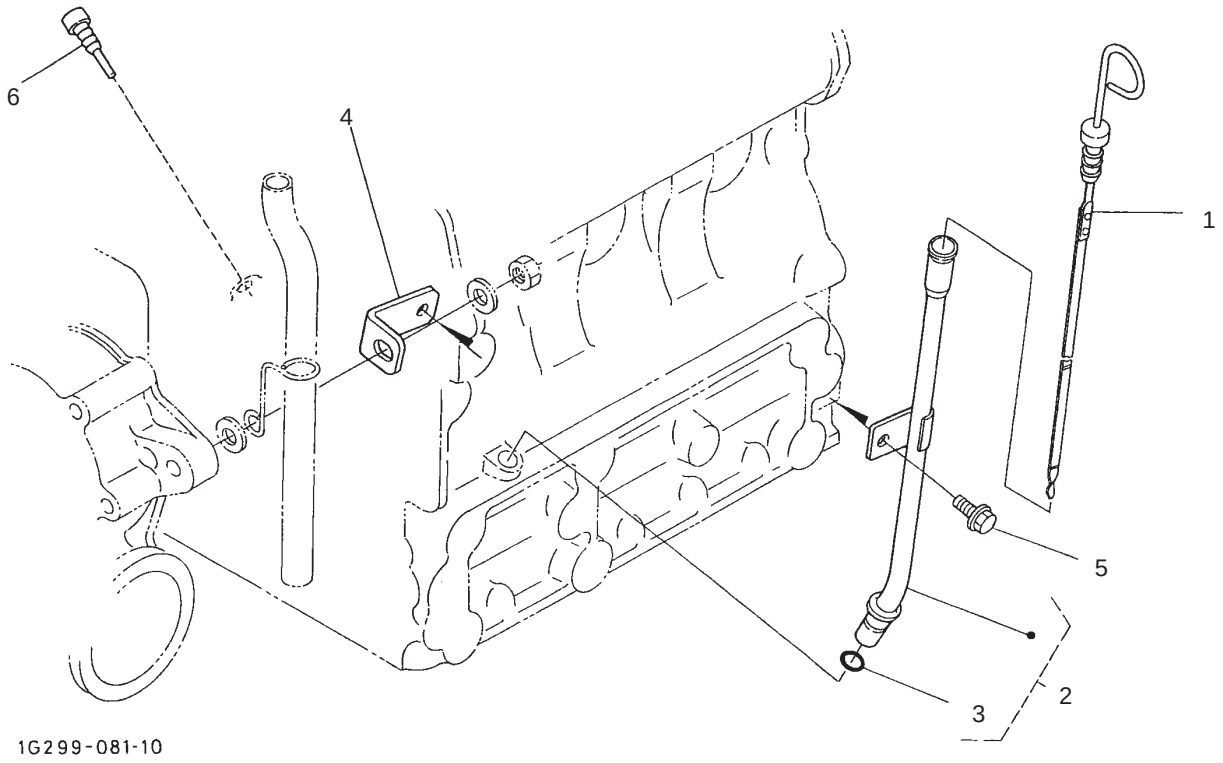


Sheet No.:6

Head Cover Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1972	1	Joint–Pipe, Breather
2	100–1877	1	Plate–Element
3	100–1878	1	Plate–Element
4	100–1881	1	Element–Breather
5	100–1879	1	Breather–Shield, Oil
6	100–2040	2	Screw
7	100–1880	1	Pipe–Breather
8	100–1973	1	Clamp–Pipe
9	98–7739	1	Nut
10	98–7660	2	Washer–Plain
11	100–2029	1	Cover–Head, Cylinder
12	100–2030	1	Gasket–Cover, Head
13	98–7655	3	Nut–Cap
14	98–7654	3	Gasket
15	98–9449	1	Plug–Filler, Oil
16	99–3446	1	O–Ring

Ref. No.	Part No.	Qty.	Description

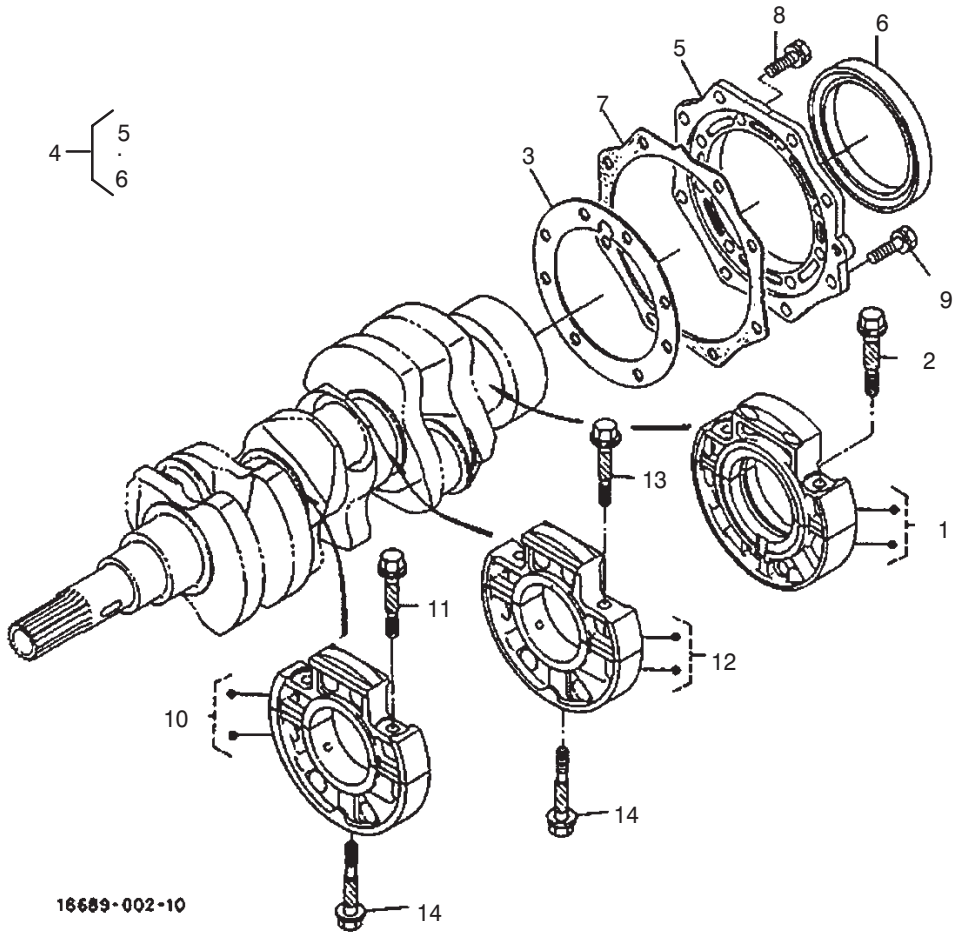


Sheet No.:7

Dipstick and Guide Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2247	1	Gauge–Oil
2	100–2249	1	Oil Gauge Guide ASM
3	98–9374	1	O–Ring
4	100–2248	1	Support–Guide, Gauge
5	100–1774	1	Bolt–Flange
6	100–2229	1	Plug–Rubber

Ref. No.	Part No.	Qty.	Description

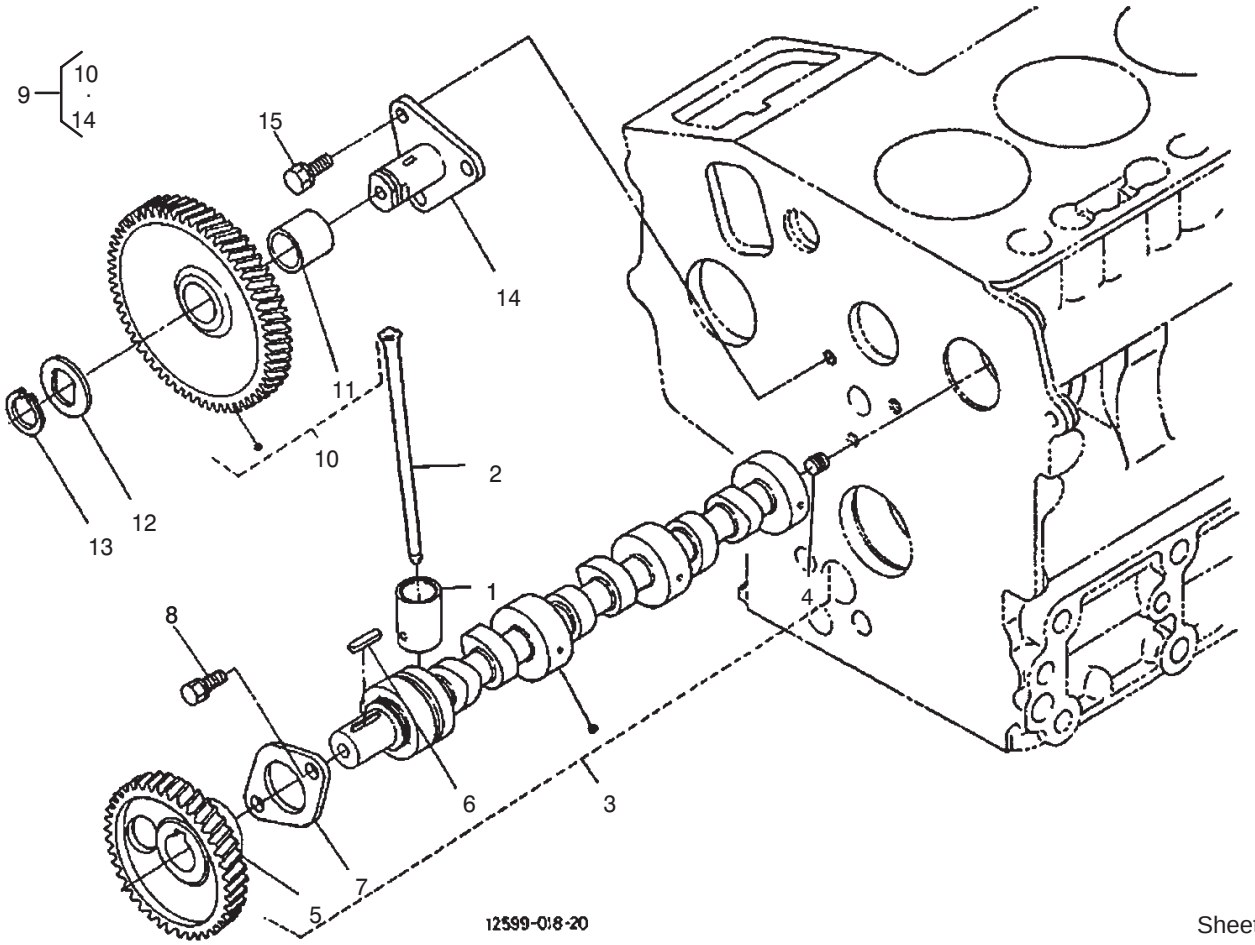


Sheet No.:8

Main Bearing Case Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1988	1	Main Brg. Case ASM
2	100–1757	2	Bolt–Case, Bearing
3	100–1929	1	Gasket–Case, Bearing
4	100–2233	1	Bearing Case Cover ASM
5	100–1875	1	Cover–Case, Bearing
6	100–2055	1	Seal–Oil
7	100–1876	1	Gasket–Case, Bearing
8	98–7568	8	Bolt
9	100–1750	8	Bolt
10	100–1987	1	Main Bearing Case ASM
11	100–1757	2	Bolt–Case, Bearing
12	100–2027	1	Main Bearing Case ASM
13	100–1757	2	Bolt–Case, Bearing
14	100–1874	2	Bolt–Case, Bearing

