

GEHL®

Model **Z45 GEN:2**

Form No.
50940219
Revision A
April 2014

Compact Excavator

Serial Numbers 00701 and Up



Parts Manual

INTRODUCTION

General

- MANITOU AMERICAS, INC. reserves the right to make changes or improvements in the design or construction of any part of the machine without incurring the obligation to install such changes on any previously delivered machines.
- This parts manual should not be used as a technical data reference; it uses simplified illustrations and does not detail servicing procedures.
- Internal engine components not shown in this manual are contained in a separate engine parts manual. The engine parts manual is contained in the documentation packet shipped with the machine, and is also available separately. Contact your dealer with any documentation requests.

Parts Ordering Information

- When ordering service parts, specify the correct part number, full description and quantity required, as well as the machine and engine model and serial numbers. For your safety and continued proper operation, use only genuine GEHL service parts.
- “Right”, “left”, “front” and “back” are determined from a position sitting on the operator’s seat and facing forward, and the excavator “house” rotated so that the blade is also facing forward.

Model and Serial Number Record

Excavator Model Number	
Excavator Serial Number	
Engine Serial Number	

Torque Charts

Standard attaching hardware torque values are provided on the inside back cover, and some torque values may be shown in illustrations. Metric torque

values are shown in Newton-meters, and are converted to foot-pounds by multiplying by 0.738.

Illustrations and Parts Lists

- Not all parts shown in the illustrations may be included in the parts listings; some are not serviced separately or are not included on engines sold in all areas.
- Ref. Nos. shown in the parts listings without part numbers are shown for reference purposes only and are not available for purchase.
- Boxes or brackets may be used in some illustrations to indicate assemblies (part groupings), or in some cases to highlight different versions of individual parts or assemblies.
- Text references may be present on some illustrations to provide additional information.
- Some illustrations will contain circled letters or a circled combination of letters and numbers in addition to the regular number callouts. These special callouts may be used to identify hydraulic port locations which are marked on components, or to identify the two ends of a hose, tube, or other part that is shown split in the illustration. They may also be used to indicate a common reference point when different versions of components are shown on the illustration.

Serial Number Locations and Information

Locations

- Product Identification Plate - Located at the lower right front of the machine on the turning frame. There are four items shown on the plate:
 - 1) Model = machine model number
 - 2) Machine No. = machine serial number
 - 3) Engine No. = engine serial number
 - 4) Product Identification Number = a sequence starting with YMR plus the machine model number, and ending with the five digit machine serial number. The additional characters in-between provide information about specific machine configuration.

INTRODUCTION

NOTE: *The engine serial number is shown on this plate for ease of access. It is also shown on a serial plate located on the engine cylinder head cover.*

- ROPS /FOPS Serial Plate - Located on a crossmember on the inside of the canopy roof, if equipped. There are four items shown on the plate:
 - 1) Machine Model = models that this structure is rated for, may be more than one model
 - 2) ROPS/FOPS part number
 - 3) ROPS/FOPS Serial Number
 - 4) Max. Gross Machine Weight
- TOPS/FOPS Serial Plate - Located inside the cabin on a support post behind the operator seat at the left side, if equipped. There are four items shown on the plate:
 - 1) TOPS/FOPS part number
 - 2) TOPS/FOPS Serial Number
 - 3) Machine Model = models that this structure is rated for, may be more than one model
 - 4) Max. Gross Machine Weight

NOTE: *ROPS = Roll Over Protective Structure, TOPS = Tip Over Protective Structure, FOPS = Falling Object Protective Structure*

Additional Serial Number Information

Parts changes are often defined by serial numbers, and less often by date codes.

- Serial numbers as shown in the parts manual may have prefixes M (machine) or E (engine) preceding the serial number shown on the identification tag.
- (From 1st SN) – indicates that the part can be used on all machines from 1st serial number to present.
- “XXXXX” and “ZZZZZ” are used in the SN sequence instead of numbers for parts that have changed, but where the serial number for the change is not known.
- In some cases, a date code is used instead of a serial number, and is displayed in the YYYY.MM format. Months will be displayed as .01-.12. For example, 2012.02 would be the second month (February) of 2012.

Reference Number Sequencing in Parts Lists

NOTE: *Reference numbers in the illustrations and parts listings may include sequencing variations of hyphens (-) and/or letters.*

FOR EXAMPLE (Ref. Nos.):

5 = Original version/configuration of a part or assembly

5-1, 5-2, etc. = The hyphen (-) indicates an updated version/configuration of Ref. No. 5, and should have an associated serial number. The highest numbered version is the latest. If a hyphenated version is shown in the parts listing, but only the non-hyphenated version is shown in the illustration, the versions are visually similar. Multiple versions may be shown in the illustration, to identify changes.

5A, 5B, etc. = These parts do not replace Ref. Nos. 5 or 5-1, they are added components and may have an associated serial number.

5-1A, 5-1B, etc. = These are added components and may have an associated serial number.

NOTE: *There may be a Ref. No. 5A without an associated Ref. No. 5 in the list. In that example, Ref. No. 5A is a newly added part and may have an associated serial number and also an additional note or remark.*

INTRODUCTION

Unless otherwise specified, all cap screws, nuts, and bolts are Grade 8.8, cadmium or zinc plated.

NOTE: *The following abbreviations may be used herein:*

ASSD	Assembled	SQ.....	Square
ASSY	Assembly	TOPS	Tip Over Protective Structure
A/C.....	Air Conditioning	US.....	Undersized
A/D	Auto-Deceleration	W/	With
AR.....	As Required	W/O	Without
CB.....	Carriage Bolt		
CP	Cotter Pin		
CS	Cap Screw (Hexagon Head)		
C/V.....	Control Valve		
CYL	Cylinder		
DIA	Diameter		
ESS	Engine Speed Sensing		
FHCS	Flat Head Cap Screw		
FOPS.....	Falling Object Protective Structure		
G	Grams		
GR.....	Grade		
HB.....	Hex Bolt		
HLN	Hex Lock Nut		
HN.....	Hex Nut		
HP	High Pressure		
HYD.....	Hydraulic		
INS.....	Insert		
LN	Lock Nut		
LT	Left		
LW	Lock Washer		
M.....	Meter or Meters		
MM/mm.....	Millimeter		
N/A	Not Available, Not Applicable		
NPT.....	National Pipe Thread		
OS	Oversized		
PTO.....	Power Take-Off		
ROPS	Roll Over Protective Structure		
RT	Right		
SHCS	Socket Head Cap Screw		
SLTD.....	Slotted		
SN	Serial Number or Slotted Nut		

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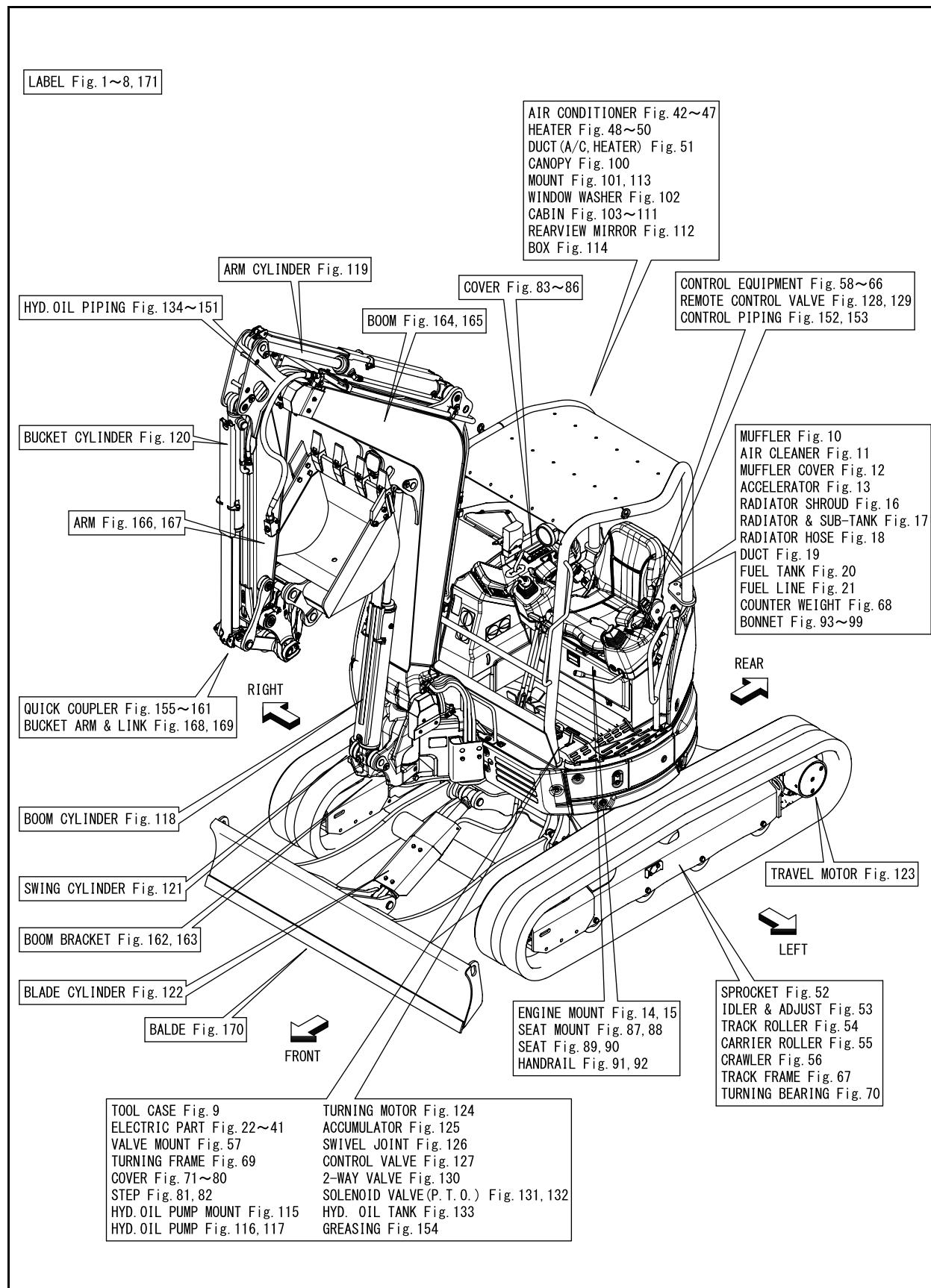
**Z45 GEN:2 - COMPACT EXCAVATOR
SPECIAL TOOLS, PAINT**

Ref.

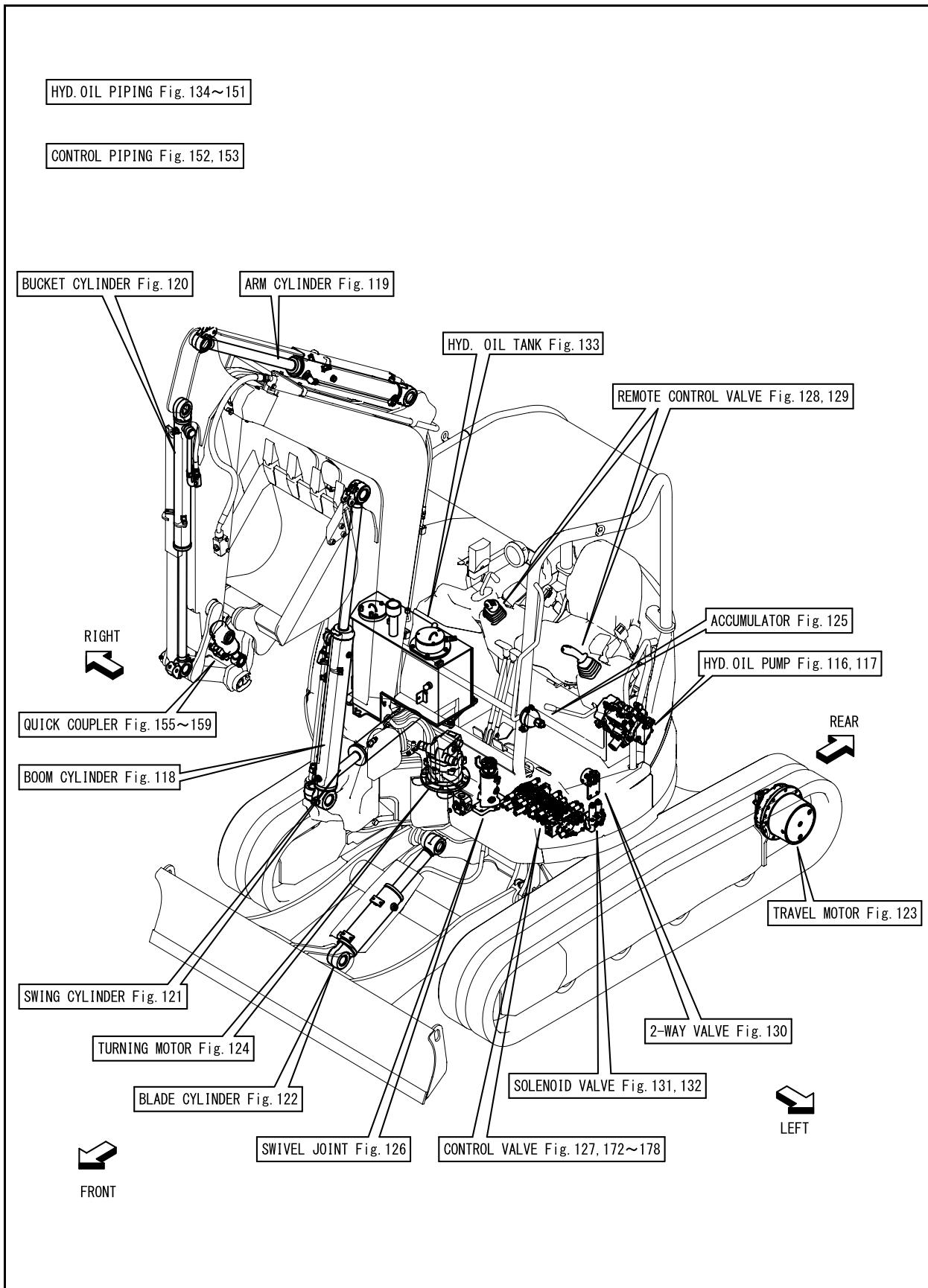
No.	Part No.	Description	Qty.
1	184467	HYDRAULIC GAUGE KIT (includes items 3, 5, 6, 7 as noted below)	1
2	50301126	TEST PORT R1/8K ADAPTER (used with Gauge Kit)	1
3	184472	TEST GAUGE, 1000PSI (1 included with Gauge Kit)	1
4	184473	TEST GAUGE, 6000PSI	1
5	184474	TEST GAUGE, 10,000PSI (3 included with Gauge Kit)	1
6	184475	TEST HOSE, 120" (4 included with Gauge Kit)	1
7	184476	ADAPTER, 4FP-M16X2BLKHD (4 included with Gauge Kit)	1
8	420-34912	ROD SEAL INSTALL TOOL, 3/4" X 1-1/4" DIAMETER SEALS	1
9	420-34913	ROD SEAL INSTALL TOOL, 1-1/2" X 2" DIAMETER SEALS	1
10	420-34914	ROD SEAL INSTALL TOOL, 2" X 3" DIAMETER SEALS	1
11	195348	SERVICE TOOL/FUEL INJECTOR PUMP TIMING KIT	1
12	272806	HYDRAULIC OIL ANALYSIS KIT (GEHL) (use with appropriate pump and tubing)	Set of 10
13	272809	ENGINE OIL ANALYSIS KIT (GEHL) (use with appropriate pump and tubing)	Set of 10
14	272811	FUEL ANALYSIS KIT (GEHL)	1
15	272812	COOLANT ANALYSIS KIT (GEHL) (use with appropriate pump and tubing)	Set of 10
16	272813	FIELD TEST COOLANT STRIP (low level visual analysis)	1
17	272814	OIL VACUUM PUMP (use with hydraulic oil and engine oil analysis kits)	1
18	272815	COOLANT VACUUM PUMP (use with coolant analysis kit)	1
19	272816	1/4" PLASTIC TUBING, 100' (bulk roll, use with hydraulic oil, engine oil and coolant analysis kits)	1
20	167788	GEHL 4-PK QT EXCAVATOR CONSTRUCTION YELLOW	1
21	167754	GEHL 4-PK QT GUNMETAL GRAY	1
22	167789	GEHL 6-PK SPRAY EXCAVATOR CONSTRUCTION YELLOW, 12.8 OZ.	1
23	167755	GEHL 6-PK SPRAY GUNMETAL GRAY, 12.8 OZ.	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIGURE INDEX (1) - MAIN PARTS

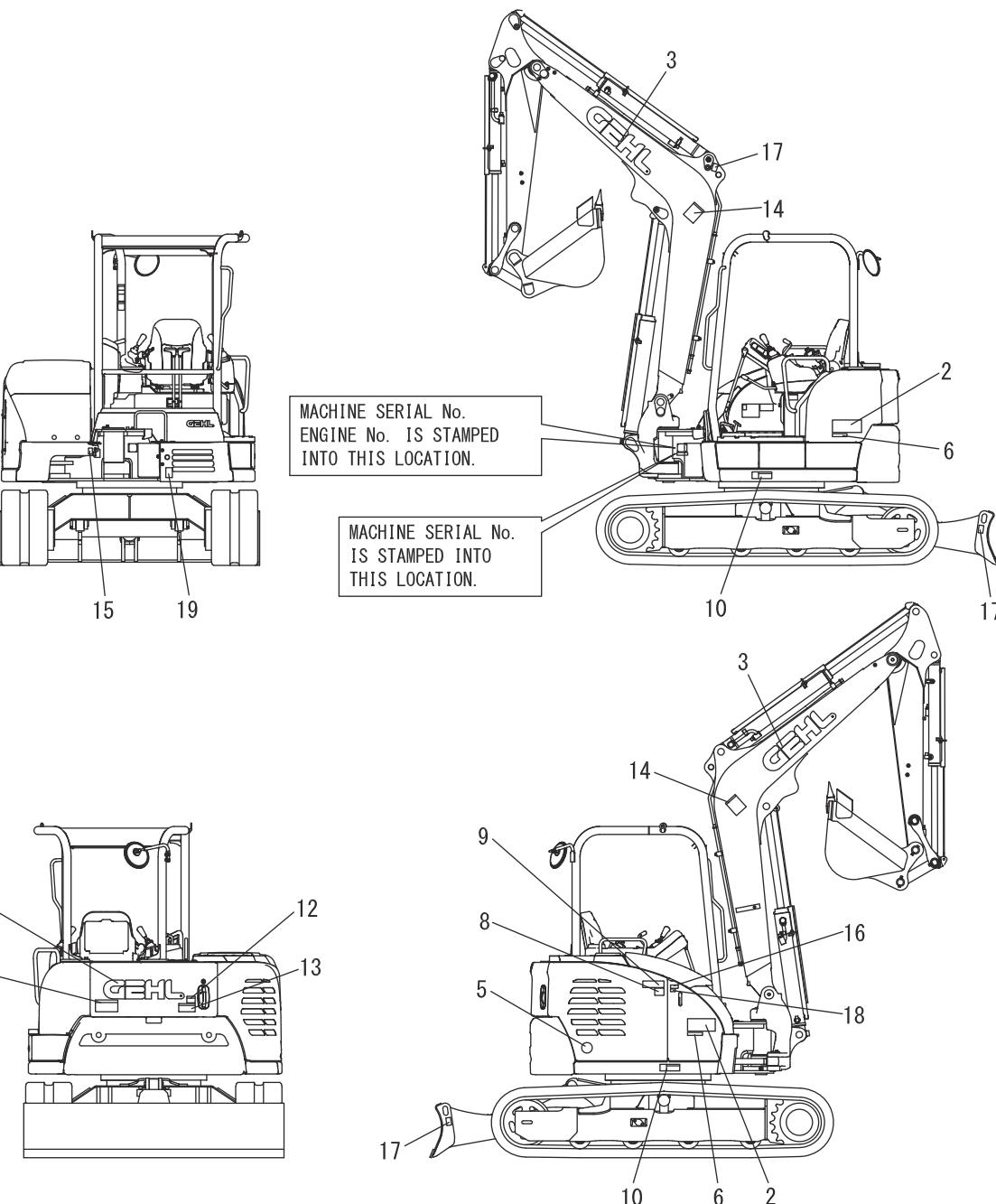


Z45 GEN:2 - COMPACT EXCAVATOR
FIGURE INDEX (2) - HYDRAULIC SECTION

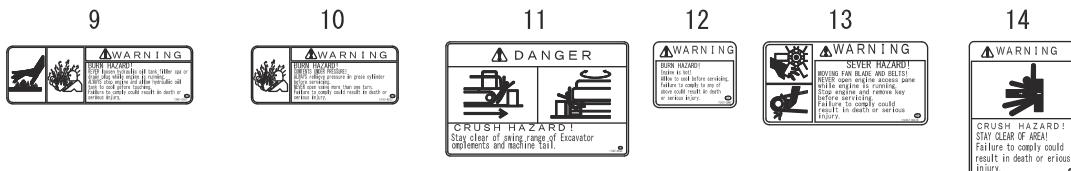


Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 1 - LABEL (EXTERIOR)



SAFETY LABEL



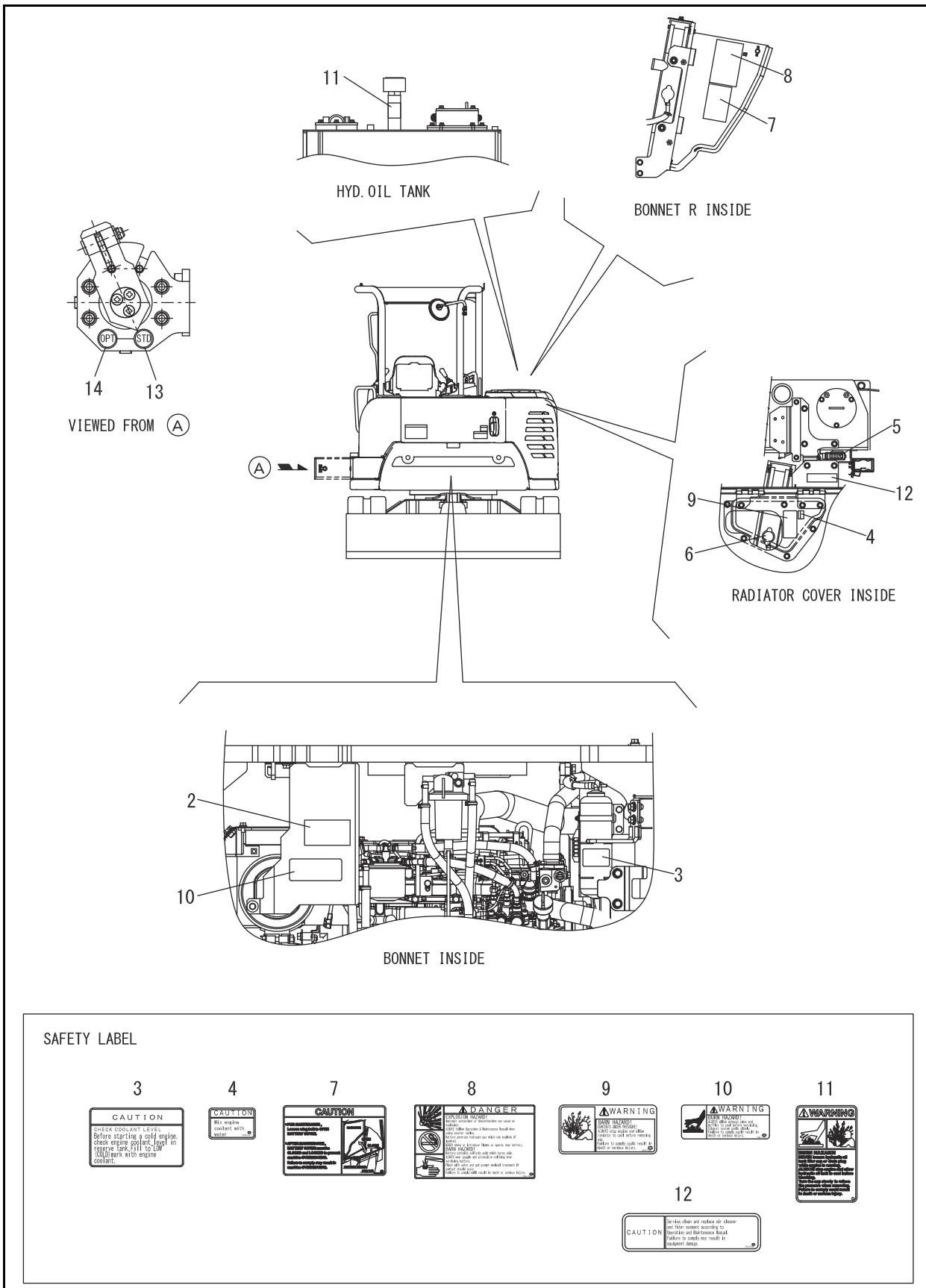
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 1 - LABEL (EXTERIOR)

Ref.

No.	Part No.	Description	Qty.
2	50300834	DECAL/Z45	2
3	102025	DECAL/GEHL 8.00 X 33.95	2
4	183962	DECAL/GEHL 6.00 X 25.47	1
5	50300780	DECAL/ZERO TAIL	1
6	50301424	DECAL/GEN:2	2
8	50281149	LABEL, HYD.OIL US	1
9	50281021	LABEL, HYD.OIL TANK	1
10	50281023	LABEL, GREASE CYL.	2
11	50285436	LABEL, SWING AREA US	1
12	50281028	LABEL, ENG, COVER US	1
13	50281425	LABEL, ENG ROOM	1
14	50282884	LABEL, BOOM US	2
15	50287434	LABEL/GREASE US	1
16	50281034	LABEL, FUEL US	1
17	50281035	LABEL, HOOK US	3
18	197868	LABEL/FUEL OIL NOTI	1
19	50288972	PTO SELECT DECAL	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 3 - LABEL (BONNET INSIDE)



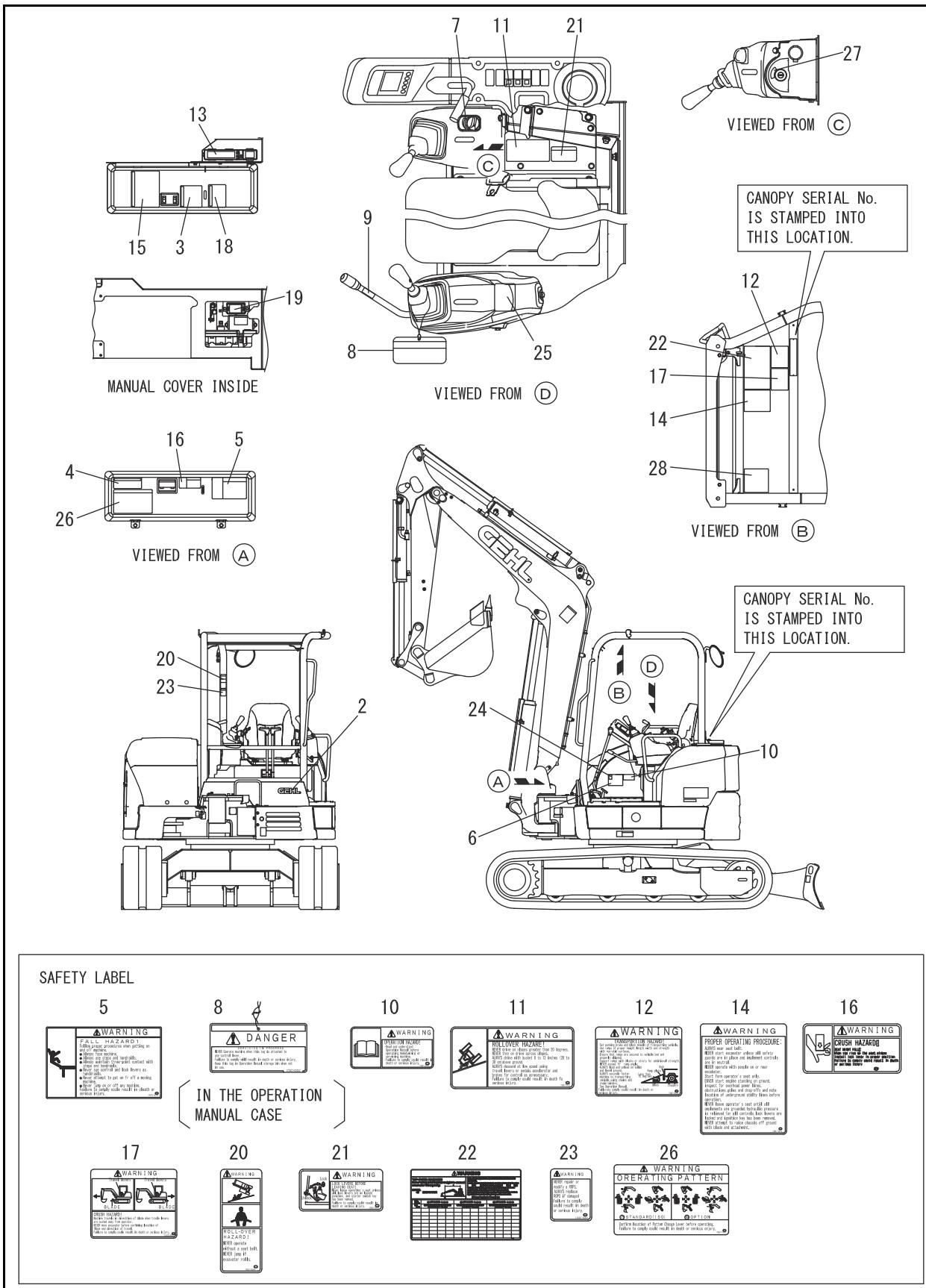
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 3 - LABEL (BONNET INSIDE)

Ref.

No.	Part No.	Description	Qty.
2	50281407	LABEL/WATER SEPARATOR INFO	1
3	50281458	LABEL, SUB-TANK US	1
4	50281459	LABEL,ANTI-FREEZING	1
5	50288973	FUSE DECAL	1
6	50281147	LABEL/RADIATOR CAP	1
7	50281551	LABEL,BATTERY COVER	1
8	50281024	LABEL, BATTERY US	1
9	50281027	LABEL, RADIATOR US	1
10	50287429	LABEL/SILENCER EX	1
11	50288980	HYDRAULIC TANK DECAL	1
12	50280797	LABEL, AIR CLEANER	1
13	50281038	LABEL/ISO-SAE POSITION STD	1
14	50281039	LABEL/ISO_SAE POSITION OPT	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 4 - LABEL (CANOPY)



Z45 GEN:2 - COMPACT EXCAVATOR**FIG. 4 - LABEL (CANOPY)**

Ref.

No. Part No.

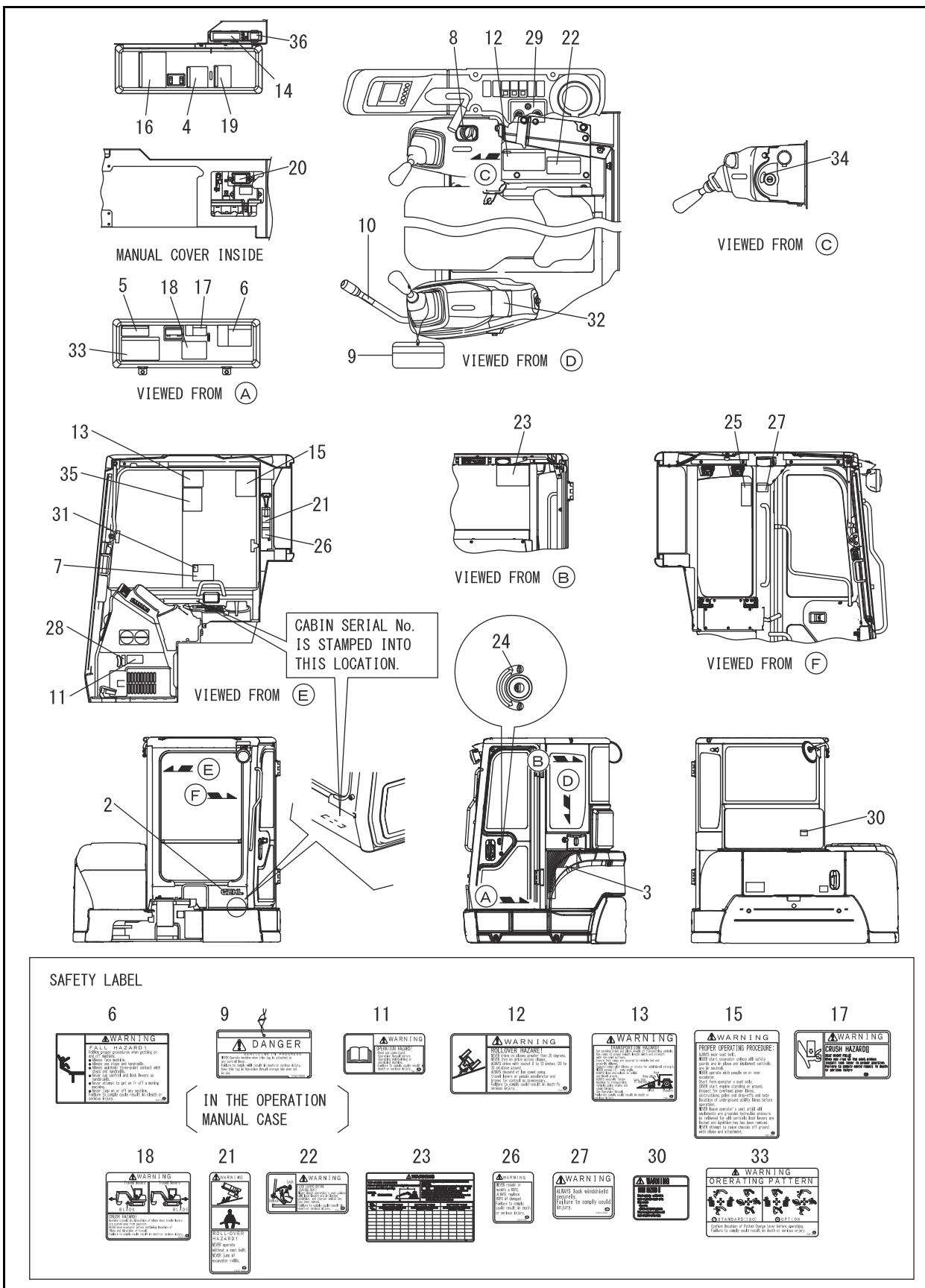
Description

Qty.

2	184305	DECAL/GEHL/2.75 X 11.67 (WHITE)	1
3	50282883	LABEL, CRAWLER US	1
4	50289420	SPECIFICATIONS DECAL	1
5	50281172	LABEL, SUPPORT US	1
6	50287422	LABEL OPERATION	1
7	50281547	LABEL,ACCELERATOR	1
8	50281018	TAG ASSY, CAUTION	1
9	50280917	LABEL,LOCK	1
10	50281019	LABEL, MANUAL US	1
11	50281020	LABEL,SLOPE US	1
12	50281022	LABEL, TRANSPORT US	1
13	50288974	CANOPY RELAY BOX DECAL	1
14	50281025	LABEL, NEUTRAL US	1
15	50288977	FLUIDS DECAL	1
16	50287430	LABEL/SEAT TILT UP	1
17	50281030	LABEL, STEERING US	1
18	50288978	LUBRICATION DECAL	1
19	50288979	FUSE BOX DECAL	1
20	50281032	LABEL, SEAT BELT US	1
21	50281033	LABEL, LEVER LOCK US	1
22	50289421	LIFT DECAL	1
23	50281031	LABEL, ROPS US	1
24	50283980	LABEL,PTO SWITCH	1
25	50283362	LABEL,PTO EX	1
26	50281037	LABEL, 2-WAY US	1
27	50287423	LABEL/SW	1
28	50288976	DPF DECAL	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 6 - LABEL (CABIN)



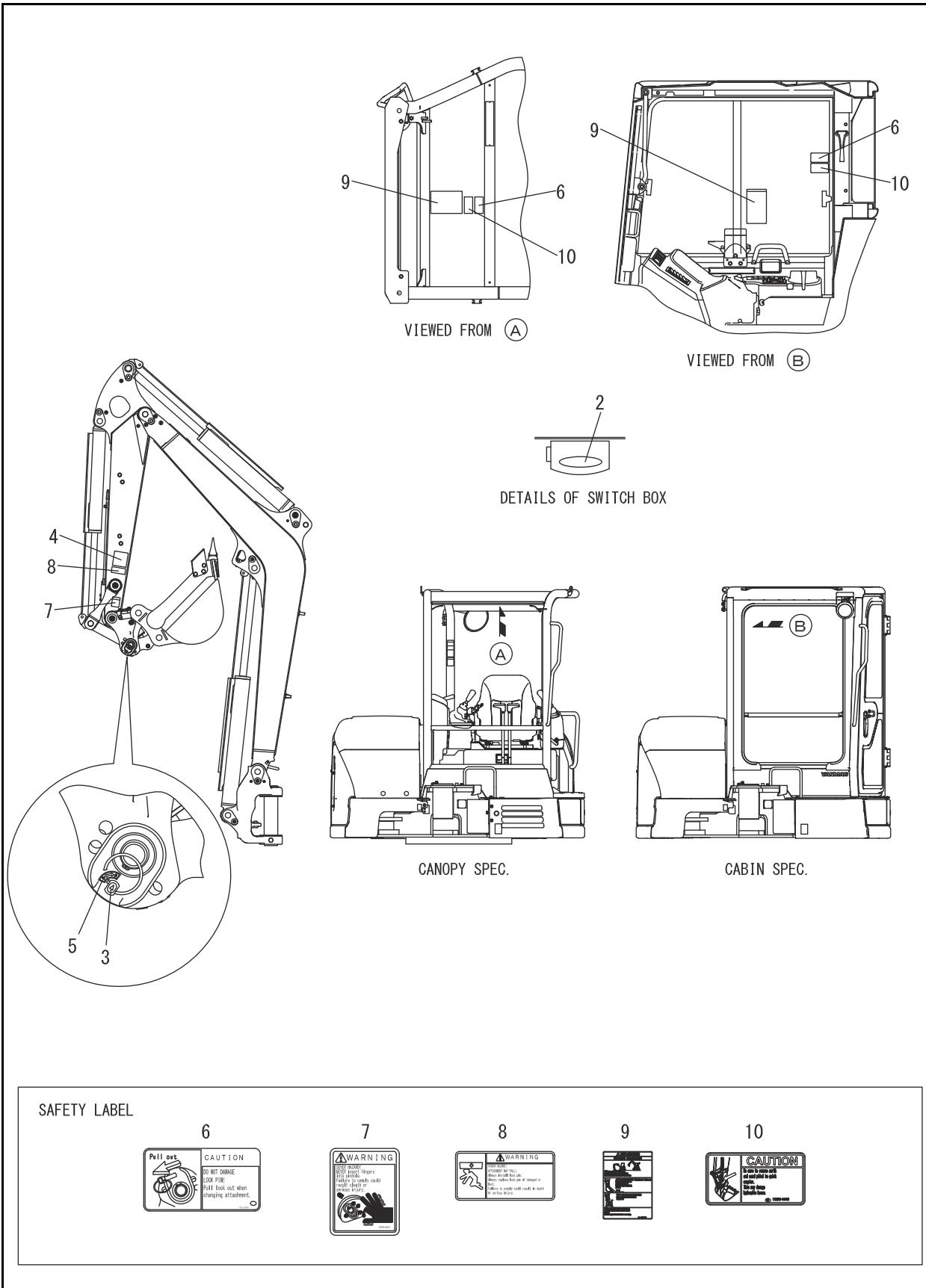
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 6 - LABEL (CABIN)

Ref.