Ref. No.	Part No.	Qty.	Description

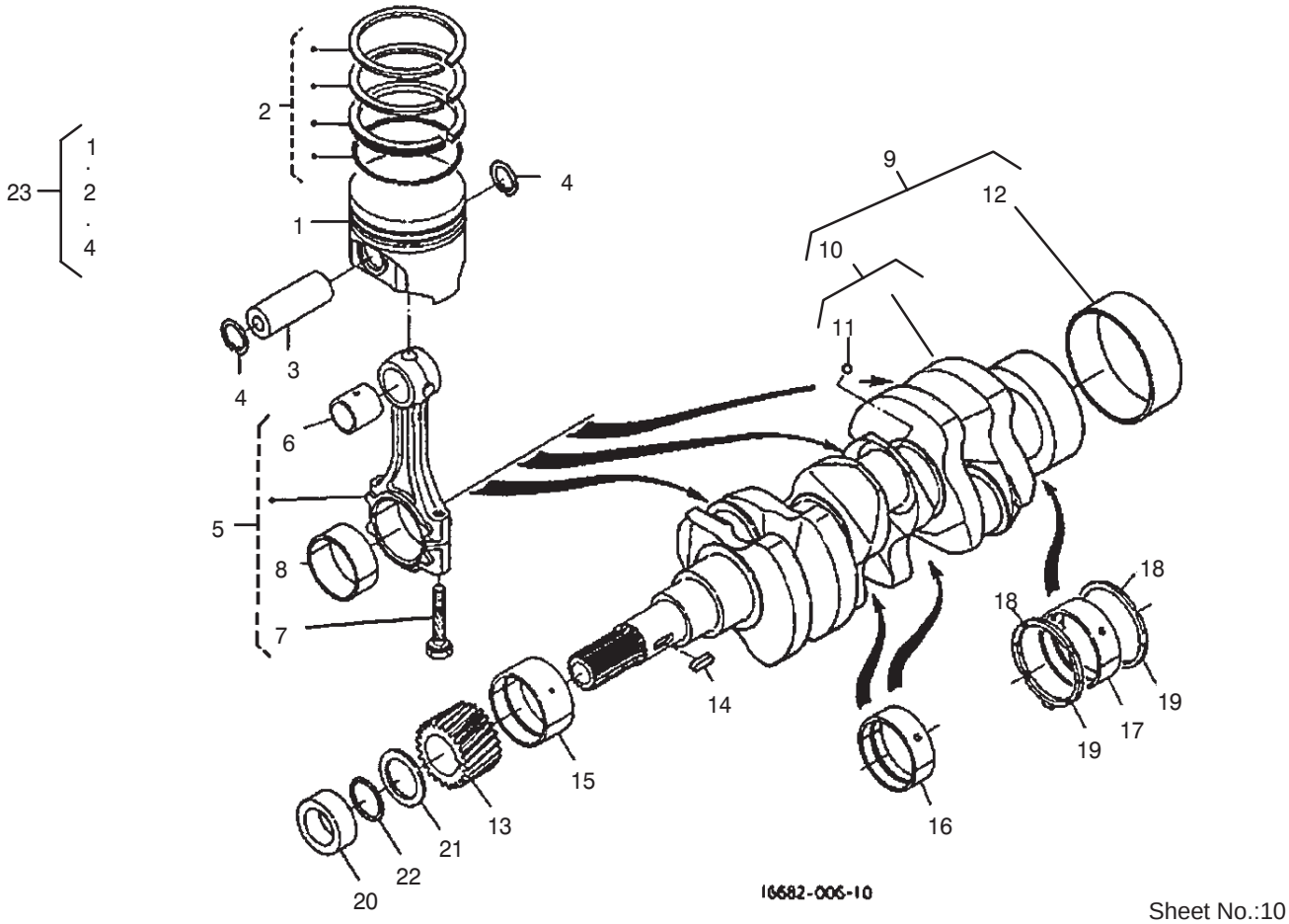


Sheet No.:9

Camshaft Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1990	6	Tappet
2	100–1989	6	Rod–Push
3	100–2162	1	Camshaft ASM
4	98–7449	1	Screw–Set
5	100–2163	1	Gear–Cam
6	98–9378	1	Key–Feather
7	100–1887	1	Camshaft–Stopper
8	98–9350	2	Bolt
9	100–2240	1	Ser/V Idle Gear ASM
10	100–1966	1	Gear–Idle, Comp.
11	100–1968	1	Bush
12	100–1970	1	Collar–Gear, Idle
13	100–1969	1	Ring–Snap
14	100–1967	1	Shaft–Gear, Idle
15	98–9351	3	Bolt

Ref. No.	Part No.	Qty.	Description

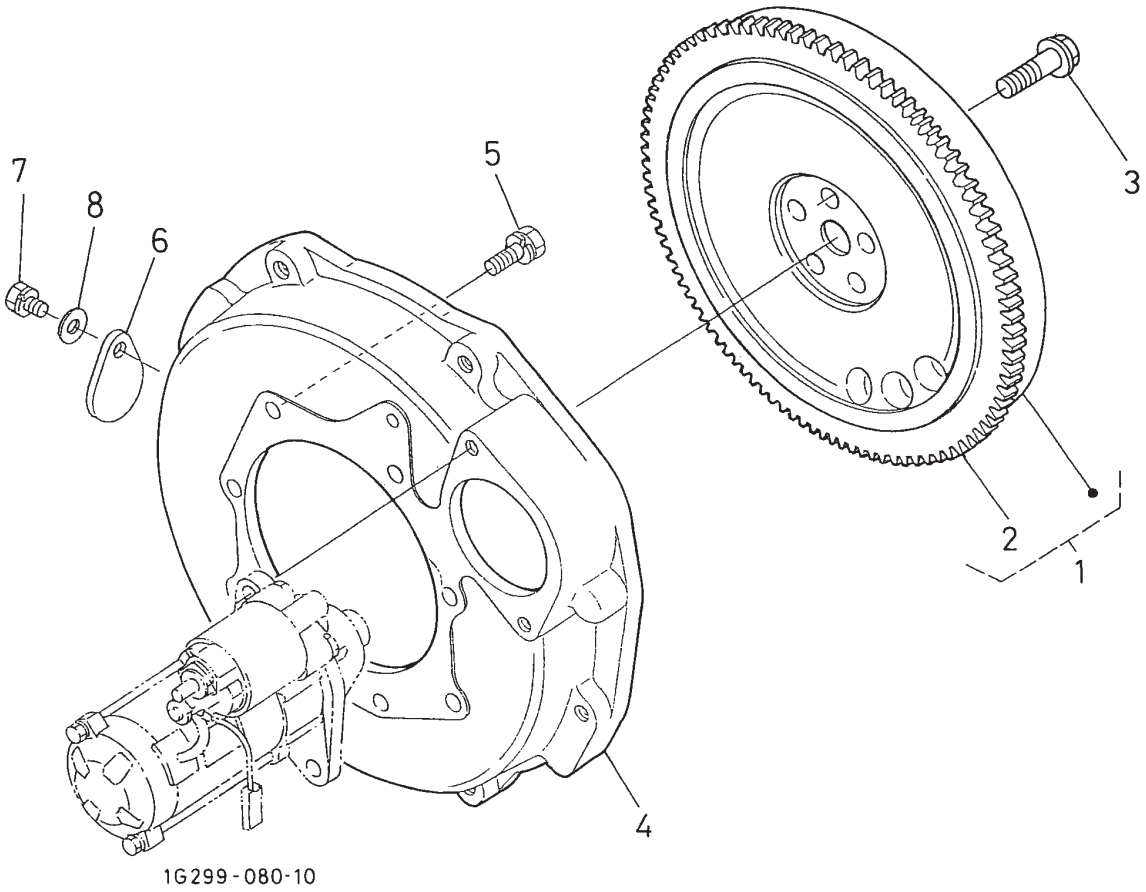


Sheet No.:10

Piston and Crankshaft Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1994	3	Piston (STD.)
1	100–1996	3	Piston (+0.25 Mm)
2	100–2158	3	Piston Ring ASM
2	100–2159	3	Piston Ring ASM
3	100–1995	3	Pin–Piston
4	100–1835	6	Cir–Cup, Piston Pin
5	100–1998	3	Connecting Rod ASM
6	100–1997	3	Bush–Pin, Piston
7	100–1999	6	Bolt–Rod, Connecting
8	100–1942	3	Crankpin–Metal (–0.2 Mm)
8	100–1943	3	Crankpin–Metal (–0.4 Mm)
8	100–2000	3	Crankpin–Metal (STD.)
9	100–2161	1	Crankshaft ASM
10	100–2160	1	Crankshaft–Comp.
11	100–1791	3	Ball
12	100–2054	1	Sleeve–Crankshaft
13	100–1891	1	Gear–Crankshaft
14	100–1752	1	Key–Feather
15	100–1944	1	Crankshaft–Metal (STD.)
15	100–1947	1	Crankshaft–Metal (–0.2 Mm)
15	100–1948	1	Crankshaft–Metal (–0.4 Mm)

Ref. No.	Part No.	Qty.	Description
16	100–1945	2	Crankshaft–Metal (–0.2 Mm Set)
16	100–1946	2	Crankshaft–Metal (–0.4 Mm Set)
16	100–2033	2	Crankshaft–Metal (STD. Set)
17	100–1870	1	Crankshaft–Metal (–0.2 Mm Set)
17	100–1871	1	Crankshaft–Metal (–0.4 Mm Set)
17	100–2032	1	Crankshaft–Metal (STD. Set)
18	100–1836	2	Metal–Side (STD.)
18	100–1838	2	Metal–Side (+0.2 Mm)
18	100–1839	2	Metal–Side (+0.4 Mm)
19	100–1837	2	Metal–Side (STD.)
19	100–1840	2	Metal–Side (+0.2 Mm)
19	100–1841	2	Metal–Side (+0.4 Mm)
20	100–1890	1	Collar–Crankshaft
21	100–1974	1	Slinger–Oil
22	100–2209	1	O–Ring
23	100–2164	1	Kit–Piston



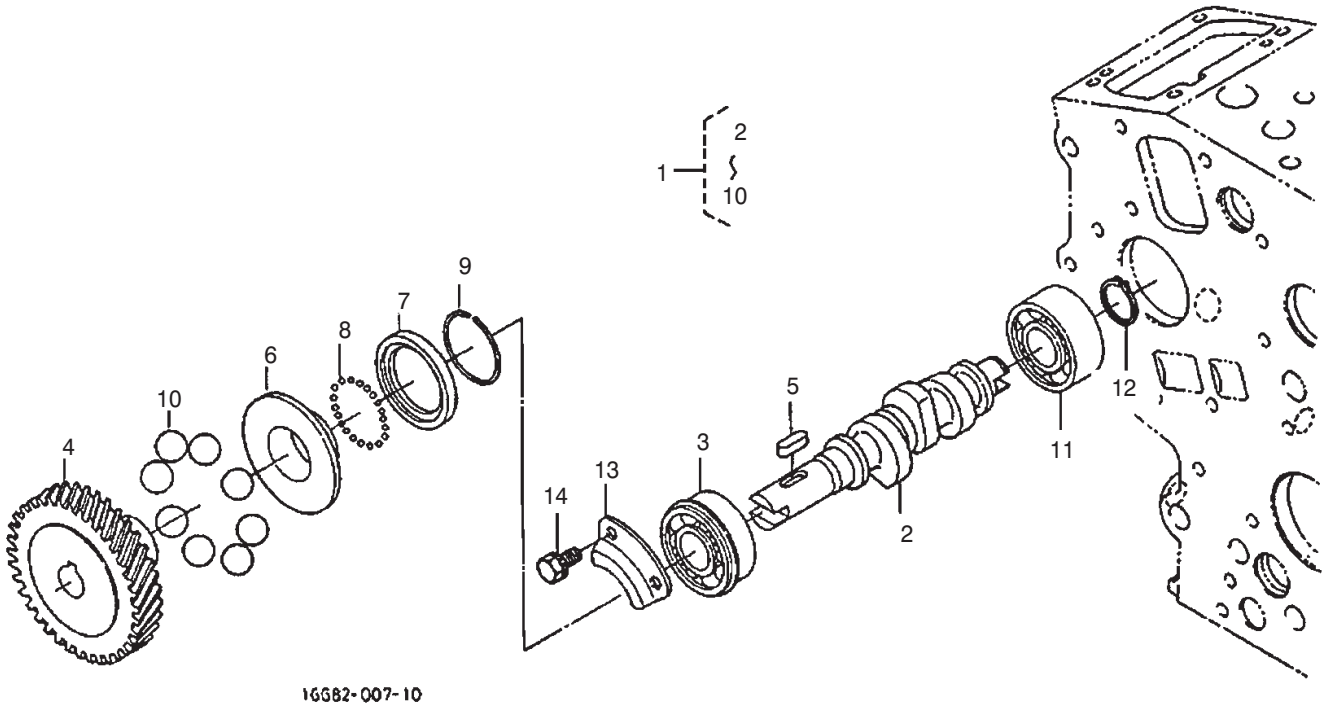
1G299-080-10

Sheet No.:11

Flywheel Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2034	1	Flywheel–Comp.
2	100–2156	1	Gear–Ring
3	100–1930	1	Bolt–Flywheel
4	100–2234	1	Housing–Flywheel
5	98–9359	10	Bolt
6	100–2177	1	Cover
7	98–7585	1	Bolt
8	98–7660	1	Washer–Plain

Ref. No.	Part No.	Qty.	Description

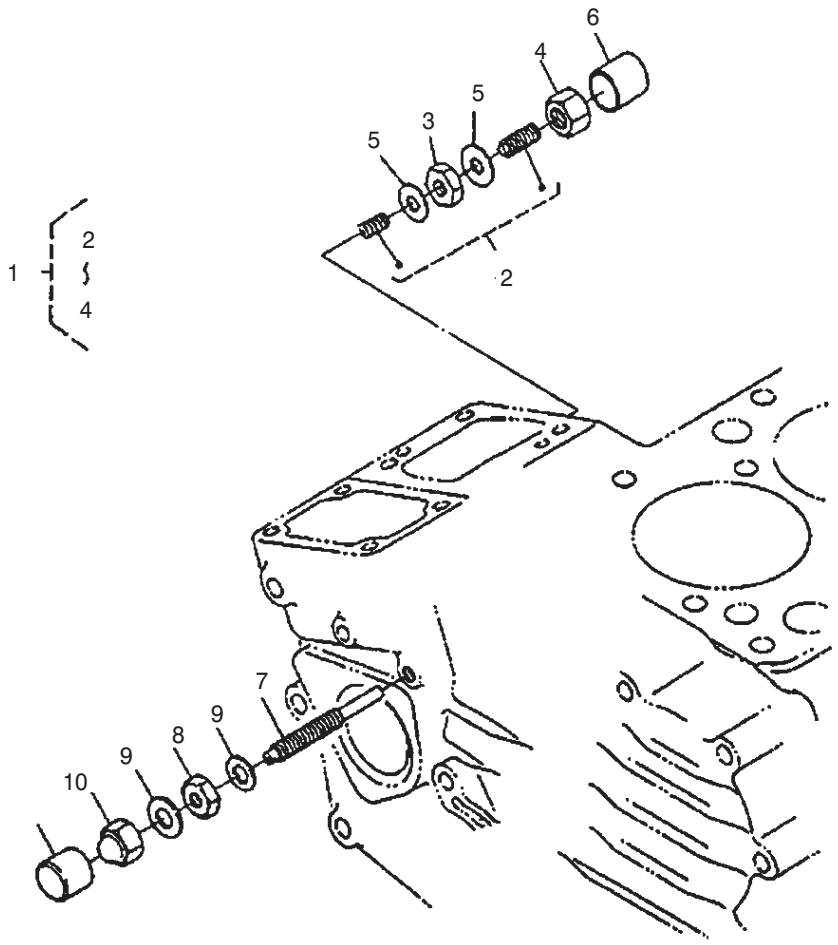


Sheet No.:12

Fuel Camshaft Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2031	1	Fuel Camshaft ASM
2	100–1965	1	Camshaft
3	100–1795	1	Bearing–Ball
4	100–2006	1	Gear–Pump, Injection
5	100–1752	1	Key–Feather
6	100–1903	1	Sleeve–Governor
7	100–1904	1	Case–Ball, Governor
8	100–1790	32	Ball
9	100–1843	1	Cir–Clip, Gov. Sleeve
10	100–1793	8	Ball
11	100–1794	1	Bearing–Ball
12	100–1784	1	Cir–Clip, External
13	100–1888	1	Stopper–Fuel, C/Shaft
14	98–9350	2	Bolt

Ref. No.	Part No.	Qty.	Description

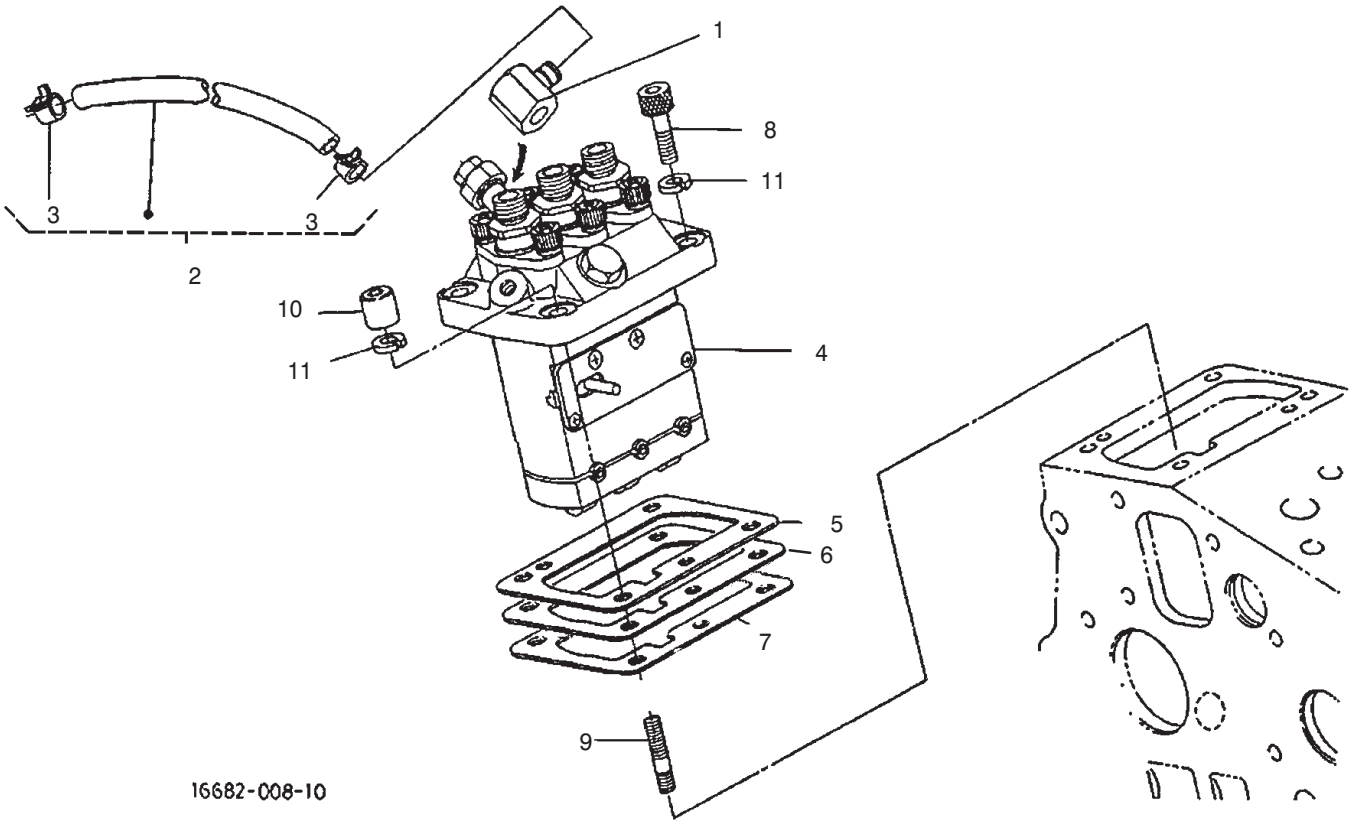


Sheet No.:13

Engine Stop Lever Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1898	1	Idle Appartus ASM
2	100–1899	1	Adjusting Bolt ASM
3	100–1846	1	Nut
4	100–1901	1	Nut–Cap
5	98–7428	2	Gasket
6	100–1902	1	Cap
7	100–1900	1	Bolt–Adjusting
8	100–2175	1	Nut–Lock
9	98–7654	2	Gasket
10	98–9441	1	Nut–Cap

Ref. No.	Part No.	Qty.	Description

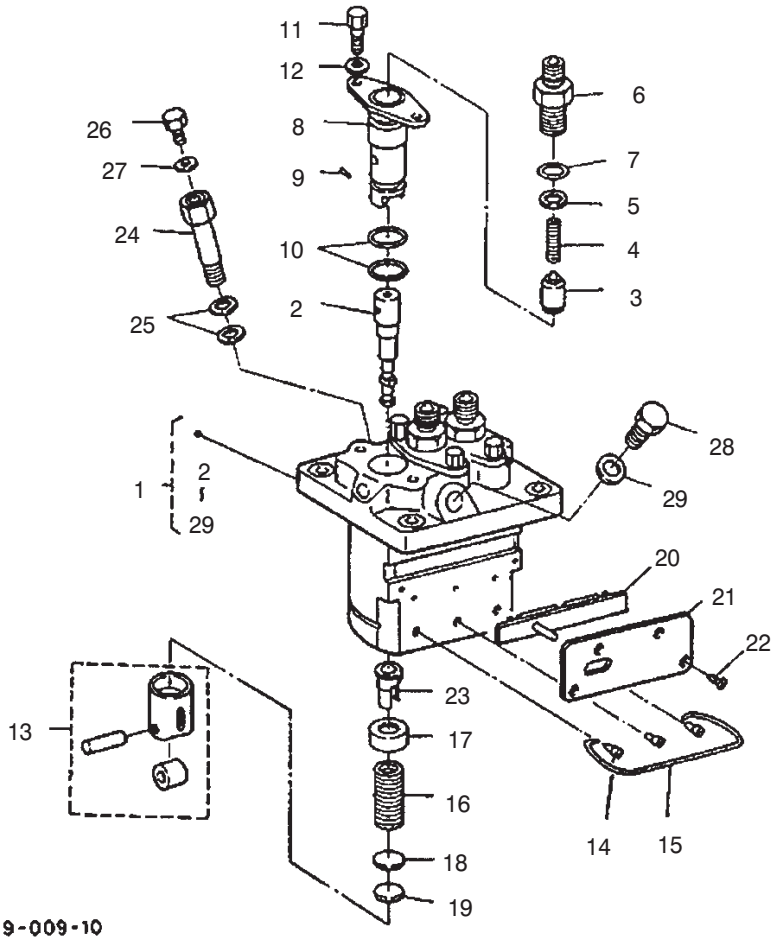


Sheet No.:14

Injection Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1928	1	Joint–Eye
2	100–1842	1	Fuel Pipe ASM
3	100–2217	2	Clip–Pipe
4	100–1759	1	Inj. Pump ASM
5	98–9456	1	Shim (0.2mm)
6	98–9457	1	Shim–Injection (0.25mm)
7	98–9458	1	Shim–Injection (0.30mm)
8	98–9361	2	Bolt–HSH
9	98–9438	2	Stud
10	98–9440	2	Nut–Cap
11	98–9367	4	Washer–Spring

Ref. No.	Part No.	Qty.	Description



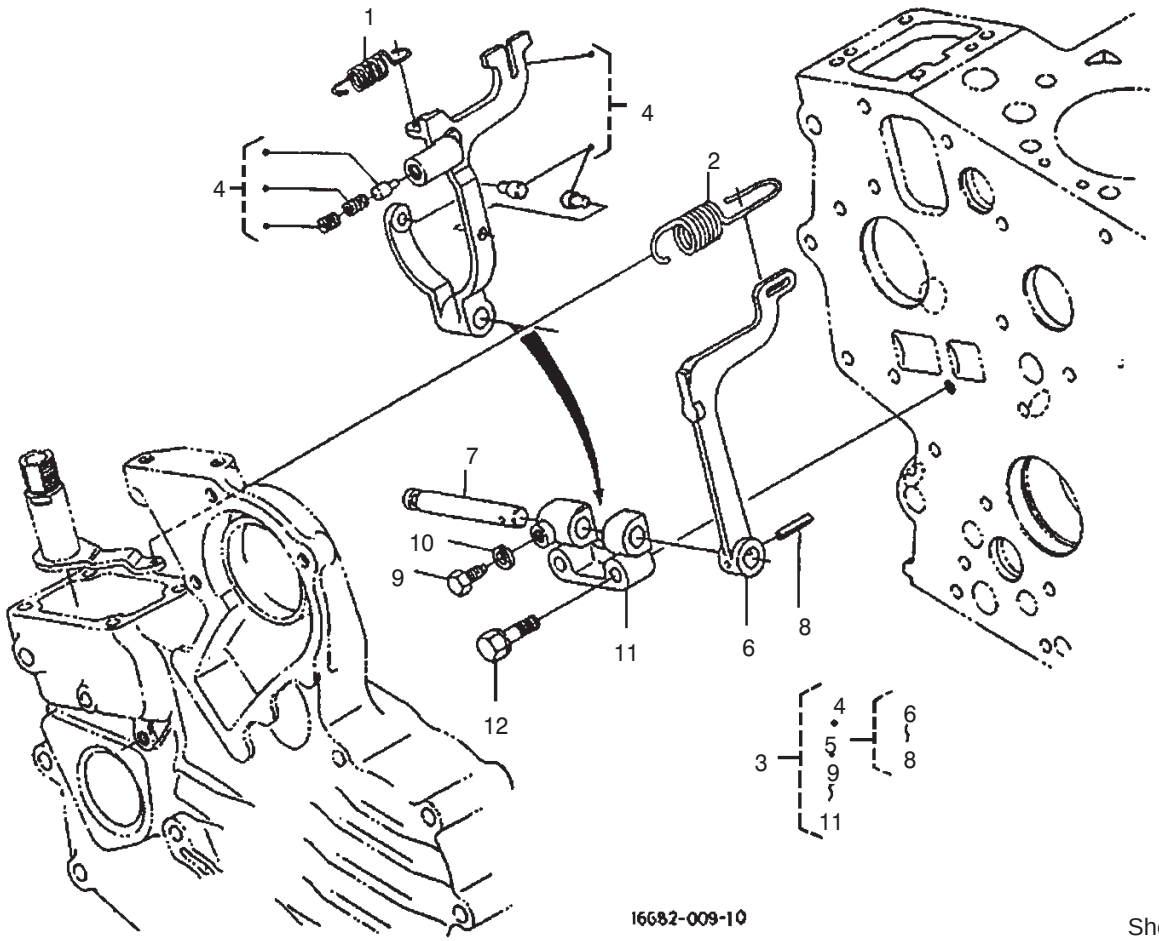
16689-009-10

Sheet No.:15

Injection Pump (Complete Parts)

Ref. No.	Part No.	Qty.	Description
1	100–1759	1	Inj. Pump ASM
2	100–2005	3	Plunger–Pump
3	98–9421	3	Valve–Delivery
4	98–9424	3	Spring–Valve, Delivery
5	98–9425	3	Gasket–Valve, Delivery
6	100–2007	3	Holder–Valve, Deliv.
7	98–9447	3	O–Ring
8	98–9434	3	Flange–Sleeve
9	98–9443	3	Pin–Joint
10	100–1895	6	O–Ring
11	98–9452	6	Screw
12	100–1931	6	Washer
13	98–9422	3	Tappet ASM
14	98–9426	3	Pin–Guide, Tappet
15	98–9450	1	Pin–Clamp
16	98–9428	3	Spring–Plunger
17	98–9427	3	Seat–Spring, Upper
18	98–9429	3	Seat–Spring, Lower
19	98–9433	3	Shim
20	100–1949	1	Rack–Control
21	100–1950	1	Plate
22	98–9442	4	Screw
23	98–9432	3	Sleeve–Control
24	100–1896	1	Screw–Hollow
25	98–9445	2	Gasket

Ref. No.	Part No.	Qty.	Description
26	98–9430	1	Screw
27	98–9446	1	Gasket
28	100–1953	1	Bolt
29	98–9451	1	Gasket