No.	Part No.	Description	Qty.
2	184305	DECAL/GEHL/2.75 X 11.67 (WHITE)	1
3	50287421	LABEL/CAB L	1
4	50282883	LABEL, CRAWLER US	1
5	50289420	SPECIFICATIONS DECAL	1
6	50281172	LABEL, SUPPORT US	1
7	50287422	LABEL OPERATION	1
8	50281547	LABEL,ACCELERATOR	1
9	50281018	TAG ASSY, CAUTION	1
10	50280917	LABEL,LOCK	1
11	50281019	LABEL, MANUAL US	1
12	50281020	LABEL,SLOPE US	1
13	50281022	LABEL, TRANSPORT US	1
14	50288974	CANOPY RELAY BOX DECAL	1
15	50281025	LABEL, NEUTRAL US	1
16	50288977	FLUIDS DECAL	1
17	50287430	LABEL/SEAT TILT UP	1
18	50281030	LABEL, STEERING US	1
19	50288978	LUBRICATION DECAL	1
20	50288979	FUSE BOX DECAL	1
21	50281032	LABEL, SEAT BELT US	1
22	50281033	LABEL, LEVER LOCK US	1
23	50289421	LIFT DECAL	1
24	50287427	LABEL/DOOR KEY LOCK	1
25	50283217	LABEL,F/W LOWER US	1
26	50281031	LABEL, ROPS US	1
27	50281036	LABEL, WINDOW US	1
28	50287424	LABEL/AIR SELECT	1
29	50287425	LEBEL/SW AC	1
30	50287431	LABEL/WARNING AC US	1
31	50283980	LABEL,PTO SWITCH	1
32	50283362	LABEL,PTO EX	1
33	50281037	LABEL, 2-WAY US	1
34	50287423	LABEL/SW	1
35	50288976	DPF DECAL	1
36	50288975	CAB RELAY BOX DECAL	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 8 - LABEL (QUICK COUPLER)



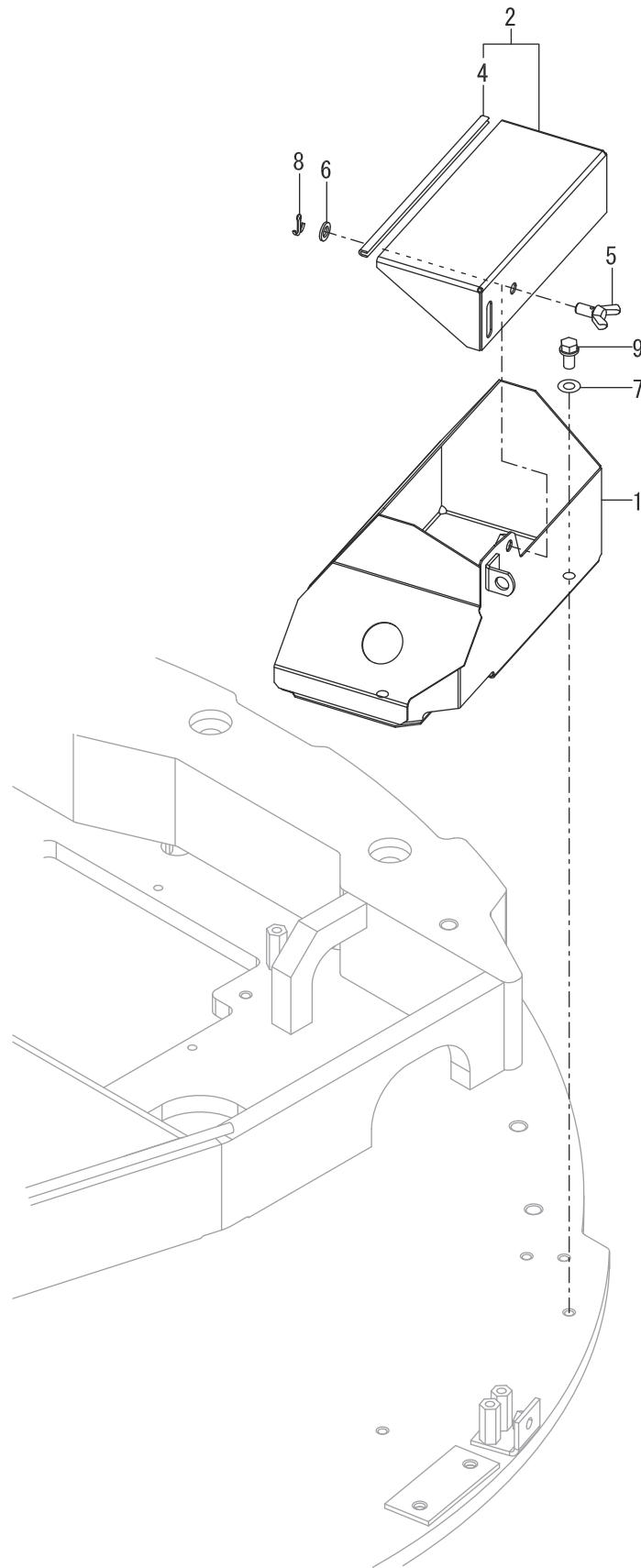
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 8 - LABEL (QUICK COUPLER)

Ref.

No.	Part No.	Description	Qty.
2	50301147	DECAL/POWER-A-TACH	1
3	50281361	LABEL/LOCK-PIN ARROW	1
4	50281173	LABEL,OPERATION PIN	1
5	50281130	LABEL,LOCK	1
6	50281174	LABEL, PIN US	1
7	50281176	LABEL, FINGER US	1
8	50281181	LABEL,LOCK PIN(US	1
9	50287435	LABEL/WARNING HITCH	1
10	50287436	LABEL/SAND US	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 9 - TOOL CASE



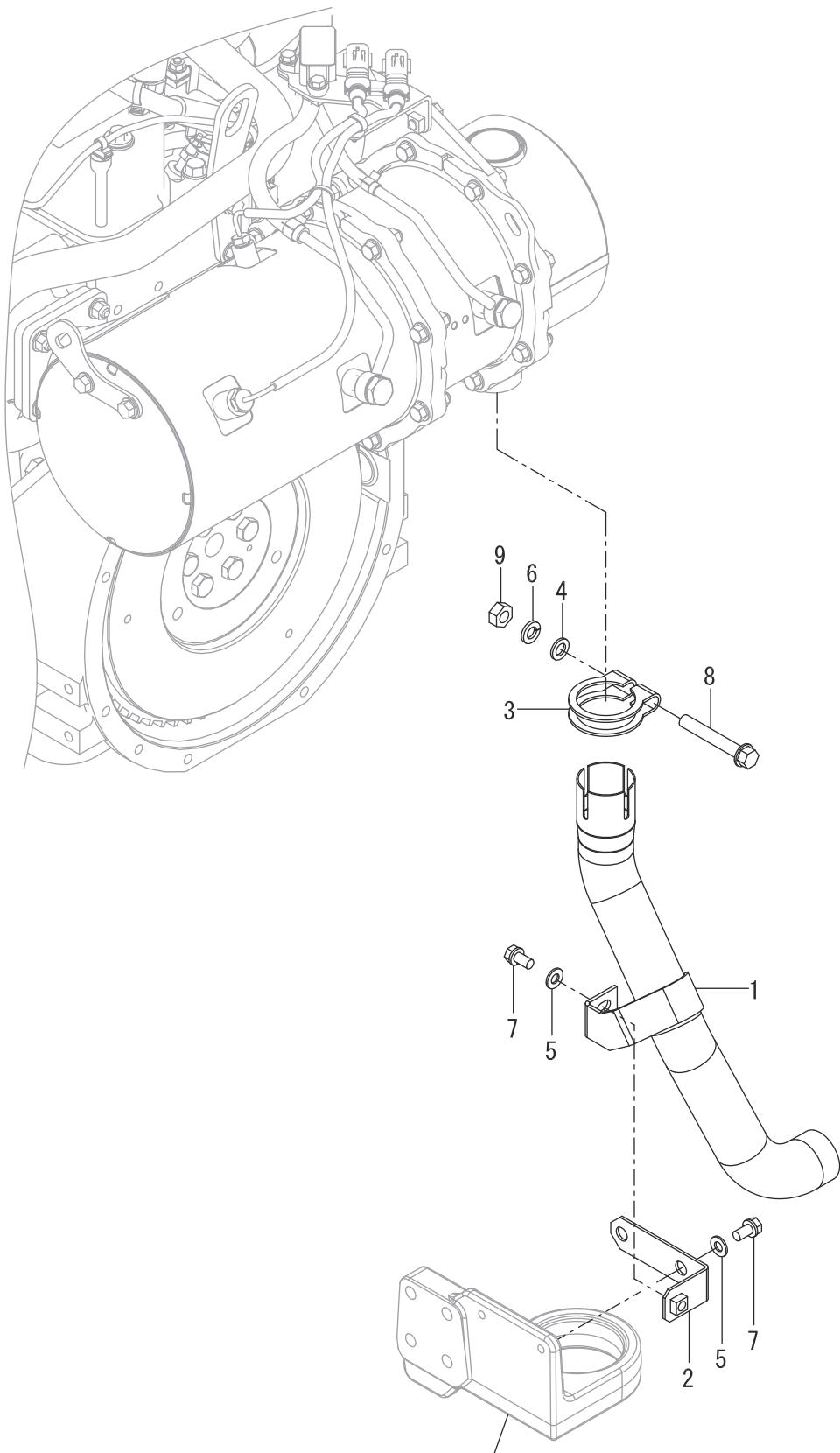
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 9 - TOOL CASE

Ref.

No.	Part No.	Description	Qty.
1	50287448	BOX ASSY/TOOL	1
2	50287449	PLATE ASSY/UP BOX	1
4	50287096	TRIM 245	1
5	50280817	WING BOLT,M10X20	1
6	50282377	WASHER 10	1
7	138111	WASHER/POLISHED	2
8	50282419	COTTER PIN 2.5X20	1
9	50282515	BOLT W/WASHER M10X20	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 10 - MUFFLER



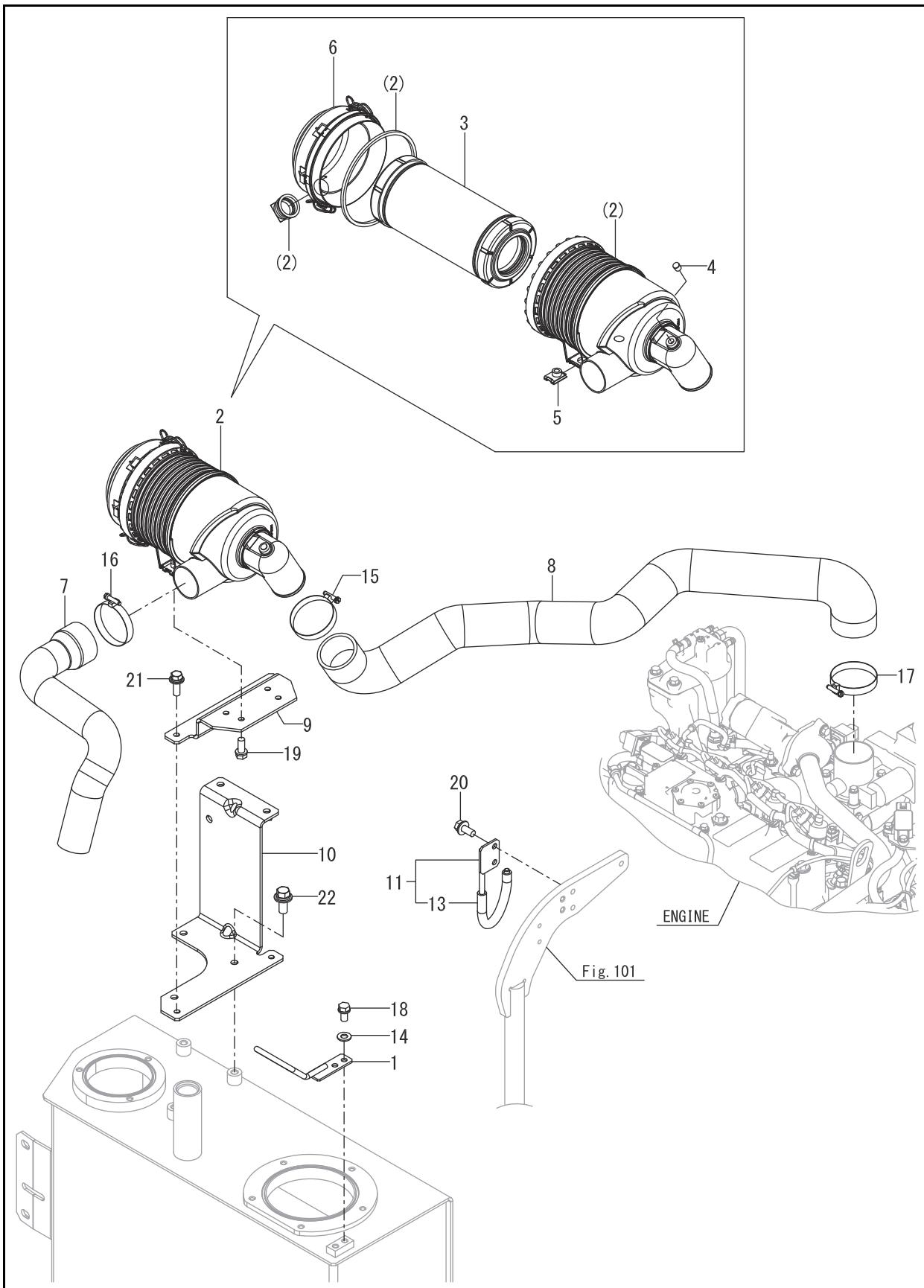
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 10 - MUFFLER

Ref.

No.	Part No.	Description	Qty.
1	50288985	EXHAUST PIPE ASSY	1
2	50288986	EXHAUST PIPE BRACKET	1
3	50286869	CLAMP	1
4	50282377	WASHER 10	1
5	50282380	WASHER 8, POLISHED	3
6	50282393	SPRING WASHER 10	1
7	50282506	BOLT W/WASHER M8X16	3
8	50282561	BOLT M10X 65 PLATED	1
9	50282594	NUT M10	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 11 - AIR CLEANER



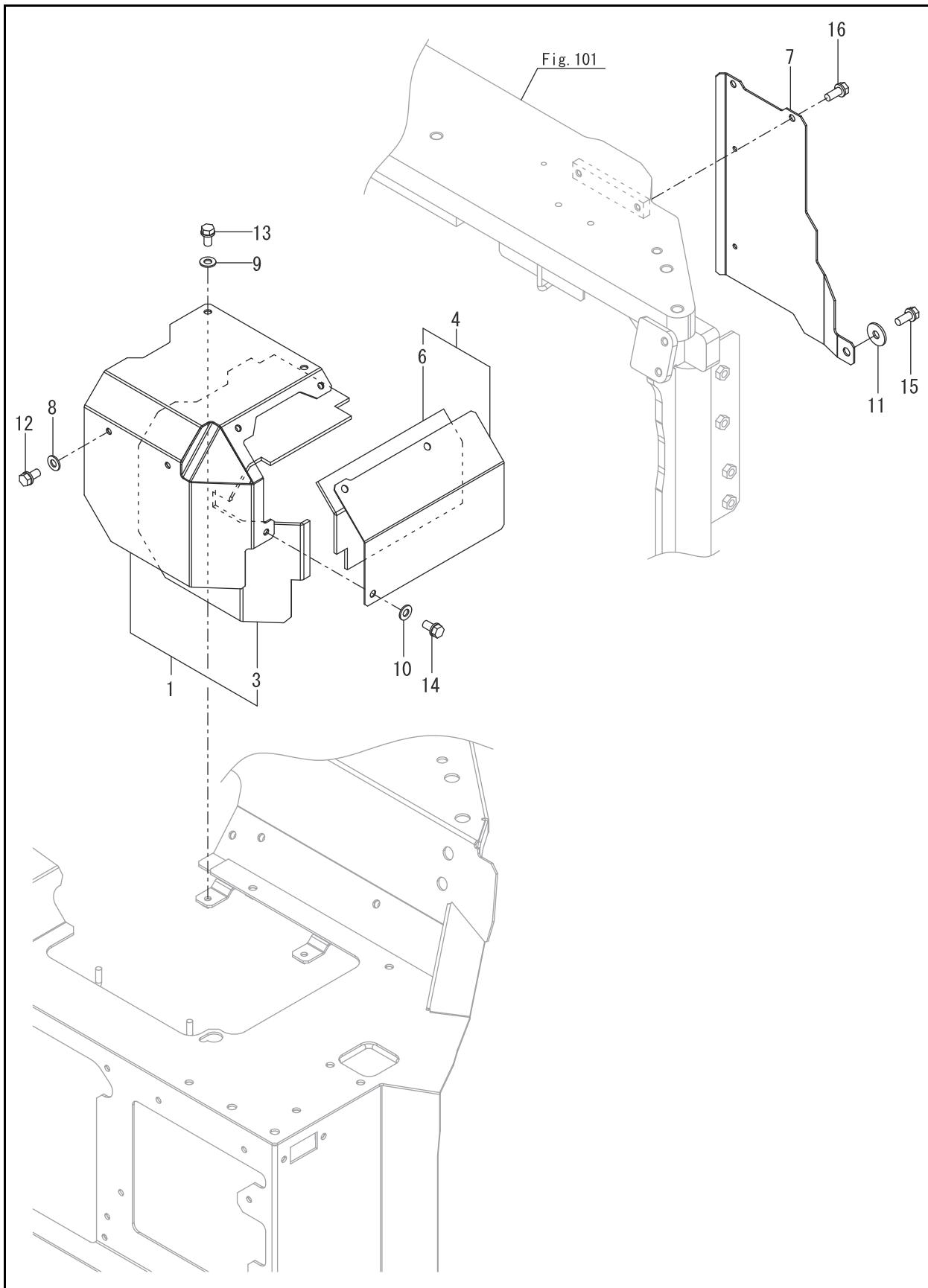
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 11 - AIR CLEANER

Ref.

No.	Part No.	Description	Qty.
1	50288987	HOSE GUIDE	1
2	50288988	AIR CLEANER ASSY	1
3	50289428	OUTER AIR FILTER ELEMENT	1
4	50287464	PLUG	1
5	50288946	SPECIAL NUT	2
6	50288992	AIR CLEANER COVER ASSY	1
7	50288989	AIR INTAKE HOSE	1
8	50288990	AIR CLEANER HOSE	1
9	50288991	AIR CLEANER BRACKET	1
10	50288993	AIR CLEANER SUPPORT	1
11	50288999	HOSE GUIDE ASSY	1
13	50289000	HOSE	1
14	50282380	WASHER 8, POLISHED	2
15	425-36133	CLAMP 70	1
16	425-36133	CLAMP 70	1
17	50282425	CLAMP 80	1
18	50282506	BOLT W/WASHER M8X16	2
19	50282507	BOLT W/WASHER M8X20	2
20	50282534	BOLT M 8X 20	2
21	425-35026	BOLT M8 X 25	2
22	50282539	BOLT 10X25 W/PLW+SPW	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 12 - MUFFLER COVER



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 12 - MUFFLER COVER

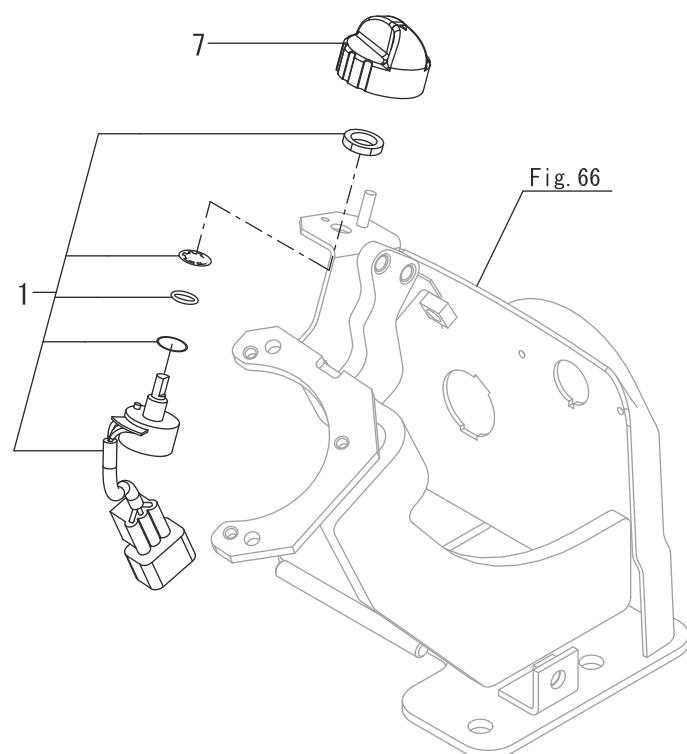
Ref.

No.	Part No.	Description	Qty.
1	50288994	MUFFLER COVER ASSY	1
3	50288995	INSULATION	1
4	50288996	MUFFLER COVER ASSY	1
6	50288997	INSULATION	1
7	50288998	MUFFLER COVER (replacement also requires label 7A)	1
7A	50287429	LABEL/SILENCER EX *	1
8	50282380	WASHER 8, POLISHED	2
9	50282380	WASHER 8, POLISHED	2
10	50282380	WASHER 8, POLISHED	3
11	186593	WASHER 8	1
12	50282506	BOLT W/WASHER M8X16	2
13	50282506	BOLT W/WASHER M8X16	2
14	50282506	BOLT W/WASHER M8X16	3
15	50282507	BOLT W/WASHER M8X20	1
16	50282507	BOLT W/WASHER M8X20	2

NOTE: * Label shown on Page 6.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 13 - ACCELERATOR



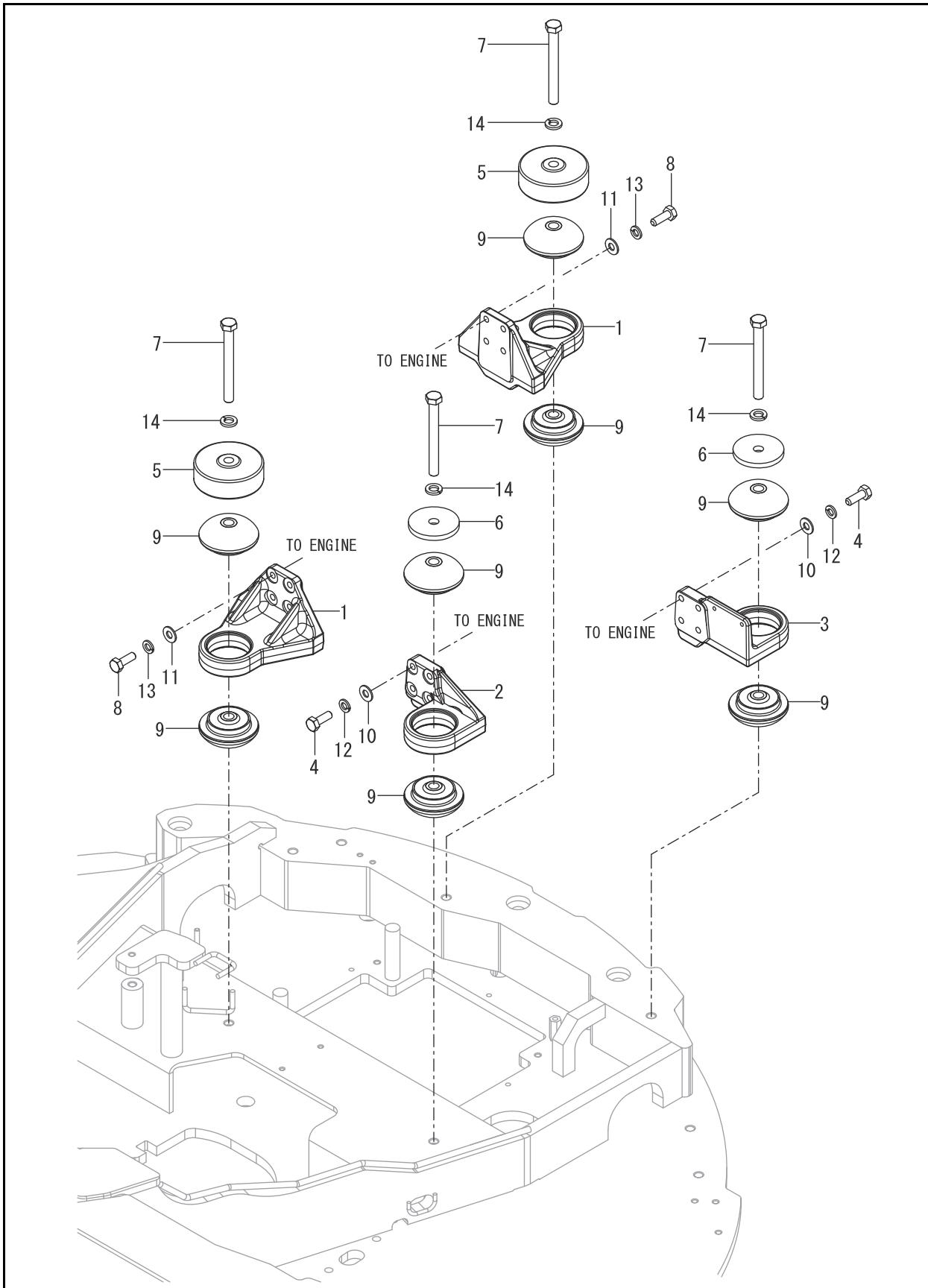
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 13 - ACCELERATOR

Ref.

No.	Part No.	Description	Qty.
1	50281556	VOLUME, ACCEL ASSY	1
7	50281557	KNOB ASSY,ACCEL	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 14 - ENGINE MOUNT



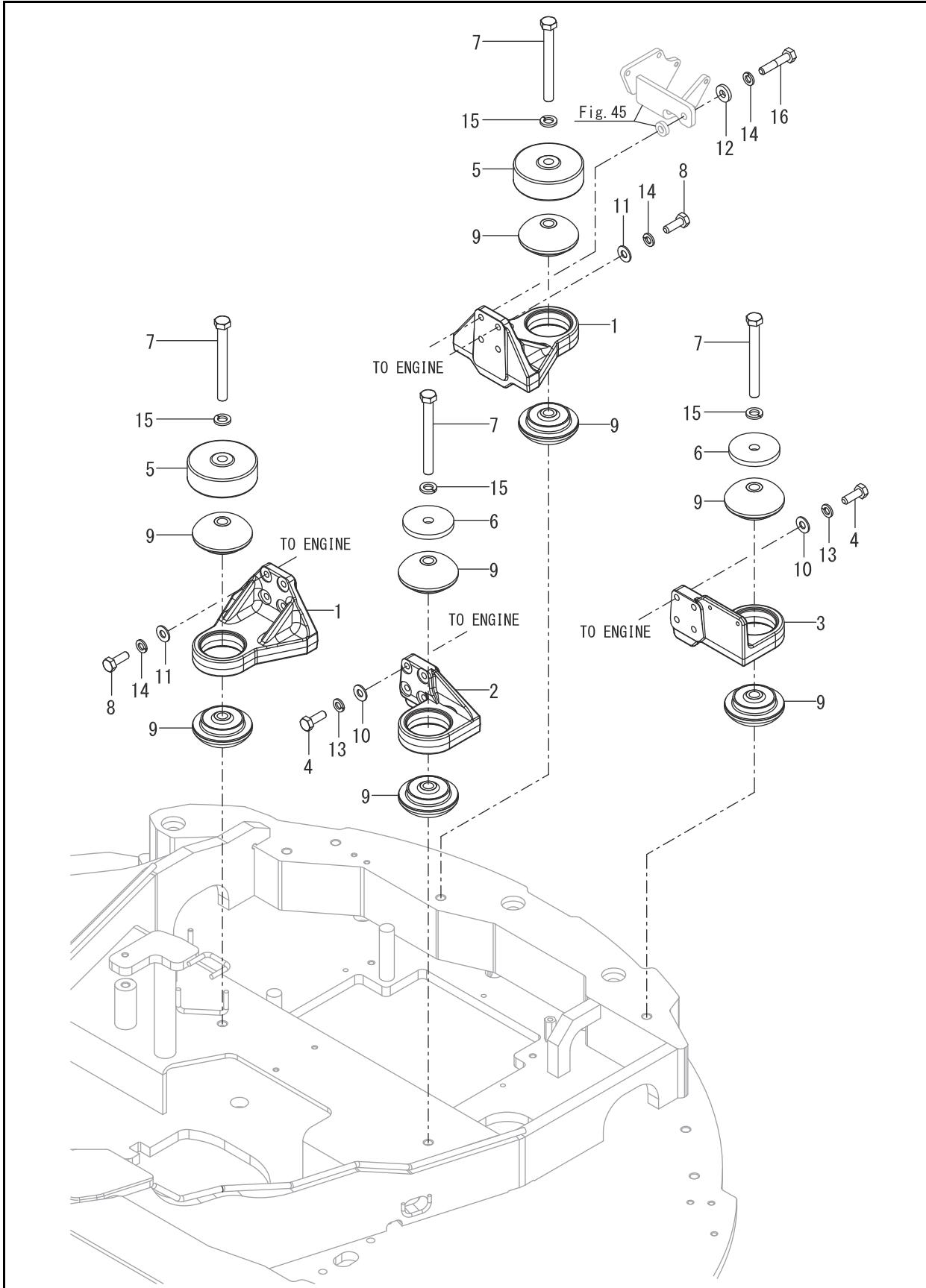
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 14 - ENGINE MOUNT

Ref.

No.	Part No.	Description	Qty.
1	50289002	RIGHT ENGINE MOUNT	2
2	50289003	LEFT FRONT ENGINE MOUNT	1
3	50289004	RIGHT FRONT ENGINE MOUNT	1
4	50283205	BOLT M10 X 40	8
5	50281565	STOPPER	2
6	50280851	WASHER	2
7	50280853	BOLT M16X150	4
8	50282770	BOLT M10X30	8
9	50288910	ISOLATOR	8
10	50280803	SEAT, SPRING	8
11	50280803	SEAT, SPRING	8
12	50282393	SPRING WASHER 10	8
13	50282393	SPRING WASHER 10	8
14	50282396	SPRING WASHER 16	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 15 - ENGINE MOUNT (A/C SPEC.)



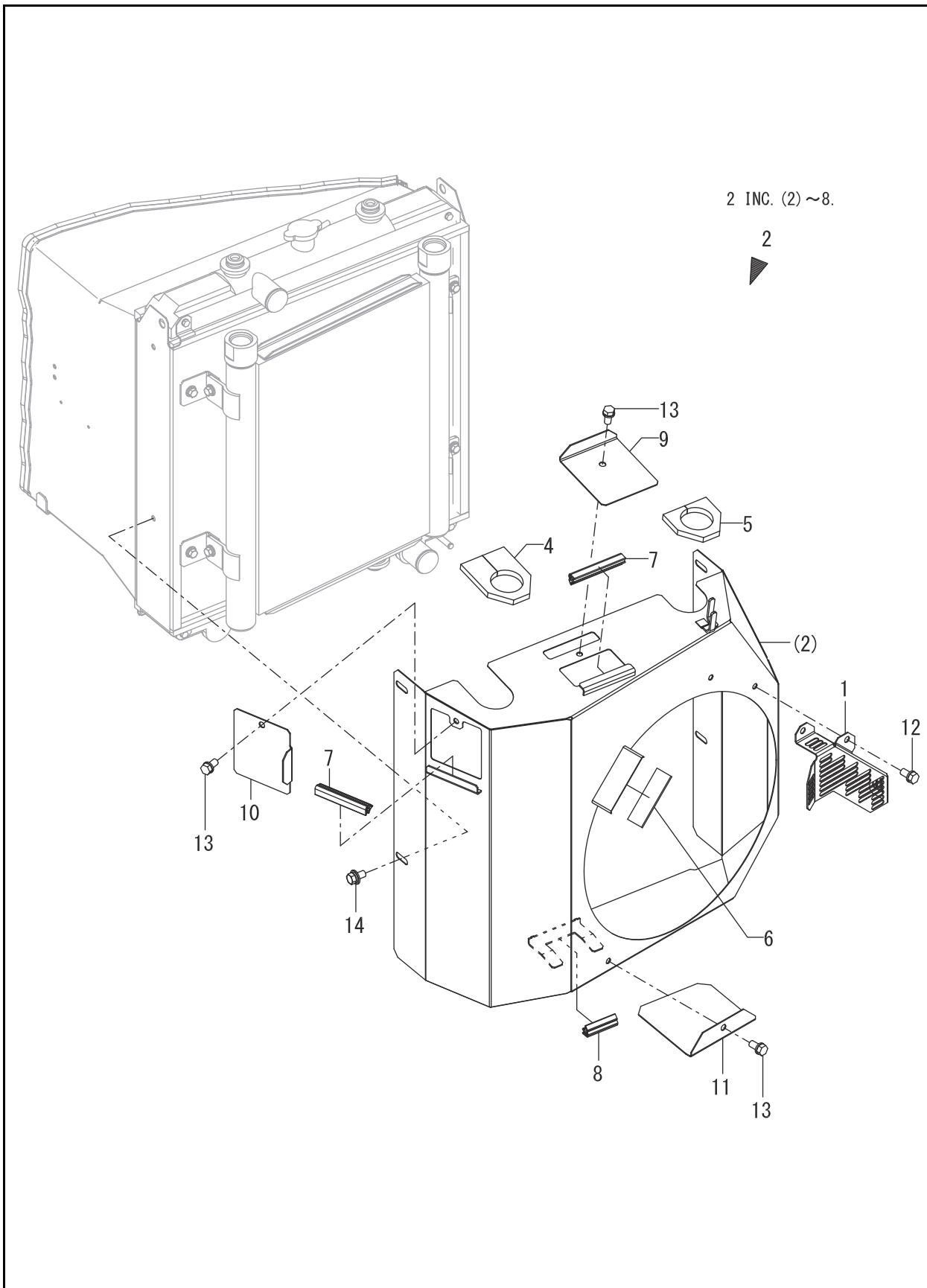
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 15 - ENGINE MOUNT (A/C SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50289002	RIGHT ENGINE MOUNT	2
2	50289003	LEFT FRONT ENGINE MOUNT	1
3	50289004	RIGHT FRONT ENGINE MOUNT	1
4	50283205	BOLT M10 X 40	8
5	50281565	STOPPER	2
6	50280851	WASHER	2
7	50280853	BOLT M16X150	4
8	50282770	BOLT M10X30	7
9	50282794	MOUNT, ENGINE	8
10	50280803	SEAT, SPRING	8
11	50280803	SEAT, SPRING	7
12	50283985	COLLOR	1
13	50282393	SPRING WASHER 10	8
14	50282393	SPRING WASHER 10	8
15	50282396	SPRING WASHER 16	4
16	50288173	BOLT	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 16 - RADIATOR SHROUD



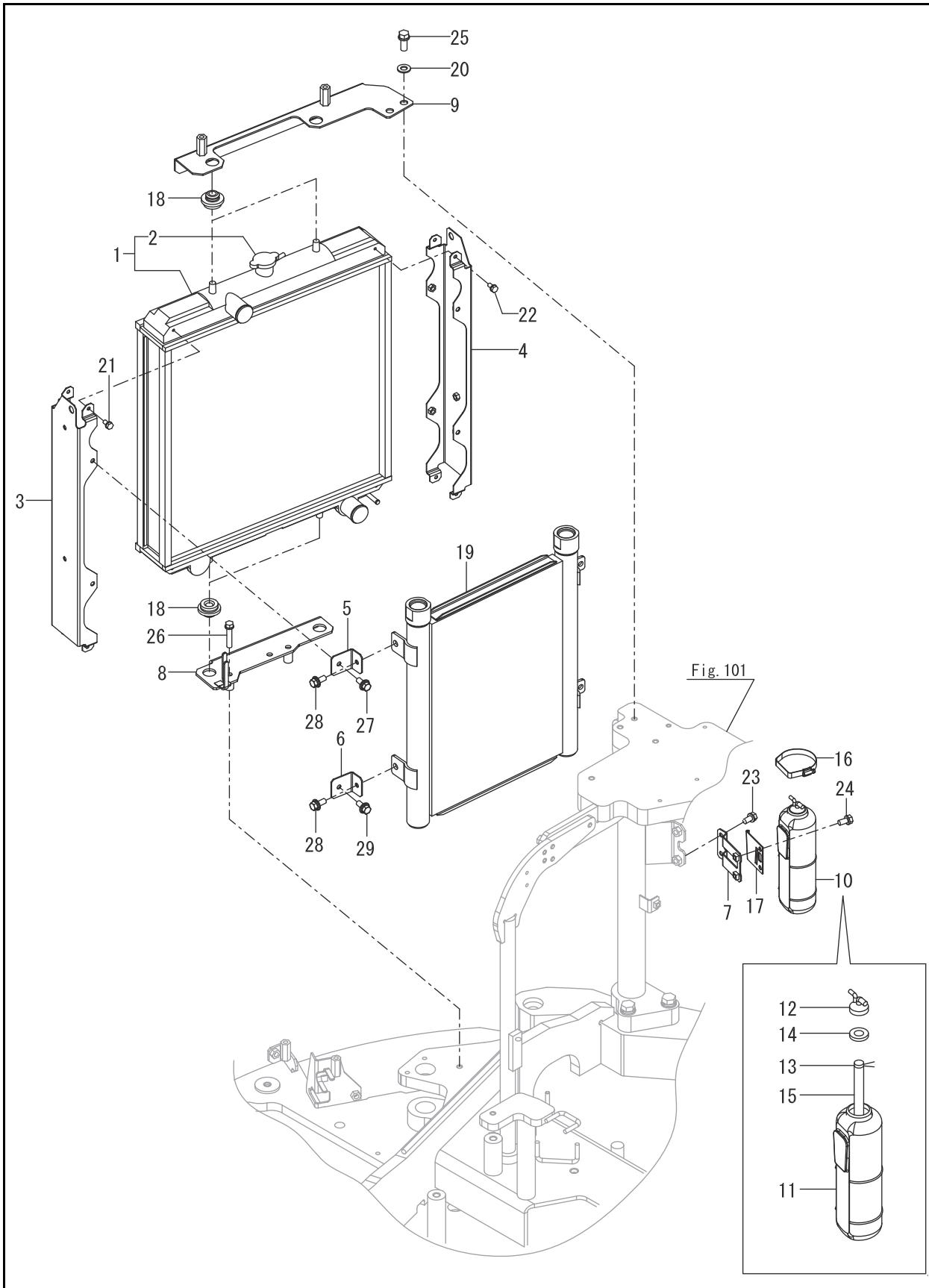
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 16 - RADIATOR SHROUD

Ref.

No.	Part No.	Description	Qty.
1	50289010	FAN GUARD	1
2	50289011	FAN SHROUD ASSY	1
4	50282109	EV A,SHROUD	1
5	50282110	EV B,SHROUD	1
6	50289443	RUBBER PLATE	1
7	50288919	RUBBER SEAL	2
8	50281139	RUBBER,SEAL 55	1
9	50289020	FAN SHROUD COVER	1
10	50289021	FAN SHROUD COVER	1
11	50289022	FAN SHROUD COVER	1
12	50282506	BOLT W/WASHER M8X16	2
13	50282506	BOLT W/WASHER M8X16	3
14	50282533	BOLT M 8X 16	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 17 - RADIATOR & SUB-TANK



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 17 - RADIATOR & SUB-TANK

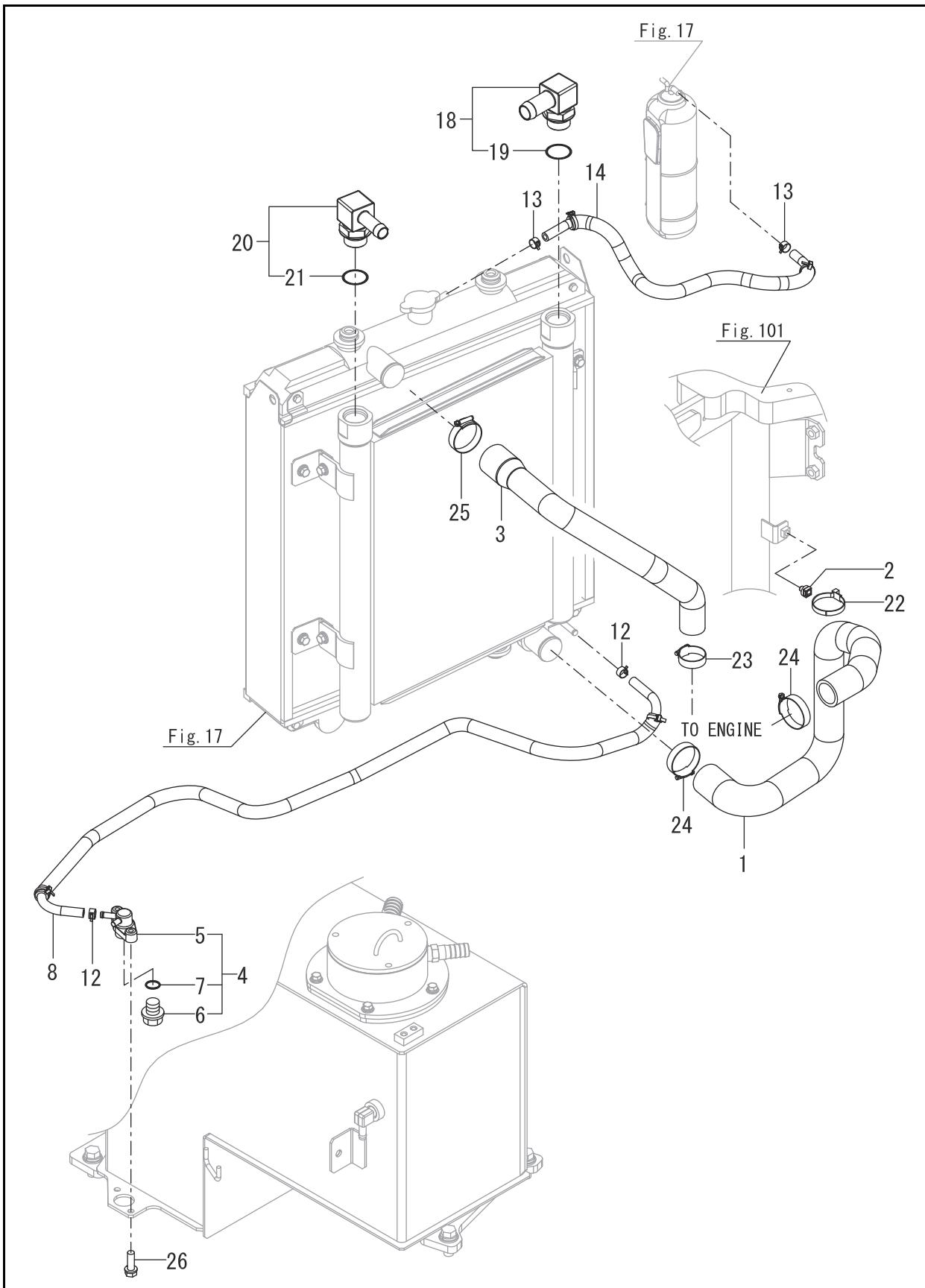
Ref.

No.	Part No.	Description	Qty.
1	50282100	RADIATOR SUB ASSY	1
2	186470	CAP RADIATOR	1
3	50289005	RADIATOR SUPPORT	1
4	50289005	RADIATOR SUPPORT	1
5	50289006	BRACKET	1
6	50289006	BRACKET	1
7	50289007	BRACKET	1
8	50289008	BRACKET	1
9	50289009	BRACKET	1
10	50280743	SUB-TANK ASSY (replacement also requires label 15A)	1
11	50282686	BODY, TANK	1
12	186359	CAP	1
13	186461	CLAMP	1
14	186361	GASKET	1
15	50282436	HOSE 7X 225	1
15A	50281458	LABEL, SUB-TANK US *	1
16	425-36235	BAND	1
17	425-36152	BRACKET/SUB-TANK	1
18	50282346	RUBBER, RADIATOR	4
19	50289247	OIL COOLER	1
20	138111	WASHER/POLISHED	2
21	50282501	BOLT M 6X 12	4
22	50282501	BOLT M 6X 12	4
23	50282506	BOLT W/WASHER M8X16	2
24	50282506	BOLT W/WASHER M8X16	2
25	50282516	BOLT W/WASHER M10X25	2
26	50282521	BOLT M10X 50	2
27	50282534	BOLT M 8X 20	1
28	50282534	BOLT M 8X 20	4
29	50282534	BOLT M 8X 20	1

NOTE: * Label shown on Page 6.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 18 - RADIATOR HOSE



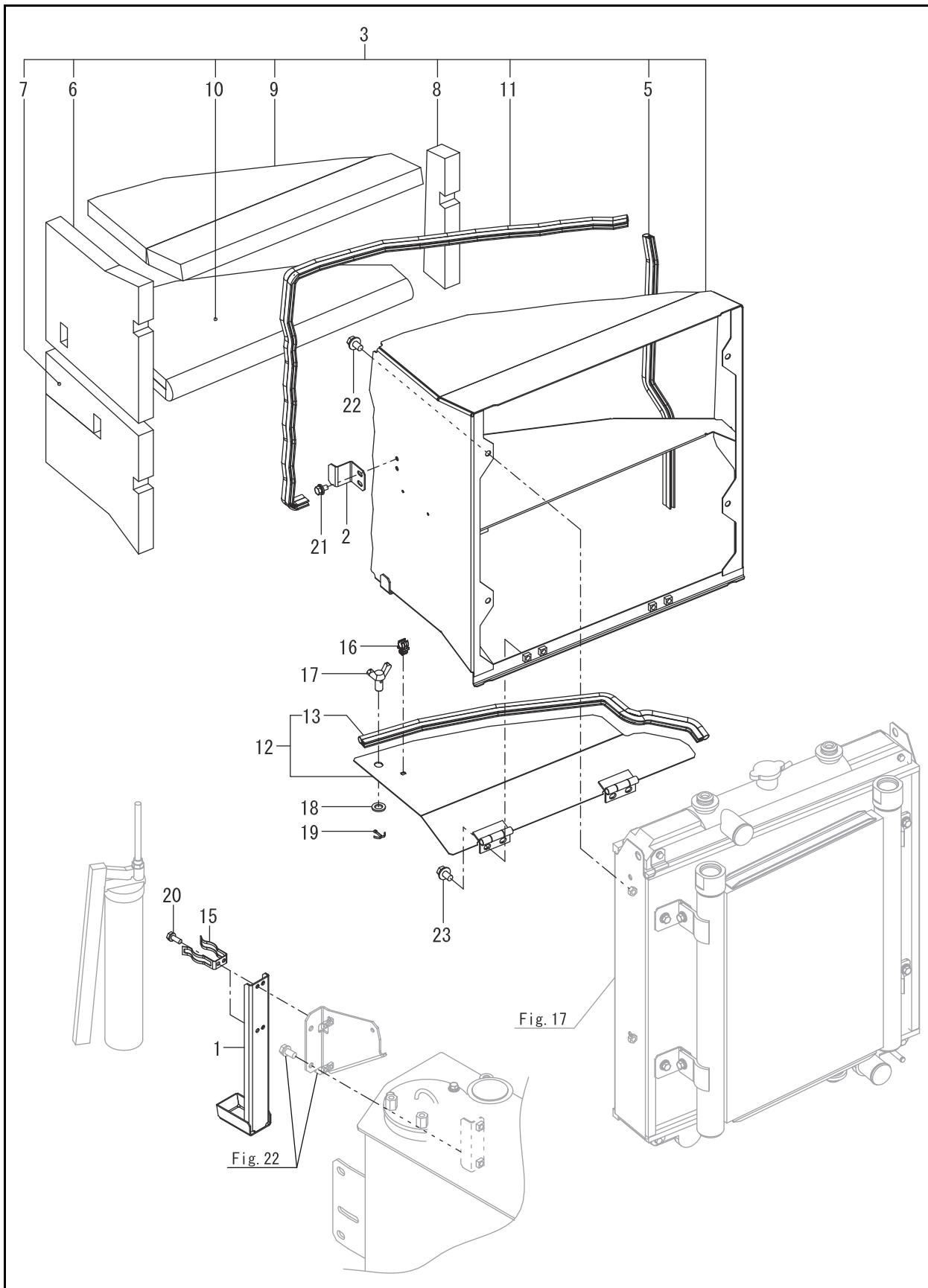
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 18 - RADIATOR HOSE

Ref.

No.	Part No.	Description	Qty.
1	50287217	LOWER RADIATOR HOSE	1
2	50289001	TREE CLIP	1
3	50287215	UPPER RADIATOR HOSE	1
4	50281046	COCK ASSY,2-WAY	1
5	50281047	BODY	1
6	50280728	PLUG	1
7	425-34744	O-RING 1A P-16.0	1
8	50288926	HOSE ASSY	1
12	425-34916	CLAMP 12	2
13	425-34916	CLAMP 12	2
14	50282345	PIPE ASSY, FUEL	1
18	50289265	90° ELBOW	1
19	50281537	PACKING,29.0	1
20	50289266	90° ELBOW	1
21	50281537	PACKING,29.0	1
22	50282709	CLAMP B	1
23	50282430	CLIP 41,HOSE	1
24	50282431	CLIP, HOSE	2
25	50282431	CLIP, HOSE	1
26	50282508	BOLT M 8X 25	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 19 - DUCT



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 19 - DUCT

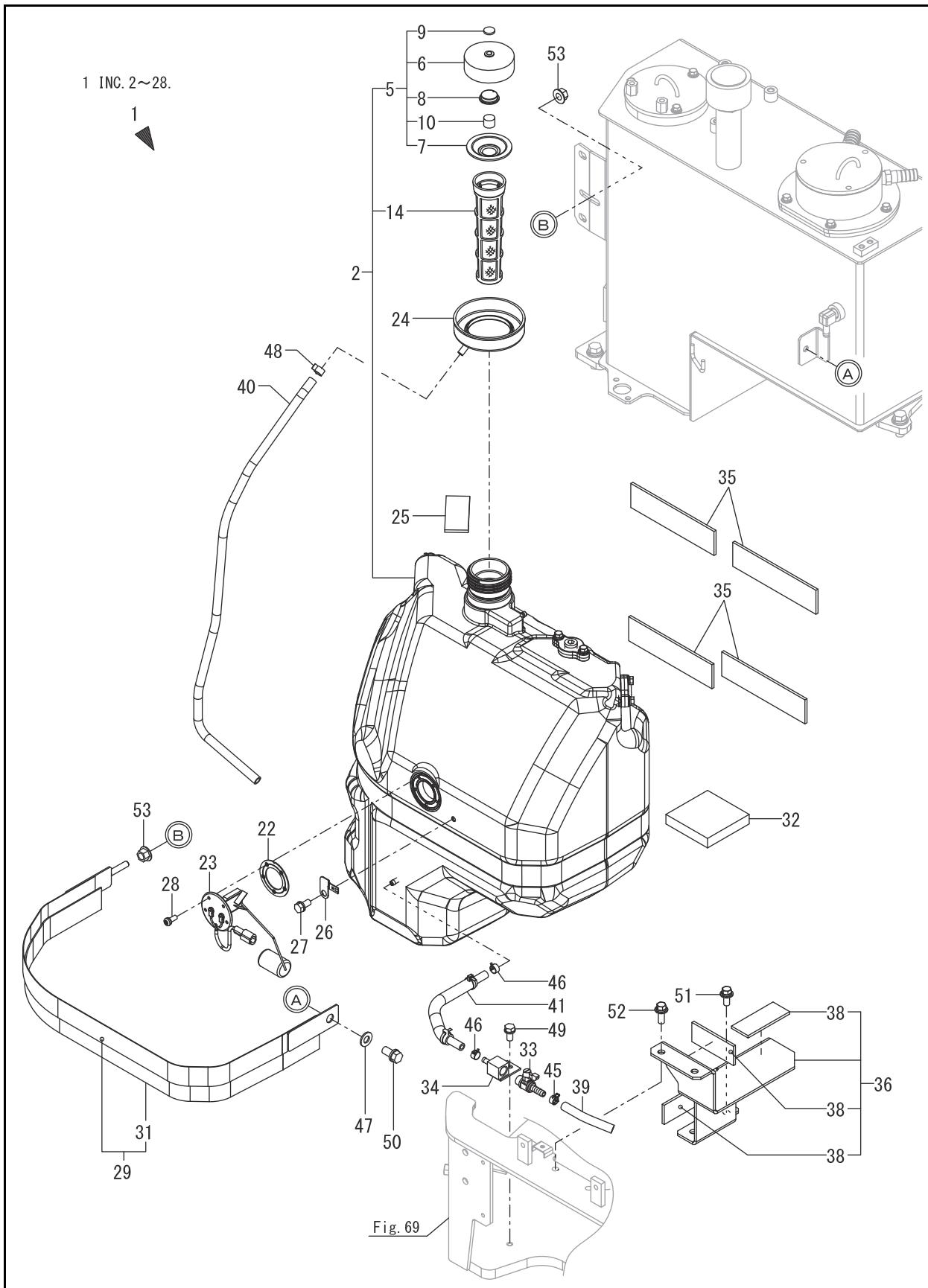
Ref.

No.	Part No.	Description	Qty.
1	50288981	GREASE GUN BRACKET	1
2	50288982	BRACKET SUPPORT	1
3	50289012	RADIATOR DUCT ASSY	1
5	50281568	SEAL 540	1
6	50289013	INSULATION	1
7	50289014	INSULATION	1
8	50289015	INSULATION	1
9	50289016	INSULATION	1
10	50289017	INSULATION	1
11	50289018	SEAL	1
12	50289019	COVER ASSY (replacement also requires labels 14A, 14B)	1
13	50288927	SEAL	1
14A	50281551	LABEL,BATTERY COVER *	1
14B	50281024	LABEL, BATTERY US *	1
15	50280784	BRACKET, GREASE PUMP	2
16	50282365	HOLDER, ROD 8	1
17	50280817	WING BOLT,M10X20	1
18	50282377	WASHER 10	1
19	50282419	COTTER PIN 2.5X20	1
20	50282502	BOLT M 6X 16	4
21	50282530	BOLT M 6X 12	2
22	50282533	BOLT M 8X 16	4
23	50282533	BOLT M 8X 16	4

NOTE: * Labels shown on Page 6.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 20 - FUEL TANK



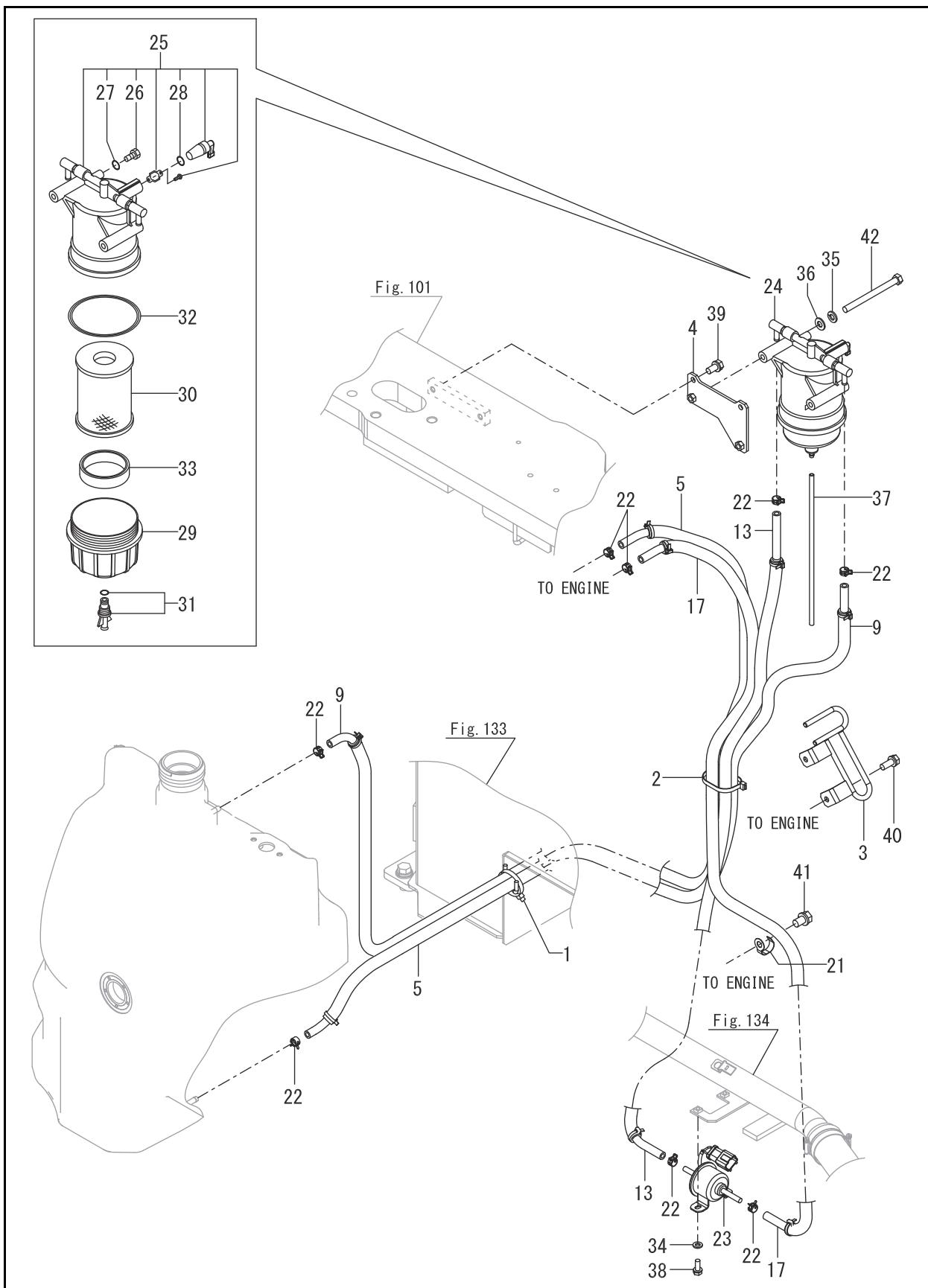
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 20 - FUEL TANK

Ref.

No.	Part No.	Description	Qty.
1	50288984	FUEL TANK ASSY	1
2	50289023	FUEL TANK ASSY	1
5	50284256	FUEL CAP	1
6	50284257	CAP	1
7	50284258	GASKET	1
8	50284259	GASKET	1
9	50284260	WASHER	1
10	50284261	SPONGE	1
14	50287504	STRAINER 200	1
22	50280854	GASKET	1
23	50289027	FUEL SENDER	1
24	50282953	CUP,FUEL OIL	1
25	50289030	RUBBER PAD	1
26	50281588	BRACKET,SWP 2P-M	1
27	50282506	BOLT W/WASHER M8X16	1
28	425-36271	SCREW M 5 X 12	5
29	50289024	FUEL TANK STRAP ASSY	1
31	50289025	RUBBER STAP	1
32	50289026	RUBBER PAD	1
33	50281573	VALVE,FUEL DRAIN	1
34	50287505	JOINT ASSY/DRAIN	1
35	50287132	PLATE/RUBBER	4
36	50289029	BRACKET ASSY	1
38	50289030	RUBBER PAD	3
39	50287098	HOSE/DRAIN	1
40	50283407	HOSE	1
41	50289035	HOSE ASSY	1
45	50280724	CLIP, HOSE	1
46	425-34916	CLAMP 12	2
47	138111	WASHER/POLISHED	1
48	50282437	CLAMP 13,HOSE	1
49	50282506	BOLT W/WASHER M8X16	1
50	50282515	BOLT W/WASHER M10X20	1
51	50282539	BOLT 10X25 W/PLW+SPW	2
52	50285904	BOLT M10 X 30	2
53	50282578	U-NUT M10	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 21 - FUEL LINE



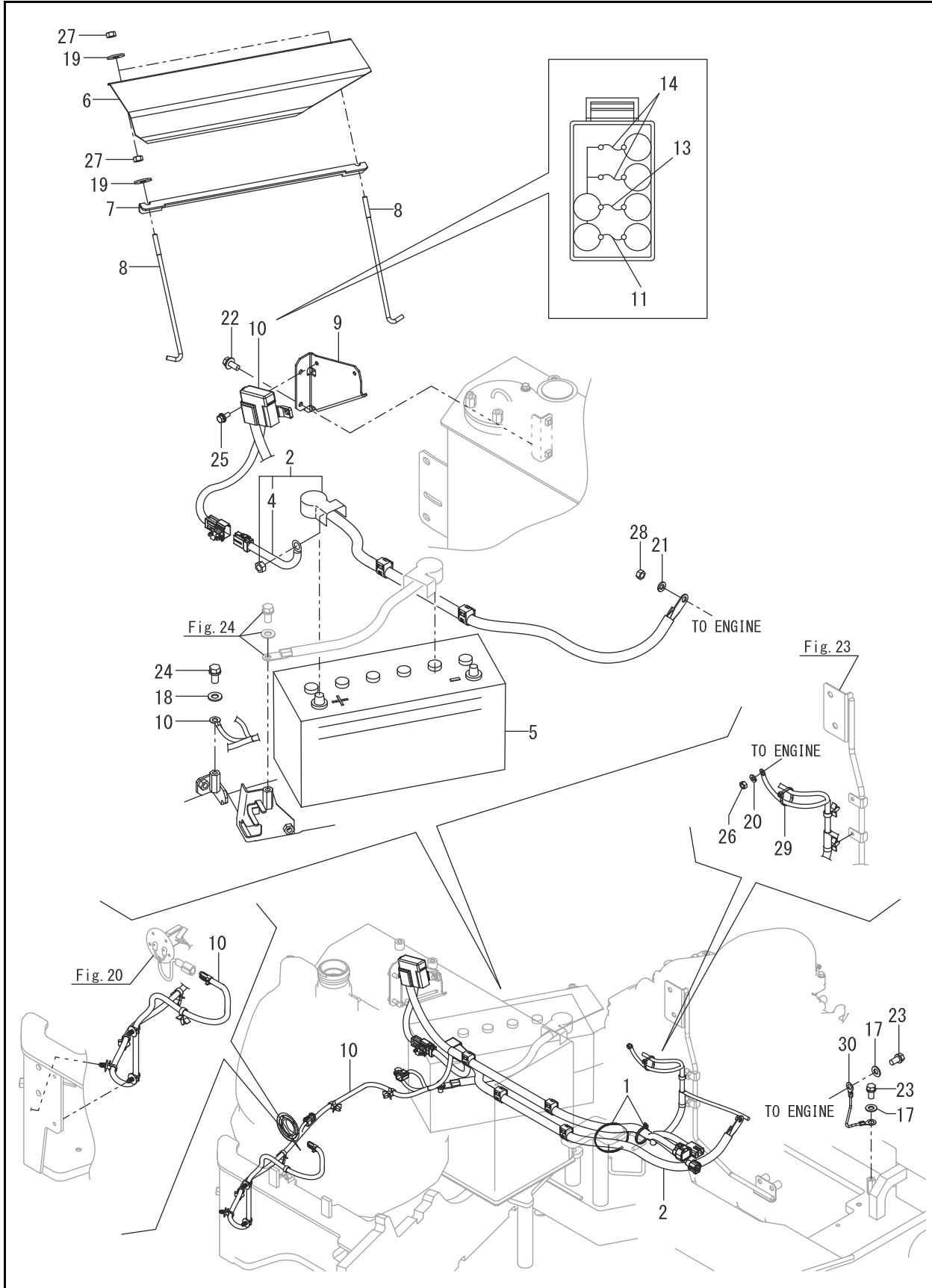
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 21 - FUEL LINE

Ref.

No.	Part No.	Description	Qty.
1	50280798	BAND 300	1
2	50280798	BAND 300	1
3	50289028	HOSE GUIDE ASSY	1
4	50289031	BRACKET	1
5	50289032	HOSE ASSY	1
9	50289033	HOSE ASSY	1
13	50289418	HOSE	1
17	50289034	HOSE ASSY	1
21	50280799	CLAMP 10X70	1
22	50280724	CLIP, HOSE	8
23	186483	FUEL PUMP	1
24	50351686	FUEL WATER SEPARATOR	1
25	50250462	BODY ASSY	1
26	50250363	PLUG, BREATHER	1
27	50250364	O-RING	1
28	138125	O-RING	1
29	50250361	CUP, CLEAR	1
30	50352550	FILTER ELEMENT FUEL/WATER SEPARATOR	1
31	203823	DRAIN PLUG	1
32	50250362	O-RING	1
33	50250365	FLOAT	1
34	50282379	WASHER 6, POLISHED	2
35	50282380	WASHER 8, POLISHED	2
36	50282392	WASHER, 8	2
37	50284066	PIPE, VINYL 5	1
38	50282502	BOLT M 6X 16	2
39	50282506	BOLT W/WASHER M8X16	2
40	50282507	BOLT W/WASHER M8X20	2
41	50282514	BOLT M10X 16	1
42	50289440	BOLT M8X95	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 22 - ELECTRIC (AROUND ENGINE)



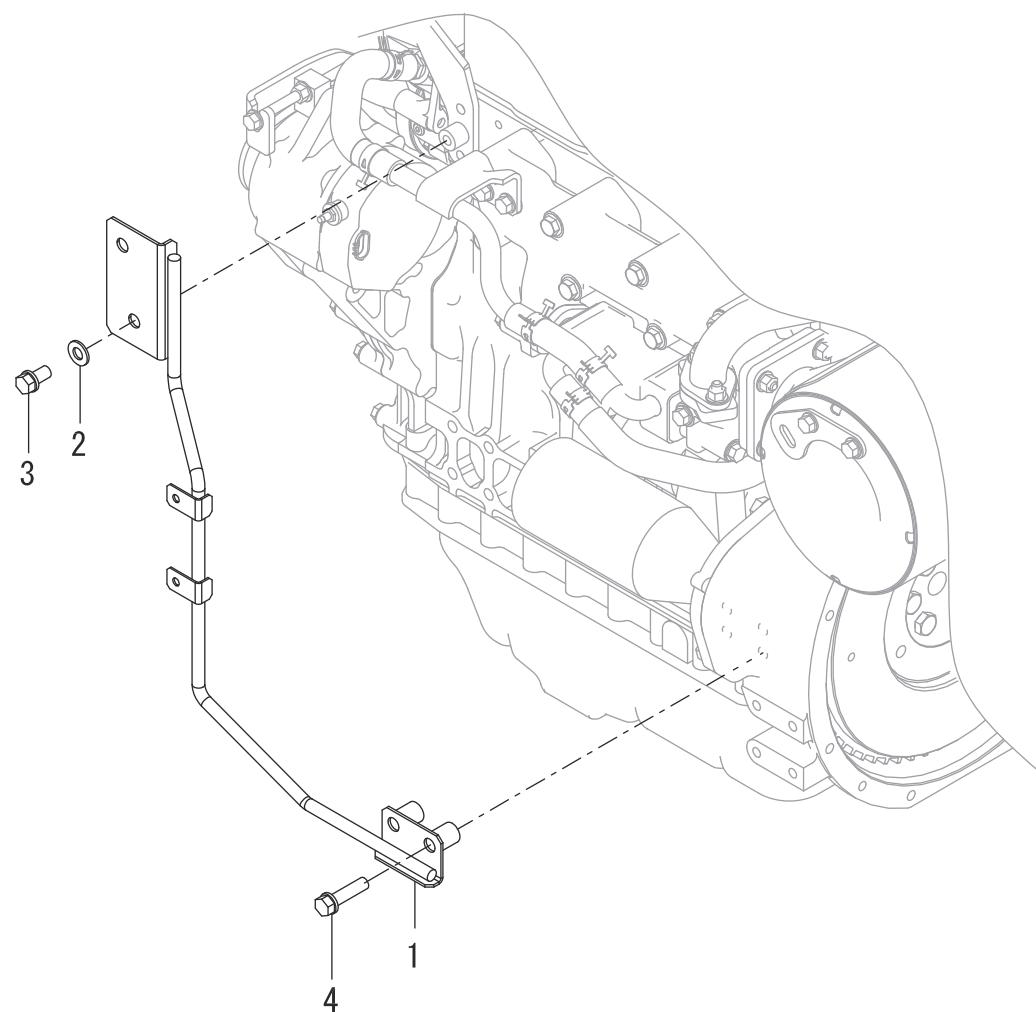
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 22 - ELECTRIC (AROUND ENGINE)

Ref.

No.	Part No.	Description	Qty.
1	50280798	BAND 300	2
2	50289036	POSITIVE BATTERY CABLE	1
4	50289037	BATTERY FUSE CABLE ASSY	1
5	N/A	BATTERY *	1
6	50289039	BATTERY COVER	1
7	50280773	RETAINER, BATTERY	1
8	50280887	ROD	2
9	50289040	BATTERY FUSE BRACKET	1
10	50289044	POWER WIRE HARNESS	1
11	50288858	FUSE 80A	1
13	50287271	FUSE 100A	1
14	50287270	FUSE 60A	2
17	138111	WASHER/POLISHED	2
18	138111	WASHER/POLISHED	1
19	186593	WASHER 8	4
20	425-34891	SPRING WASHER 6	1
21	50282392	WASHER, 8	1
22	50282506	BOLT W/WASHER M8X16	2
23	50282515	BOLT W/WASHER M10X20	2
24	50282515	BOLT W/WASHER M10X20	1
25	50282531	BOLT M 6X 16	2
26	138143	NUT	1
27	50282596	NUT M 8	4
28	50282596	NUT M 8	1
29	50284153	BAND 146	1
30	50284878	WIRE, EARTH	1

NOTE: * Purchase locally; Group size 95R; 650 CCA

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 23 - ELECTRIC (HARNESS SUPPORT)

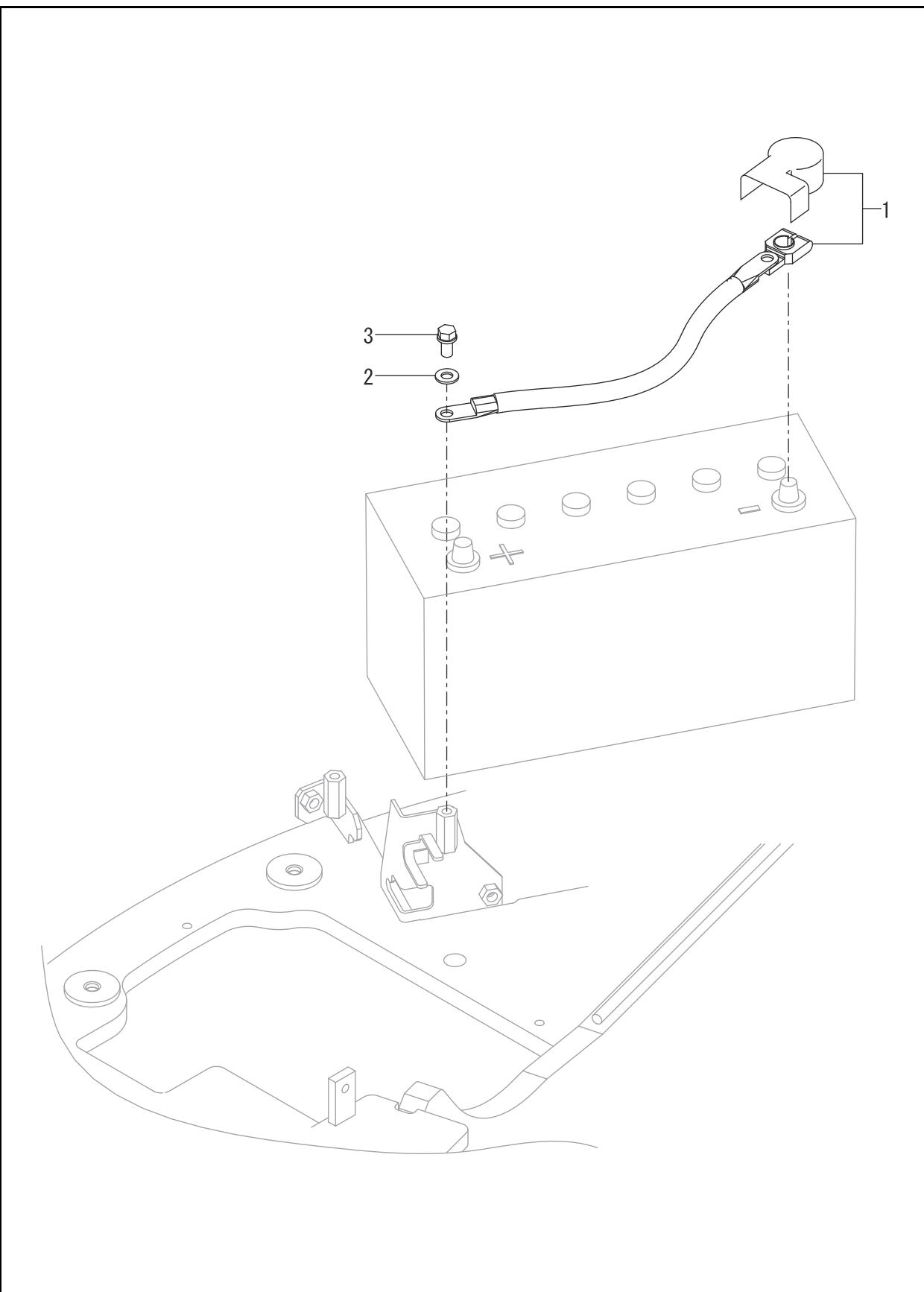


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 23 - ELECTRIC (HARNESS SUPPORT)

Ref.

No.	Part No.	Description	Qty.
1	50289041	SUPPORT ASSY	1
2	138111	WASHER/POLISHED	1
3	50282515	BOLT W/WASHER M10X20	1
4	50282519	BOLT M10X 40	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 24 - ELECTRIC (BATTERY NEGATIVE CABLE)



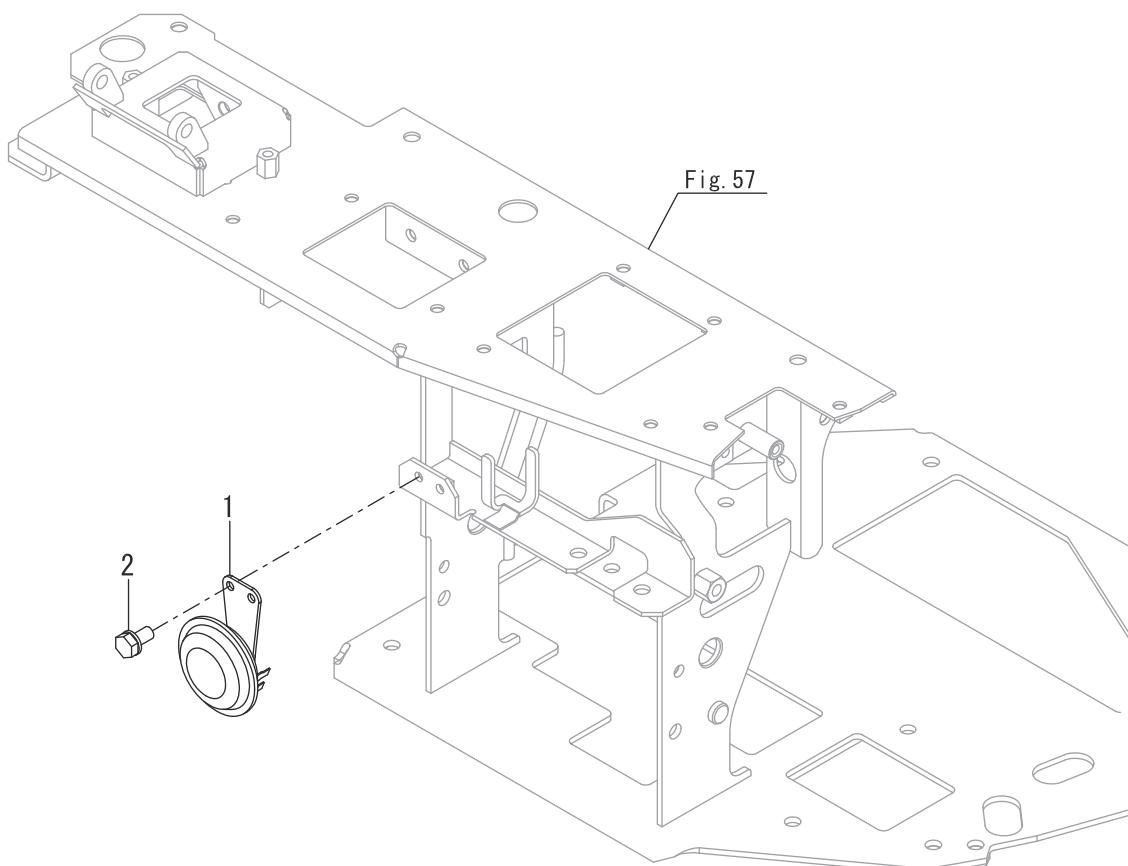
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 24 - ELECTRIC (BATTERY NEGATIVE CABLE)

Ref.

No.	Part No.	Description	Qty.
1	50289038	NEGATIVE BATTERY CABLE	1
2	138111	WASHER/POLISHED	1
3	50282515	BOLT W/WASHER M10X20	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 25 - ELECTRIC (HORN)



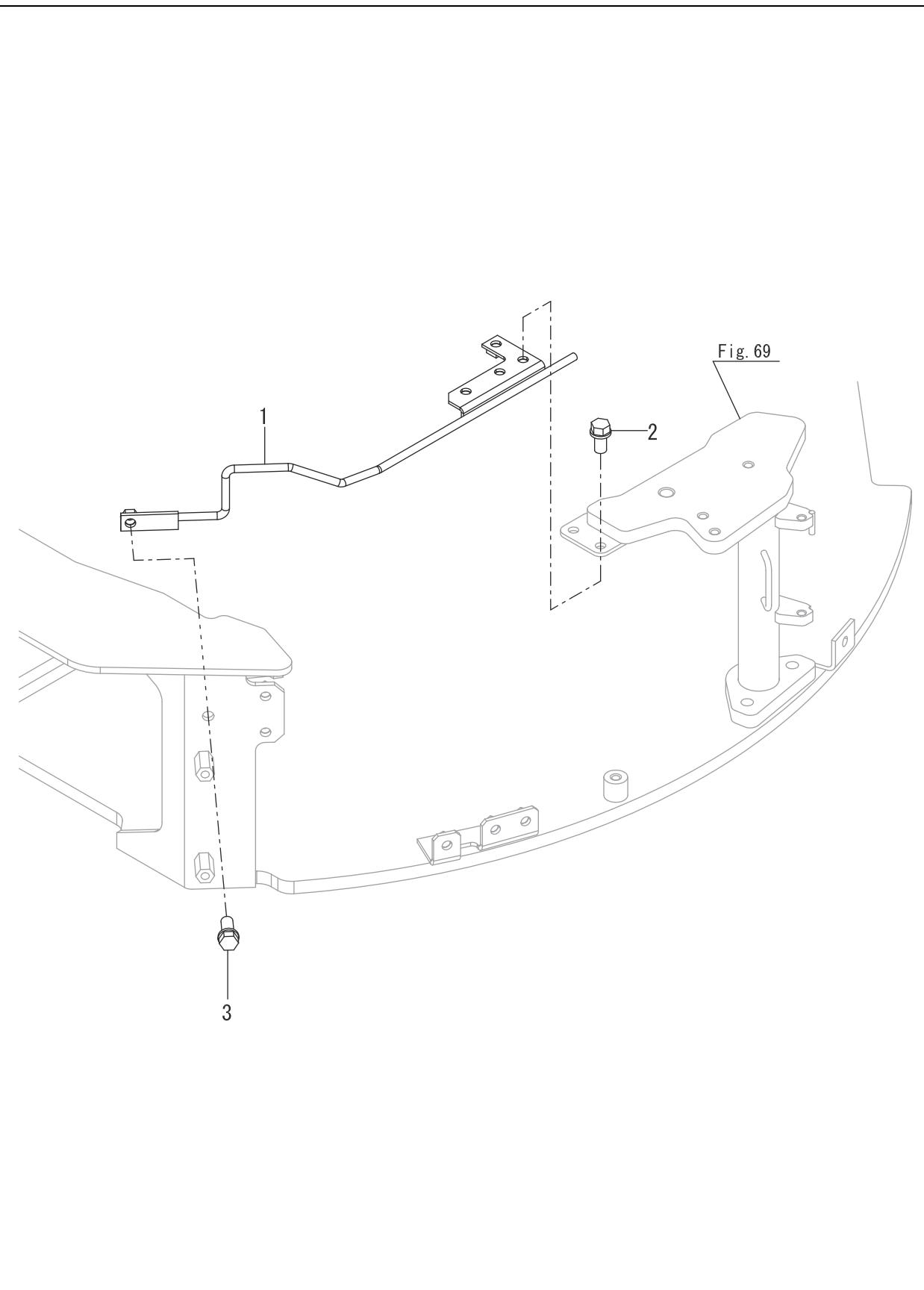
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 25 - ELECTRIC (HORN)

Ref.

No.	Part No.	Description	Qty.
1	50282351	HORN	1
2	50282501	BOLT M 6X 12	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 26 - ELECTRIC (HARNESS GUIDE)



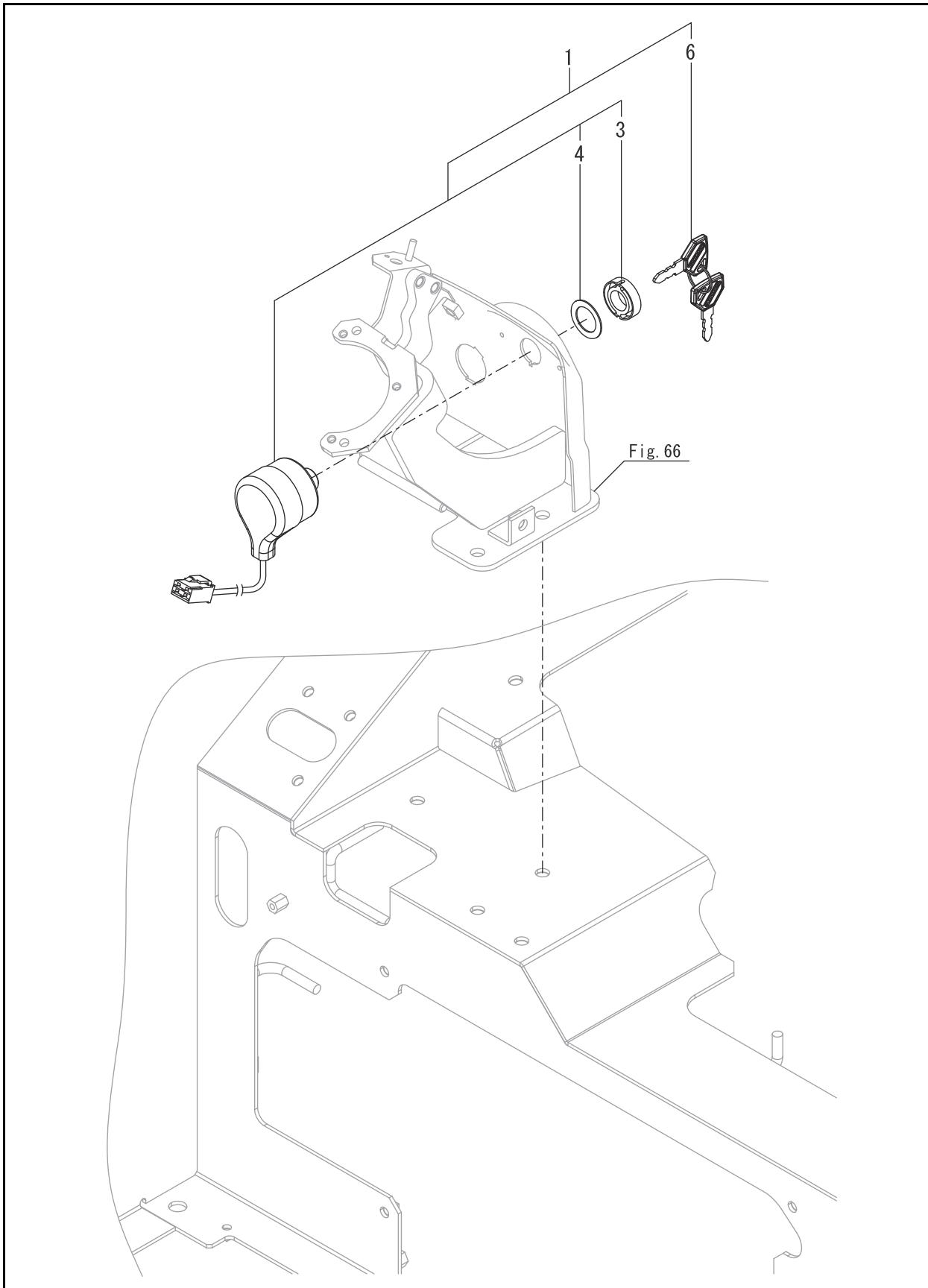
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 26 - ELECTRIC (HARNESS GUIDE)

Ref.