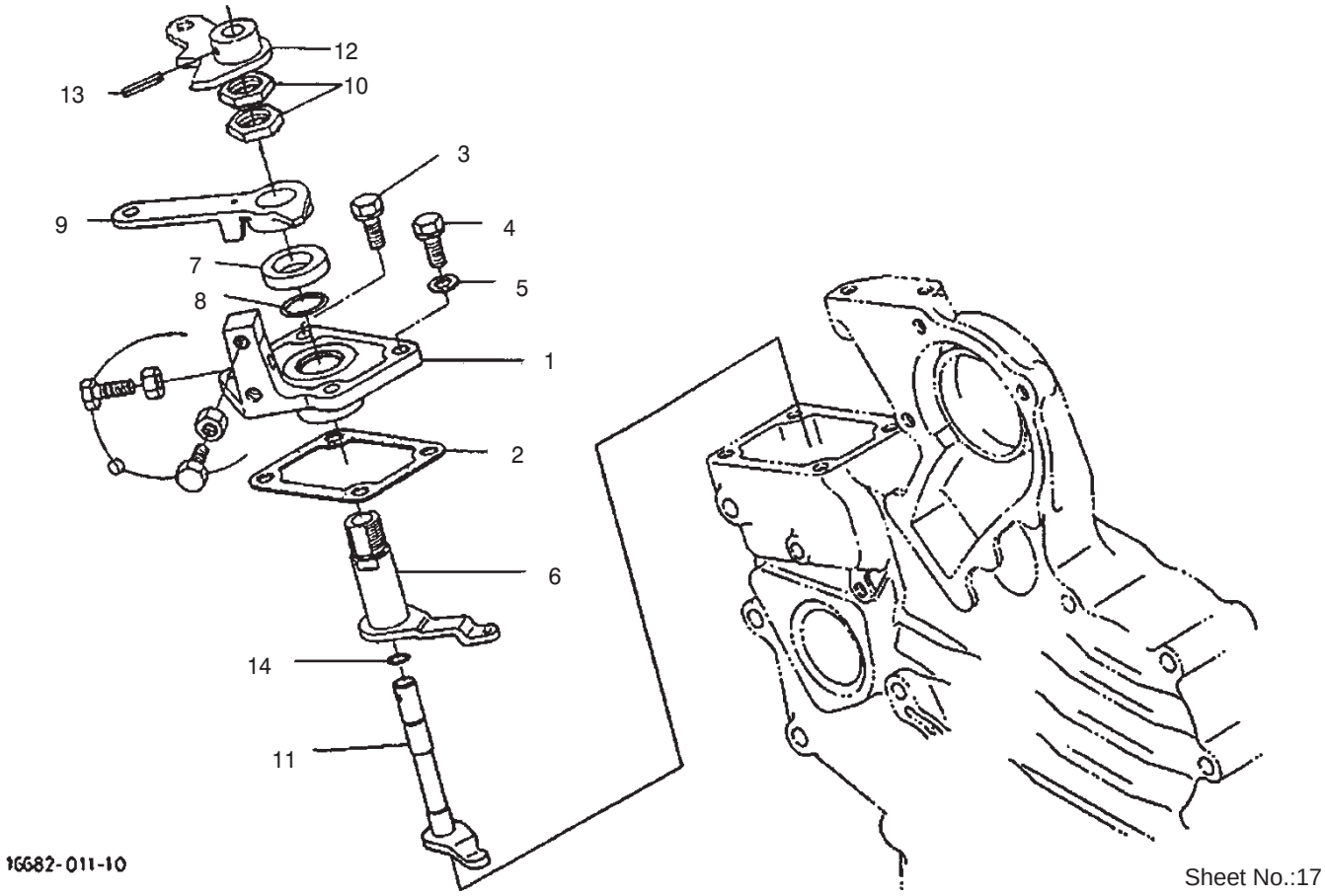


Sheet No.:16

Governor Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1911	1	Spring–Start
2	100–2059	1	Spring–Governor
3	100–1981	1	Fork Lever ASM
4	100–2241	1	Lever–Fork, Comp.
5	100–1905	1	Fork Lever ASM
6	100–1907	1	Lever–Fork
7	100–1908	1	Shaft–Lever, Fork
8	100–1751	1	Pin–Spring
9	100–1845	1	Bolt
10	100–2204	1	Washer–Spring
11	100–1909	1	Holder–Lever, Fork
12	100–1763	2	Bolt

Ref. No.	Part No.	Qty.	Description

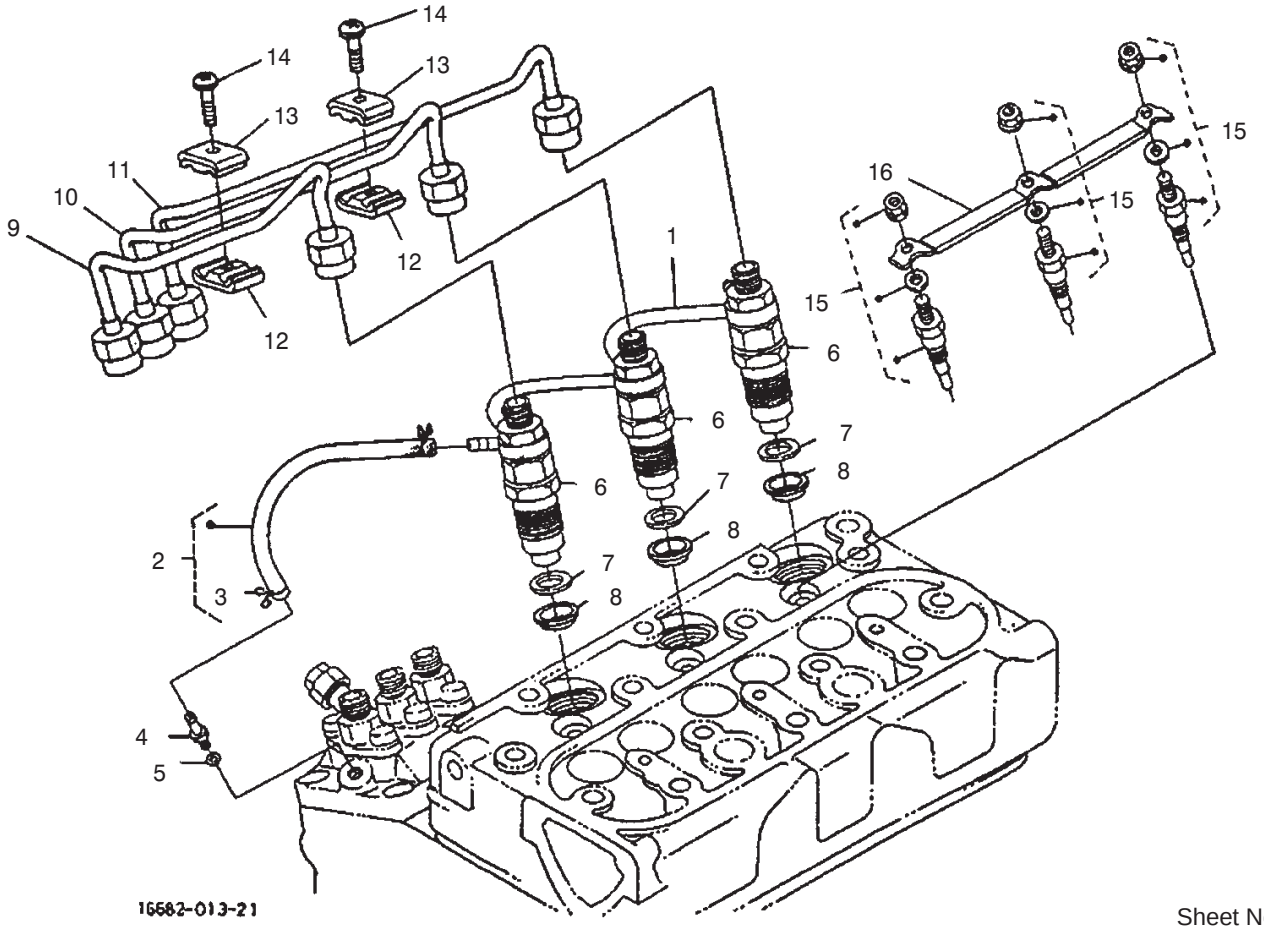


Sheet No.:17

Speed Control Plate Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1912	1	Plate–Speed, Cont.
2	100–1914	1	Gasket
3	98–7605	2	Bolt
4	100–1769	2	Bolt
5	98–7654	2	Gasket
6	100–2172	1	Lever–Governor
7	100–1915	1	Collar
8	100–2208	1	O–Ring
9	100–1986	1	Lever–Cont., Speed
10	100–1925	2	Nut
11	100–2050	1	Shaft–Lever
12	100–2173	1	Lever–Stop, Engine
13	100–1751	1	Pin–Spring
14	100–2207	1	O–Ring

Ref. No.	Part No.	Qty.	Description

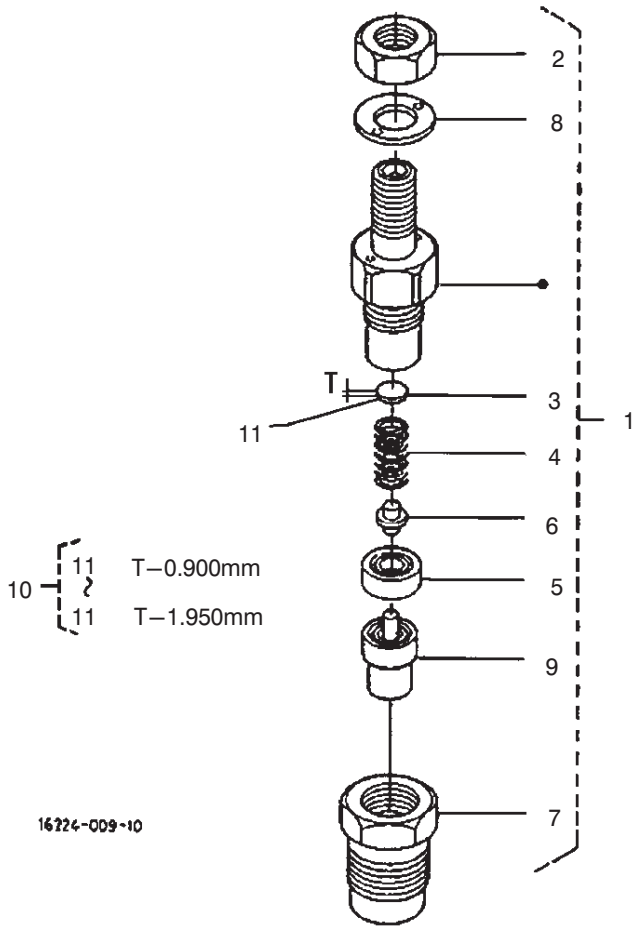


Sheet No.:18

Nozzle Holder and Glow Plugs Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1960	1	Over Flow Pipe ASM
2	98–9420	1	Over Flow Pipe ASM
2:1	98–7671	1	Clip–Pipe
3	98–7671	2	Clip–Pipe
4	98–9431	1	Screw–Bleeder
5	98–7654	1	Gasket
6	100–1758	3	Nozzle Holder ASM
7	98–7676	3	Gasket
8	98–7677	3	Seal
9	100–2011	1	Pipe–Injection
10	100–2013	1	Pipe–Injection
11	100–2036	1	Pipe–Injection
12	98–7682	2	Clamp–Pipe
13	98–7683	2	Clamp–Pipe
14	98–7684	2	Screw W/Washer
15	100–1854	3	Plug–Glow
16	100–2037	1	Cord–Plug, Glow

Ref. No.	Part No.	Qty.	Description

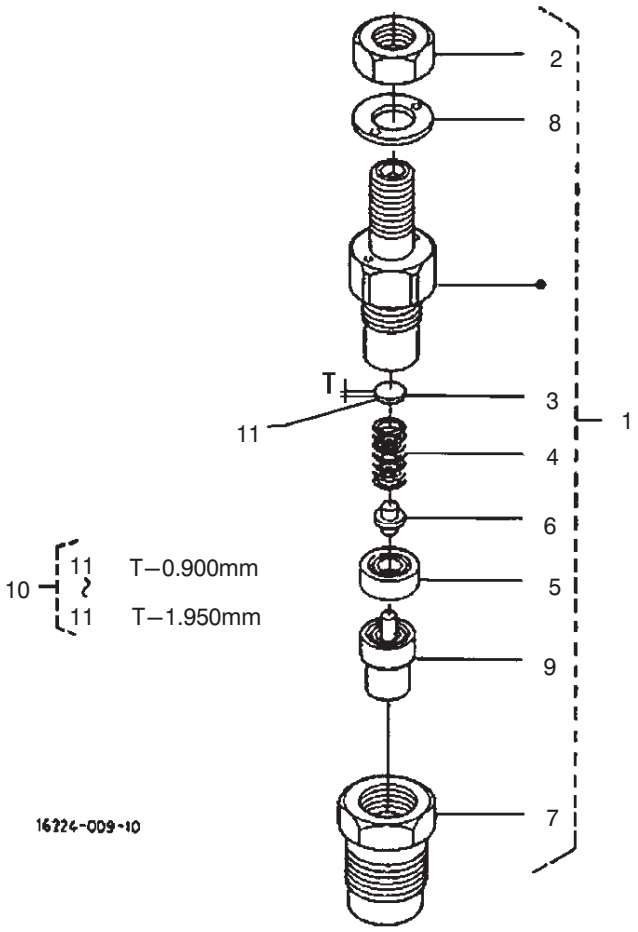


Sheet No.:19

Nozzle Holder (Complete Parts)