No.	Part No.	Description	Qty.
1	50287539	GUIDE ASSY/HARNESS	1
2	50282515	BOLT W/WASHER M10X20	2
3	50282516	BOLT W/WASHER M10X25	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 27 - ELECTRIC (STARTING SWITCH)



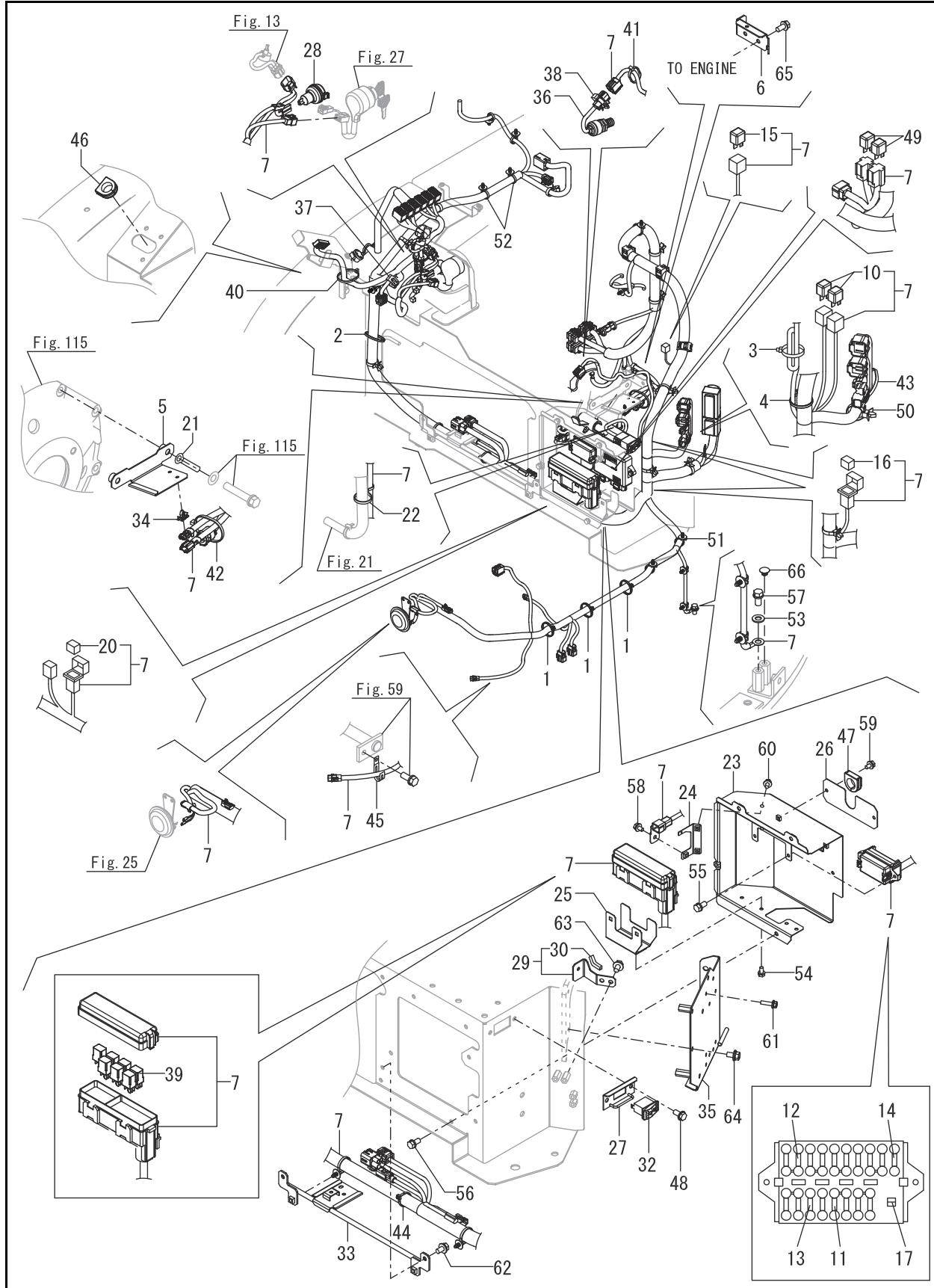
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 27 - ELECTRIC (STARTING SWITCH)

Ref.

No.	Part No.	Description	Qty.
1	50288097	SWITCH/STARTING	1
3	50288101	NUT/RING	1
4	50288102	WASHER	1
6	50288194	KEY ASSY, SET OF 2	1

Z45 GEN:2 - COMPACT EXCAVATOR

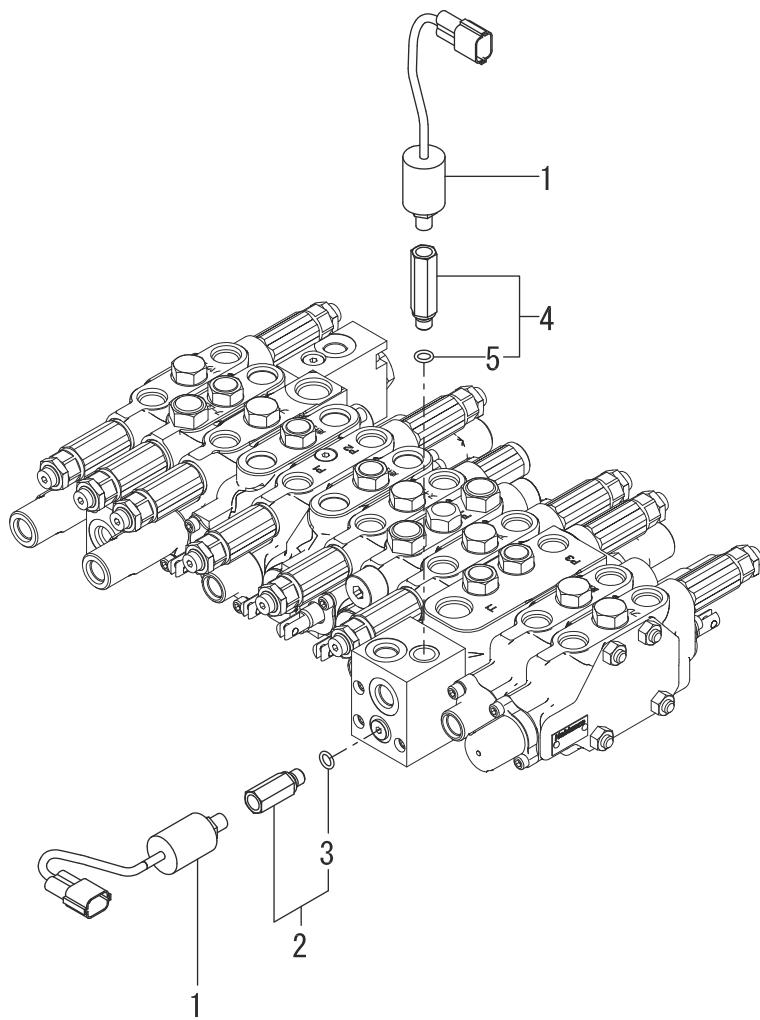
FIG. 28 - ELECTRIC (AROUND SEAT)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 28 - ELECTRIC (AROUND SEAT)

Ref.	No.	Part No.	Description	Qty.	Ref.	No.	Part No.	Description	Qty.
	1	50280798	BAND 300	3		53	138111	WASHER/POLISHED	1
	2	50280798	BAND 300	1		54	50282501	BOLT M 6X 12	2
	3	50280798	BAND 300	1		55	50284095	BOLT M6 X 20	2
	4	50280798	BAND 300	1		56	50282506	BOLT W/WASHER M8X16	4
	5	50289042	BRACKET	1		57	50282515	BOLT W/WASHER M10X20	1
	6	50289043	BRACKET	1		58	50282530	BOLT M 6X 12	1
	7	50289045	HORN WIRE HARNESS	1		59	50282530	BOLT M 6X 12	2
	10	50289425	RESISTOR 2W R120	2		60	50282530	BOLT M 6X 12	2
	11	50286740	FUSE	6		61	425-35450	BOLT M6 X 25	4
	12	50286741	FUSE	4		62	50282533	BOLT M 8X 16	2
	13	50288854	FUSE, 20A	6		63	50282533	BOLT M 8X 16	2
	14	50289426	FUSE 25A	6		64	50282533	BOLT M 8X 16	3
	15	50289430	DIODE 090 1.5A	1		65	425-34733	BOLT M8 X 16 PLATED	2
	16	50288861	DIODE 1.5A	2		66	50280920	TREE CLIP	1
	17	50288122	MINI FUSE PULLER	1					
	20	50288860	DIODE 3A	4					
	21	50280799	CLAMP 10X70	1					
	22	50280802	BAND	1					
	23	50289051	RELAY BOX	1					
	24	50287541	STAY ASSY/CONNECTOR	1					
	25	50289052	RELAY BOX BRACKET	1					
	26	50287542	COVER/FUSE	1					
	27	50282141	PLATE ASSY,SWITCH	1					
	28	50281499	SOCKET ASSY	1					
	29	50289054	BRACKET ASSY	1					
	30	50289055	SEAL	1					
	32	50281601	SWITCH, ENGINE STOP	1					
	33	50289058	HARNESS SUPPORT ASSY	1					
	34	50289060	CONNECTOR CLIP	1					
	35	50289061	PLATE ASSY	1					
	36	50284018	SWITCH ASSY	1					
	37	50284002	CLAMP, WIRE HARNESS	1					
	38	50284003	BAND	1					
	39	50288856	RELAY	7					
	40	50282352	BAND	1					
	41	50282352	BAND	1					
	42	50282352	BAND	1					
	43	50282352	BAND	1					
	44	50282352	BAND	1					
	45	50288855	CLAMP	1					
	46	50284224	GROMMET 26	1					
	47	50284224	GROMMET 26	1					
	48	50281318	BOLT 8X 16	2					
	49	197663	RELAY (ISO 70A)	2					
	50	50282373	BAND CLAMP	1					
	51	50284027	LAMP, BAND B	1					
	52	50284027	LAMP, BAND B	2					

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 29 - ELECTRIC (PRESSURE SWITCH)



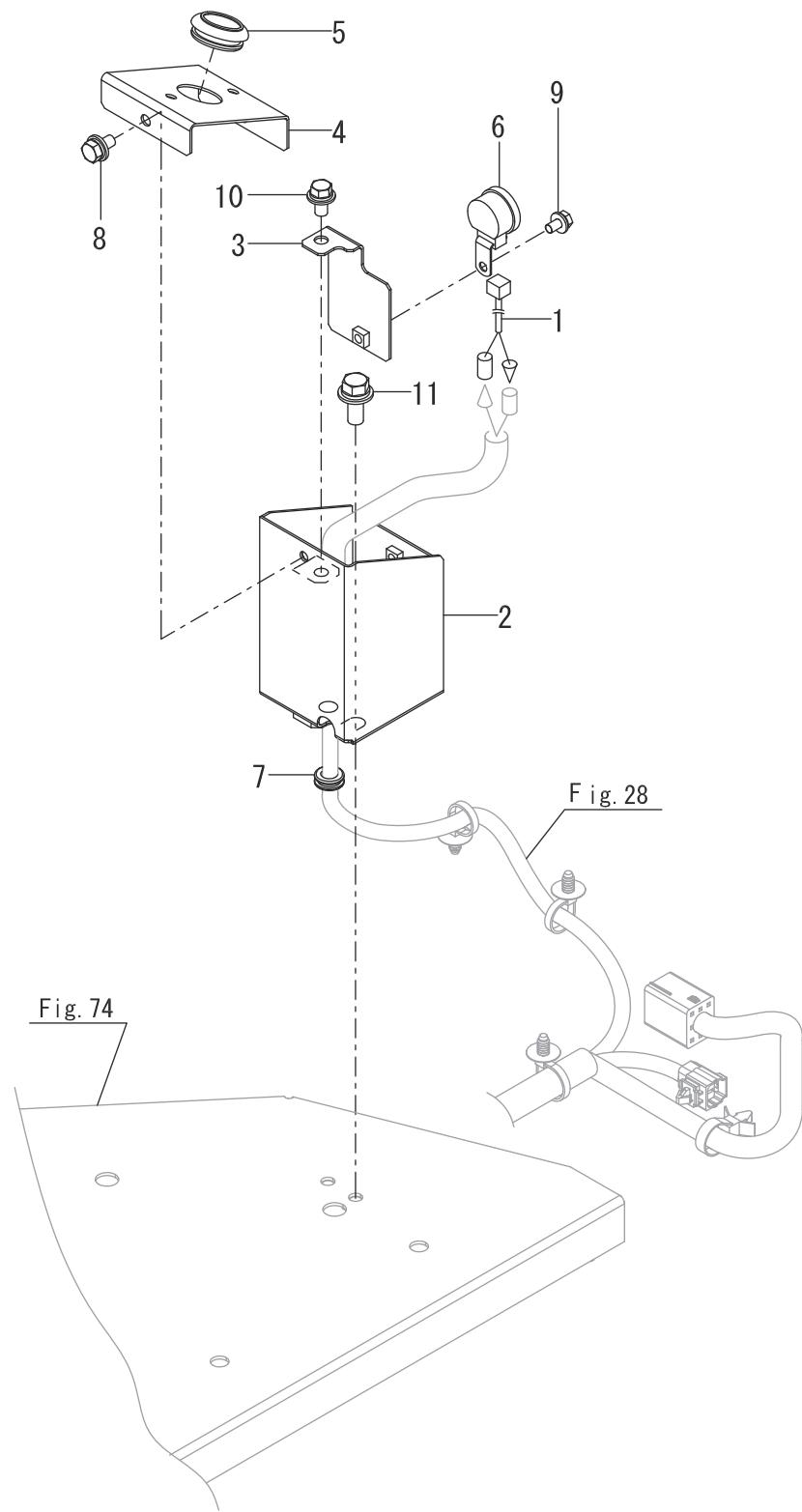
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 29 - ELECTRIC (PRESSURE SWITCH)

Ref.

No.	Part No.	Description	Qty.
1	50281182	PRESSER SWITCH,ASSY	2
2	50283773	CONNECTOR G1/8-R1/8	1
3	50282468	O-RING 1B P-8.0	1
4	50286561	CONNECTOR	1
5	50282468	O-RING 1B P-8.0	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 30 - ELECTRIC (TRAVEL BUZZER)



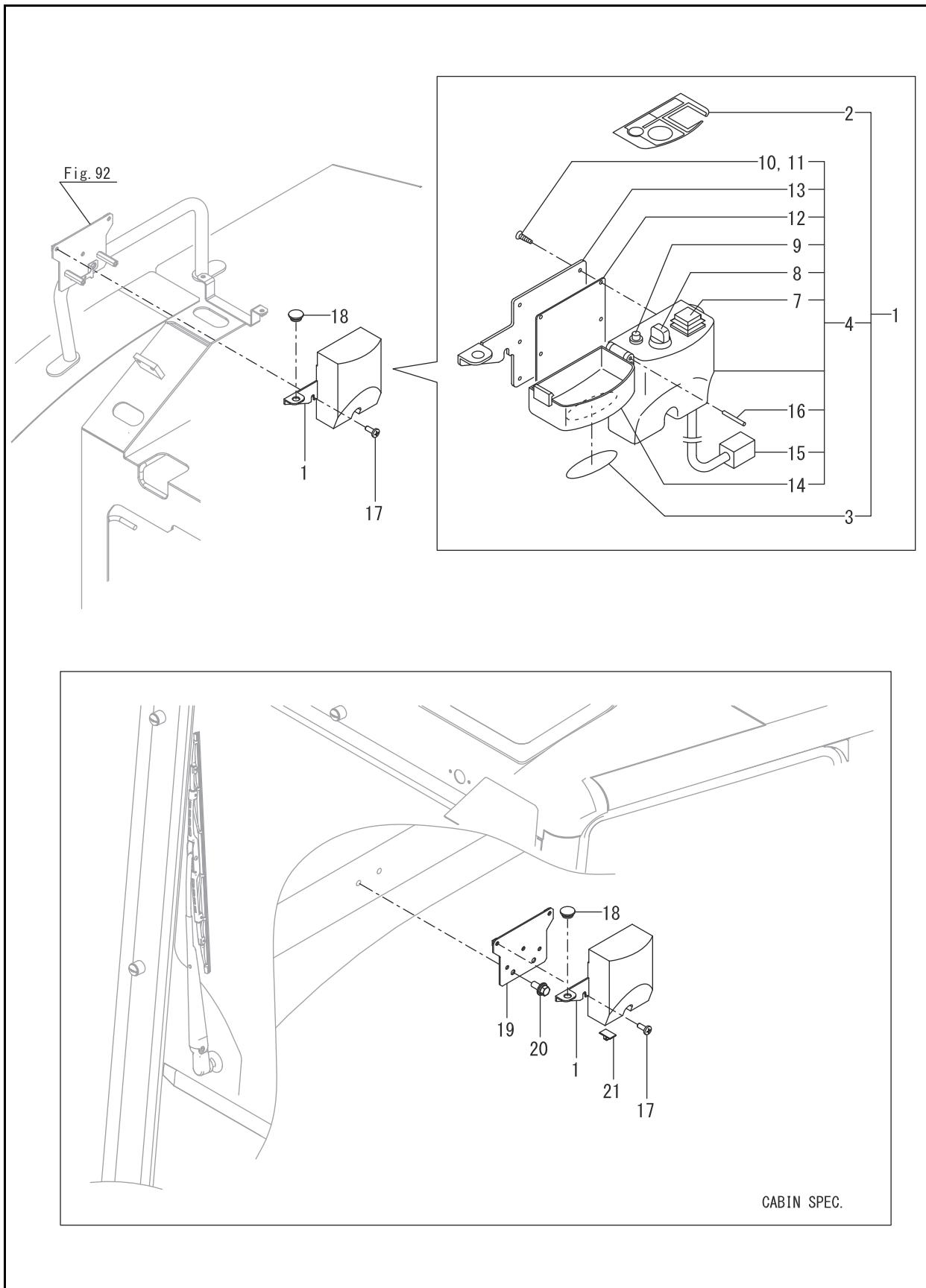
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 30 - ELECTRIC (TRAVEL BUZZER)

Ref.

No.	Part No.	Description	Qty.
1	50287526	HARNESS/BUZZER	1
2	50288947	BOX	1
3	50288948	BRACKET	1
4	50288949	PLATE	1
5	50281128	GROMMET 30	1
6	50288093	BUZZER/BACK	1
7	50287084	GROMMET	1
8	50282530	BOLT M 6X 12	2
9	50282531	BOLT M 6X 16	1
10	50282533	BOLT M 8X 16	1
11	50282534	BOLT M 8X 20	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 31 - ELECTRIC (SWITCH BOX:QUICK COUPLER SPEC.)



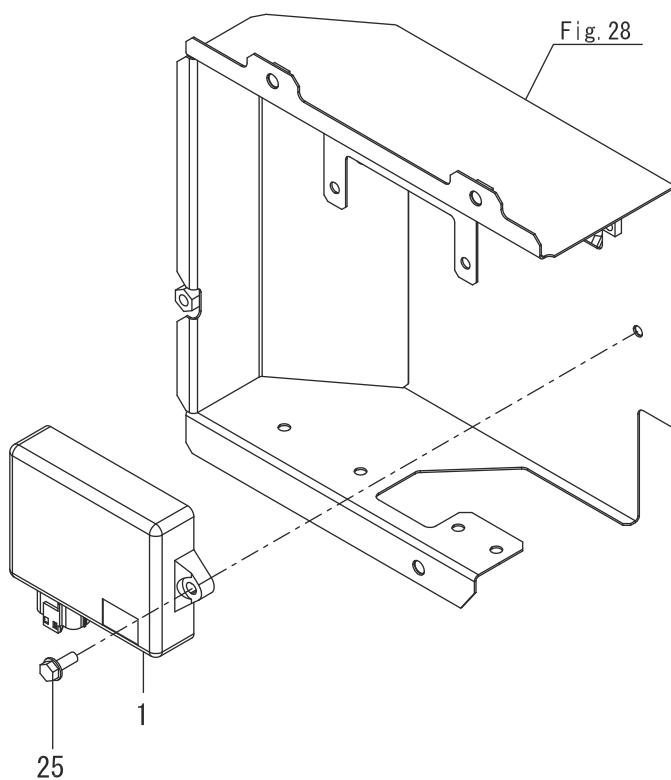
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 31 - ELECTRIC (SWITCH BOX:QUICK COUPLER SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50288886	SWITCH BOX ASSY	1
2	50281179	LABEL/SWITCH	1
3	50301147	DECAL/POWER-A-TACH	1
4	50288925	SWITCH BOX	1
7	50281364	SWITCH ASSY(GEN)	1
8	50281365	SWITCH ASSY(CONTR)	1
9	50281366	INDICATOR LAMP(CP)	1
10	50281367	TAPPING SCREWS	6
11	50281368	TAPPING SCREWS	2
12	50281369	PACKING	1
13	50281370	BRACKET	1
14	50281371	CASE, UPPER	1
15	50281372	CODE CP 4P	1
16	50282412	SPRING PIN 3X28	1
17	50280804	SCREW	3
18	50280948	PLUG	1
19	50287555	STAY ASSY/SWITCH BOX (w/cabin only)	1
20	50282534	BOLT M 8X 20 (w/cabin only)	2
21	50288190	STAPLE P-25 (w/cabin only)	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 32 - ELECTRIC (ESS CONTROLLER, W/ AC ONLY)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 32 - ELECTRIC (ESS CONTROLLER, W/ AC ONLY)

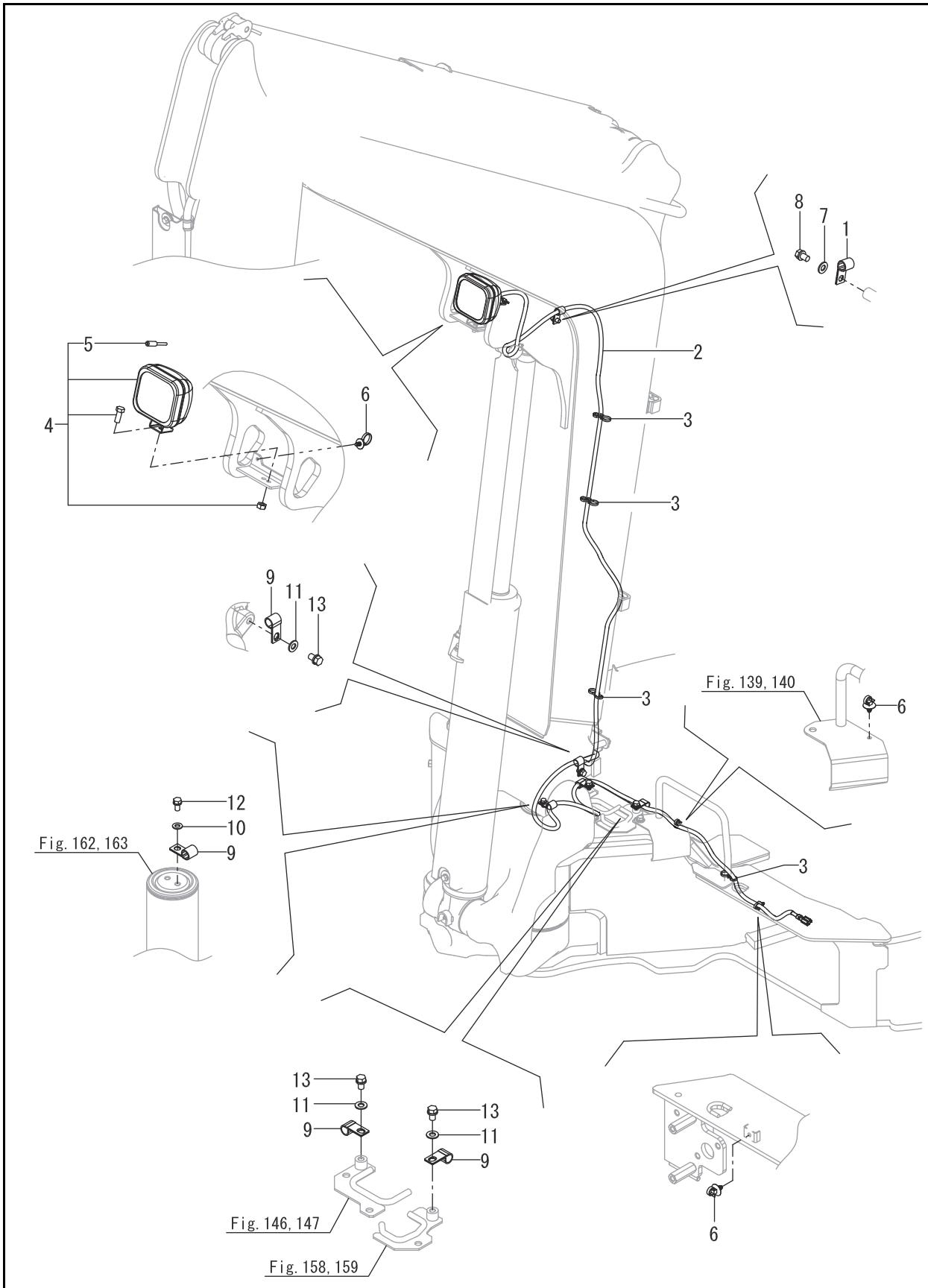
Ref.

No.	Part No.	Description	Qty.
1	50288116	CONTROLLER (ESS) *	1
25	425-35164	BOLT M6 X 16 PLATED	2

NOTE: * To expedite ordering a replacement ESS Controller, contact Customer Service and have the machine model number and serial number at hand.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 33 - ELECTRIC (WORK LAMP)



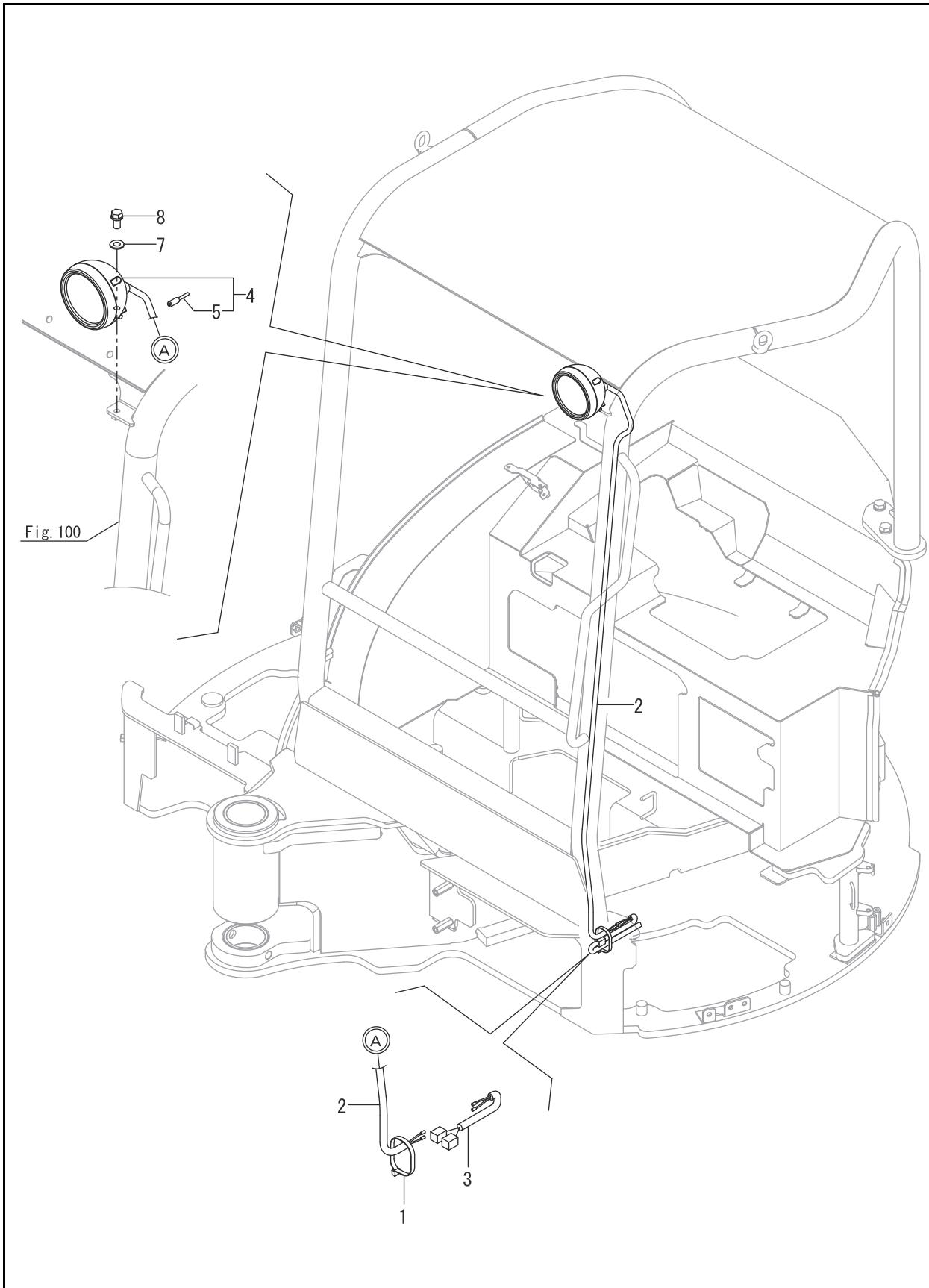
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 33 - ELECTRIC (WORK LAMP)

Ref.

No.	Part No.	Description	Qty.
1	50287514	CLAMP/WRC15-11	1
2	50289046	WORK LIGHT HARNESS	1
3	50280802	BAND	4
4	50287550	LAMP ASSY/WORK	1
5	50286743	BULB 12V 55W	1
6	50284027	LAMP, BAND B	4
7	138111	WASHER/POLISHED	1
8	50282514	BOLT M10X 16	1
9	50287514	CLAMP/WRC15-11	4
10	50282380	WASHER 8, POLISHED	1
11	138111	WASHER/POLISHED	3
12	50282506	BOLT W/WASHER M8X16	1
13	50282514	BOLT M10X 16	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 34 - ELECTRIC (CANOPY LAMP)



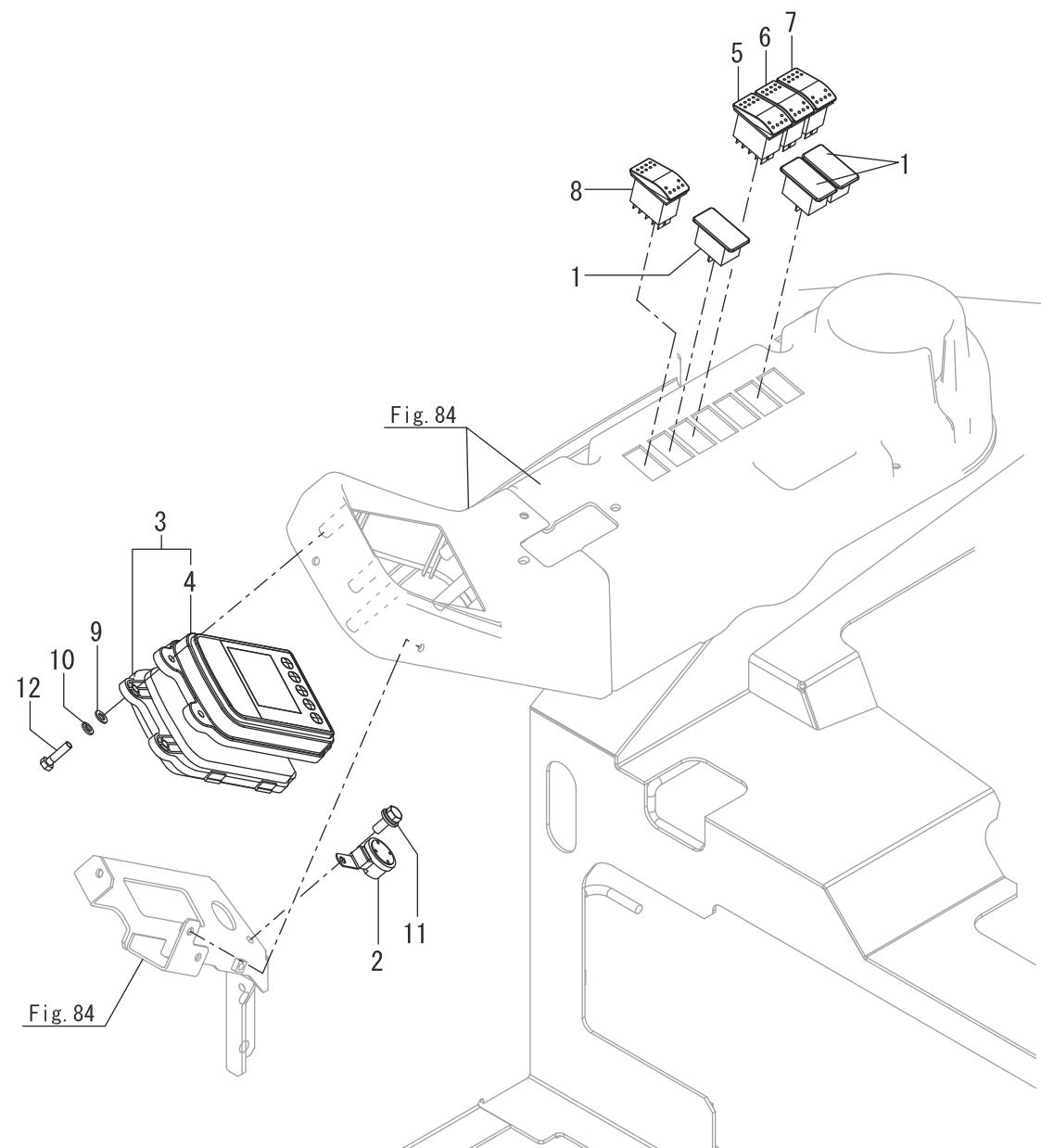
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 34 - ELECTRIC (CANOPY LAMP)

Ref.

No.	Part No.	Description	Qty.
1	50280798	BAND 300	1
2	50287531	HARNESS/LAMP B	1
3	50289047	DOME LIGHT HARNESS	1
4	50288112	LAMP/WORKING	1
5	50286744	BULB 12V 55W	1
7	138111	WASHER/POLISHED	1
8	50282515	BOLT W/WASHER M10X20	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 35 - ELECTRIC (INSTRUMENT PANEL:CANOPY SPEC.)



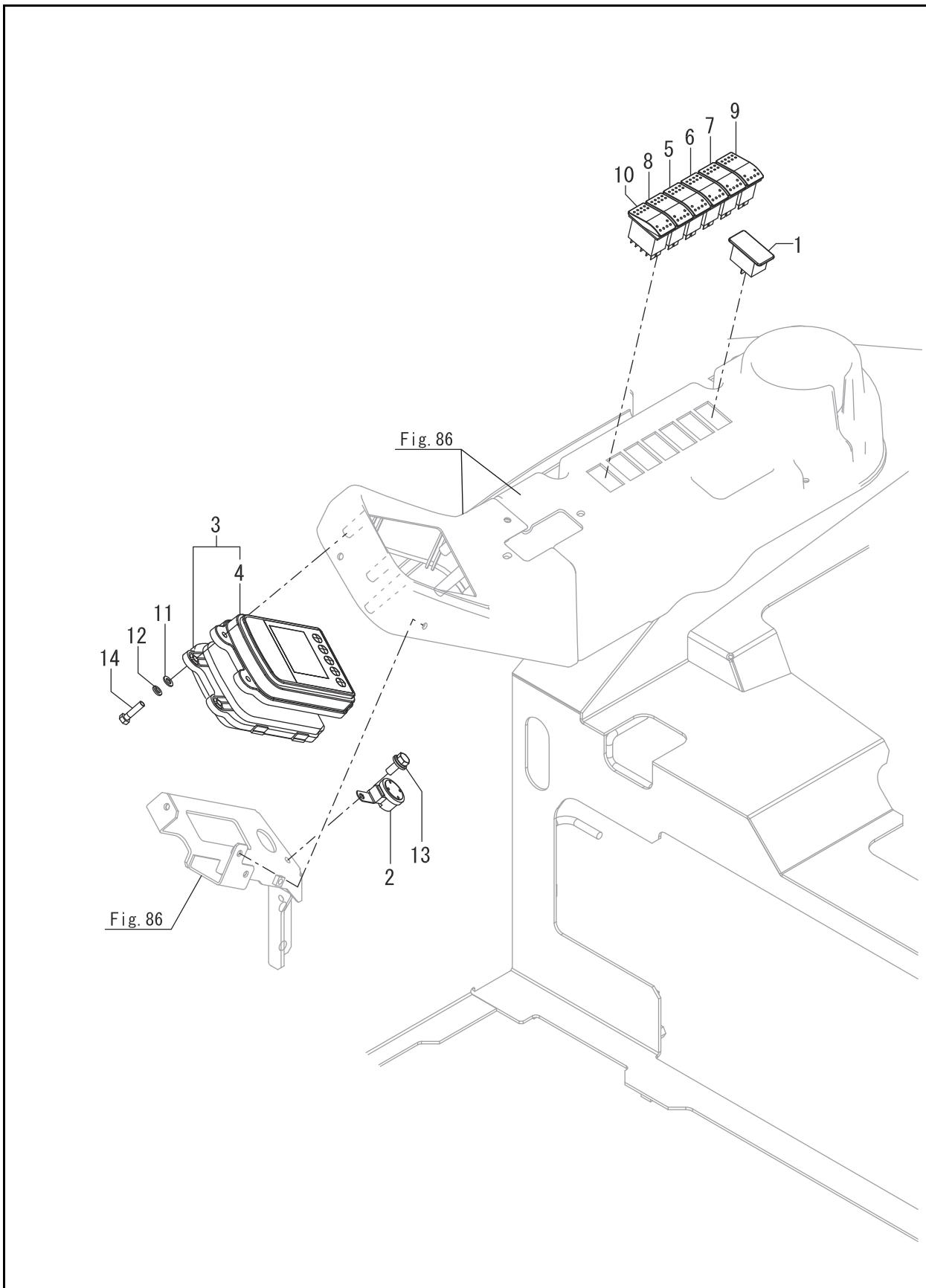
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 35 - ELECTRIC (INSTRUMENT PANEL:CANOPY SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50281321	PANEL PLUG	3
2	50287074	BUZZER	1
3	50288279	DISPLAY ASSY	1
4	50288894	MONITOR DISPLAY	1
5	50288950	SWITCH/LIGHT	1
6	50287546	SWITCH/ECO	1
7	50287547	SWITCH/AD	1
8	50289062	DPF SWITCH	1
9	50284040	WASHER 5, POLISHED	4
10	425-34968	SPRING WASHER 5	4
11	50282530	BOLT M 6X 12	1
12	50288176	BOLT	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 36 - ELECTRIC (INSTRUMENT PANEL:CABIN HEATER SPEC.)