Ref. No.	Part No.	Qty.	Description
1	100–1758	3	Nozzle Holder ASM
2	98–7613	3	Nut
3	98–7642	3	Washer–Adjusting
4	98–7647	3	Spring–Nozzle
5	98–7665	3	Piece–Distant
6	98–7666	3	Rod–Push
7	100–2242	3	Nut–Nozzle
8	98–7668	3	Washer
9	100–2009	3	Piece–Nozzle
10	98–9448	3	Adj Washer ASM
11	98–7642	3	Washer–Adjusting
11	98–7841	3	Washer–Adjusting
11	98–7842	3	Washer–Adjusting
11	98–7843	3	Washer–Adjusting
11	98–7844	3	Washer–Adjusting
11	98–7845	3	Washer–Adjusting
11	98–7846	3	Washer–Adjusting
11	98–7847	3	Washer–Adjusting
11	98–7848	3	Washer–Adjusting
11	98–7849	3	Washer–Adjusting
11	98–7850	3	Washer–Adjusting
11	98–7851	3	Washer–Adjusting
11	98–7852	3	Washer–Adjusting
11	98–7853	3	Washer–Adjusting
11	98–7854	3	Washer–Adjusting
11	98–7855	3	Washer–Adjusting

Ref. No.	Part No.	Qty.	Description
11	98–7856	3	Washer–Adjusting
11	98–7857	3	Washer–Adjusting
11	98–7858	3	Washer–Adjusting
11	98–7859	3	Washer–Adjusting
11	98–7860	3	Washer–Adjusting
11	98–7861	3	Washer–Adjusting
11	98–7862	3	Washer–Adjusting
11	98–7863	3	Washer–Adjusting
11	98–7864	3	Washer–Adjusting
11	98–7865	3	Washer–Adjusting
11	98–7866	3	Washer–Adjusting
11	98–7867	3	Washer–Adjusting
11	98–7868	3	Washer–Adjusting
11	98–7869	3	Washer–Adjusting
11	98–7870	3	Washer–Adjusting
11	98–7871	3	Washer–Adjusting
11	98–7872	3	Washer–Adjusting
11	98–7873	3	Washer–Adjusting
11	98–7874	3	Washer–Adjusting
11	98–7875	3	Washer–Adjusting
11	98–7876	3	Washer–Adjusting
11	98–7877	3	Washer–Adjusting
11	98–7878	3	Washer–Adjusting
11	98–7879	3	Washer–Adjusting
11	98–7880	3	Washer–Adjusting
11	98–7881	3	Washer–Adjusting

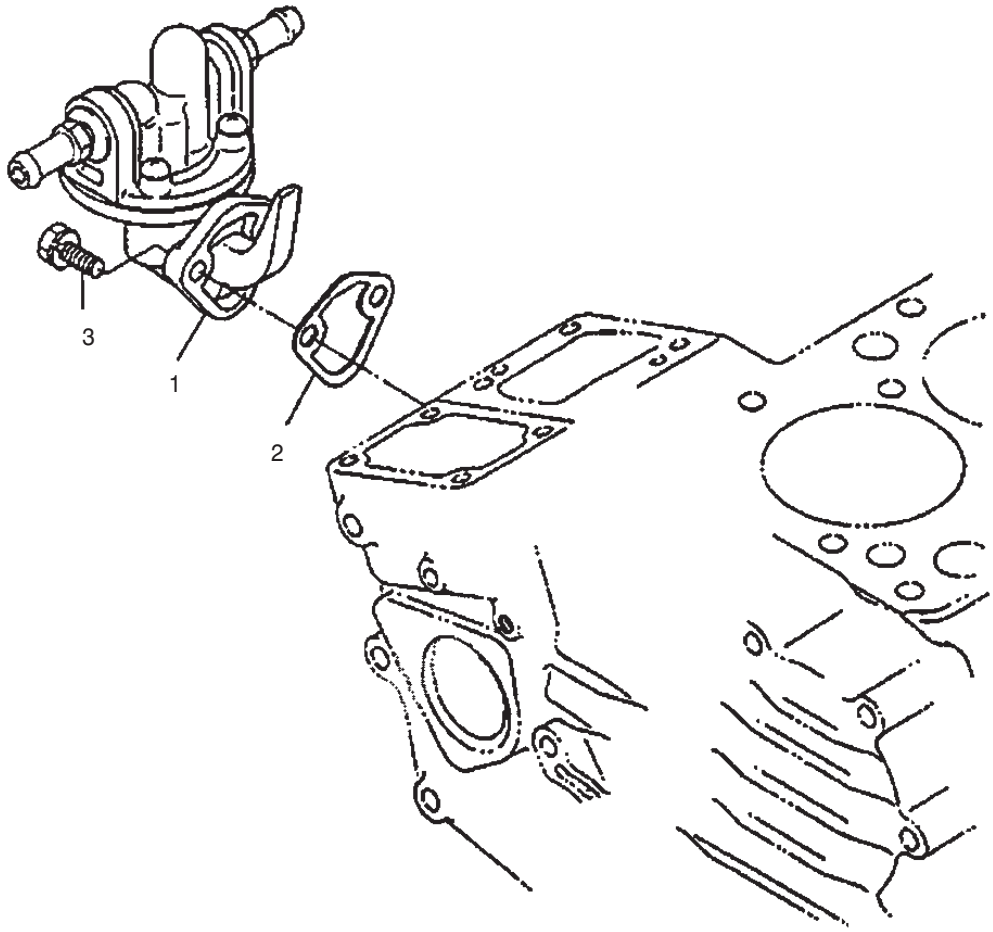


Sheet No.:19

Nozzle Holder (Complete Parts Continued)

Ref. No.	Part No.	Qty.	Description
11	98–7882	3	Washer–Adjusting

Ref. No.	Part No.	Qty.	Description

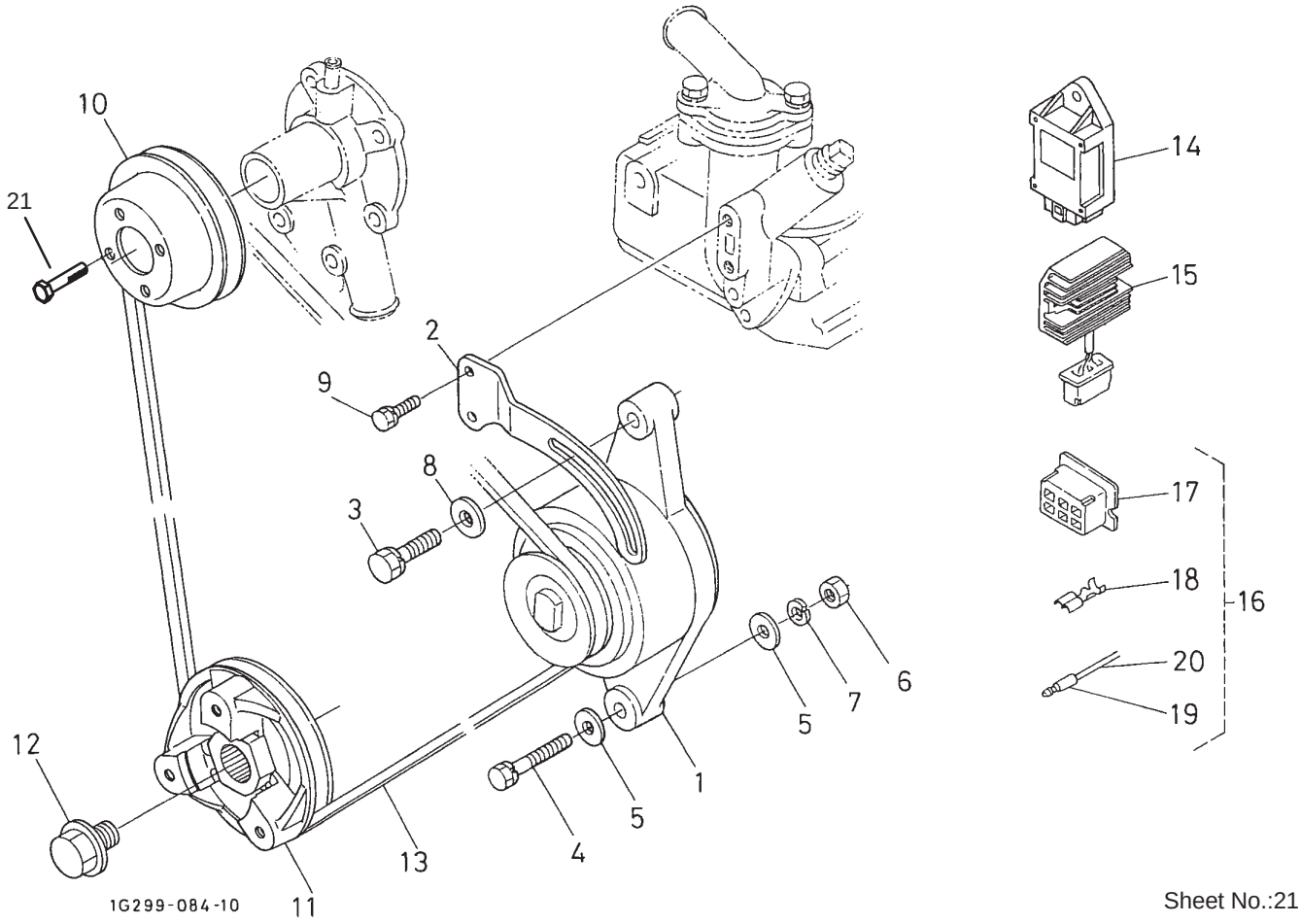


Sheet No.:20

Fuel Pump (Mechanical)

Ref. No.	Part No.	Qty.	Description
1	100–2232	1	Fuel Pump ASM
2	98–9636	1	Gasket–Pump, Fuel
3	98–7692	2	Bolt

Ref. No.	Part No.	Qty.	Description

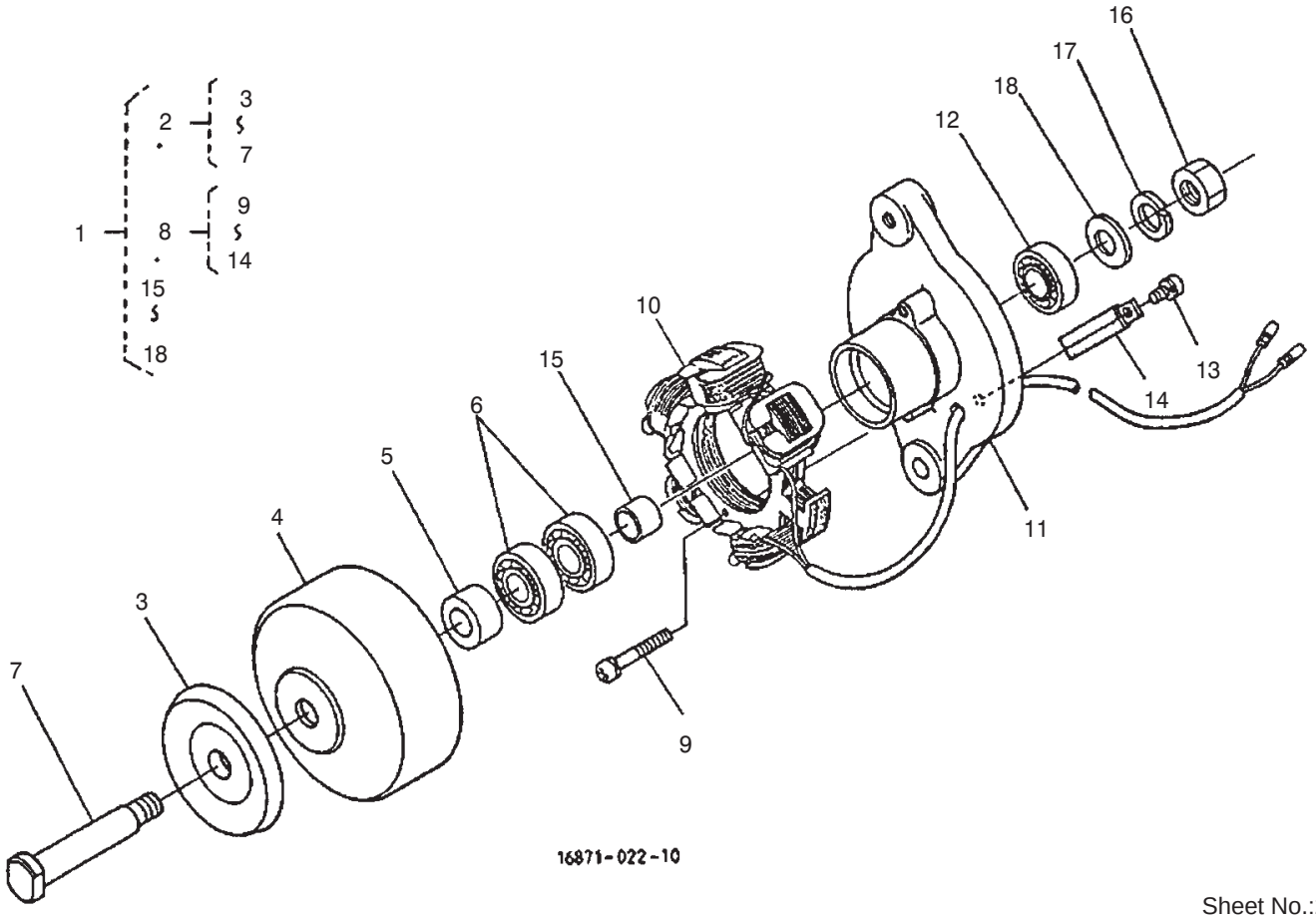


Sheet No.:21

Dynamo and Pulley Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2168	1	Dynamo ASM
2	100–2214	1	Stay–Dynamo
3	98–7697	1	Bolt
4	100–1771	1	Bolt
5	98–7660	2	Washer–Plain
6	98–7739	1	Nut
7	98–7535	1	Washer–Spring
8	100–1782	1	Washer–Plain
9	98–7692	2	Bolt
10	100–1921	1	Pulley–Fan
11	100–2039	1	Pulley–Drive, Fan
12	100–1978	1	Bolt
13	100–1979	1	V–Belt
14	98–7611	1	Controller–Glow
15	100–2057	1	Regulator ASM
16	100–2058	1	Coupler ASM
17	100–2056	1	Connector
18	98–9699	6	Terminal
19	98–9701	2	Terminal
20	98–9702	2	Sleeve
21	100–1773	4	Bolt–Flange