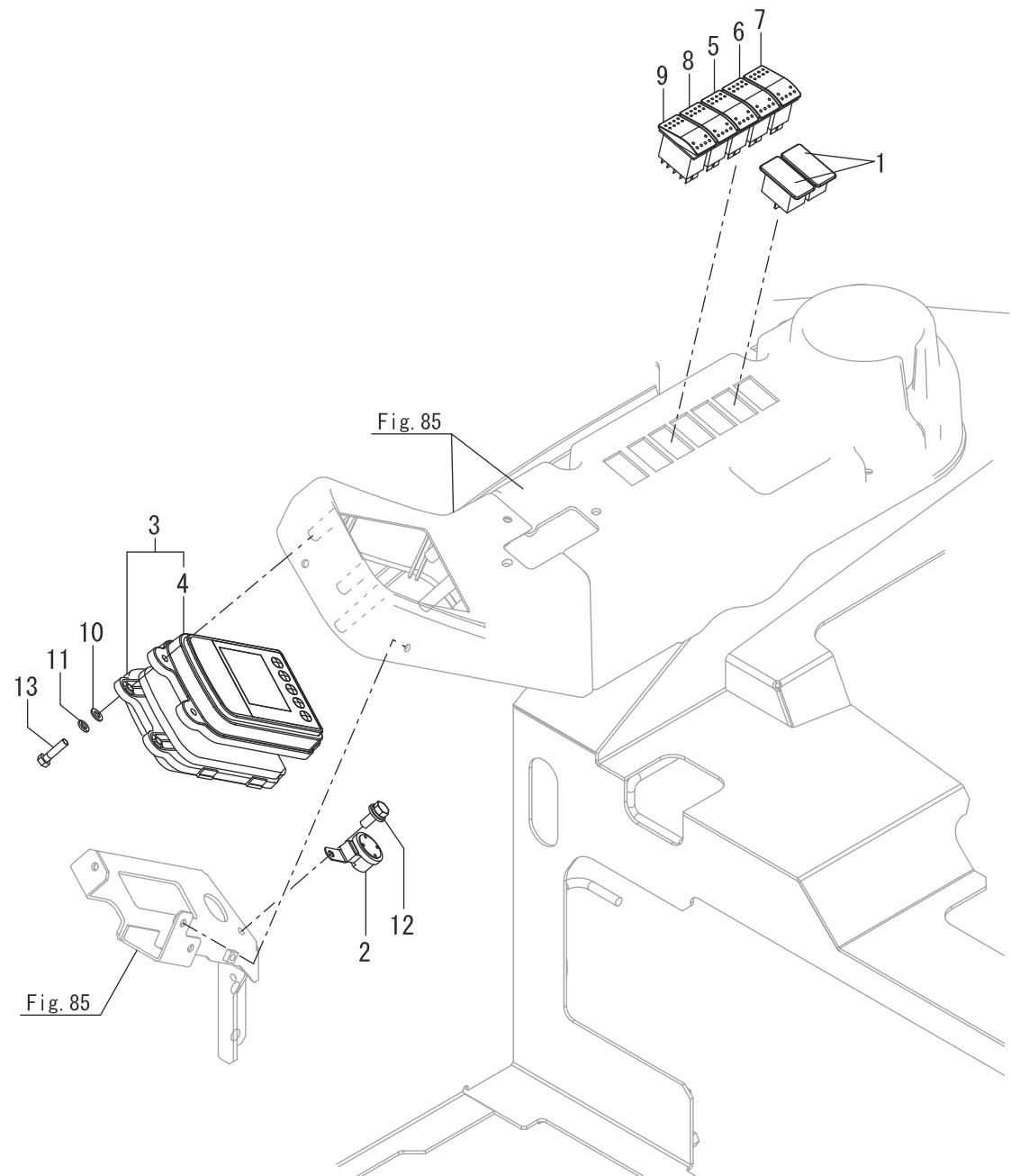
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 36 - ELECTRIC (INSTRUMENT PANEL:CABIN HEATER SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50281321	PANEL PLUG	1
2	50287074	BUZZER	1
3	50288279	DISPLAY ASSY	1
4	50288894	MONITOR DISPLAY	1
5	50288950	SWITCH/ LIGHT	1
6	50287546	SWITCH/ECO	1
7	50287547	SWITCH/AD	1
8	50288951	SWITCH/WIPER	1
9	50288952	SWITCH/HEATER	1
10	50289062	DPF SWITCH	1
11	50284040	WASHER 5, POLISHED	4
12	425-34968	SPRING WASHER 5	4
13	50282531	BOLT M 6X 16	1
14	50288176	BOLT	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 37 - ELECTRIC (INSTRUMENT PANEL:CABIN A/C SPEC.)



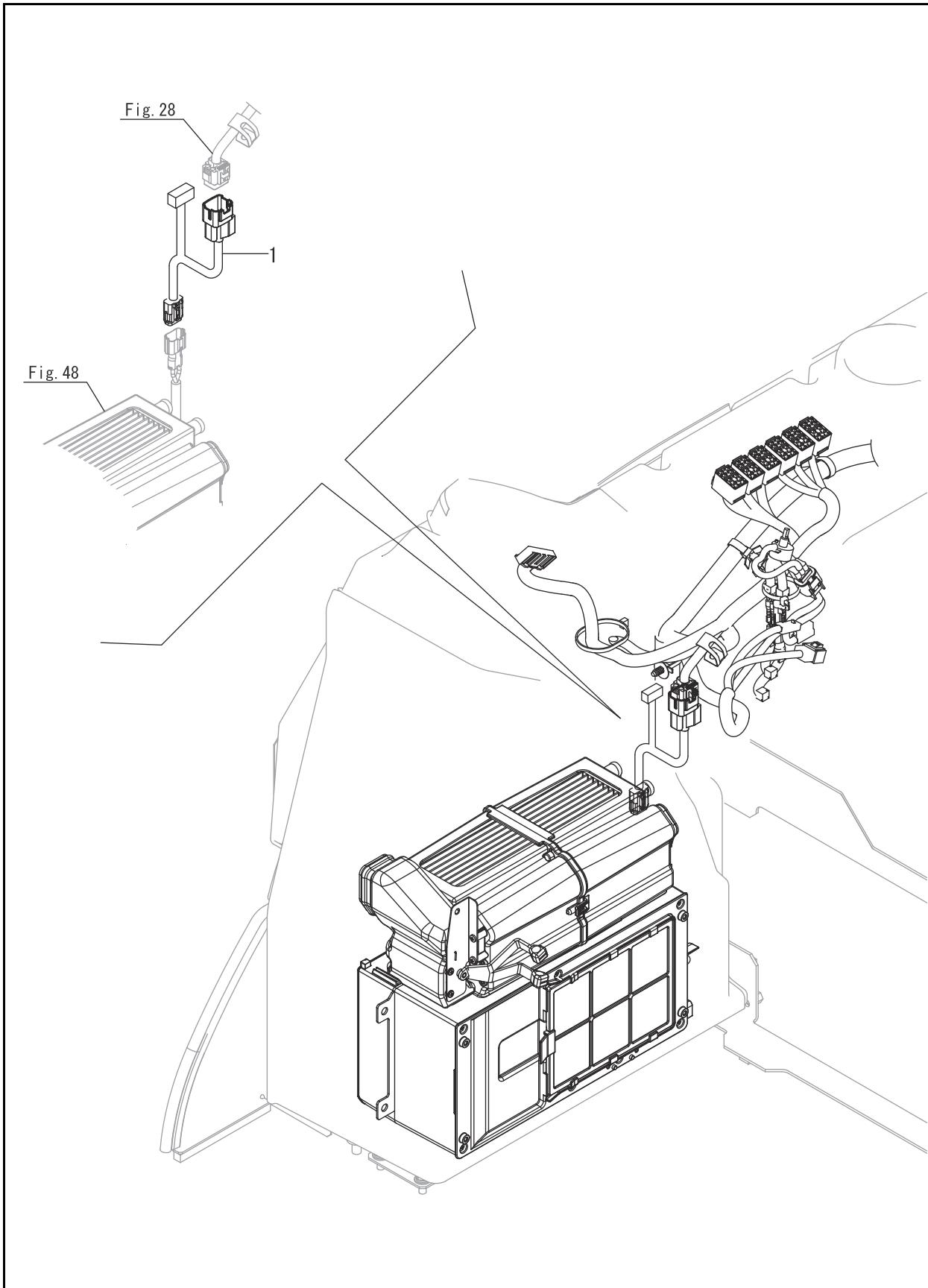
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 37 - ELECTRIC (INSTRUMENT PANEL:CABIN A/C SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50281321	PANEL PLUG	2
2	50287074	BUZZER	1
3	50288279	DISPLAY ASSY	1
4	50288894	MONITOR DISPLAY	1
5	50288950	SWITCH/LIGHT	1
6	50287546	SWITCH/ECO	1
7	50287547	SWITCH/AD	1
8	50288951	SWITCH/WIPER	1
9	50289062	DPF SWITCH	1
10	50284040	WASHER 5, POLISHED	4
11	425-34968	SPRING WASHER 5	4
12	50282530	BOLT M 6X 12	1
13	50288176	BOLT	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 38 - ELECTRIC (HEATER HARNESS)

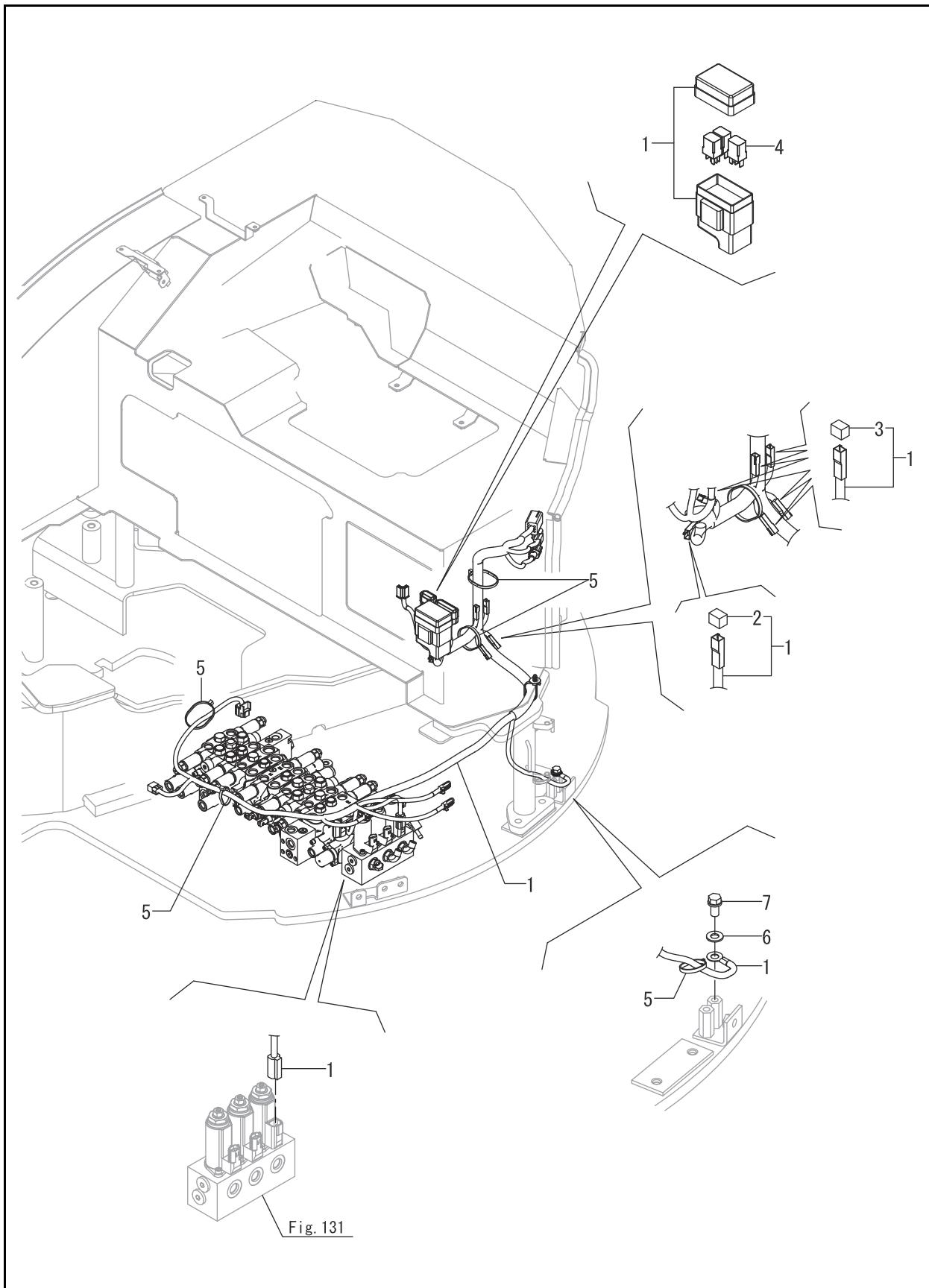


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 38 - ELECTRIC (HEATER HARNESS)

Ref.	No. Part No.	Description	Qty.
1	50289050	CAB HEATER HARNESS	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 39 - ELECTRIC (WORK CONTROL)



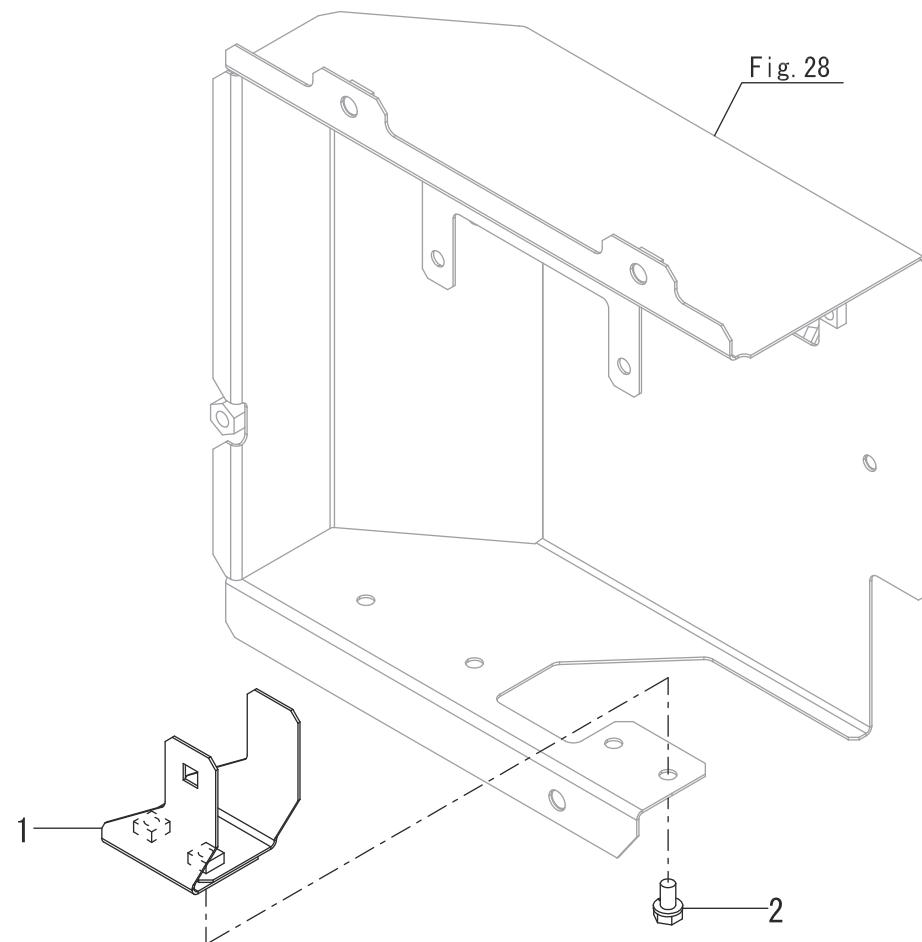
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 39 - ELECTRIC (WORK CONTROL)

Ref.

No.	Part No.	Description	Qty.
1	50289048	WORK CONTROL HARNESS	1
2	50289430	DIODE 090 1.5A	1
3	50288860	DIODE 3A	5
4	50288856	RELAY	3
5	50282352	BAND	5
6	138111	WASHER/POLISHED	1
7	50282515	BOLT W/WASHER M10X20	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 40 - ELECTRIC (RELAY BRACKET)



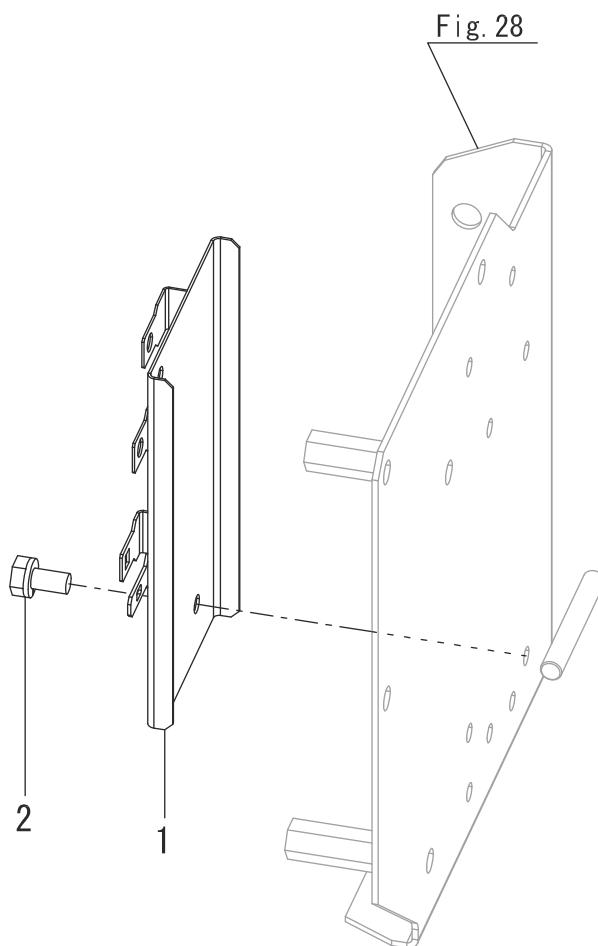
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 40 - ELECTRIC (RELAY BRACKET)

Ref.

No.	Part No.	Description	Qty.
1	50289053	RELAY BOX BRACKET	1
2	50282501	BOLT M 6X 12	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 41 - ELECTRIC (HARNESS MOUNT)

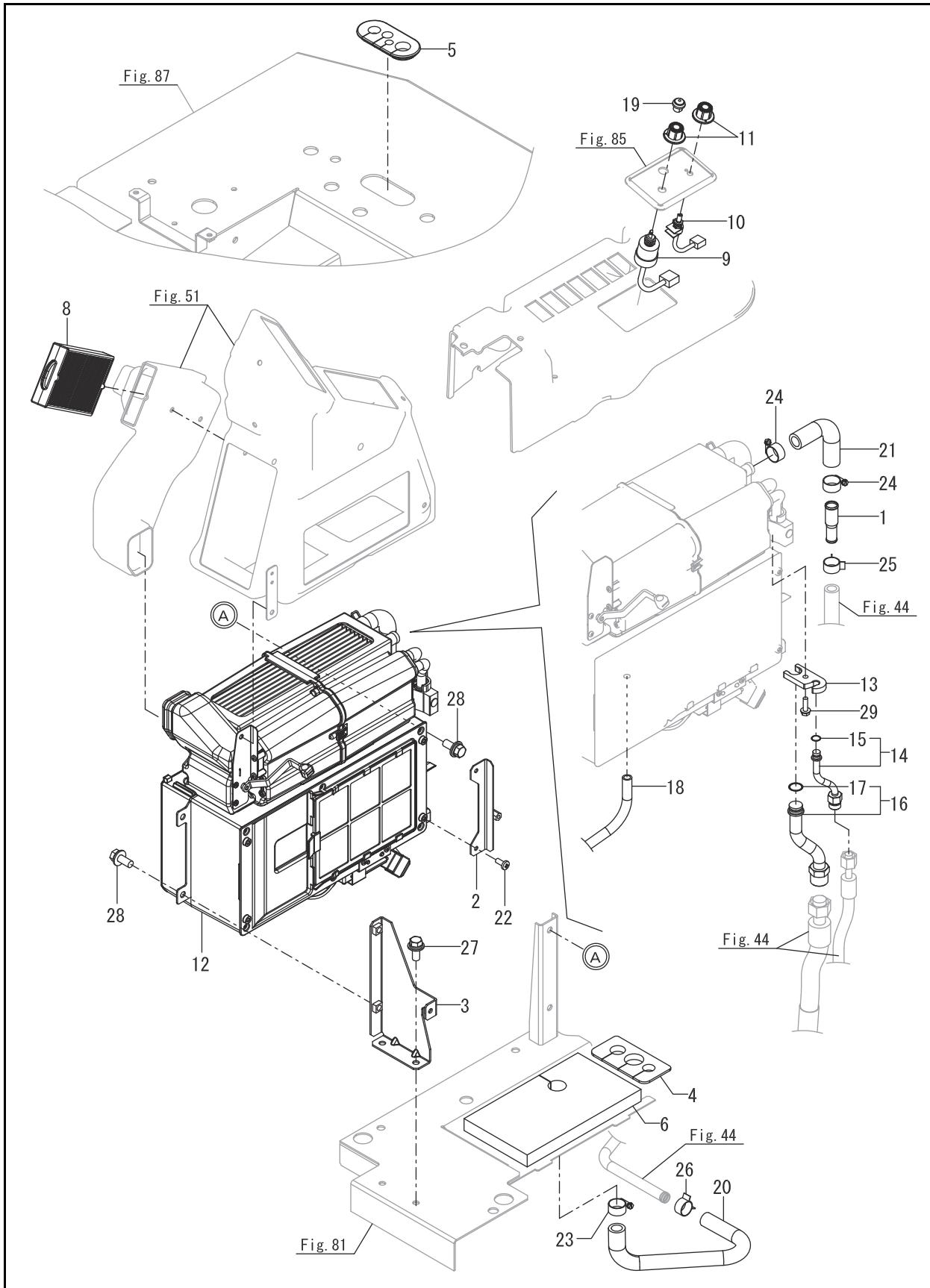


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 41 - ELECTRIC (HARNESS MOUNT)

Ref.

No.	Part No.	Description	Qty.
1	50289059	BRACKET ASSY	1
2	50282501	BOLT M 6X 12	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 42 - AIR CONDITIONER (UNIT)(W/HEATER)



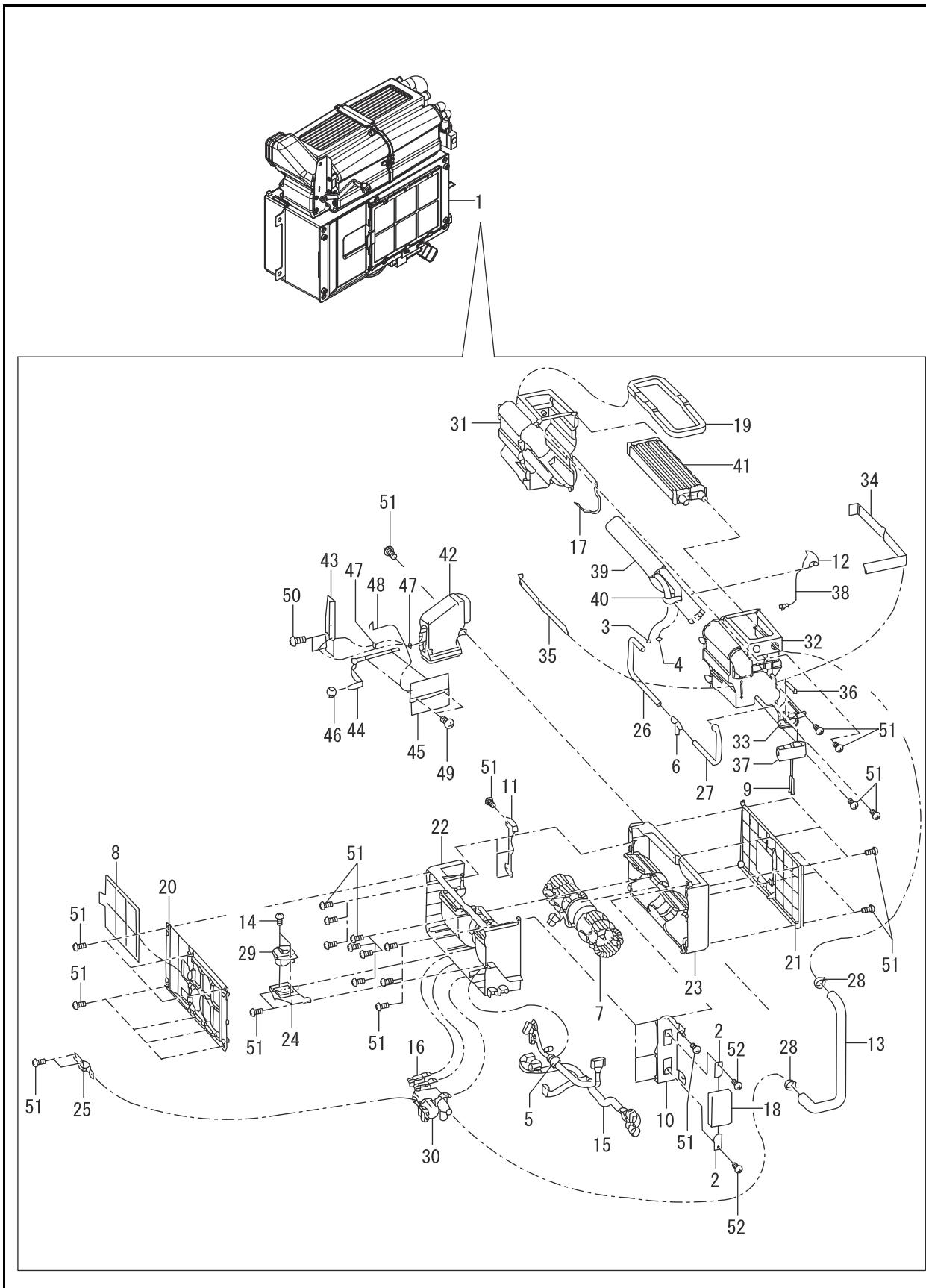
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 42 - AIR CONDITIONER (UNIT)(W/HEATER)

Ref.

No.	Part No.	Description	Qty.
1	50287121	JOINT/HOSE	1
2	50287558	STAY ASSY/AC R	1
3	50287559	BRACKET ASSY/AC F	1
4	50289064	GROMMET	1
5	50287562	GROMMET/CAB AC	1
6	50289066	PARTITION PAD	1
8	50286728	FILTER	1
9	50288021	SWITCH/BROWER	1
10	50288022	SWITCH/THERMO	1
11	50288023	KNOB	2
12	50287579	AC UNIT (See Fig. 43 for internal components)	1
13	50287580	PLATE/FLANGE	1
14	50289070	HVAC PIPE IN	1
15	50288026	O-RING/L-HOSE	1
16	50289071	HVAC PIPE OUT	1
17	50288025	O-RING/S-HOSE	1
18	50289076	AC DRAIN HOSE	1
19	50287582	SWITCH ASSY/AC	1
20	50289079	HEATER HOSE IN	1
21	50287598	HOSE/HEATER ELBOW	1
22	50288154	SCREW	2
23	50282427	HOSE CLAMP 22	1
24	50282427	HOSE CLAMP 22	2
25	188718	CLAMP 18	1
26	188718	CLAMP 18	1
27	50282534	BOLT M 8X 20	2
28	50282534	BOLT M 8X 20	4
29	188732	BOLT M6 X 20 PLATED	1

Z45 GEN:2 - COMPACT EXCAVATOR

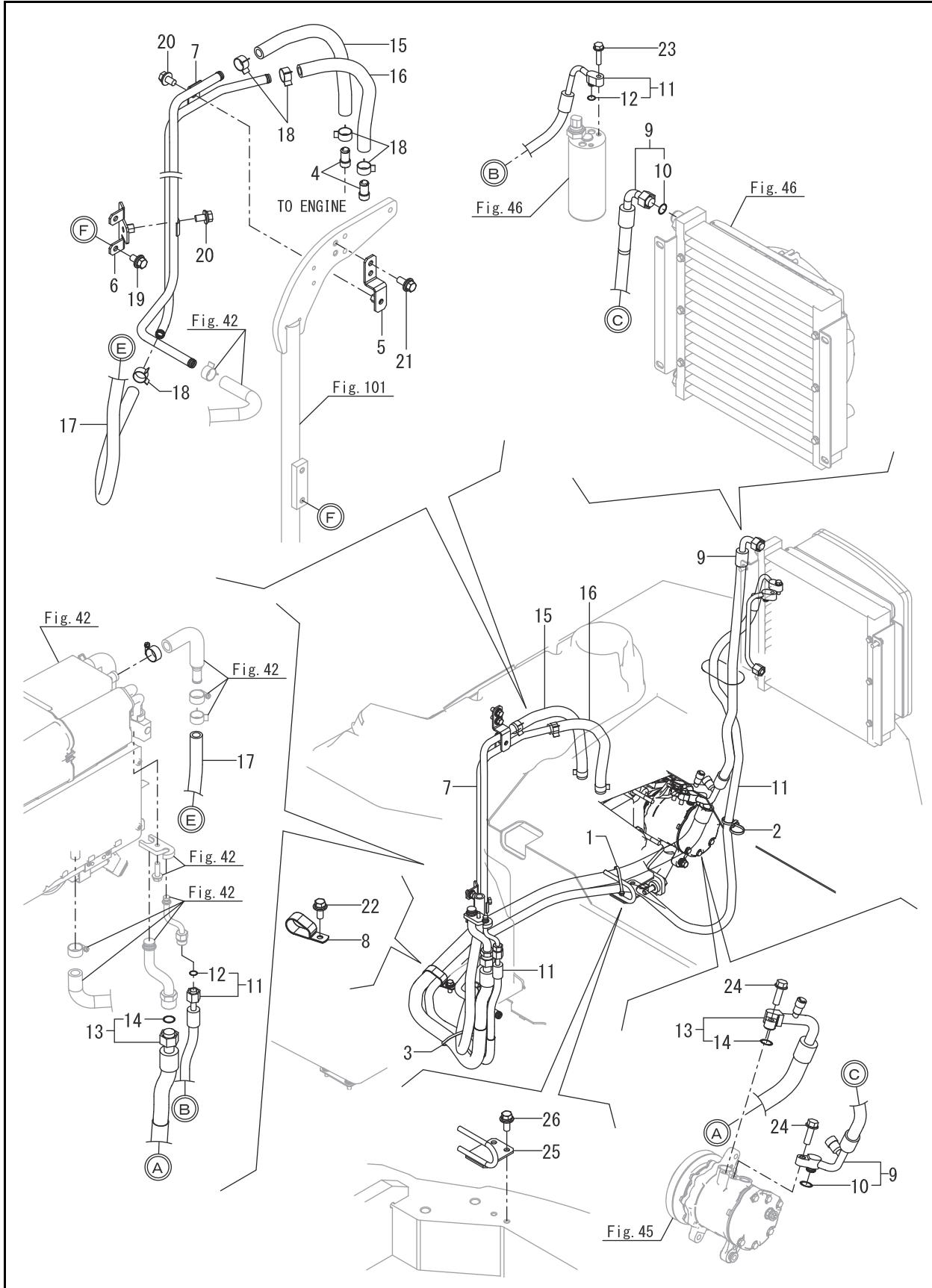
FIG. 43 - AIR CONDITIONER (UNIT INNER PARTS)(W/HEATER)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 43 - AIR CONDITIONER (UNIT INNER PARTS)(W/HEATER)

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	50287579	AC UNIT	1	48	50288315	SPRING	1
2	50288327	BRACKET	2	49	50288316	SCREW 3X6	2
3	50288024	O-RING/D-HOSE	1	50	50288317	SCREW 4X10	2
4	50288025	O-RING/S-HOSE	1	51	50288318	SCREW 4X16	36
5	50288328	INSULATOR	1	52	50288319	SCREW 5X5	2
6	50288329	DRAIN ELBOW	1				
7	50288330	BLOWER MOTOR ASSY	1				
8	50287581	FILTER/REC	1				
9	50288331	SOCKET BOLT M5X40	2				
10	50288280	BRACKET	1				
11	50288281	BRACKET	1				
12	50288332	THERMISTOR HOLDER	1				
13	50288282	HEATER HOSE	1				
14	50288333	PAN HEAD SCREW	2				
15	50288283	HVAC WIRE HARNESS	1				
16	50288284	RELAY	2				
17	50288334	CASE SEAL	1				
18	50288285	HVAC CONTROLLER	1				
19	50288286	HVAC HEATER SEAL	1				
20	50288287	FRONT COVER	1				
21	50288288	BACK COVER	1				
22	50288289	HVAC CASE FRONT	1				
23	50288290	HVAC CASE BACK	1				
24	50288291	RESISTOR MOUNT	1				
25	50288292	VALVE RETAINER	1				
26	50288293	DRAIN HOSE	1				
27	50288294	DRAIN HOSE	1				
28	50288295	HOSE CLAMP	2				
29	50288296	RESISTOR	1				
30	50288297	WATER VALVE ASSY	1				
31	50288298	HVAC CASE TOP	1				
32	50288299	HVAC CASE BOTTOM	1				
33	50288300	COVER ASSY	1				
34	50288301	HVAC SEAL	1				
35	50288302	HVAC SEAL	1				
36	50288303	RETAINER	1				
37	50288304	EXPANSION VALVE	1				
38	50288305	TEMPERATURE SENSOR	1				
39	50288306	EVAPORATOR ASSY	1				
40	50288307	RETAINER	1				
41	50288308	HEATER ASSY	1				
42	50288309	DUCT ASSY	1				
43	50288310	BRACKET	1				
44	50288311	LEVER ASSY	1				
45	50288312	DOOR ASSY	1				
46	50288313	KNOB	1				
47	50288314	SPACER	2				

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 44 - AIR CONDITIONER (PIPING)(W/HEATER)

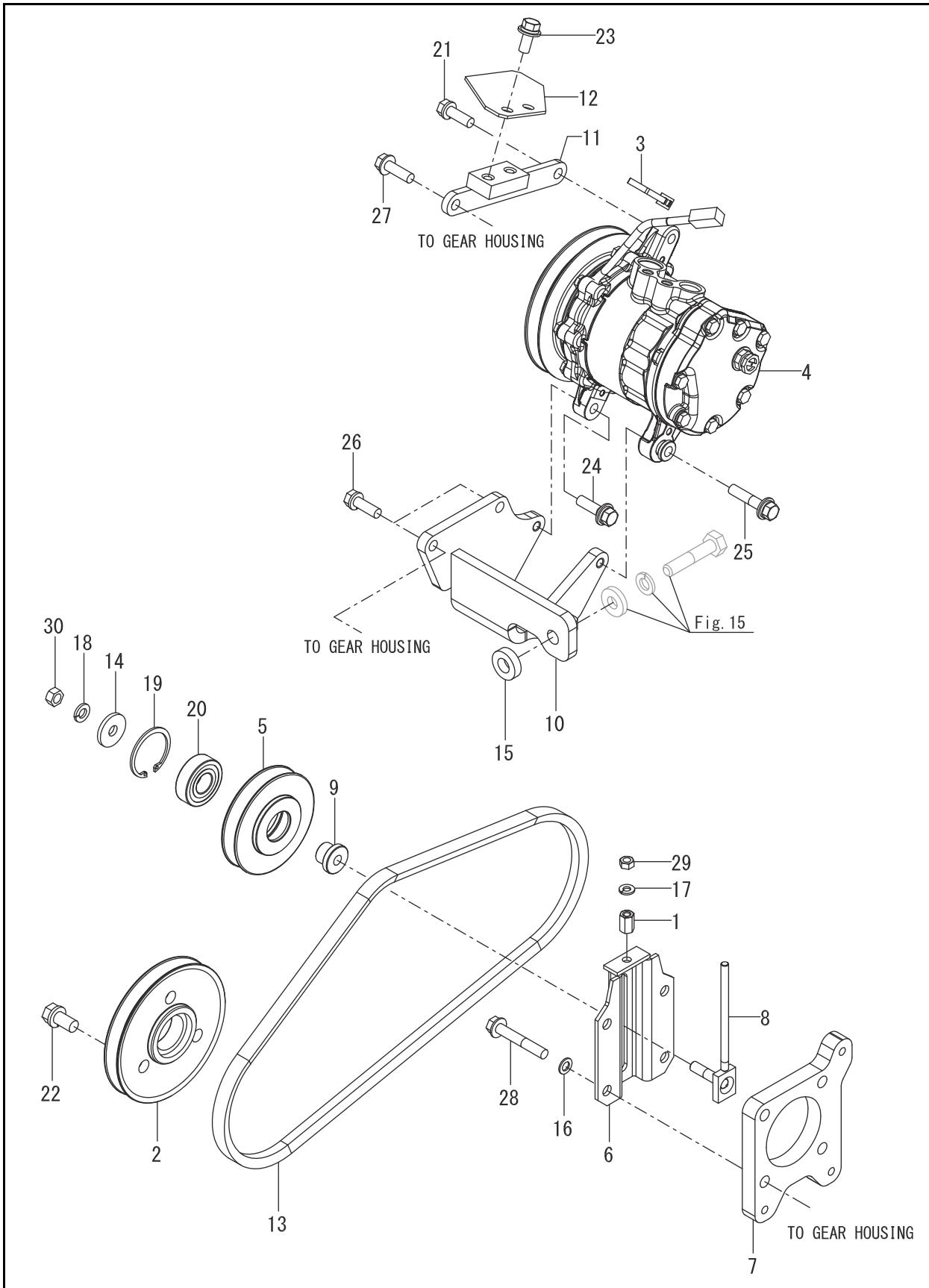


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 44 - AIR CONDITIONER (PIPING)(W/HEATER)

Ref.

No.	Part No.	Description	Qty.
1	50280798	BAND 300	1
2	50280802	BAND	1
3	50282838	CLIP 400,HOSE	1
4	50282711	JOINT 3/8	2
5	50289067	BRACKET	1
6	50289068	BRACKET	1
7	50289072	HEATER PIPE ASSY	1
8	50287585	CLAMP/HOSE 17-27	1
9	50289073	HOSE ASSY	1
10	50288024	O-RING/D-HOSE	2
11	50289074	HOSE ASSY	1
12	50288026	O-RING/L-HOSE	2
13	50289075	HOSE ASSY	1
14	50288025	O-RING/S-HOSE	2
15	50289077	HEATER HOSE	1
16	50289077	HEATER HOSE	1
17	50287599	HOSE/HEATER 640	1
18	188718	CLAMP 18	5
19	50282533	BOLT M 8X 16	2
20	50282533	BOLT M 8X 16	2
21	50282534	BOLT M 8X 20	2
22	50282534	BOLT M 8X 20	1
23	197805	BOLT M6X25 PLATED	1
24	425-34765	BOLT M8 X 25 PLATED	2
25	50289063	HOSE GUIDE	1
26	50282534	BOLT M 8X 20	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 45 - AIR CONDITIONER (ENGINE RELATED)



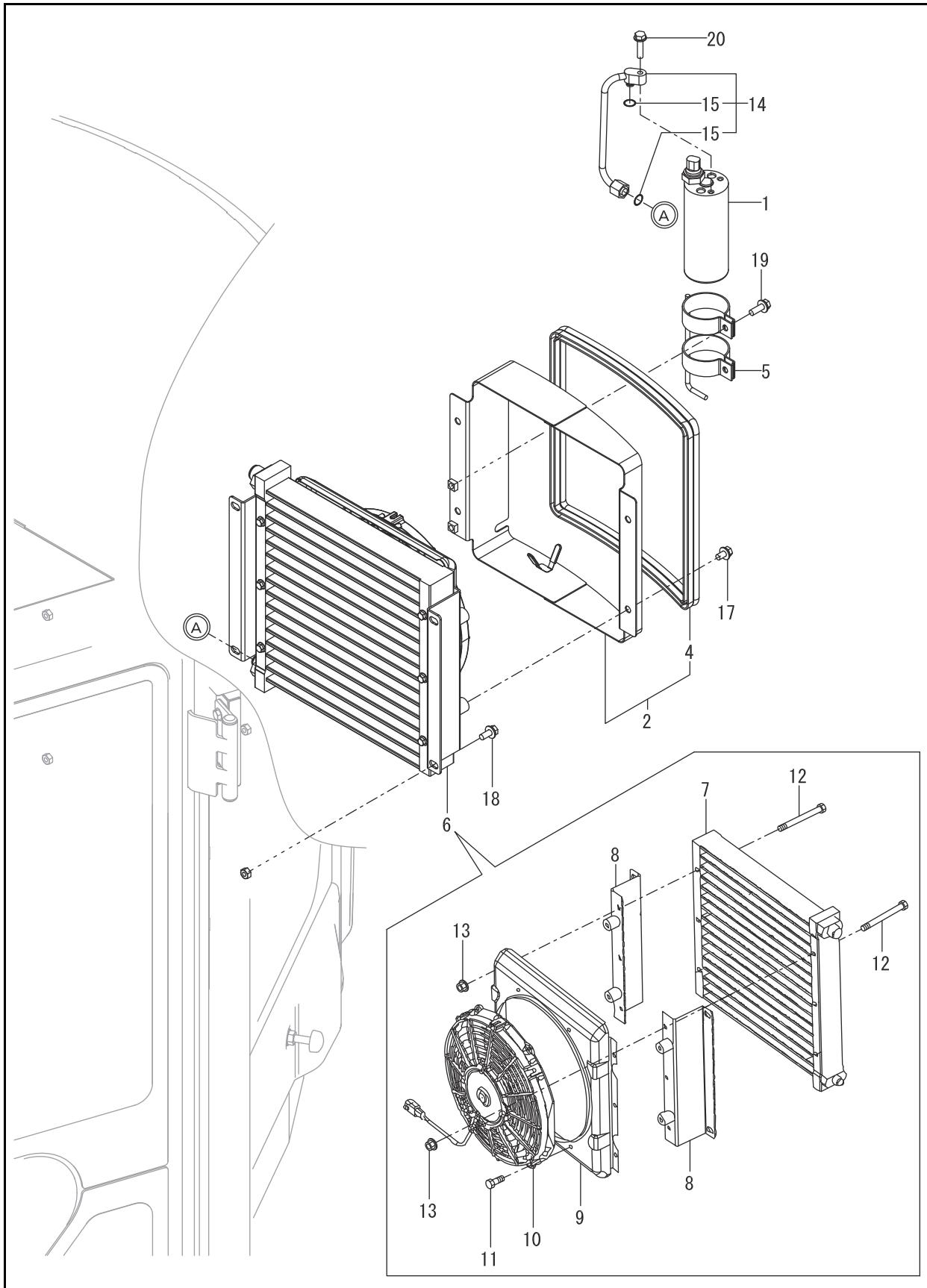
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 45 - AIR CONDITIONER (ENGINE RELATED)

Ref.

No.	Part No.	Description	Qty.
1	50289427	NUT M6X15	1
2	50283370	PULLY	1
3	50280802	BAND	1
4	50287557	COMPRESSOR ASSY 126	1
5	50282895	PULLEY, TENSION (87	1
6	50289352	PULLEY BRACKET	1
7	50289353	PULLEY PLATE	1
8	50282796	ADJUSTER ASSY	1
9	50282797	BOSS	1
10	50289354	COMPRESSOR BRACKET	1
11	50289355	COMPRESSOR BRACKET	1
12	50289069	COMPRESSOR COVER	1
13	50287183	V-BELT	1
14	50284006	SPRING WASHER	1
15	50288907	SPACER	1
16	425-34750	WASHER 8/SEAL	4
17	425-34891	SPRING WASHER 6	1
18	50282392	WASHER, 8	1
19	50284048	CIRCLIP 40(H)	1
20	50284071	BALL BEARING	1
21	50282508	BOLT M 8X 25	1
22	50282515	BOLT W/WASHER M10X20	3
23	50282534	BOLT M 8X 20	2
24	50284104	BOLT M8 X 30	1
25	50288171	BOLT	1
26	425-34765	BOLT M8 X 25 PLATED	2
27	425-34765	BOLT M8 X 25 PLATED	1
28	425-34761	BOLT M8 X 35 PLATED	4
29	138143	NUT	1
30	50282596	NUT M 8	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 46 - AIR CONDITIONER (CONDENSER RELATED)

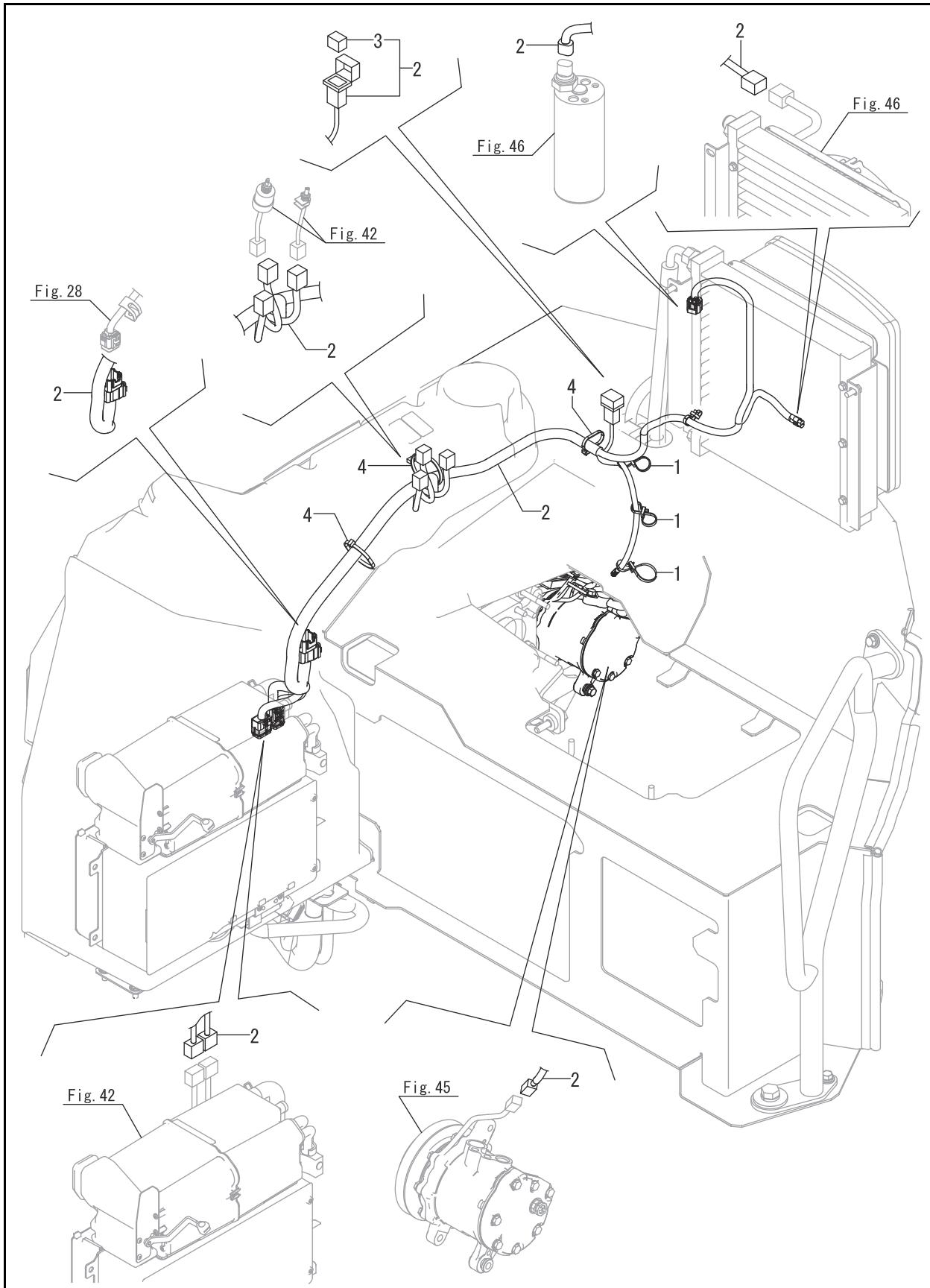


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 46 - AIR CONDITIONER (CONDENSER RELATED)

Ref.

No.	Part No.	Description	Qty.
1	50288020	RECEIVER-DRIER	1
2	50287575	DUCT ASSY/COND	1
4	50285601	SEAL,1170	1
5	50287576	BRACKET ASSY R/D	1
6	50287583	CONDENSER ASSY	1
7	50288335	CONDENSER	1
8	50288320	BRACKET ASSY	2
9	50288321	FAN SHROUD	1
10	50288322	FAN/MOTOR ASSY	1
11	425-35164	BOLT M6 X 16 PLATED	4
12	425-35166	BOLT M6 X 60 PLATED	6
13	425-34781	NUT M6	6
14	50287588	PIPE ASSY/COND-R/D	1
15	50288026	O-RING/L-HOSE	2
17	50282533	BOLT M 8X 16	4
18	50282534	BOLT M 8X 20	4
19	425-35026	BOLT M8 X 25	2
20	197805	BOLT M6X25 PLATED	1

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 47 - AIR CONDITIONER (ELECTRIC PART)



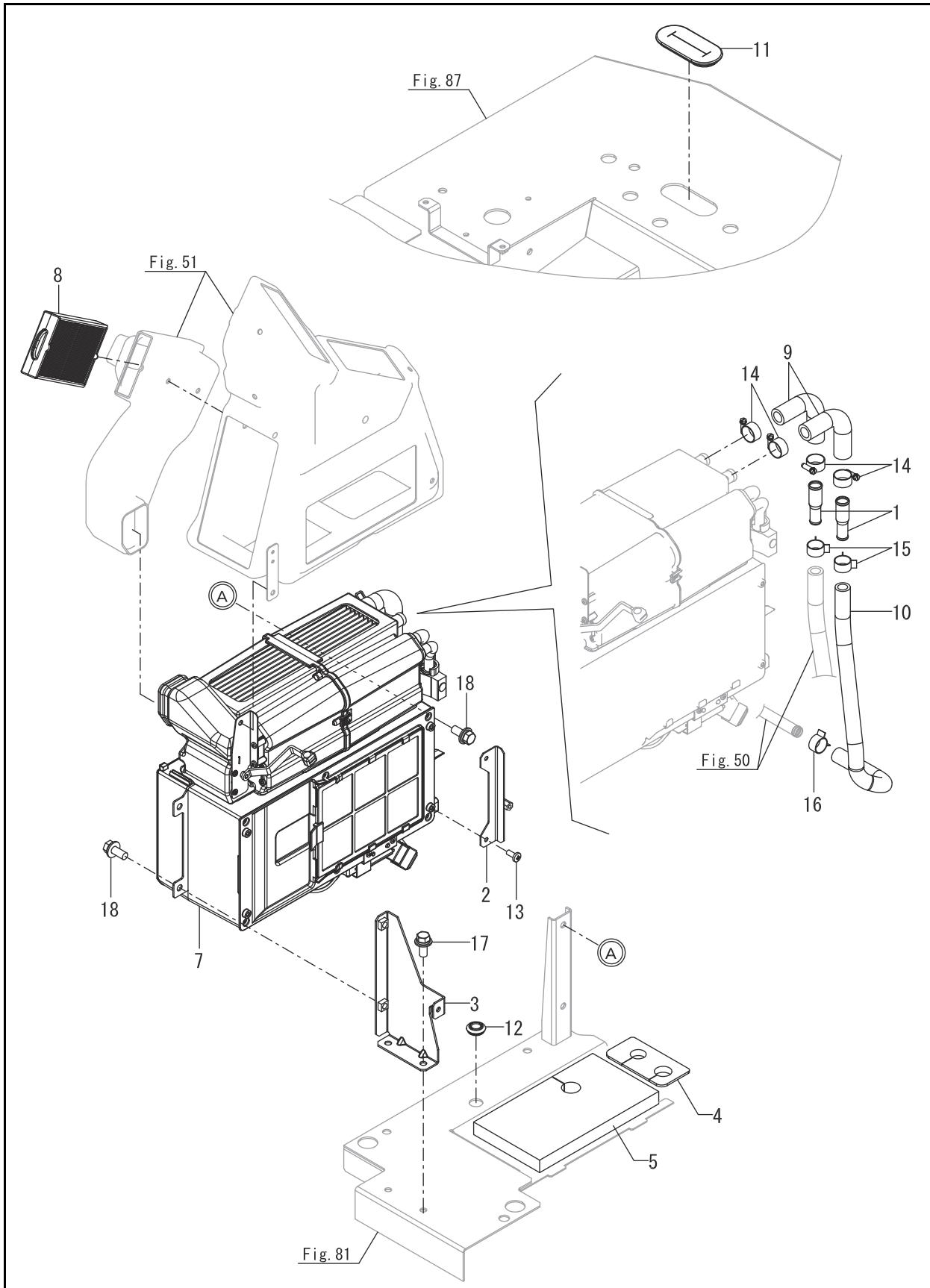
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 47 - AIR CONDITIONER (ELECTRIC PART)

Ref.

No.	Part No.	Description	Qty.
1	50280802	BAND	4
2	50289049	AC WIRE HARNESS	1
3	50288860	DIODE 3A	1
4	50282352	BAND	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 48 - HEATER (UNIT)(W/O A/C)

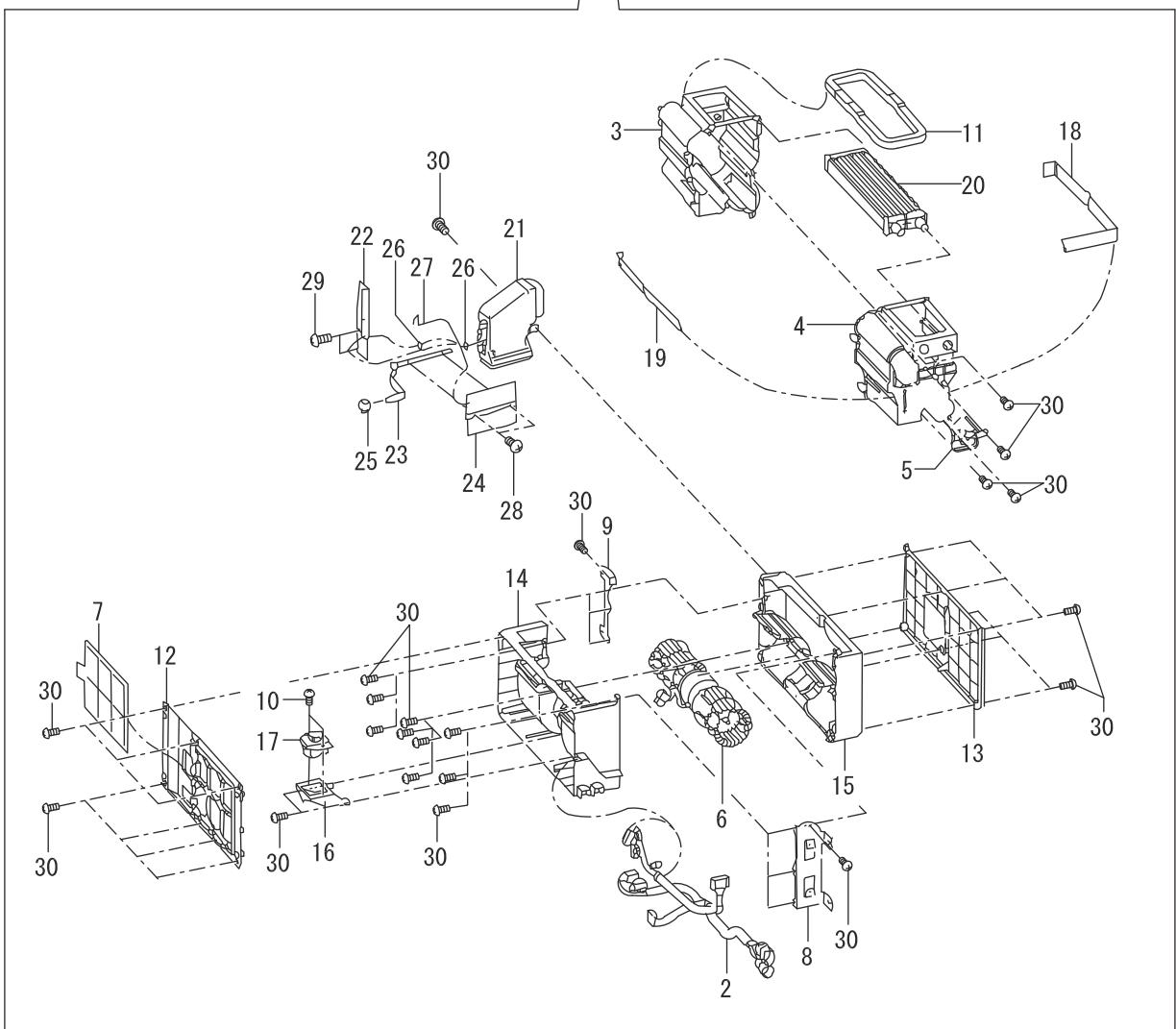


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 48 - HEATER (UNIT)(W/O A/C)

Ref.

No.	Part No.	Description	Qty.
1	50287121	JOINT/HOSE	2
2	50287558	STAY ASSY/AC R	1
3	50287559	BRACKET ASSY/AC F	1
4	50289065	GROMMET	1
5	50289066	PARTITION PAD	1
7	50287552	HEATER ASSY (See Fig. 49 for internal components)	1
8	50286728	FILTER	1
9	50287598	HOSE/HEATER ELBOW	2
10	50289080	HEATER HOSE IN	1
11	50287709	GROMMET/CABLE	1
12	50287093	GROMMET	1
13	50288154	SCREW	2
14	50282427	HOSE CLAMP 22	4
15	188718	CLAMP 18	2
16	188718	CLAMP 18	1
17	50282534	BOLT M 8X 20	2
18	50282534	BOLT M 8X 20	4

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 49 - HEATER (UNIT INNER PARTS)(W/O A/C)



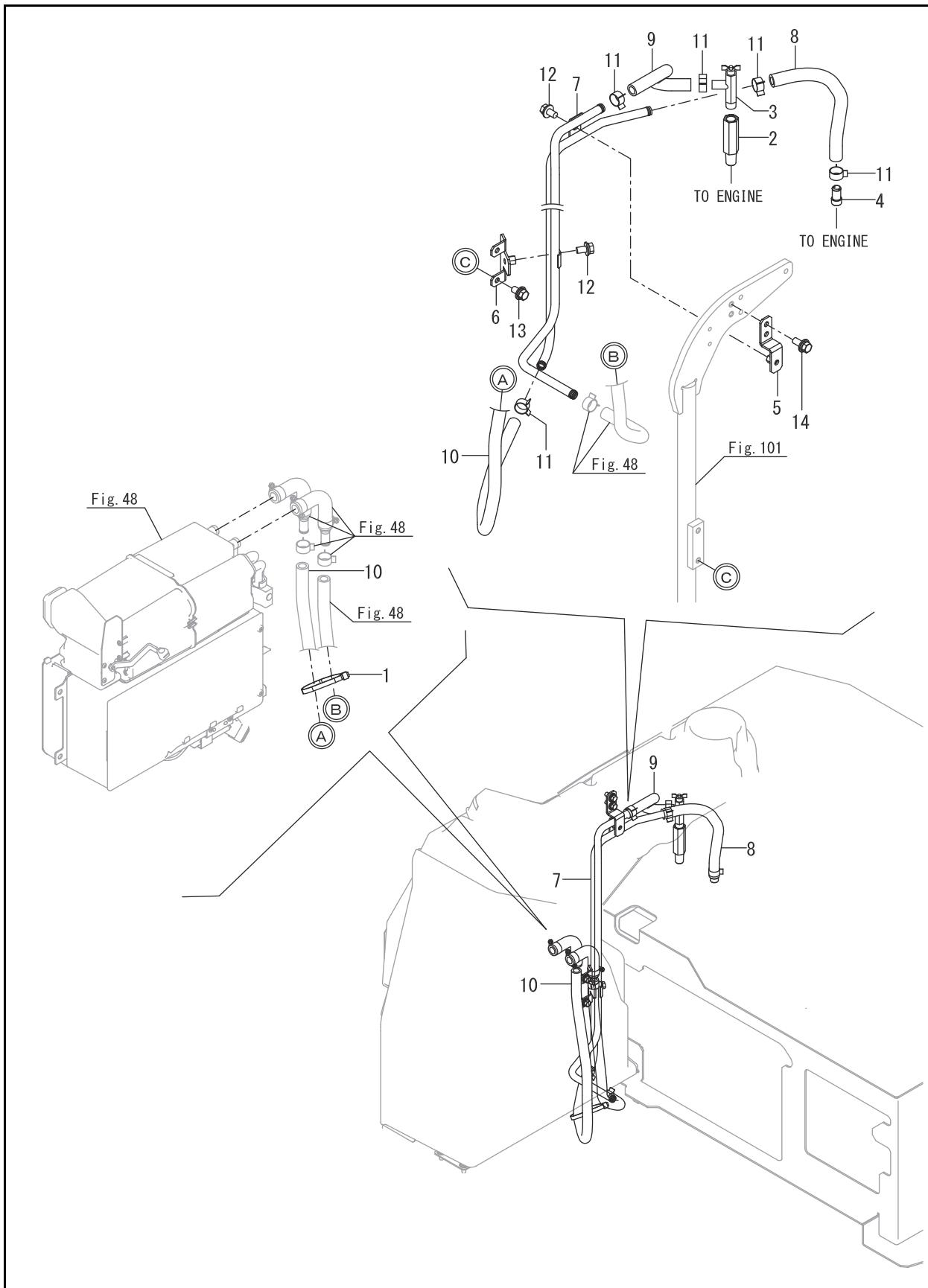
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 49 - HEATER (UNIT INNER PARTS)(W/O A/C)

Ref.

No.	Part No.	Description	Qty.
1	50287552	HEATER ASSY	1
2	50288953	HEATER WIRE HARNESS	1
3	50288954	UPPER FEMALE CASE	1
4	50288955	UPPER MALE CASE	1
5	50288956	HEATER COVER	1
6	50288330	BLOWER MOTOR ASSY	1
7	50287581	FILTER/REC	1
8	50288280	BRACKET	1
9	50288281	BRACKET	1
10	50288333	PAN HEAD SCREW	2
11	50288286	HVAC HEATER SEAL	1
12	50288287	FRONT COVER	1
13	50288288	BACK COVER	1
14	50288289	HVAC CASE FRONT	1
15	50288290	HVAC CASE BACK	1
16	50288291	RESISTOR MOUNT	1
17	50288296	RESISTOR	1
18	50288301	HVAC SEAL	1
19	50288302	HVAC SEAL	1
20	50288308	HEATER ASSY	1
21	50288309	DUCT ASSY	1
22	50288310	BRACKET	1
23	50288311	LEVER ASSY	1
24	50288312	DOOR ASSY	1
25	50288313	KNOB	1
26	50288314	SPACER	2
27	50288315	SPRING	1
28	50288316	SCREW 3X6	2
29	50288317	SCREW 4X10	2
30	50288318	SCREW 4X16	34

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 50 - HEATER (PIPING)



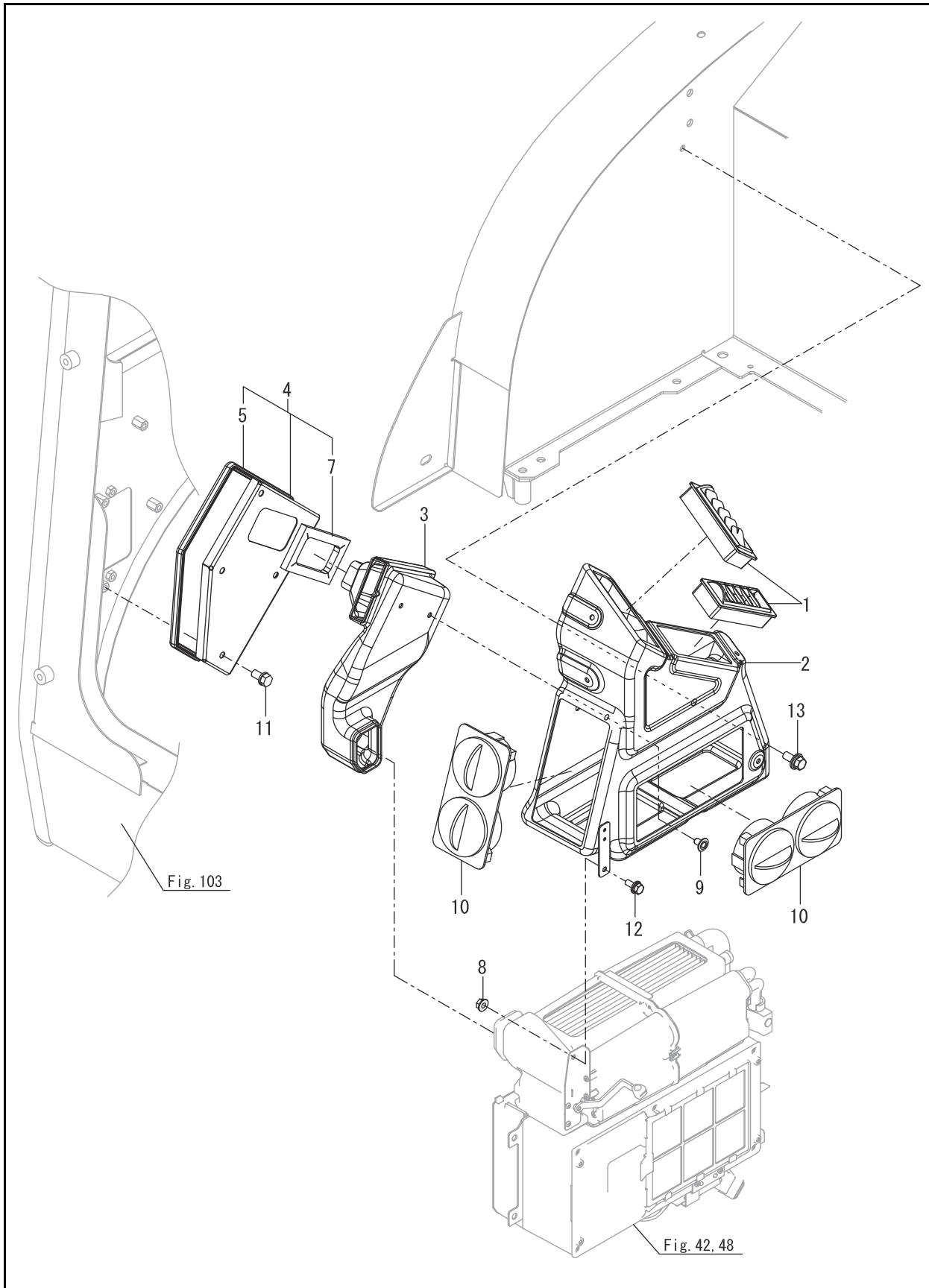
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 50 - HEATER (PIPING)

Ref.

No.	Part No.	Description	Qty.
1	50280798	BAND 300	1
2	50289057	CONNECTOR	1
3	50281016	VALVE ASSY, HEATER	1
4	50282711	JOINT 3/8	1
5	50289067	BRACKET	1
6	50289068	BRACKET	1
7	50289072	HEATER PIPE ASSY	1
8	50289077	HEATER HOSE	1
9	50289078	HEATER HOSE	1
10	50287599	HOSE/HEATER 640	1
11	188718	CLAMP 18	5
12	50282533	BOLT M 8X 16	2
13	50282533	BOLT M 8X 16	2
14	50282534	BOLT M 8X 20	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 51 - DUCT (A/C, HEATER SPEC.)



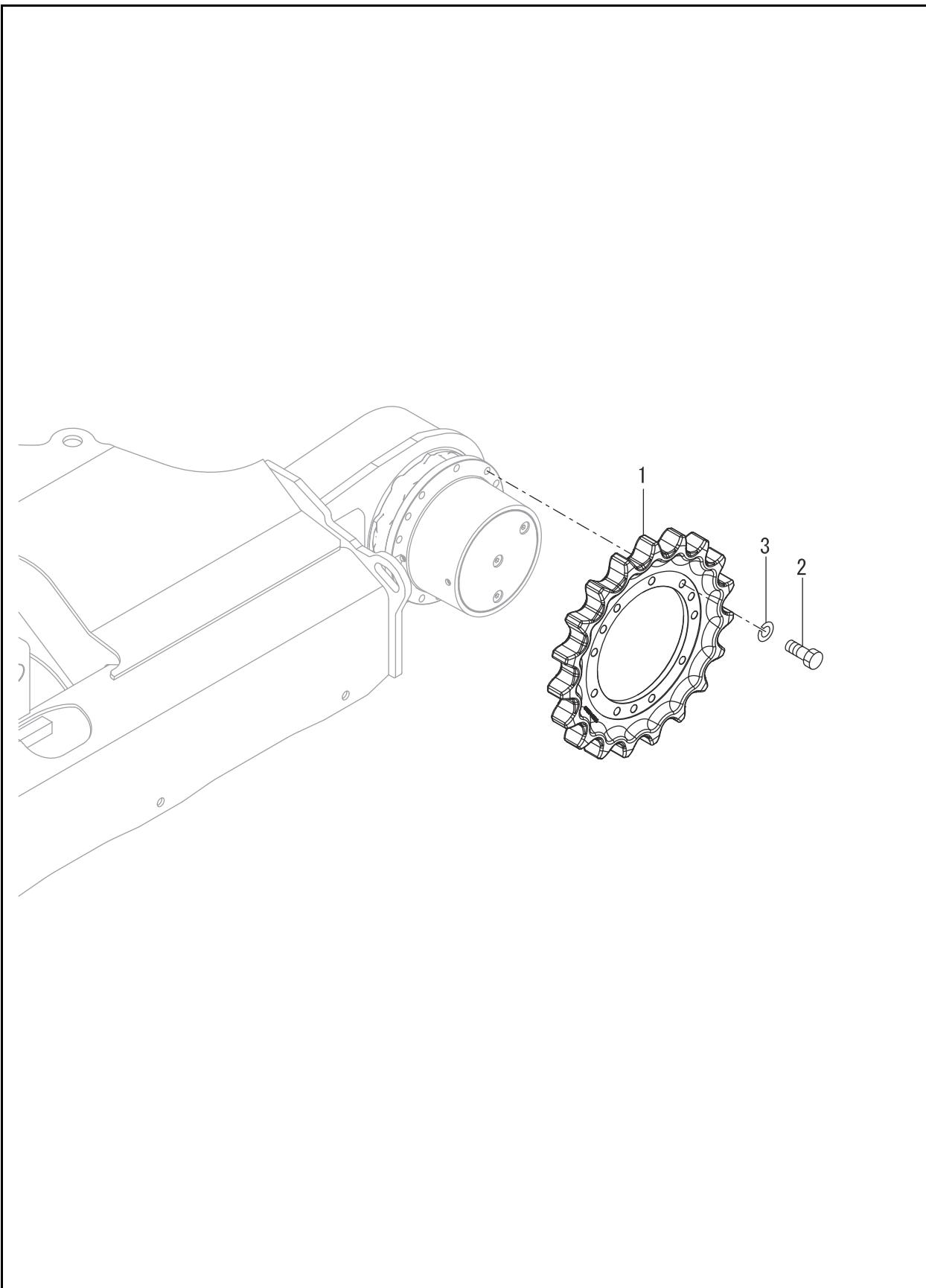
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 51 - DUCT (A/C, HEATER SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50281133	GRILLE	2
2	50287566	DUCT ASSY/AC	1
3	50287567	DUCT/AC FRESH AIR	1
4	50287568	DUCT ASSY/INTAKE	1
5	50287181	TRIM	1
7	50287570	SEAL/DUCT INTAKE	1
8	197781	NUT W/WASHER 6	1
9	50288114	RIVET	2
10	50282363	AIR-CON GRILL CMP	2
11	50282506	BOLT W/WASHER M8X16	4
12	50282531	BOLT M 6X 16	1
13	50282534	BOLT M 8X 20	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 52 - SPROCKET



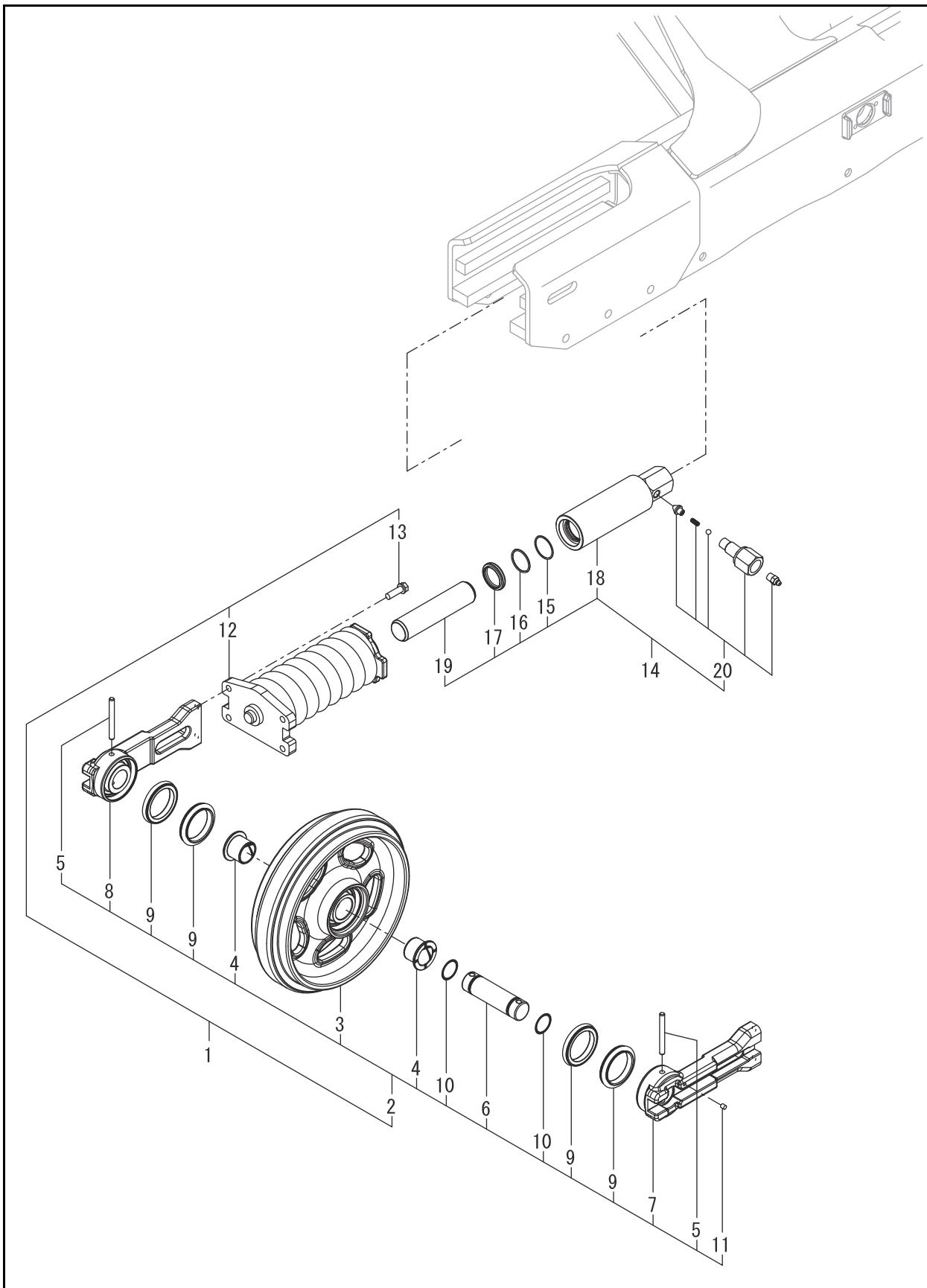
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 52 - SPROCKET

Ref.

No.	Part No.	Description	Qty.
1	50289081	SPROCKET 19T	2
2	50281066	BOLT 14X35	24
3	188712	SPRING/WASHER 14	24

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 53 - IDLER & ADJUST



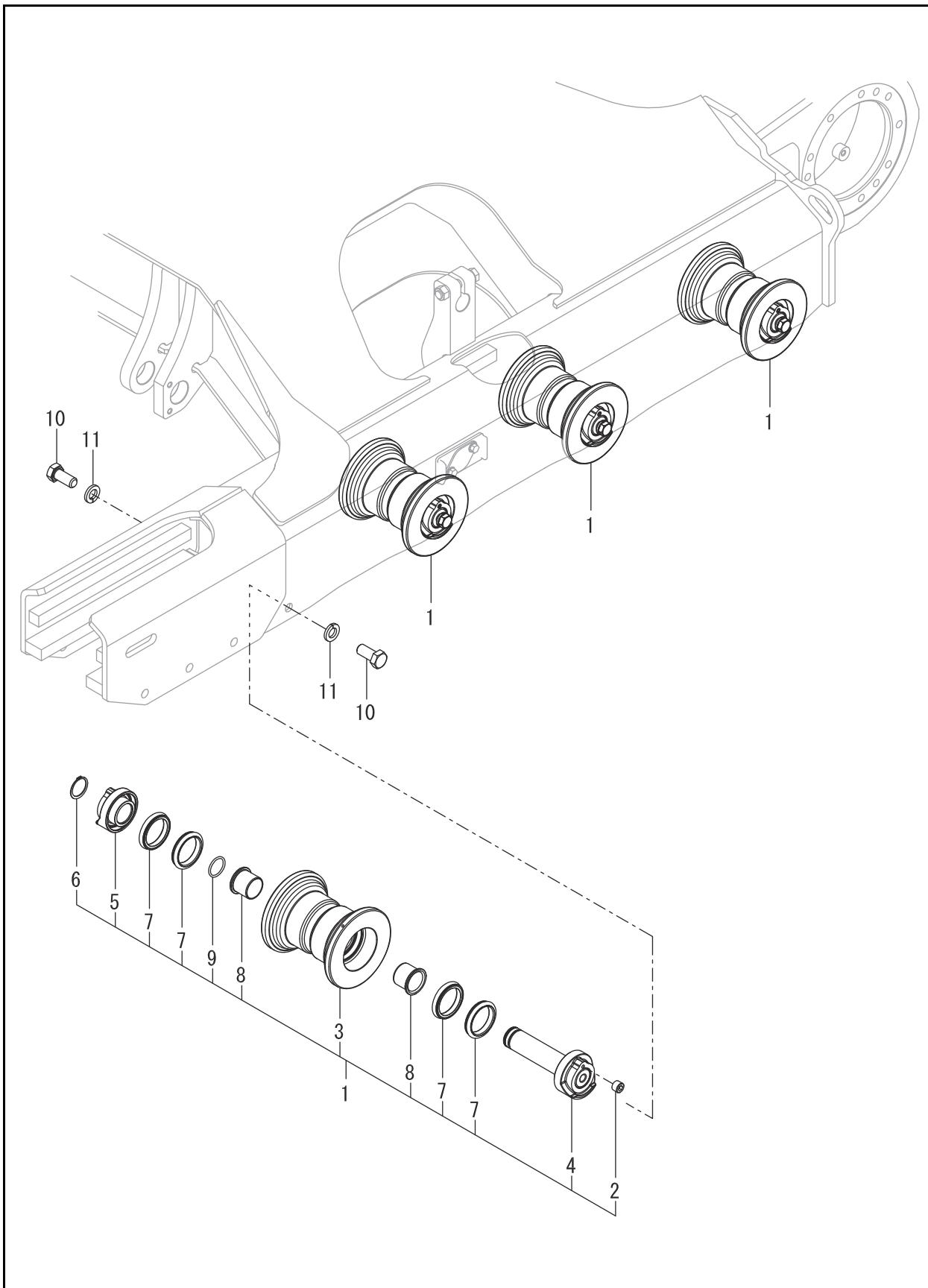
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 53 - IDLER & ADJUST

Ref.

No.	Part No.	Description	Qty.
1	50287214	IDLER ASSY	2
2	50287213	IDLER WHEEL ASSY	2
3	50289381	IDLER WHEEL	2
4	50289382	BUSHING	4
5	50289383	PIN	4
6	50289384	IDLER WHEEL AXLE	2
7	50289385	IDLER FORK ARM	2
8	50289386	IDLER FORK ARM	2
9	50289387	SEAL	8
10	50289388	O-RING	4
11	50289389	PLUG	2
12	50289396	IDLER SPRING ASSY	2
13	50282526	BOLT M12X 40	8
14	50289400	ADJUSTING CYLINDER ASSY	2
15	50289397	O-RING	2
16	50289398	BACK UP RING	2
17	50289399	SEAL	2
18	50289401	ADJUSTING CYLINDER TUBE	2
19	50289402	PISTON	2
20	50289403	VALVE FITTING	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 54 - TRACK ROLLER



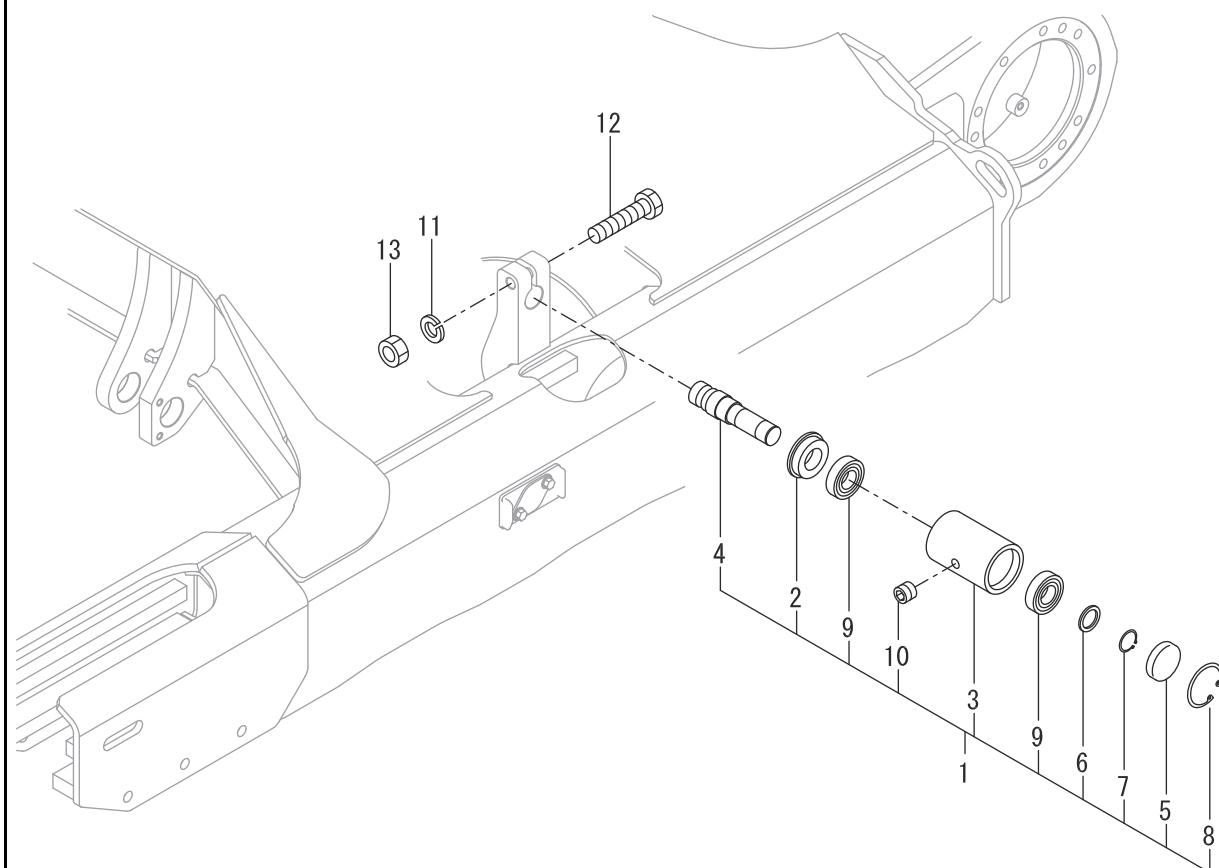
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 54 - TRACK ROLLER

Ref.