Ref. No.	Part No.	Qty.	Description

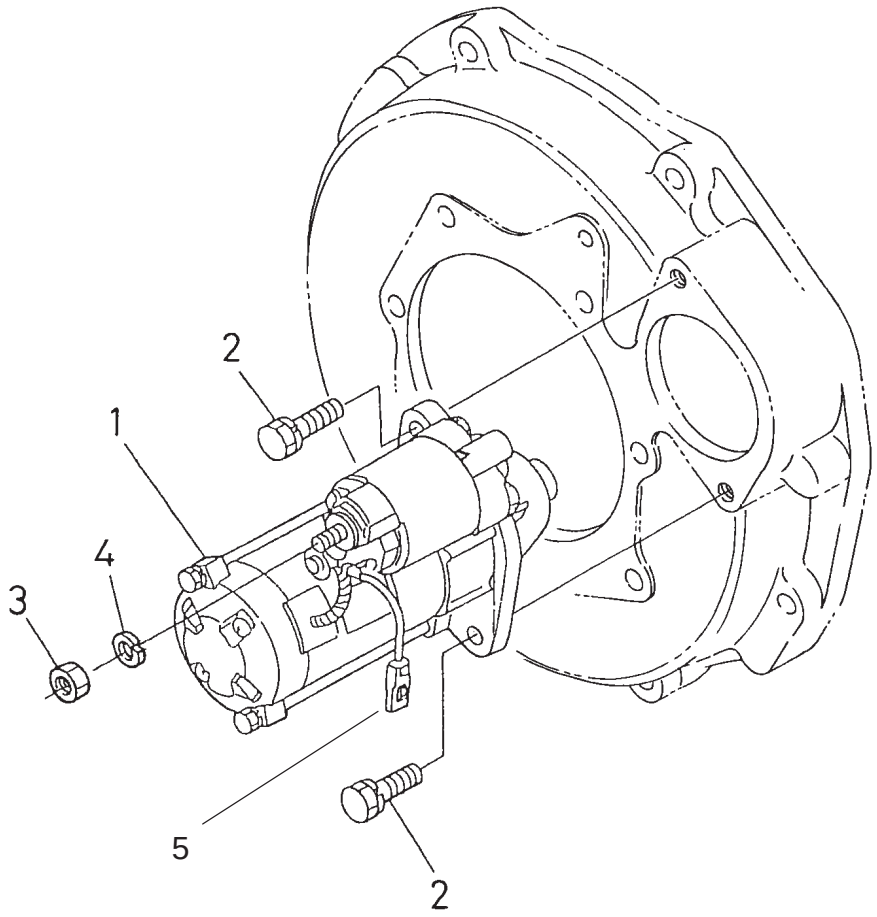


Sheet No.:22

Dynamo (Complete Parts)

Ref. No.	Part No.	Qty.	Description
1	100–2168	1	Dynamo ASM
2	100–1862	1	Rotor–Comp.
3	100–2228	1	Pulley
4	100–1860	1	Rotor
5	100–2184	1	Collar
6	100–1756	2	Bearing–Ball
7	100–1867	1	Shaft–Fan
8	100–1866	1	Stator–Comp.
9	100–1848	2	Screw–Head, Round
10	100–1865	1	Stator
11	100–1861	1	Plate
12	100–1756	1	Bearing–Ball
13	100–1868	1	Screw–Head, Round
14	100–1864	1	Clamp–Cord
15	100–1844	1	Collar
16	100–1847	1	Nut
17	100–1850	1	Washer–Spring
18	100–1849	1	Washer–Plain

Ref. No.	Part No.	Qty.	Description



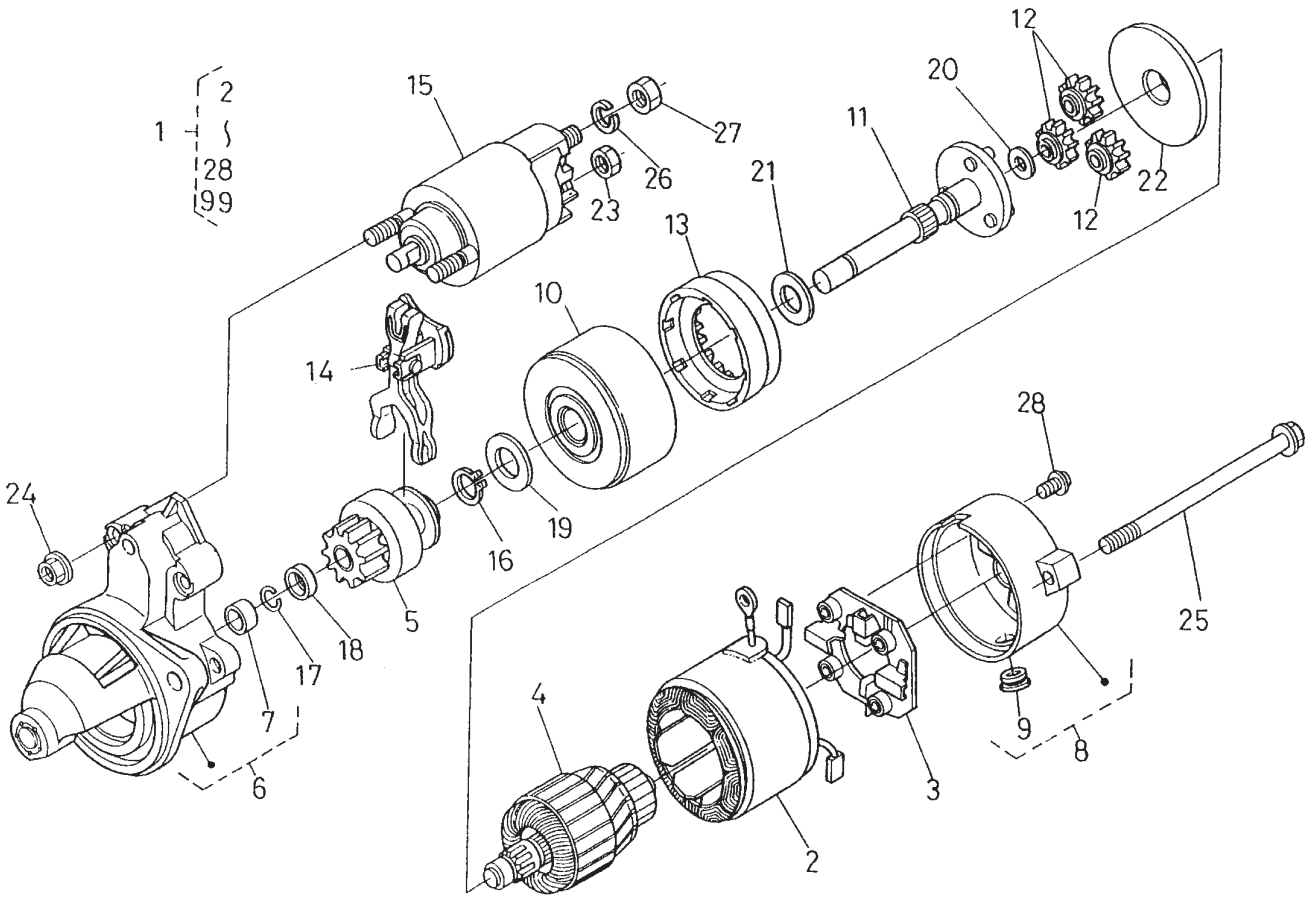
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Sheet No.:23

Starter Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2179	1	Starter ASM
2	98–7438	2	Bolt
3	98–7739	1	Nut
4	98–7535	1	Washer–Spring
5	99–1434	1	Wire–Lead

Ref. No.	Part No.	Qty.	Description



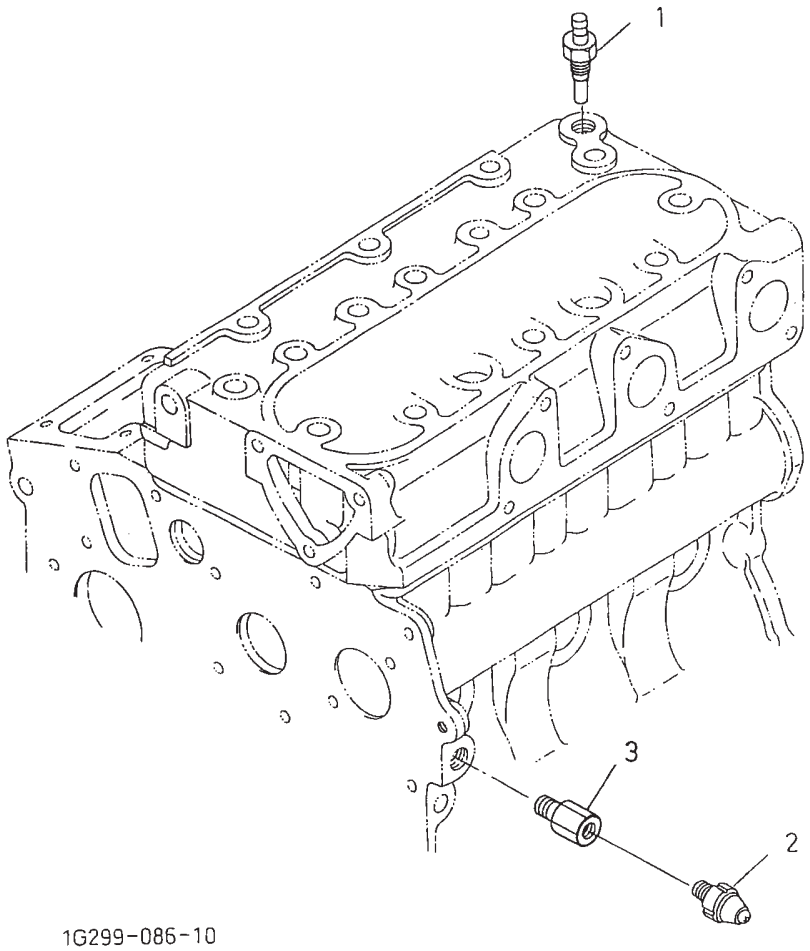
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Sheet No.:24

Starter (Complete Parts)

Ref. No.	Part No.	Qty.	Description
1	100–2179	1	Starter ASM
2	100–2181	1	Starter Yoke ASM
3	100–2222	1	Holder ASM
4	100–2182	1	Armature ASM
5	100–2185	1	Starter Clutch ASM
6	100–2180	1	Starter Housing ASM
7	100–2183	1	Bearing
8	100–2186	1	Frame ASM
9	100–2213	1	Cover
10	100–2223	1	Bearing ASM
11	100–2187	1	Starter Shaft ASM
12	100–2220	3	Gear
13	100–2221	1	Gear
14	100–2218	1	Lever
15	100–2211	1	Magnetic Switch ASM
16	100–2219	1	Ring–Snap
17	100–2212	1	Ring–Snap
18	100–2216	1	Collar
19	100–2224	1	Washer–Plain
20	100–2225	1	Washer–Plain
21	100–2226	1	Washer–Plain
22	100–2227	1	Plate
23	100–2243	1	Nut–Hexagon
24	100–1813	2	Nut
25	100–2210	2	Bolt–Through
26	100–2215	1	Washer–Spring

Ref. No.	Part No.	Qty.	Description
27	100–2171	1	Nut–Hexagon
28	100–2188	2	Screw
99	99–1434	1	Wire–Lead