No.	Part No.	Description	Qty.
1	50287185	LOWER ROLLER ASSY	8
2	50289389	PLUG	8
3	50289082	LOWER ROLLER	8
4	50289390	ROLLER SHAFT	8
5	50289391	SEAL	8
6	50289392	SNAP RING	8
7	50289393	SEAL	32
8	50289394	BUSHING	16
9	50289395	O-RING	8
10	50283253	BOLT, M16X35	16
11	50282396	SPRING WASHER 16	16

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 55 - CARRIER ROLLER



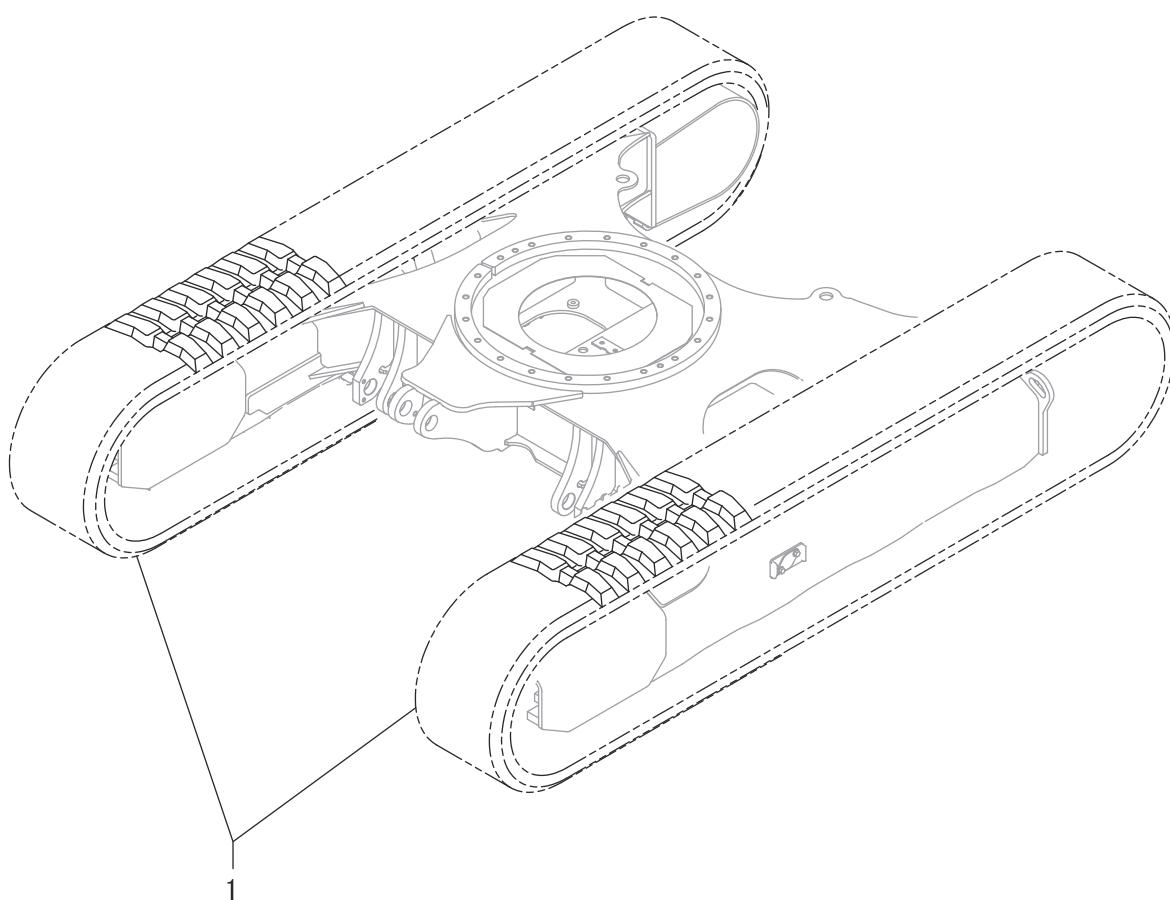
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 55 - CARRIER ROLLER

Ref.

No.	Part No.	Description	Qty.
1	50283239	ROLLER ASSY, CARRIER	2
2	50282785	SEAL, OIL	2
3	50288922	ROLLER CARRIER	2
4	50288923	ROLLER SHAFT	2
5	50283241	CAP, CARRIER ROLLER	2
6	50283242	WASHER, CARRIER	2
7	50284045	CIRCLIP 30	2
8	50284049	RING, 62	2
9	50284073	BALL BEARING	4
10	50282621	PLUG PT1/8	2
11	50282396	SPRING WASHER 16	2
12	50282573	BOLT M16X 85 PLATED	2
13	50282599	NUT M16	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 56 - CRAWLER

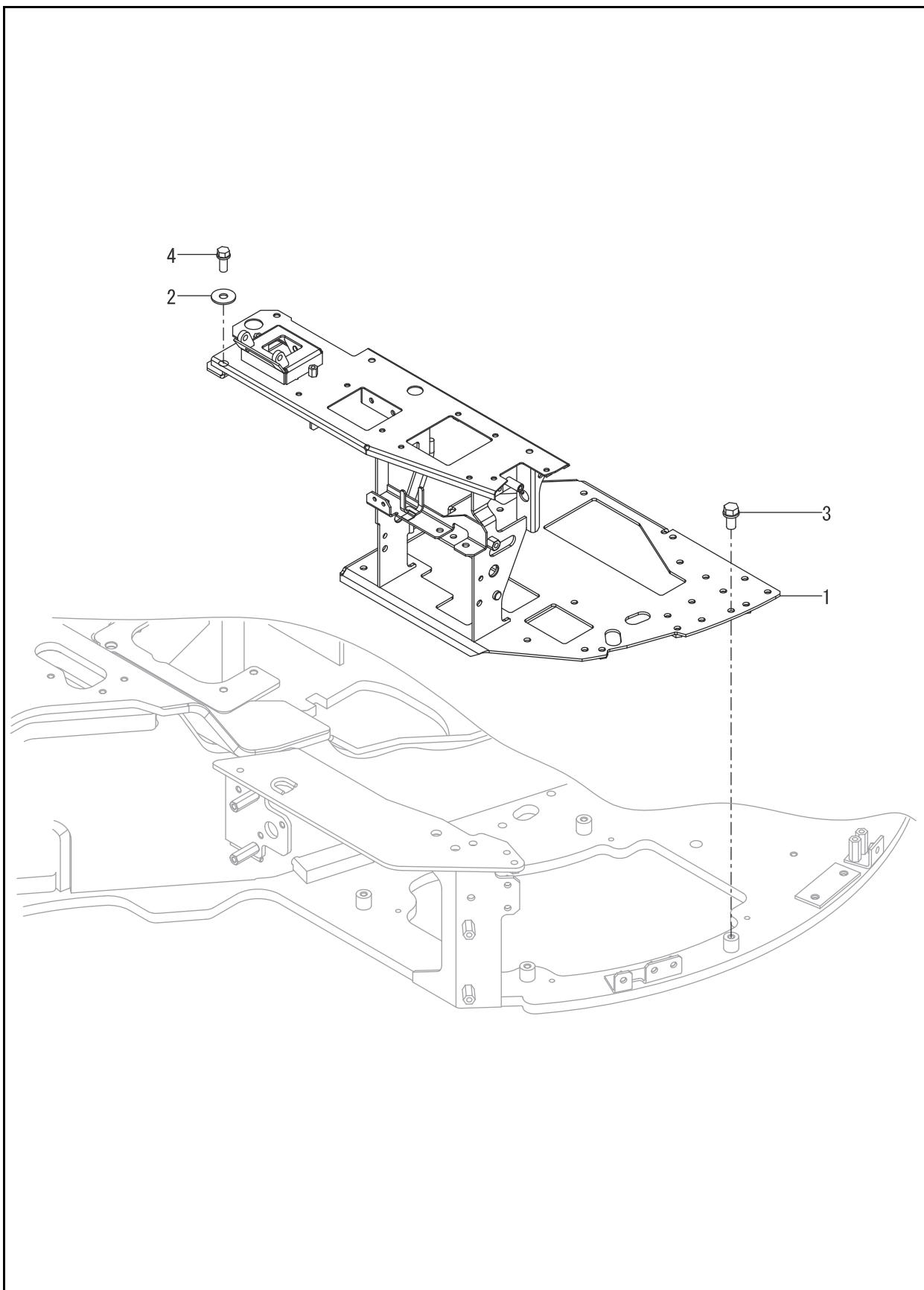


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 56 - CRAWLER

Ref.	No. Part No.	Description	Qty.
1	50289083	RUBBER TRACK	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 57 - VALVE MOUNT

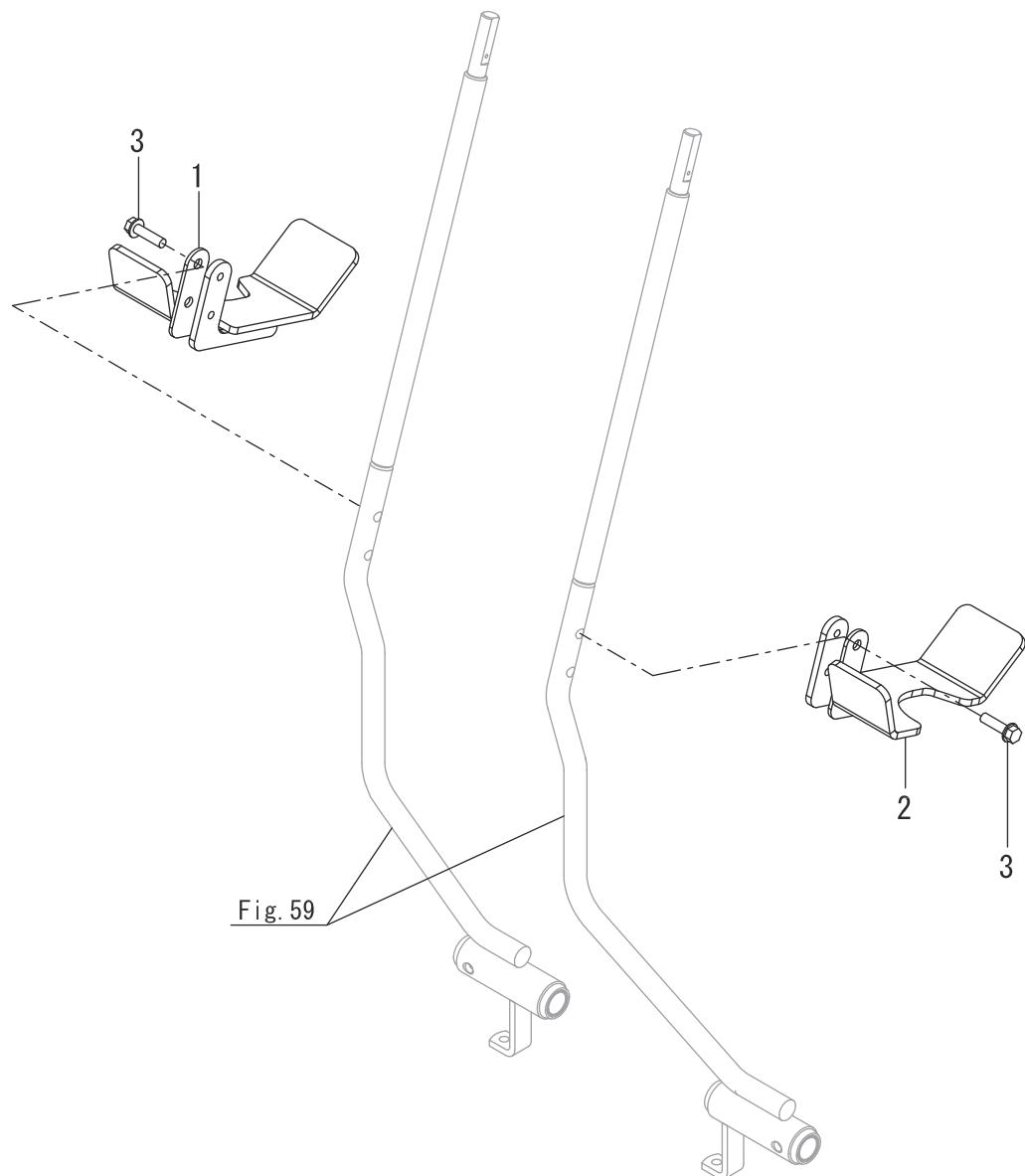


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 57 - VALVE MOUNT

Ref.

No.	Part No.	Description	Qty.
1	50288957	VALVE MOUNTING BRACKET	1
2	50282387	WASHER 10	2
3	50282515	BOLT W/WASHER M10X20	4
4	50282516	BOLT W/WASHER M10X25	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 58 - CONTROL EQUIPMENT (TRAVEL PEDAL)

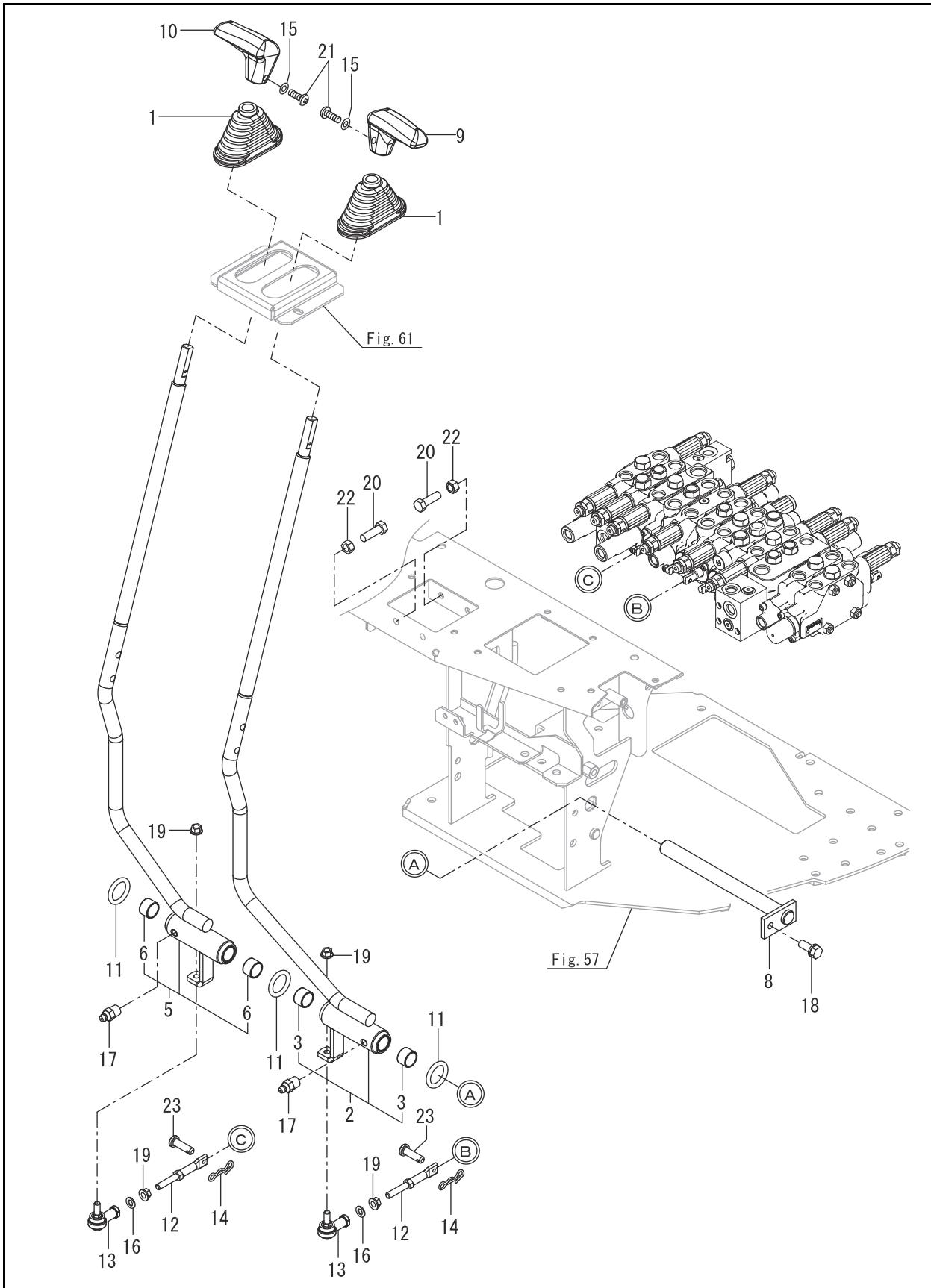


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 58 - CONTROL EQUIPMENT (TRAVEL PEDAL)

Ref.

No.	Part No.	Description	Qty.
1	50287608	PEDAL ASSY/TRACK R	1
2	50287609	PEDAL ASSY/TRACK L	1
3	425-34760	BOLT M8 X 30 PLATED	4

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 59 - CONTROL EQUIPMENT (TRAVEL LEVER)

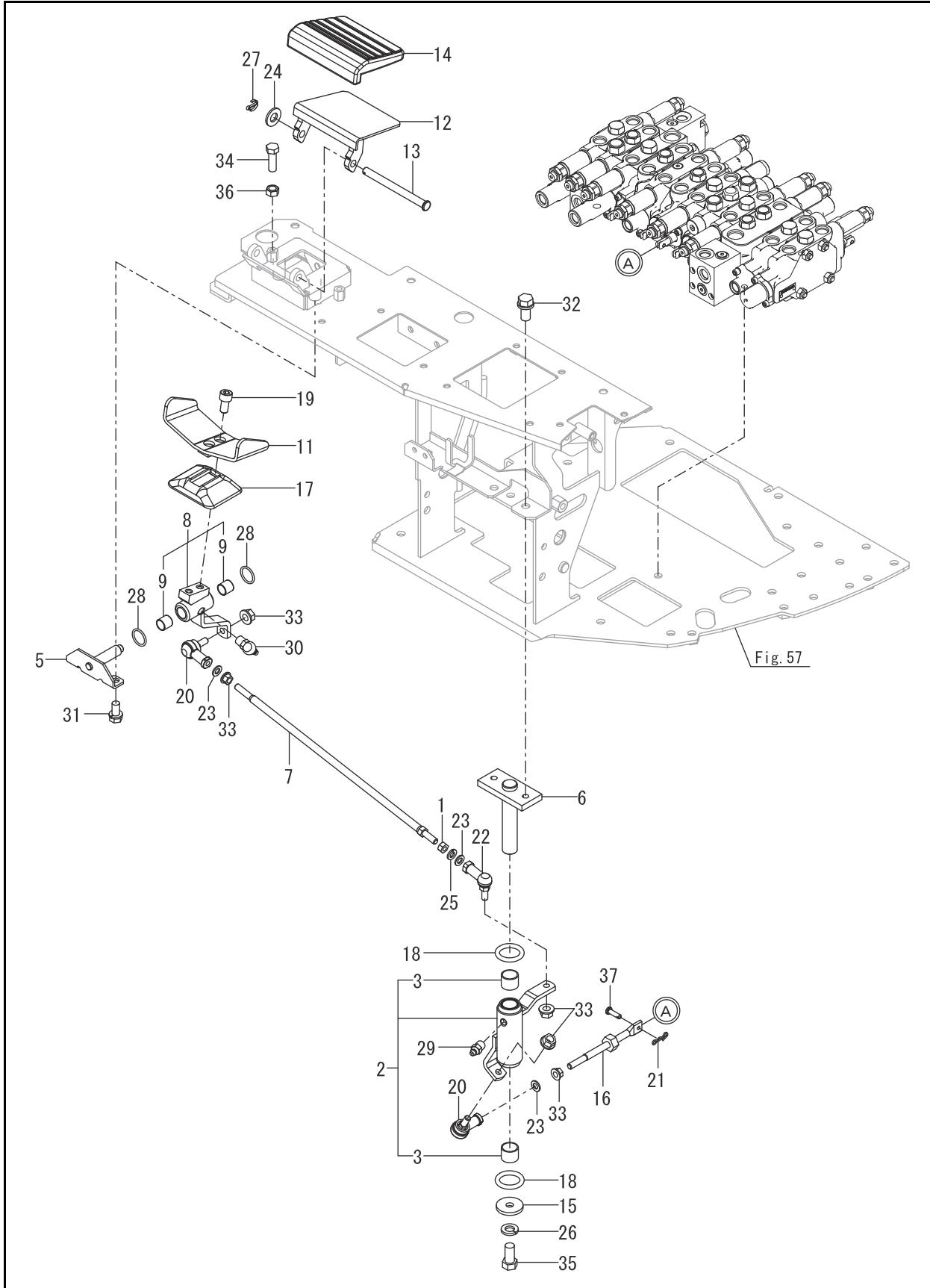


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 59 - CONTROL EQUIPMENT (TRAVEL LEVER)

Ref.

No.	Part No.	Description	Qty.
1	50282725	BOOTS	2
2	50287610	LEVER ASSY/TRACK L	1
3	50280810	BUSHING 2015	2
5	50287612	LEVER ASSY/TRACK R	1
6	50280810	BUSHING 2015	2
8	50287620	SHAFT ASSY	1
9	50280939	GRIP L, DRIVE	1
10	50280940	GRIP R, DRIVE	1
11	50280793	O-RING 27X5.7	3
12	50285236	ROD (A), SPOOL	2
13	50282702	ELBOW	2
14	50284017	PIN 6,COME-OFF SNAP	2
15	197782	WASHER 4	2
16	138515	WASHER 8	2
17	50282497	NIPPLE PT1/8,GREASE	2
18	50282507	BOLT W/WASHER M8X20	1
19	50282548	NUT M 8	4
20	50288177	BOLT	4
21	50282592	SCREW, M4X12	2
22	50282596	NUT M 8	4
23	50284148	PIN 4.75X14	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 60 - CONTROL EQUIPMENT (SWING PEDAL)

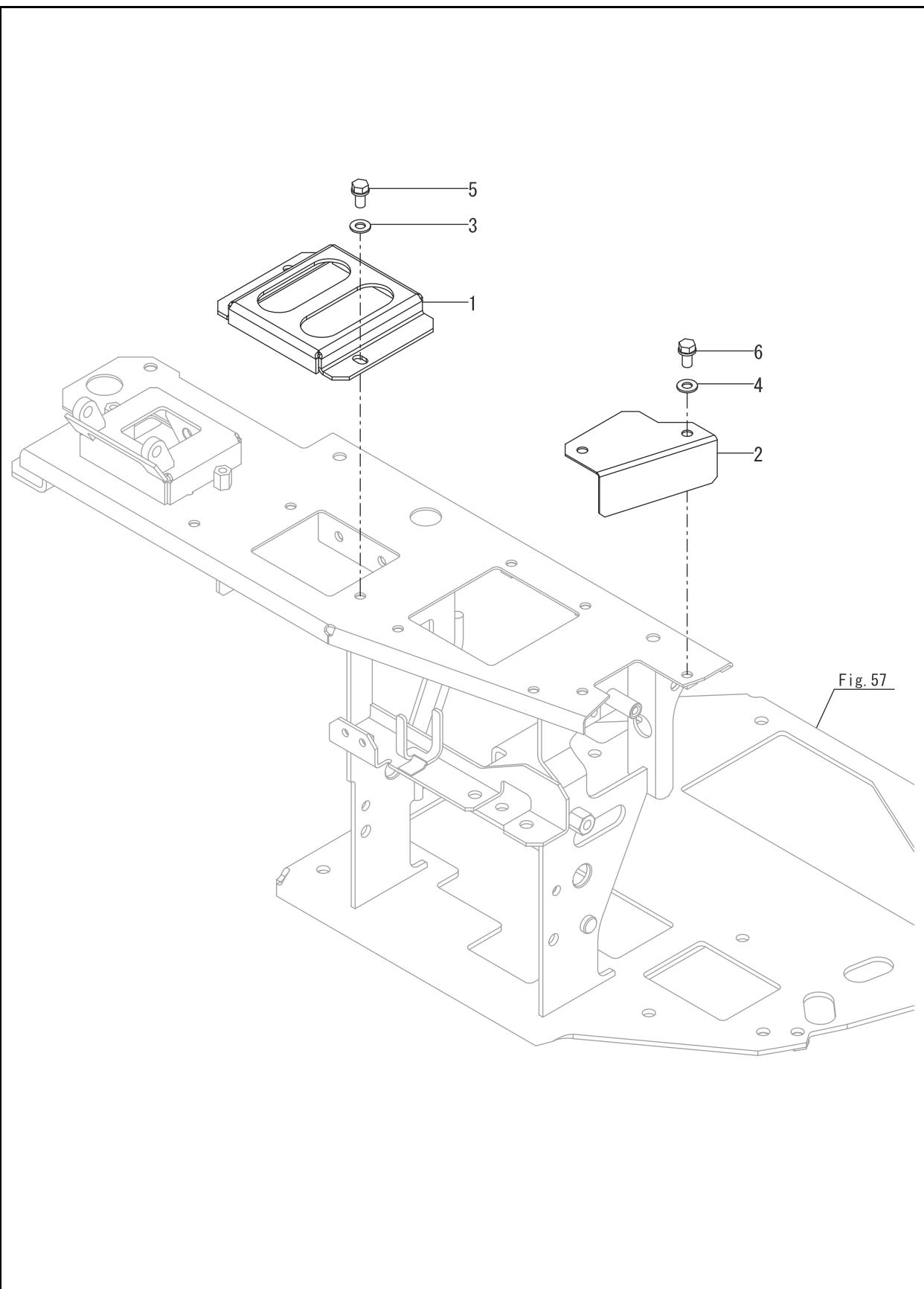


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 60 - CONTROL EQUIPMENT (SWING PEDAL)

Ref.

No.	Part No.	Description	Qty.
1	50284001	LS-NUT 8	1
2	50287614	LINK ASSY/SWING	1
3	50280810	BUSHING 2015	2
5	50287137	SHAFT/PEDAL	1
6	50287616	BRACKET/SWING	1
7	50287617	ROD ASSY 420	1
8	50287618	LINK ASSY/PEDAL	1
9	50282726	BUSHING 1415	2
11	50285388	PEDAL,SWING(GRAY:49)	1
12	50285389	COVER,PEDAL(GRAY:49)	1
13	50280936	SHAFT, PEDAL COVER	1
14	50280938	COVER PAD	1
15	50288105	WASHER	1
16	50287154	ROD ASSY	1
17	50285272	BOOTS, PEDAL	1
18	50280793	O-RING 27X5.7	2
19	50285276	BOLT	2
20	50282702	ELBOW	2
21	50284017	PIN 6,COME-OFF SNAP	1
22	50284021	BALL BL8DL, LINK	1
23	138515	WASHER 8	3
24	138111	WASHER/POLISHED	1
25	50282392	WASHER, 8	1
26	50282393	SPRING WASHER 10	1
27	50282419	COTTER PIN 2.5X20	1
28	50284076	O-RING 1A P-21.0	2
29	50282497	NIPPLE PT1/8,GREASE	1
30	50282498	NIPPLE B,GREASE	1
31	50282506	BOLT W/WASHER M8X16	2
32	50282515	BOLT W/WASHER M10X20	2
33	50282548	NUT M 8	5
34	50285911	BOLT M8 X 25 PLATED	2
35	50282564	BOLT M10X 20 PLATED	1
36	50282596	NUT M 8	2
37	50284148	PIN 4.75X14	1

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 61 - CONTROL EQUIPMENT (LINK COVER)

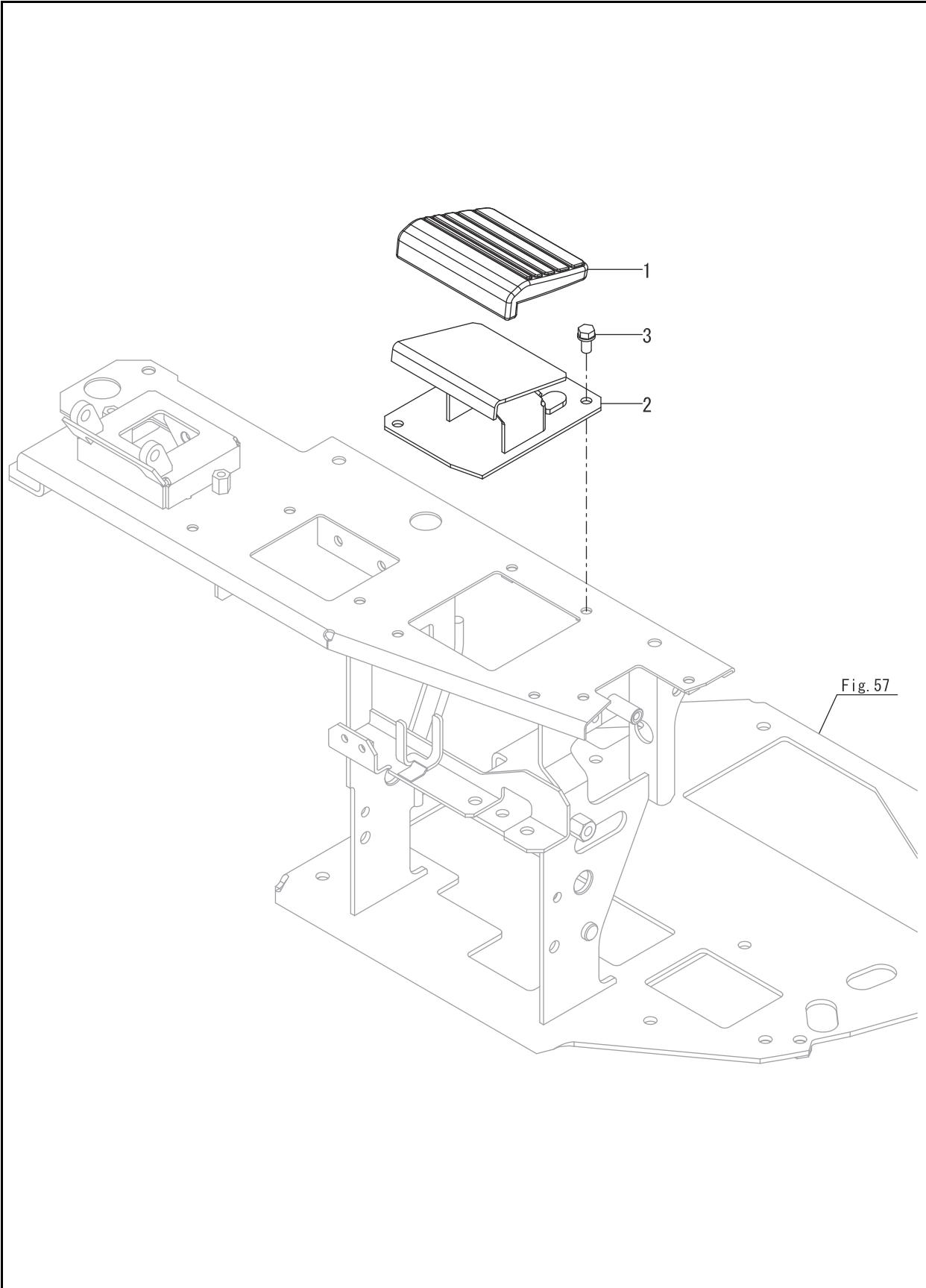


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 61 - CONTROL EQUIPMENT (LINK COVER)

Ref.

No.	Part No.	Description	Qty.
1	50285387	BRACKET,BOOT(GRAY:49	1
2	50287623	COVER/NO 2ND	1
3	50282380	WASHER 8, POLISHED	2
4	50282380	WASHER 8, POLISHED	2
5	50282506	BOLT W/WASHER M8X16	2
6	50282506	BOLT W/WASHER M8X16	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 62 - CONTROL EQUIPMENT (PEDAL COVER)

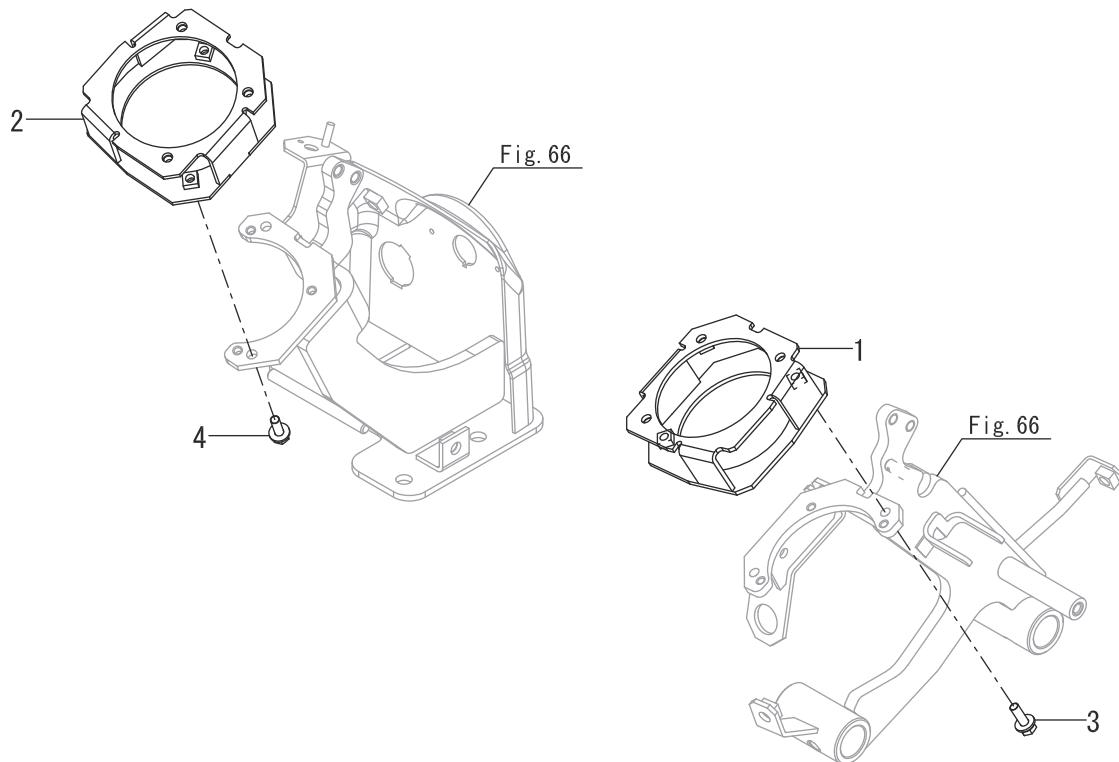


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 62 - CONTROL EQUIPMENT (PEDAL COVER)

Ref.

No.	Part No.	Description	Qty.
1	50280938	COVER PAD	1
2	50287639	COVER ASSY/NO PTO	1
3	50282506	BOLT W/WASHER M8X16	3

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 63 - CONTROL EQUIPMENT (LEVER SPACER)

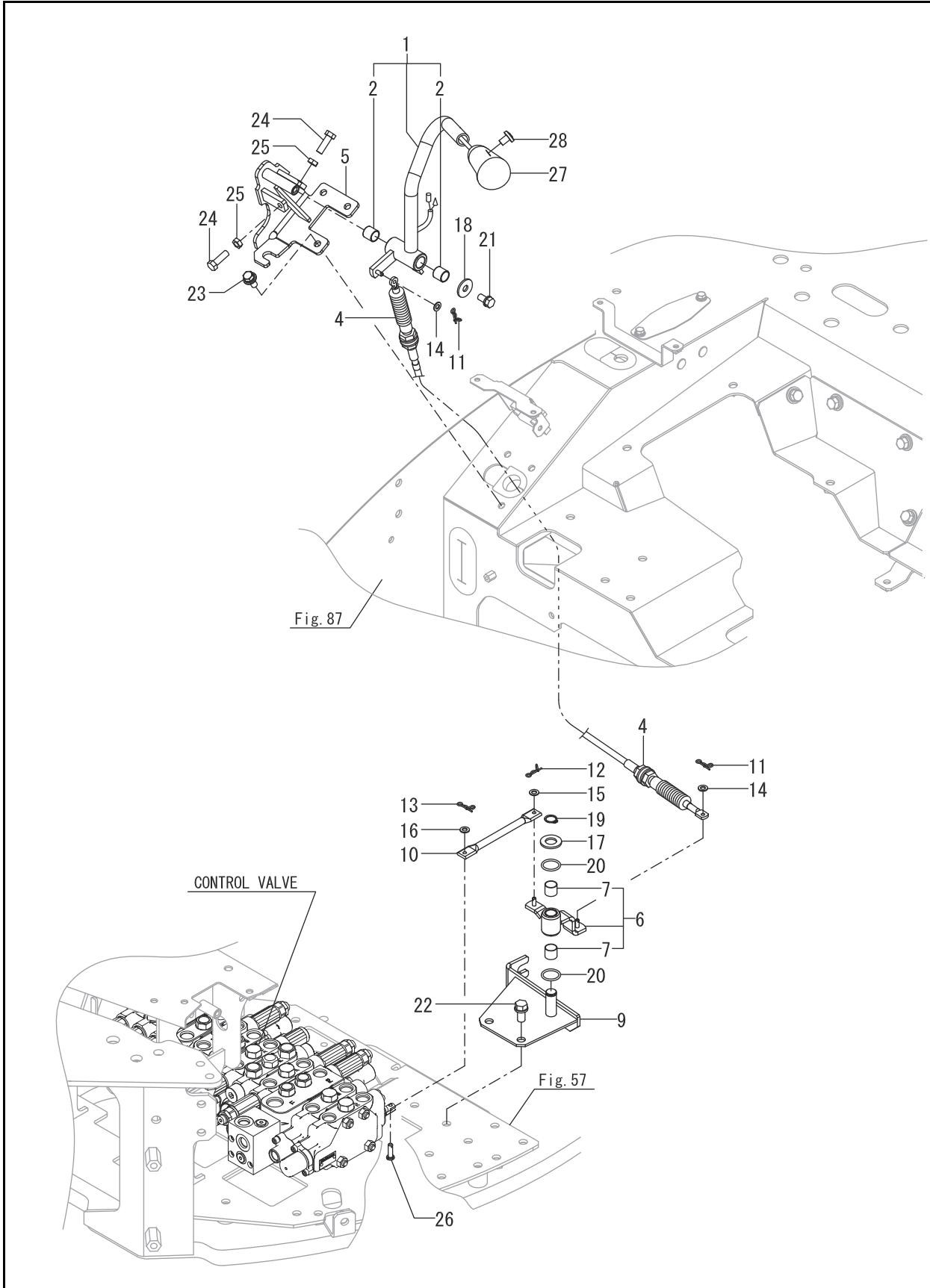


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 63 - CONTROL EQUIPMENT (LEVER SPACER)

Ref.

No.	Part No.	Description	Qty.
1	50287631	SPACER ASSY L	1
2	50287632	SPACER ASSY R	1
3	425-35319	BOLT WITH WASHER 6 X 20	2
4	425-35319	BOLT WITH WASHER 6 X 20	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 64 - CONTROL EQUIPMENT (BLADE LEVER)

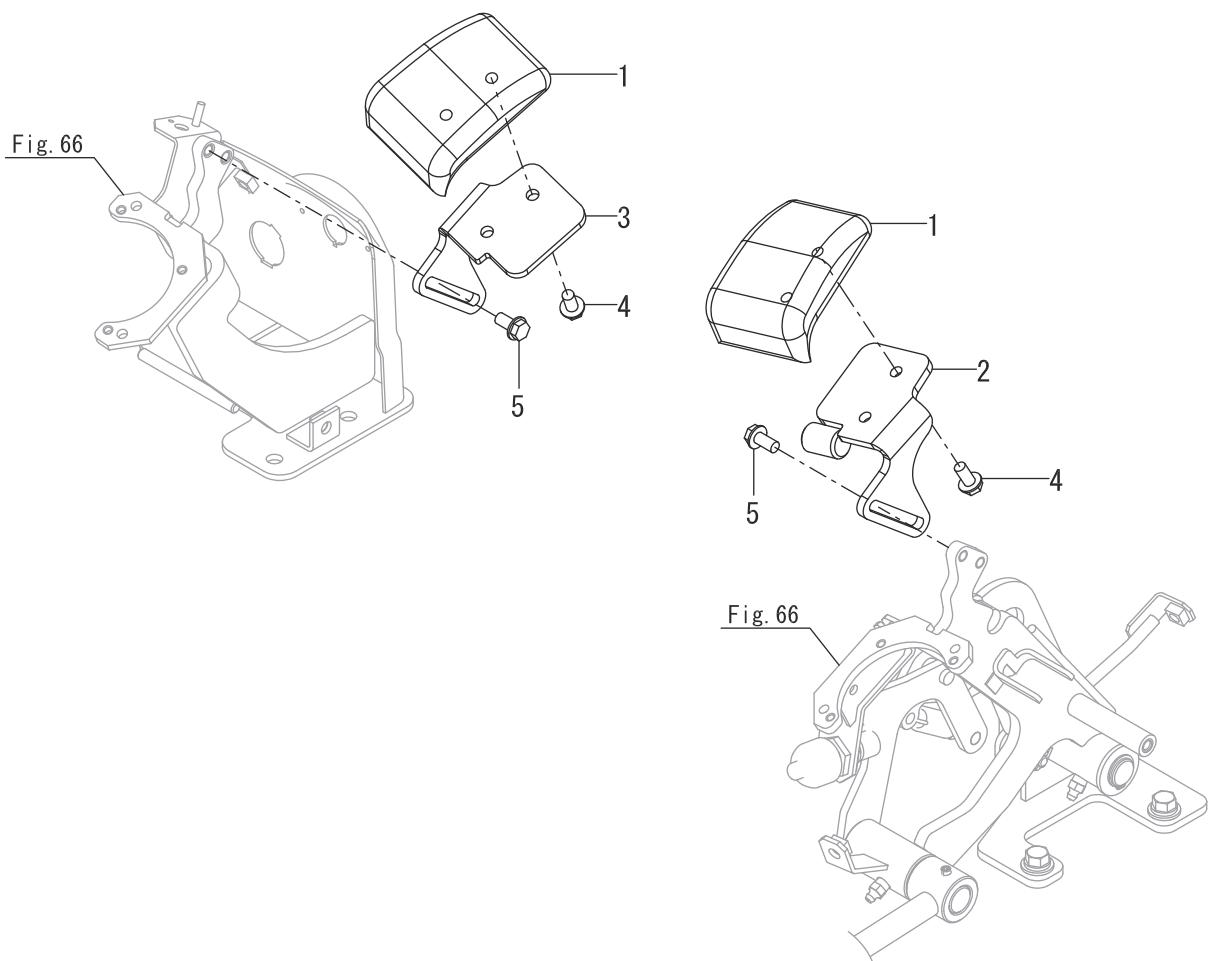


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 64 - CONTROL EQUIPMENT (BLADE LEVER)

Ref.