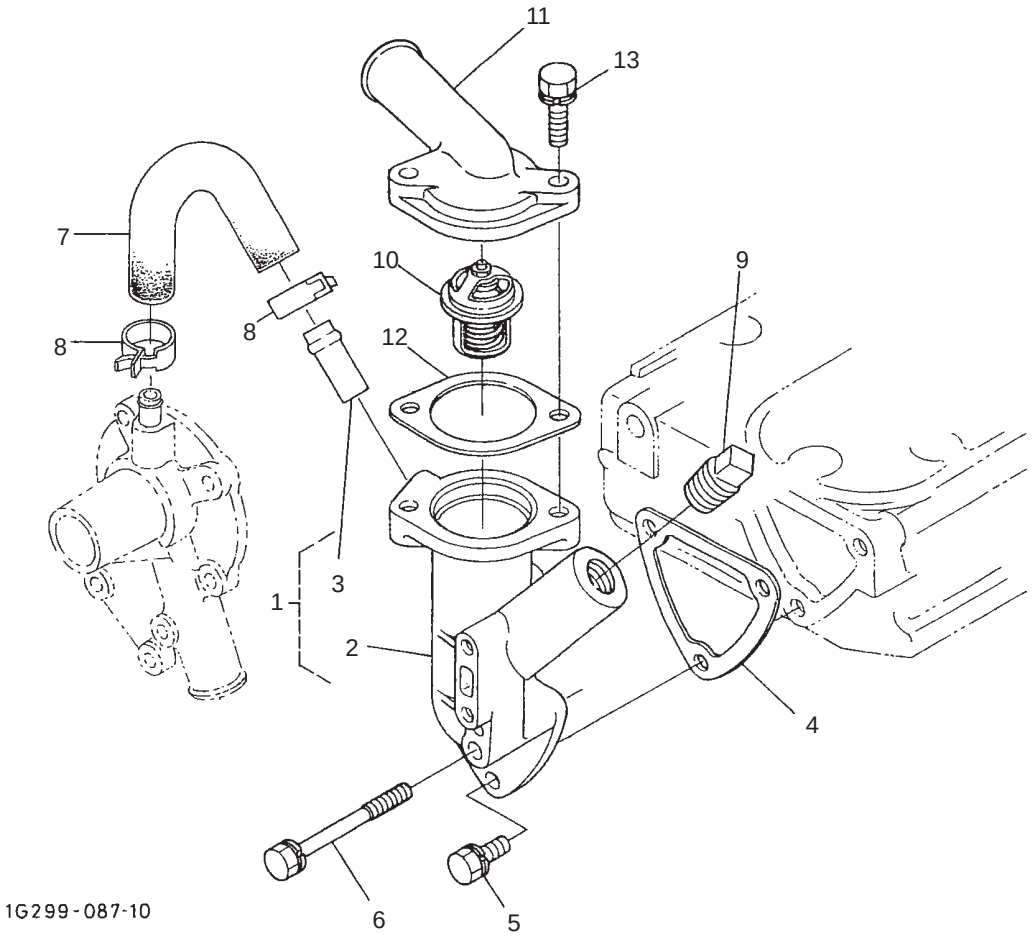
1G299-086-10

Sheet No.:25

Oil Switch and Thermoswitch Assembly

Ref. No.	Part No.	Qty.	Description
1	99–3582	1	Thermoswitch
2	98–7764	1	Switch–Oil
3	100–2170	1	Holder–Signal, Oil

Ref. No.	Part No.	Qty.	Description

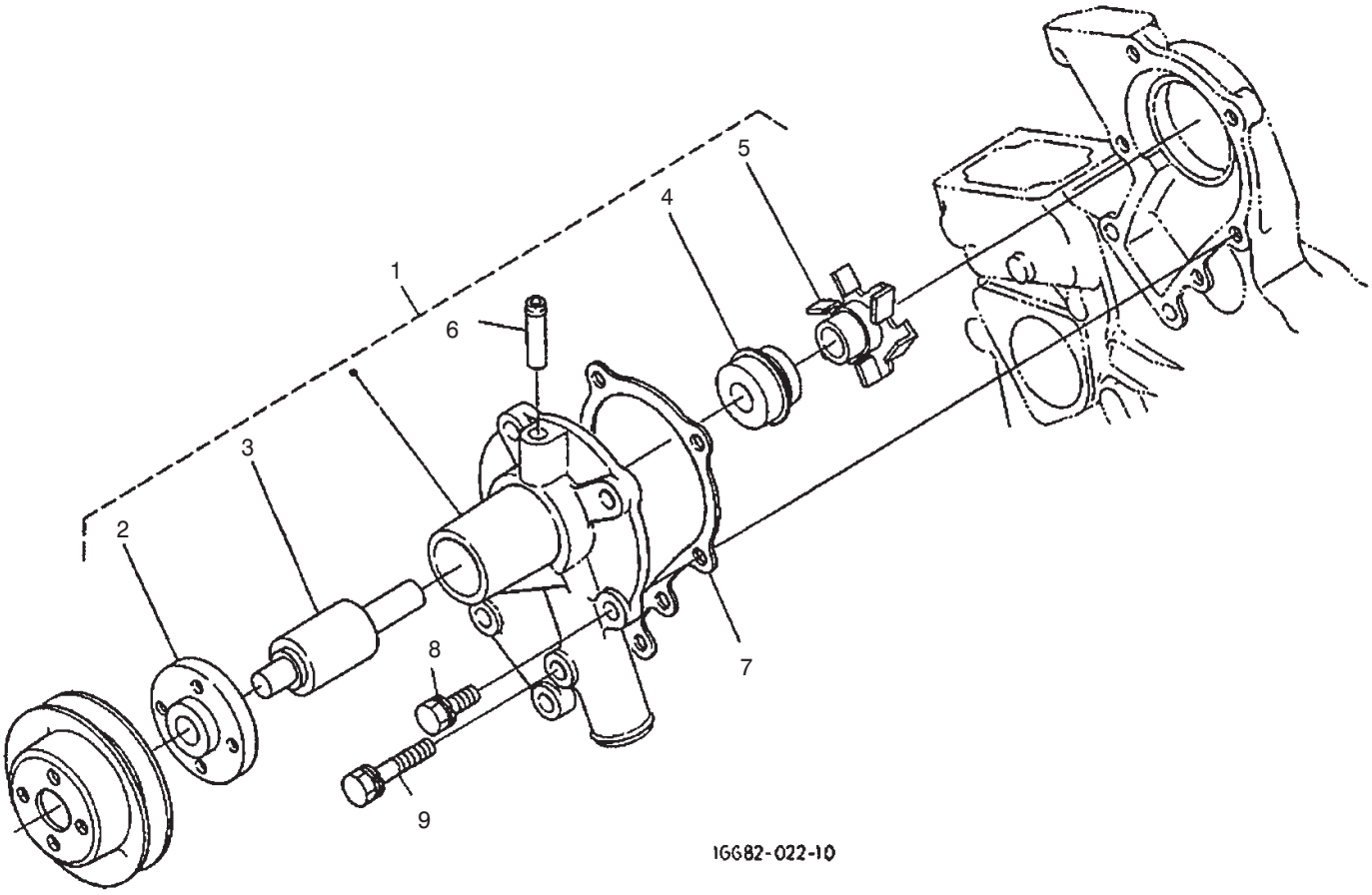


Sheet No.:26

Water Flange and Thermostat Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2165	1	Flange–Water, Comp.
2	100–2166	1	Flang–Water
3	98–9580	1	Pipe–Return, Water
4	100–1919	1	Gasket–Flange, Water
5	98–7692	2	Bolt
6	100–2201	1	Bolt
7	100–2017	1	Pipe–Return, Water
8	98–9579	2	Band–Pipe
9	100–2169	1	Plug
10	100–2053	1	Thermostat ASM
11	100–2231	1	Cover–Thermostat
12	100–2157	1	Gasket–Thermostat
13	98–9353	2	Bolt

Ref. No.	Part No.	Qty.	Description

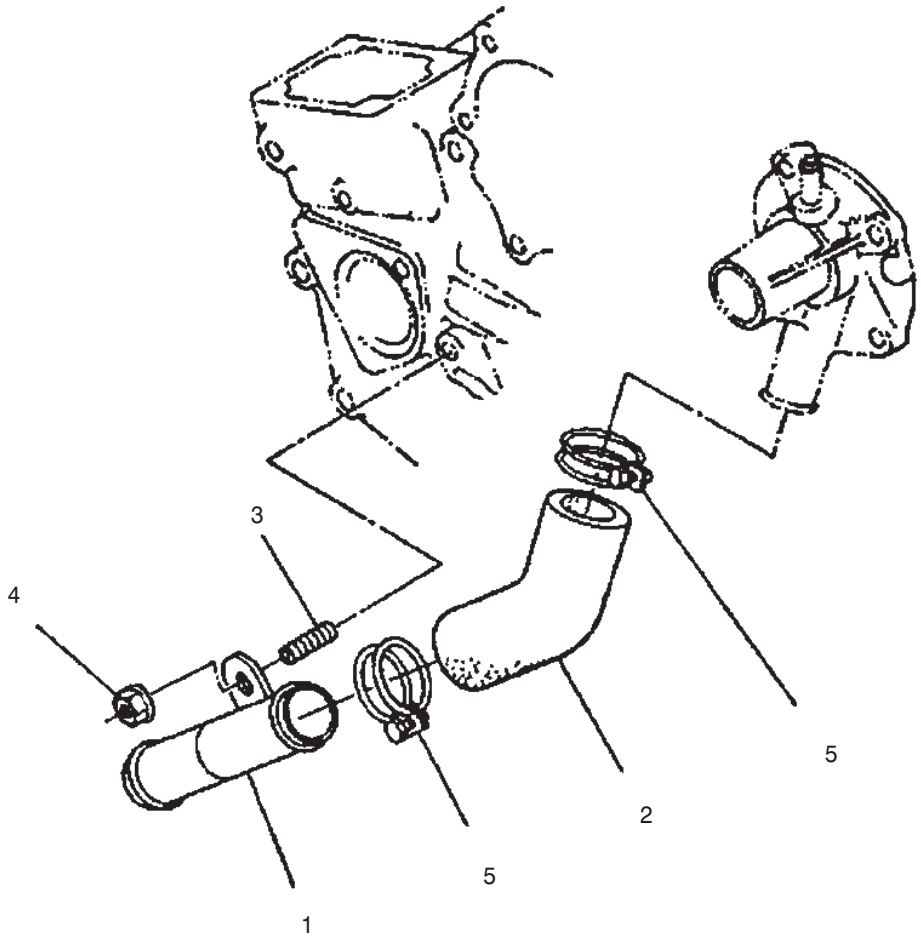


Sheet No.:27

Water Pump Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2065	1	Water Pump ASM
2	100–1933	1	Flange–Pump, Water
3	100–1934	1	Bearing–Ball
4	99–3518	1	Water Pump Seal ASM
5	100–2067	1	Impeller–Pump, Water
6	100–1932	1	Pipe–Return, Water
7	100–1976	1	Gasket–Pump, Water
8	100–1750	4	Bolt
9	100–1764	1	Bolt

Ref. No.	Part No.	Qty.	Description

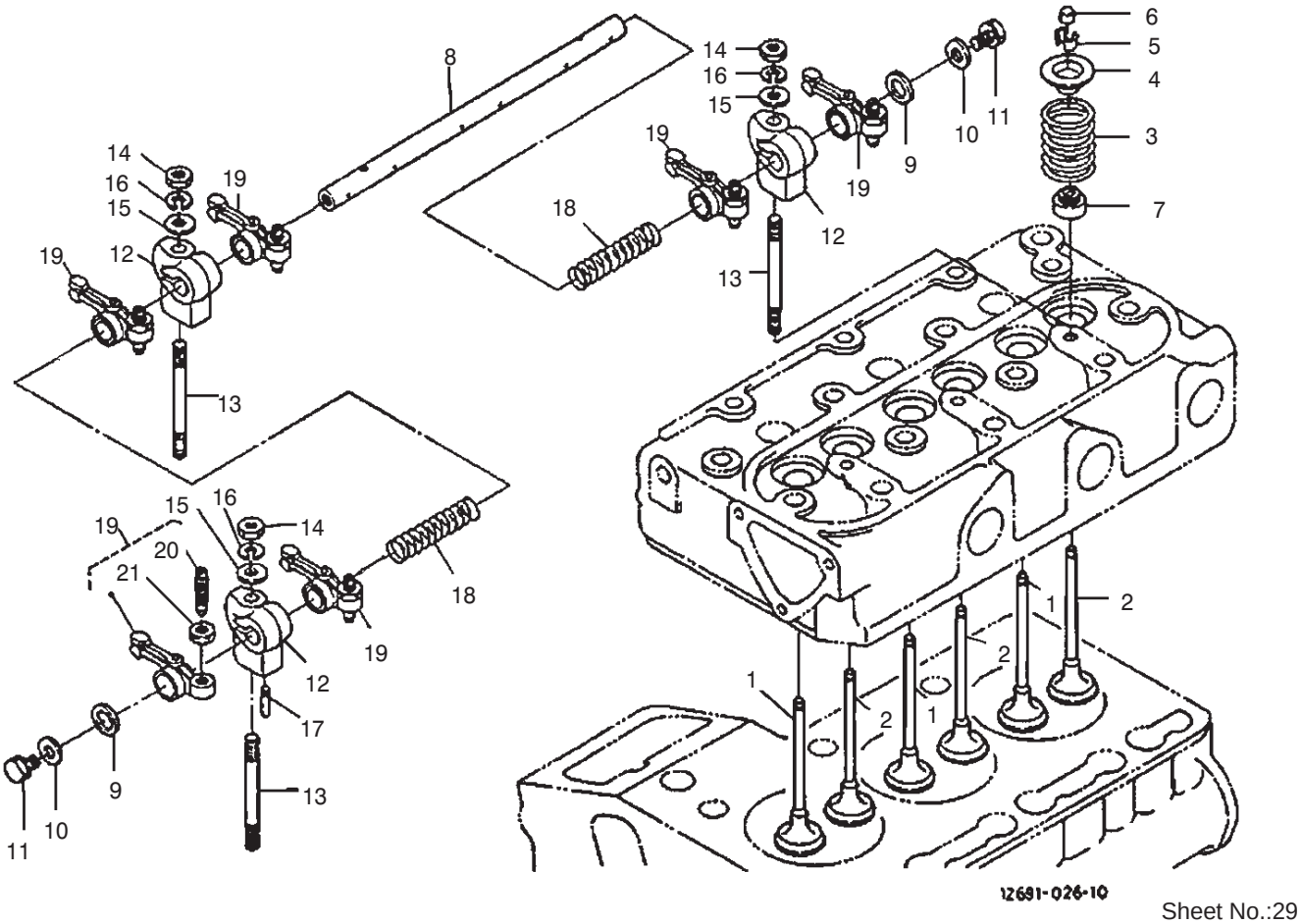


Sheet No.:28

Water Pipe Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1918	1	Pipe–Water
2	100–1975	1	Pipe–Water
3	100–1924	1	Stud
4	100–2203	1	Nut–Flange
5	100–1753	2	Clamp–Hose

Ref. No.	Part No.	Qty.	Description

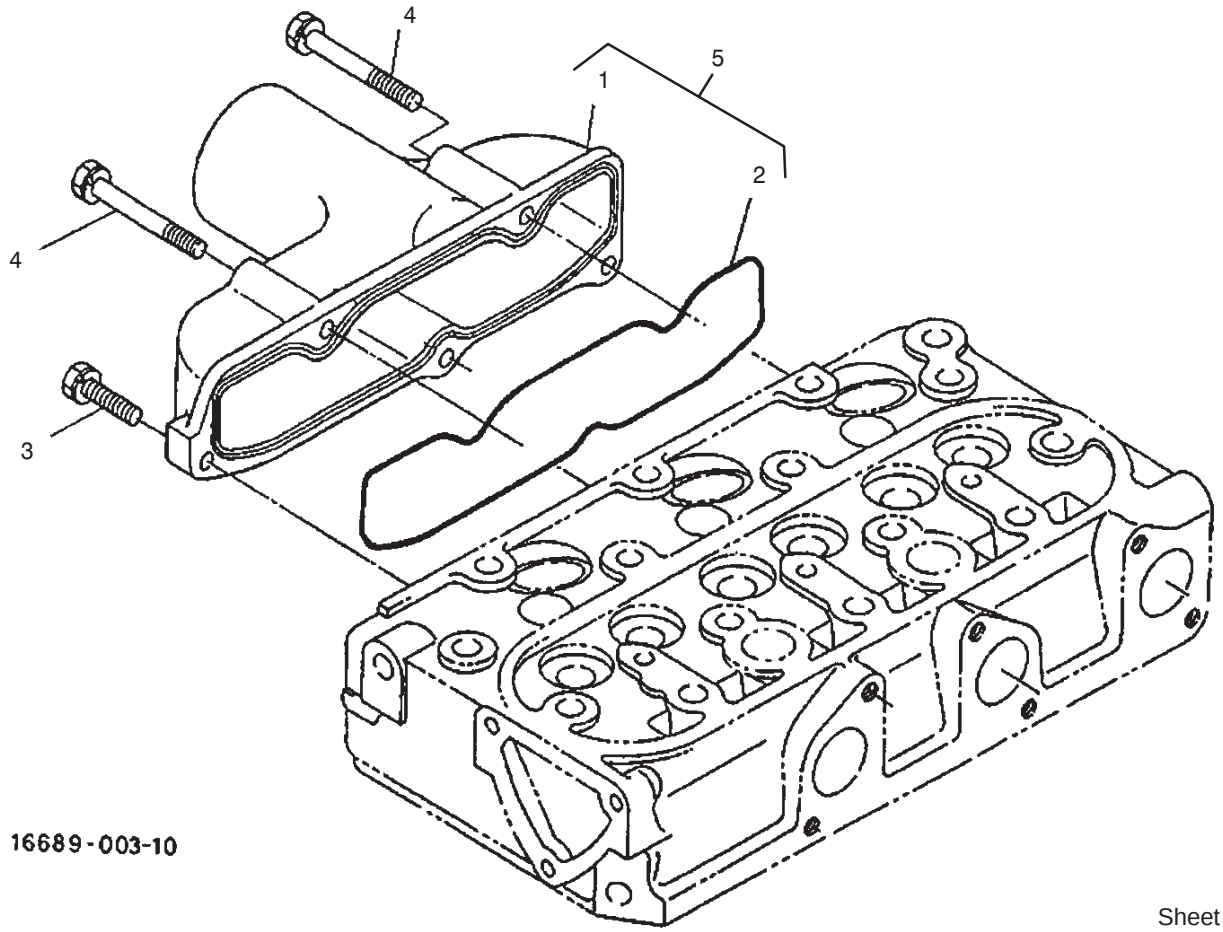


Sheet No.:29

Valve and Rocker Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	100–1821	3	Valve–Inlet
2	100–1822	3	Valve–Exhaust
3	100–1823	6	Spring–Valve
4	100–1825	6	Retainer–Valve, Sp.
5	100–1826	6	Collet–Spring, Valve
6	100–2155	6	Cap–Valve
7	100–1797	6	Seal–Stem, Valve
8	100–2237	1	Shaft–Arm, Rocker
9	100–2044	2	Washer
10	100–1927	2	Washer–Plain
11	100–1762	2	Bolt
12	100–1886	3	Bracket–Arm, Rocker
13	100–1829	3	Stud
14	98–7572	3	Nut
15	98–7648	3	Washer–Plain
16	98–9367	3	Washer–Spring
17	98–7602	1	Pin–Spring
18	100–1828	2	Spring–Arm, Rocker
19	100–1884	6	Rocker Arm ASM
20	100–1885	6	Screw–Adjusting
21	100–1827	6	Nut

Ref. No.	Part No.	Qty.	Description

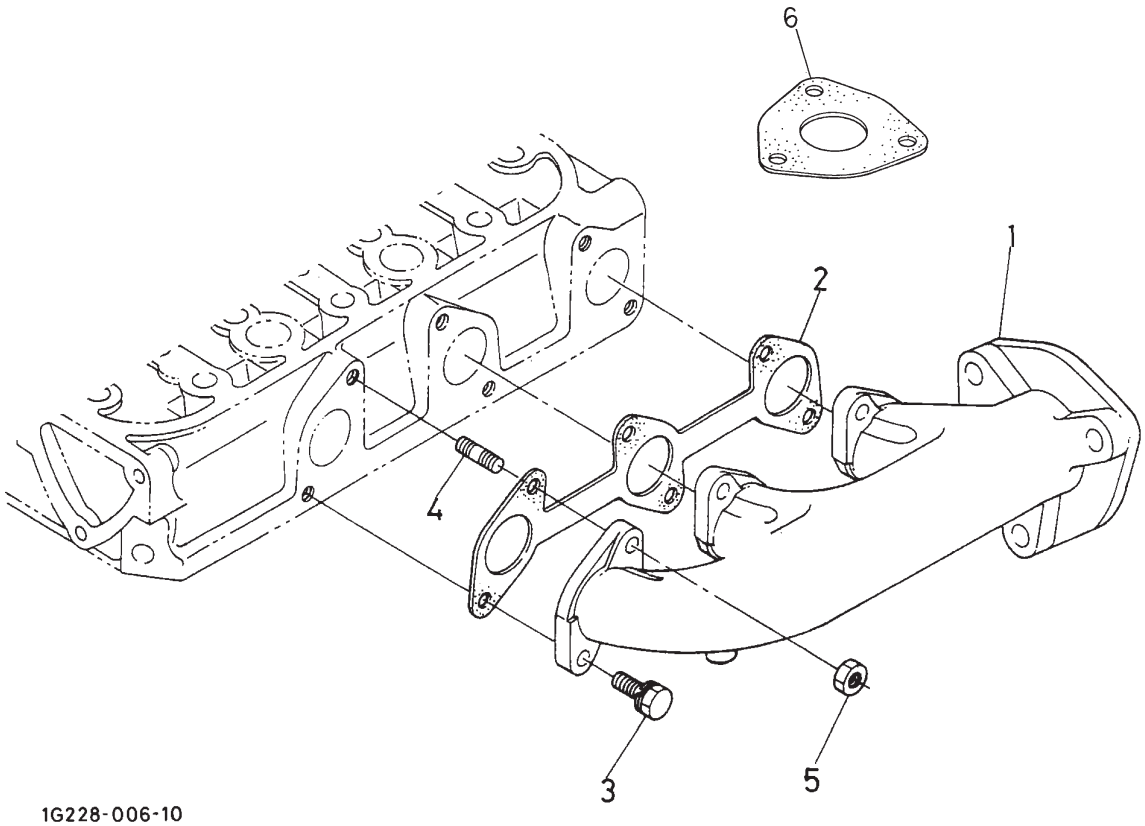


Sheet No.:30

Inlet Manifold Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2235	1	Manifold–Inlet
2	100–1937	1	Gasket–In–Manifold
3	98–7605	2	Bolt
4	100–1765	3	Bolt
5	100–2236	1	Inlet Manifold ASM

Ref. No.	Part No.	Qty.	Description

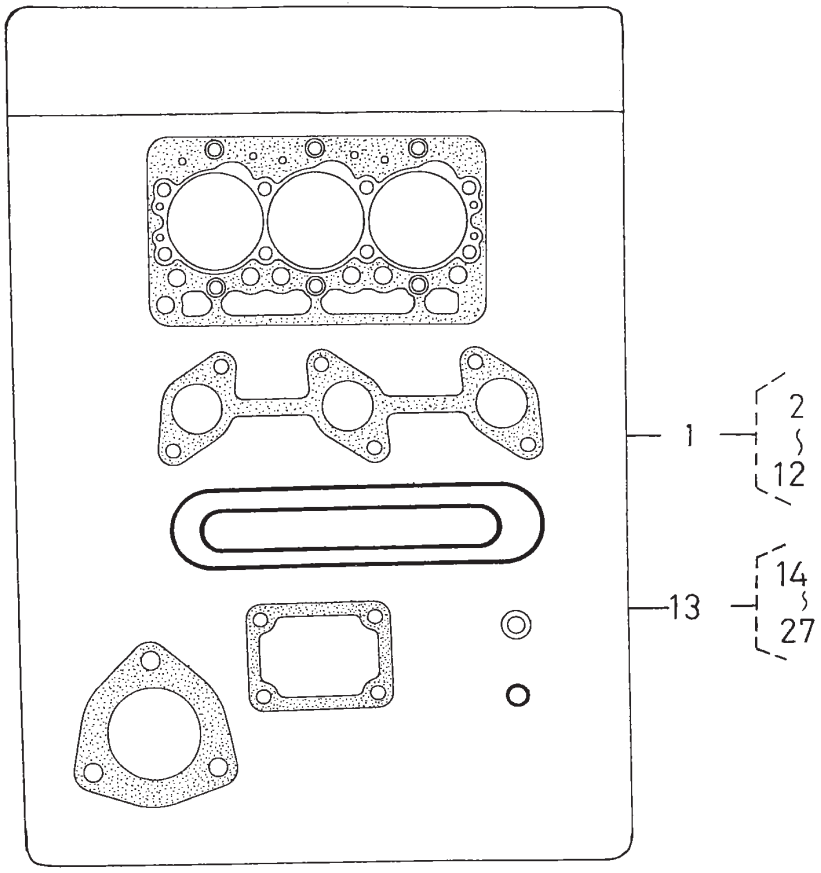


Sheet No.:31

Exhaust Manifold Assembly

Ref. No.	Part No.	Qty.	Description
1	100–2244	1	Manifold–Exhaust
2	100–1957	1	Gasket
3	100–1775	3	Bolt–Ubs
4	100–2202	3	Stud
5	100–1778	3	Nut–Ubs
6	100–2238	1	Gasket–Muffler

Ref. No.	Part No.	Qty.	Description



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Sheet No.:32

Gasket Kit

Ref. No.	Part No.	Qty.	Description
1	100–2176	1	Kit–Gasket, Upper
2	98–7509	1	O–Ring
3	100–2043	1	Gasket–Head, Cylinder
4	100–1937	1	Gasket–In–Manifold
5	100–1957	1	Gasket
6	100–1797	6	Seal–Stem, Valve
7	100–2030	1	Gasket–Cover, Head
8	98–7654	3	Gasket
9	99–3446	1	O–Ring
10	100–1919	1	Gasket–Flange, Water
11	100–2157	1	Gasket–Thermostat
12	100–2238	1	Gasket–Muffler
13	100–2174	1	Kit–Gasket, Lower
14	100–1976	1	Gasket–Pump, Water
15	100–1954	1	Gasket–Case, Gear
16	100–2206	3	O–Ring
17	100–1929	1	Gasket–Case, Bearing
18	100–1876	1	Gasket–Case, Bearing
19	100–2209	1	O–Ring
20	100–2205	1	O–Ring
21	100–2003	1	Gasket–Pump, Oil
22	98–9636	1	Gasket–Pump, Fuel
23	100–2061	1	Gasket–Gearcase, H/M
24	100–1914	1	Gasket

Ref. No.	Part No.	Qty.	Description
25	98–7428	2	Gasket
26	100–2208	1	O–Ring
27	100–2207	1	O–Ring

Maintenance Record

Date								

Maintenance Record

Date								


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