No.	Part No.	Description	Qty.
1	50287621	LEVER ASSY/BLADE EX	1
2	50282726	BUSHING 1415	2
4	50287625	CABLE/BLADE	1
5	50287626	BRACKET ASSY/BLADE	1
6	50287627	BOSS ASSY/LINK	1
7	50282726	BUSHING 1415	2
9	50287629	SHAFT ASSY/LINK	1
10	50287630	ROD 130	1
11	50284017	PIN 6,COME-OFF SNAP	2
12	50284017	PIN 6,COME-OFF SNAP	1
13	50284017	PIN 6,COME-OFF SNAP	1
14	50284040	WASHER 5, POLISHED	2
15	50284040	WASHER 5, POLISHED	1
16	50284040	WASHER 5, POLISHED	1
17	50284042	WASHER 14, POLISHED	1
18	186593	WASHER 8	1
19	50288149	RING	1
20	50284076	O-RING 1A P-21.0	2
21	50282506	BOLT W/WASHER M8X16	1
22	50282515	BOLT W/WASHER M10X20	2
23	50282534	BOLT M 8X 20	3
24	50285910	BOLT M8 X 25 PLATED	2
25	425-34794	NUT, LOCK M8 PLATED	2
26	50284148	PIN 4.75X14	1
27	50287551	KNOB ASSY/BLADE SW	1
28	50288183	SCREW	1

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 65 - CONTROL EQUIPMENT (ARMREST)



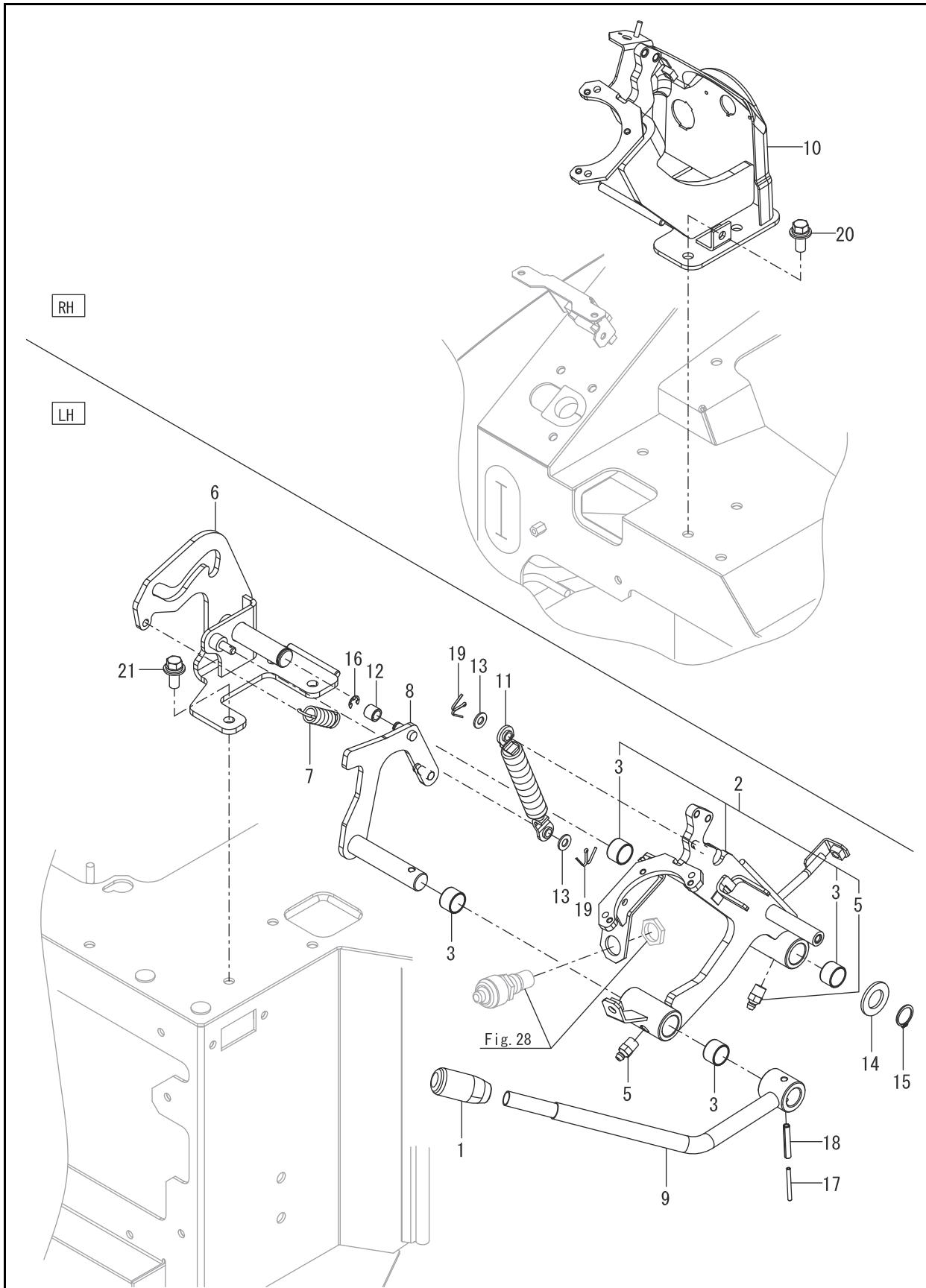
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 65 - CONTROL EQUIPMENT (ARMREST)

Ref.

No.	Part No.	Description	Qty.
1	50281043	ARM REST	2
2	50283333	GUIDE ASSY	1
3	50283334	PLATE, GUIDE	1
4	50281318	BOLT 8X 16	4
5	50281318	BOLT 8X 16	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 66 - CONTROL EQUIPMENT (LOCK LEVER & STAND)



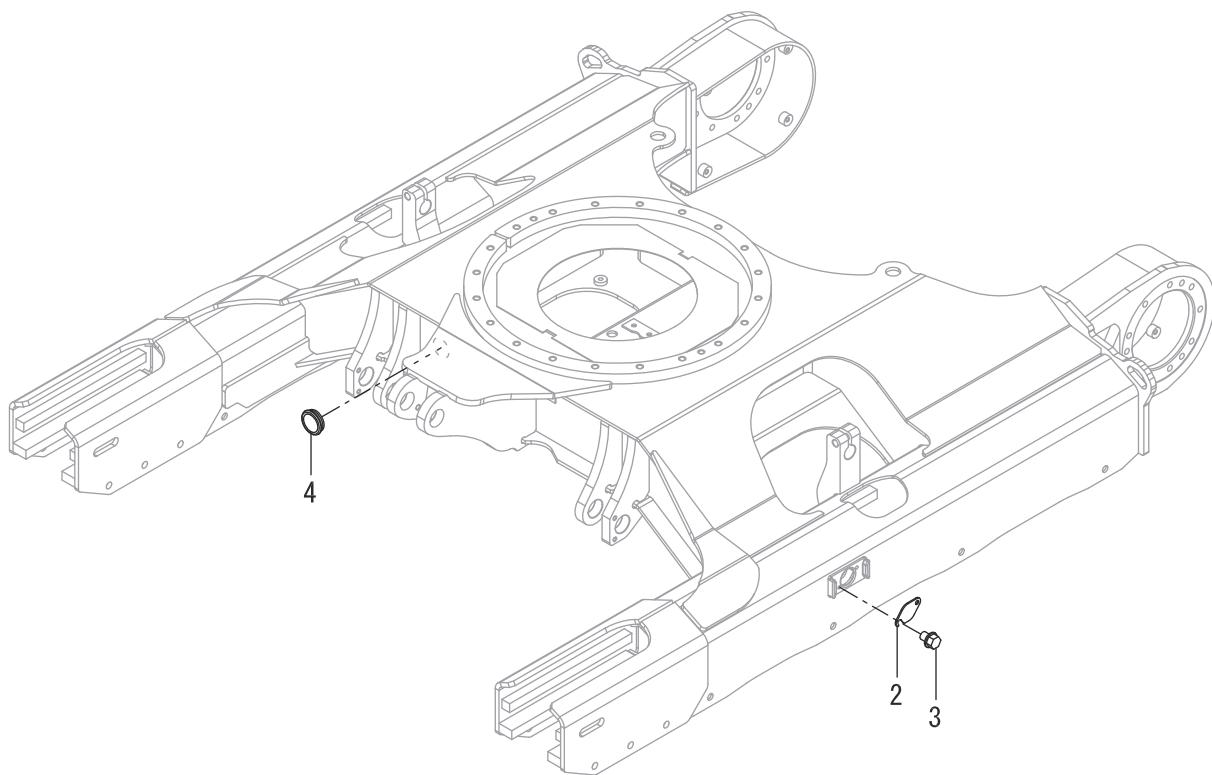
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 66 - CONTROL EQUIPMENT (LOCK LEVER & STAND)

Ref.

No.	Part No.	Description	Qty.
1	50282079	GRIP,RED	1
2	50287633	STAND ASSY/LEVER L	1
3	50280810	BUSHING 2015	4
5	50282497	NIPPLE PT1/8,GREASE	2
6	50287635	BASE ASSY/LEVER L	1
7	50281653	SPRING 2.3X15X60	1
8	50287636	ROD ASSY/GUIDE	1
9	50287637	LEVER ASSY/LOCK L	1
10	50287638	STAND ASSY/LEVER R	1
11	50281071	SPRING,GAS	1
12	50280894	BUSHING	1
13	50282380	WASHER 8, POLISHED	2
14	50282383	WASHER, 20	1
15	425-35232	CIRCLIP 20	1
16	176152	CIRCLIP E-7	1
17	50282413	SPRING PIN 3.5X40	1
18	50282414	SPRING PIN 6X40	1
19	50282418	COTTER PIN 2.0X20	2
20	50282539	BOLT 10X25 W/PLW+SPW	3
21	50282539	BOLT 10X25 W/PLW+SPW	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 67 - TRACK FRAME



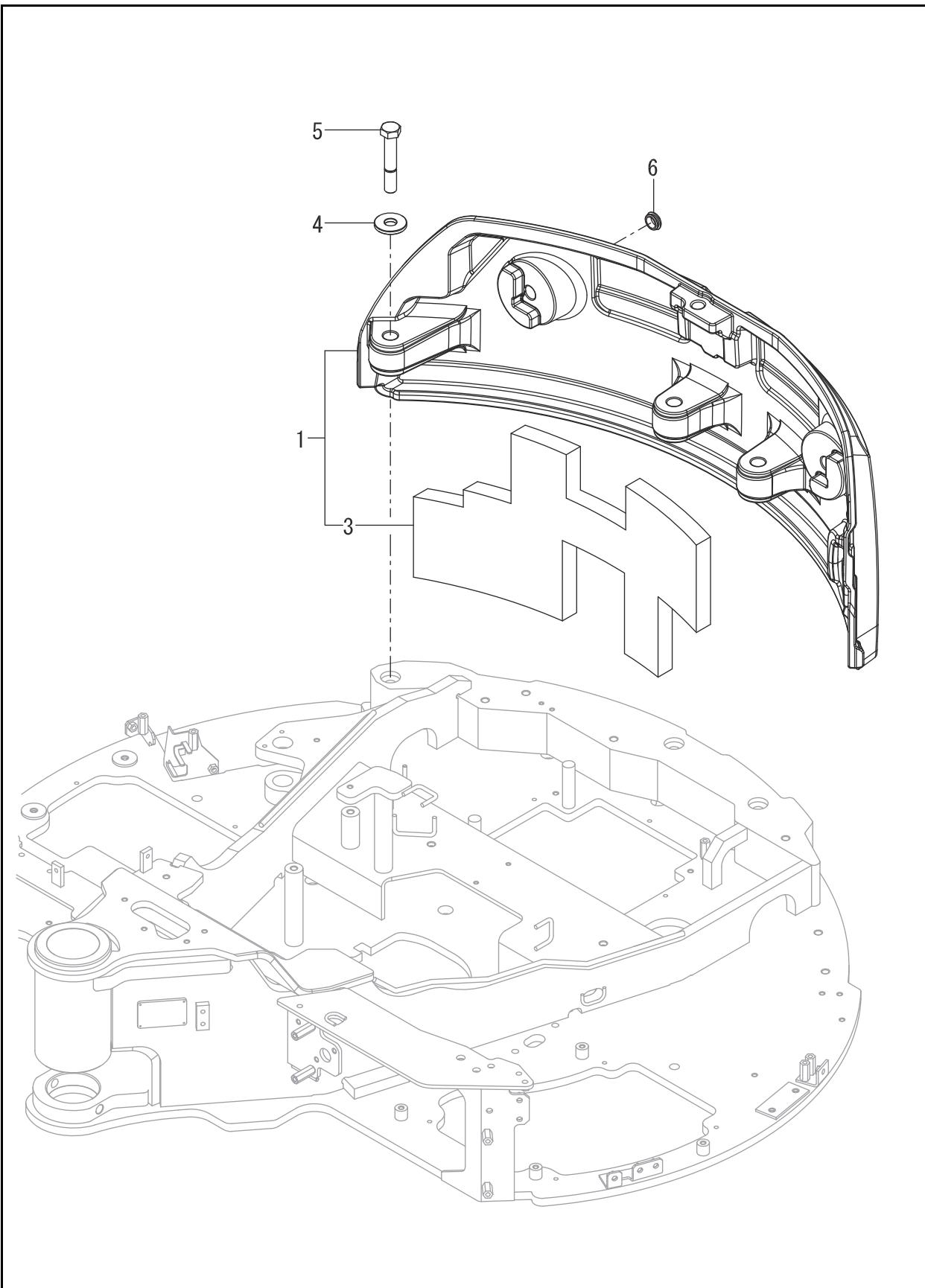
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 67 - TRACK FRAME

Ref.

No.	Part No.	Description	Qty.
2	50281136	FRAME COVER	2
3	50282558	BOLT M10X 12 PLATED	4
4	50282727	GROMMET	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 68 - COUNTER WEIGHT



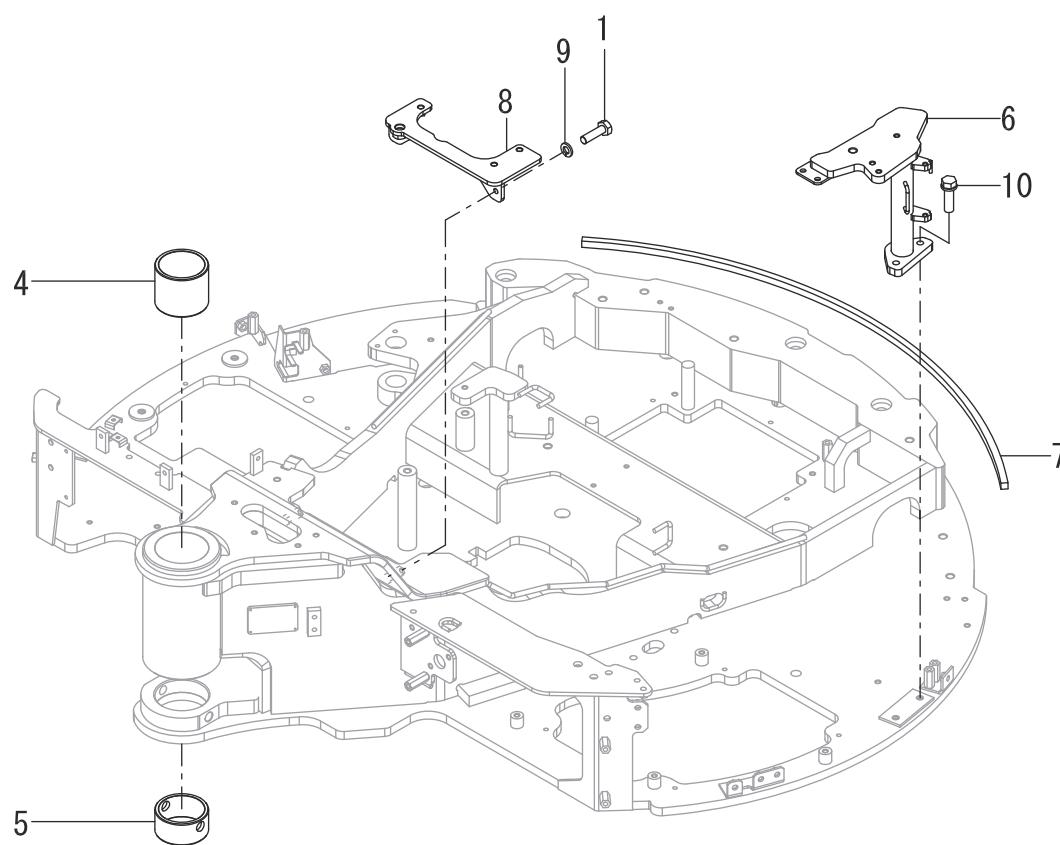
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 68 - COUNTER WEIGHT

Ref.

No.	Part No.	Description	Qty.
1	50289084	COUNTERWEIGHT ASSY	1
3	50289085	PAD	1
4	50280943	WASHER 24.5X65X8	3
5	50281072	BOLT 24X140	3
6	50281128	GROMMET 30	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 69 - TURNING FRAME



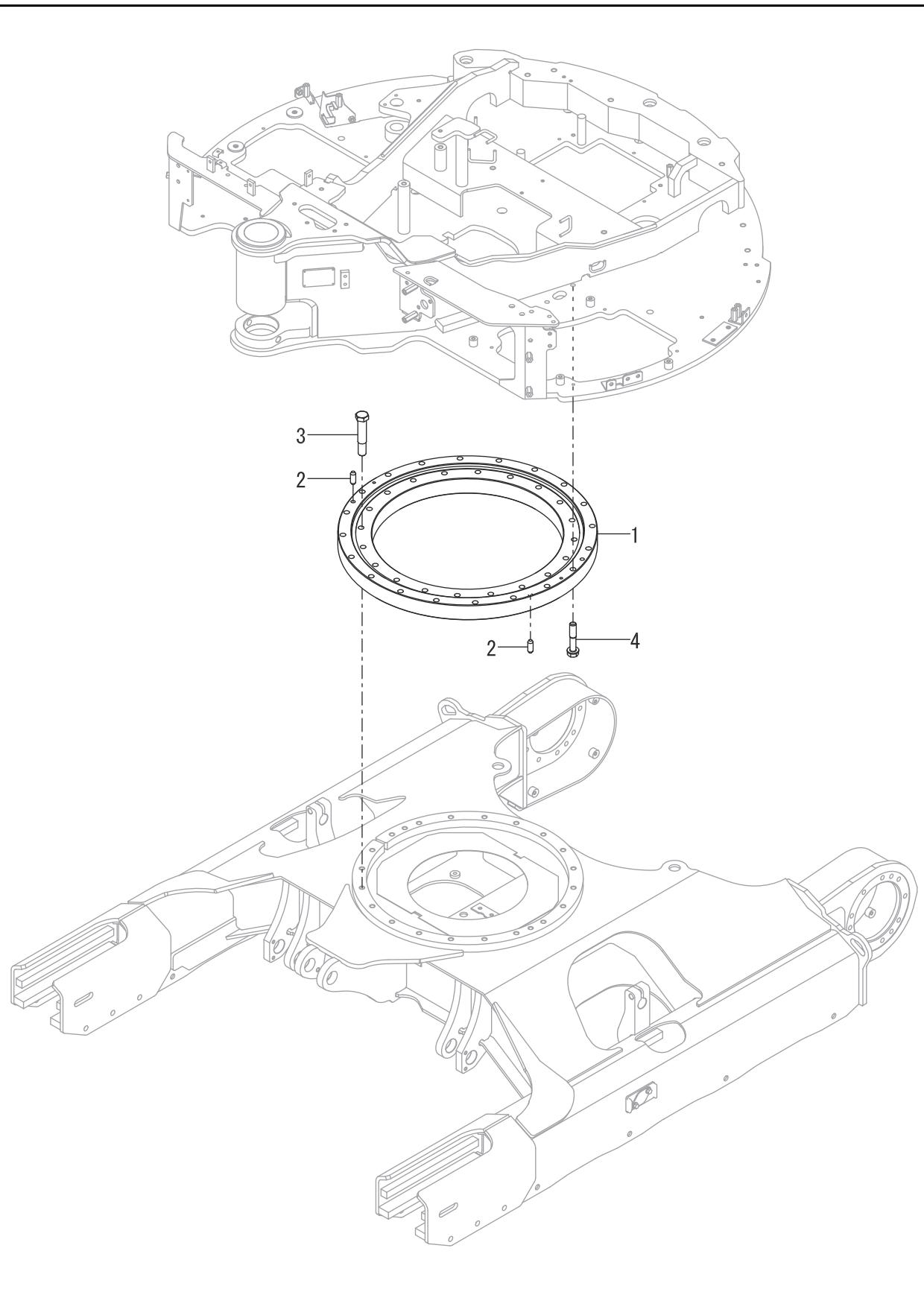
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 69 - TURNING FRAME

Ref.

No.	Part No.	Description	Qty.
1	50281411	BOLT 10X35,11T	2
4	50289087	BUSHING	1
5	50289088	BUSHING	1
6	50289086	BRACKET ASSY	1
7	50289356	SEAL	1
8	50289089	BRACKET ASSY	1
9	50282393	SPRING WASHER 10	2
10	50282526	BOLT M12X 40	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 70 - TURNING BEARING



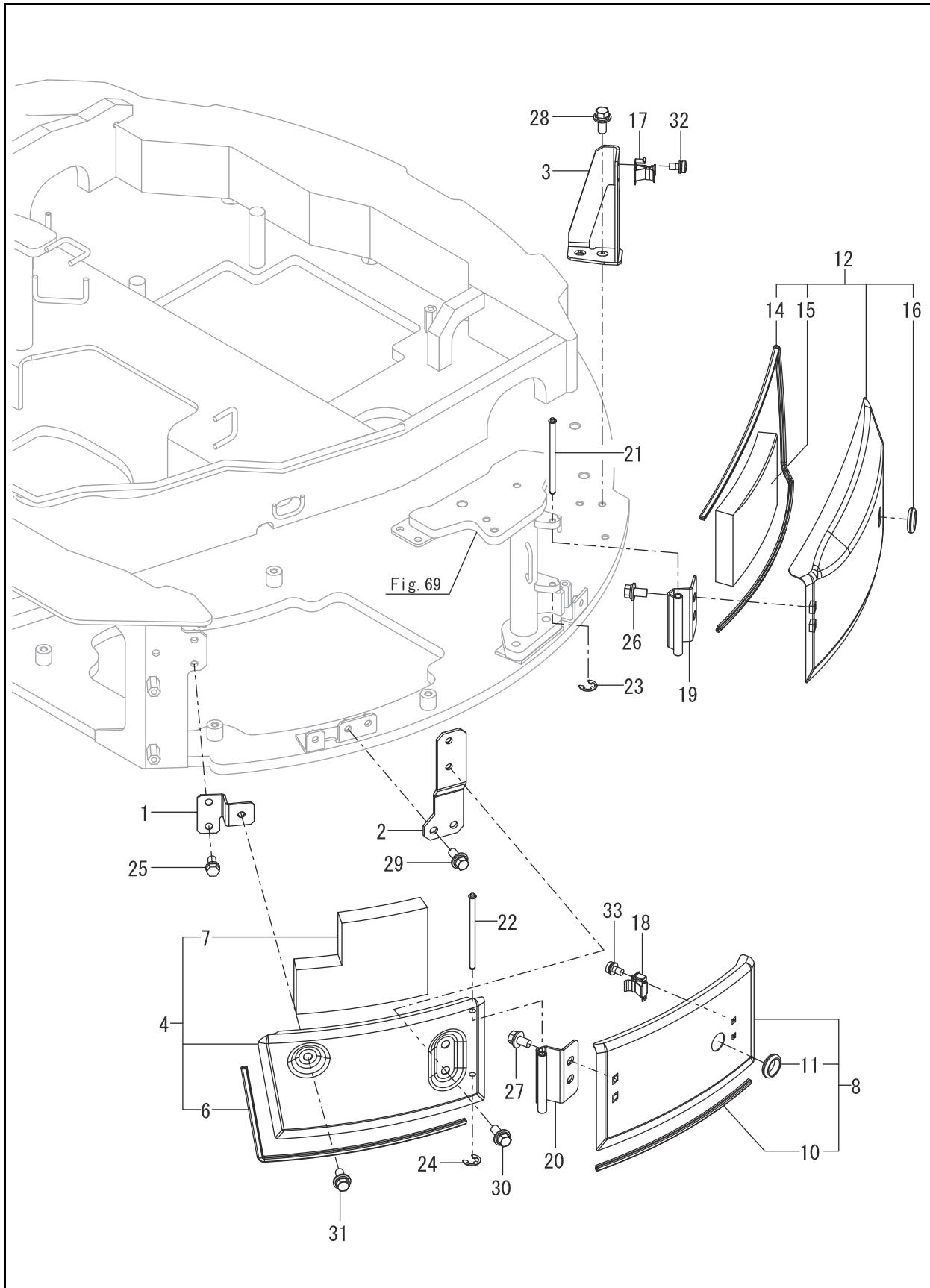
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 70 - TURNING BEARING

Ref.

No.	Part No.	Description	Qty.
1	50282896	BEARING,TURNING	1
2	50282703	PARALLEL PIN 13X36	4
3	50282921	BOLT 16X90	20
4	50283984	BOLT 10.9 16X80	20

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 71 - COVER (MULTI)



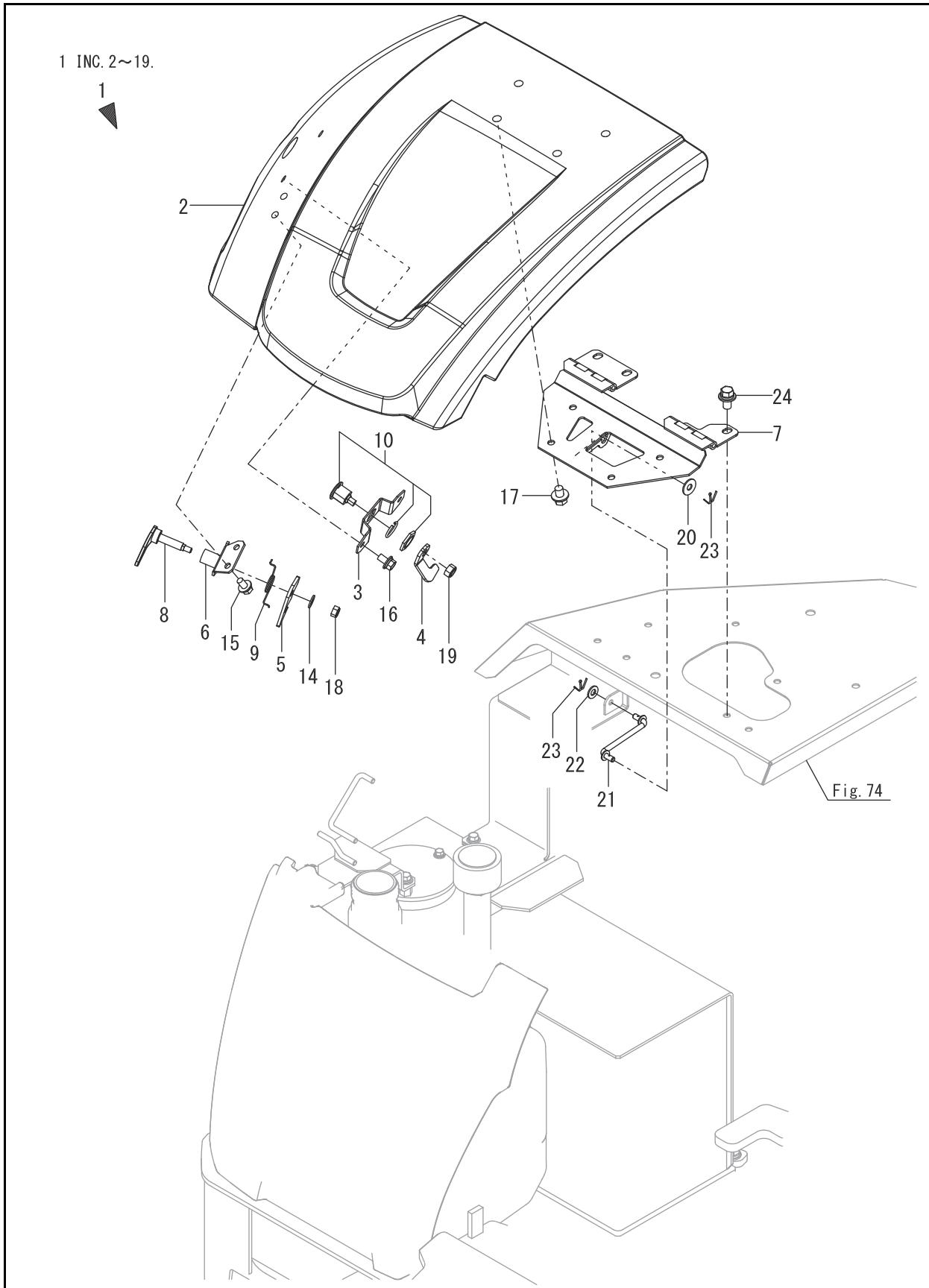
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 71 - COVER (MULTI)

Ref.

No.	Part No.	Description	Qty.
1	50287649	STAY ASSY/MULTI A A	1
2	50287650	STAY ASSY/MULTI A B	1
3	50288958	BRACKET	1
4	50287653	COVER ASSY/MULTI A	1
6	50287669	SEAL/MULTI A	1
7	50287672	SPONGE/MULTI A	1
8	50287656	COVER ASSY/MULTI B	1
10	50287670	SEAL/MULTI B	1
11	50280805	GROMMET	1
12	50287659	COVER ASSY/MULTI C	1
14	50287671	SEAL/MULTI C	1
15	50287673	SPONGE/MULTI C	1
16	50280805	GROMMET	1
17	50282360	HOLDER	1
18	50282360	HOLDER	1
19	50287674	HINGE ASSY/MULTI	1
20	50287674	HINGE ASSY/MULTI	1
21	50287103	SHAFT/HINGE	1
22	50287103	SHAFT/HINGE	1
23	176152	CIRCLIP E-7	1
24	176152	CIRCLIP E-7	1
25	50282515	BOLT W/WASHER M10X20	2
26	50282538	BOLT M10X 20	2
27	50282538	BOLT M10X 20	2
28	50282539	BOLT 10X25 W/PLW+SPW	2
29	50282539	BOLT 10X25 W/PLW+SPW	2
30	50282539	BOLT 10X25 W/PLW+SPW	2
31	50282539	BOLT 10X25 W/PLW+SPW	1
32	50282543	SCREW M 5X 10	2
33	50282543	SCREW M 5X 10	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 73 - COVER (UPPER:1)



Z45 GEN:2 - COMPACT EXCAVATOR**FIG. 73 - COVER (UPPER:1)**

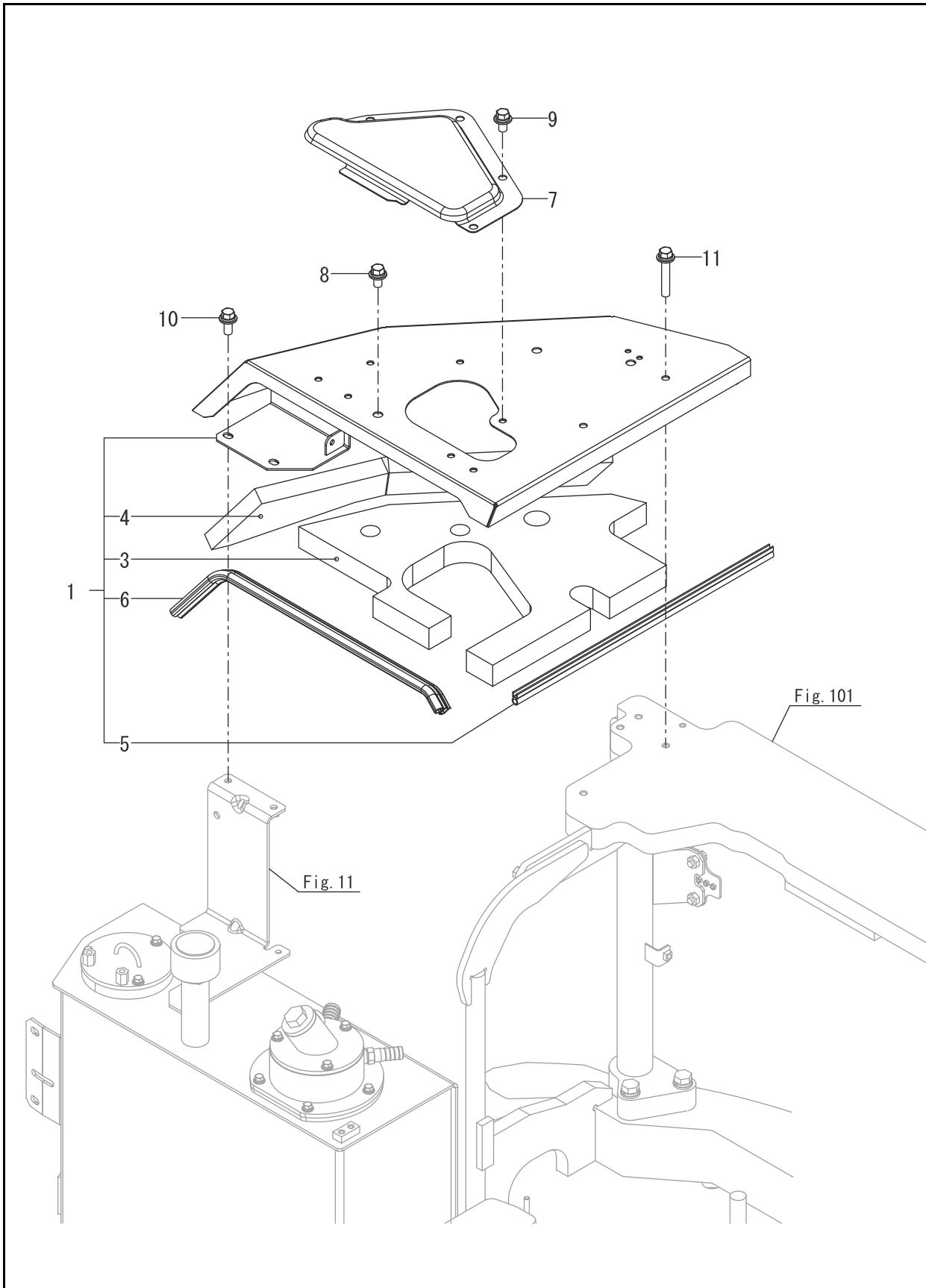
Ref.

No.	Part No.	Description	Qty.
1	50289422	HYDRAULIC TANK COVER ASSY	1
2	50289423	HYDRAULIC TANK COVER	1
3	50289109	LOCK BRACKET	1
4	Order 4-1	BRACKET (machines produced before Oct. 2013)	1
4-1	50289111	BRACKET (machines produced after Oct. 2013)	1
5	50281676	PLATE,LOCK	1
6	50289112	LATCH BRACKET	1
7	50289113	HINGE	1
8	50281686	LEVER ASSY	1
9	50280847	TORSION SPRING	1
10	50287772	CYLINDER ASSY W/O KEY *	1
14	50282380	WASHER 8, POLISHED	1
15	50282533	BOLT M 8X 16	2
16	50282533	BOLT M 8X 16	2
17	50282537	BOLT M10X16	4
18	50282575	U-NUT M 8	1
19	50282576	U-NUT M10	1
20	50282361	WASHER	1
21	50281051	ROD,STOPPER	1
22	50282380	WASHER 8, POLISHED	1
23	50282418	COTTER PIN 2.0X20	2
24	50282538	BOLT M10X 20	3

NOTE: * Key part number 50288194 (2 keys)

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 74 - COVER (UPPER:2)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 74 - COVER (UPPER:2)

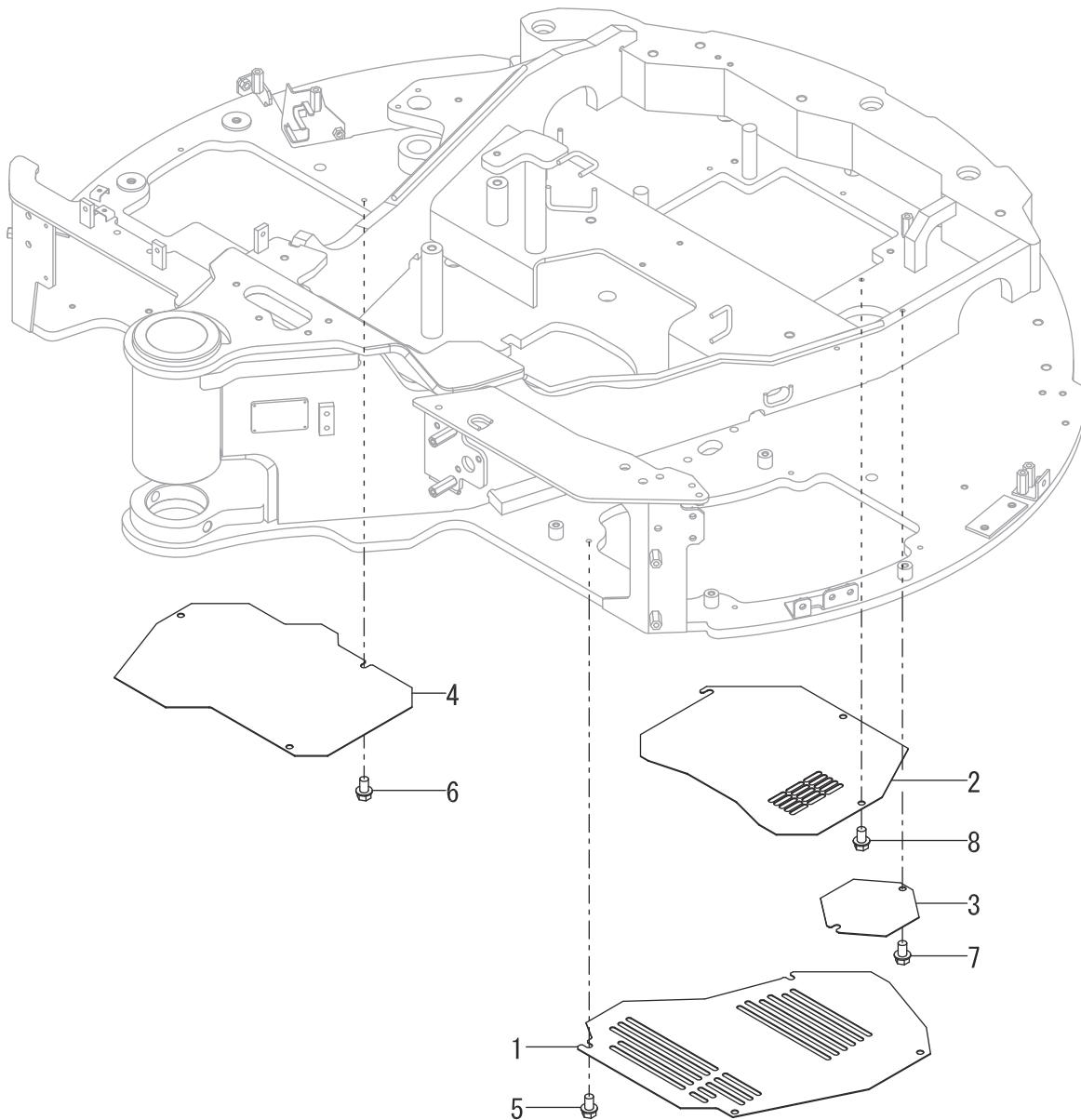
Ref.

No.	Part No.	Description	Qty.
1	50289106	HYDRAULIC TANK COVER (replacement also requires labels 6A, 6B, 6C)	1
3	50289107	PAD	1
4	50289108	PAD	1
5	50285594	SEAL,600	1
6	50288915	RUBBER SEAL	1
6A	50281459	LABEL,ANTI-FREEZING *	1
6B	50281027	LABEL, RADIATOR US *	1
6C	50280797	LABEL, AIR CLEANER *	1
7	50281672	UPPER COVER	1
8	50282538	BOLT M10X 20	2
9	50282538	BOLT M10X 20	4
10	50282539	BOLT 10X25 W/PLW+SPW	2
11	50289439	BOLT M10X60	2

NOTE: * Labels shown on Page 6.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 75 - COVER (TURNING FRAME)



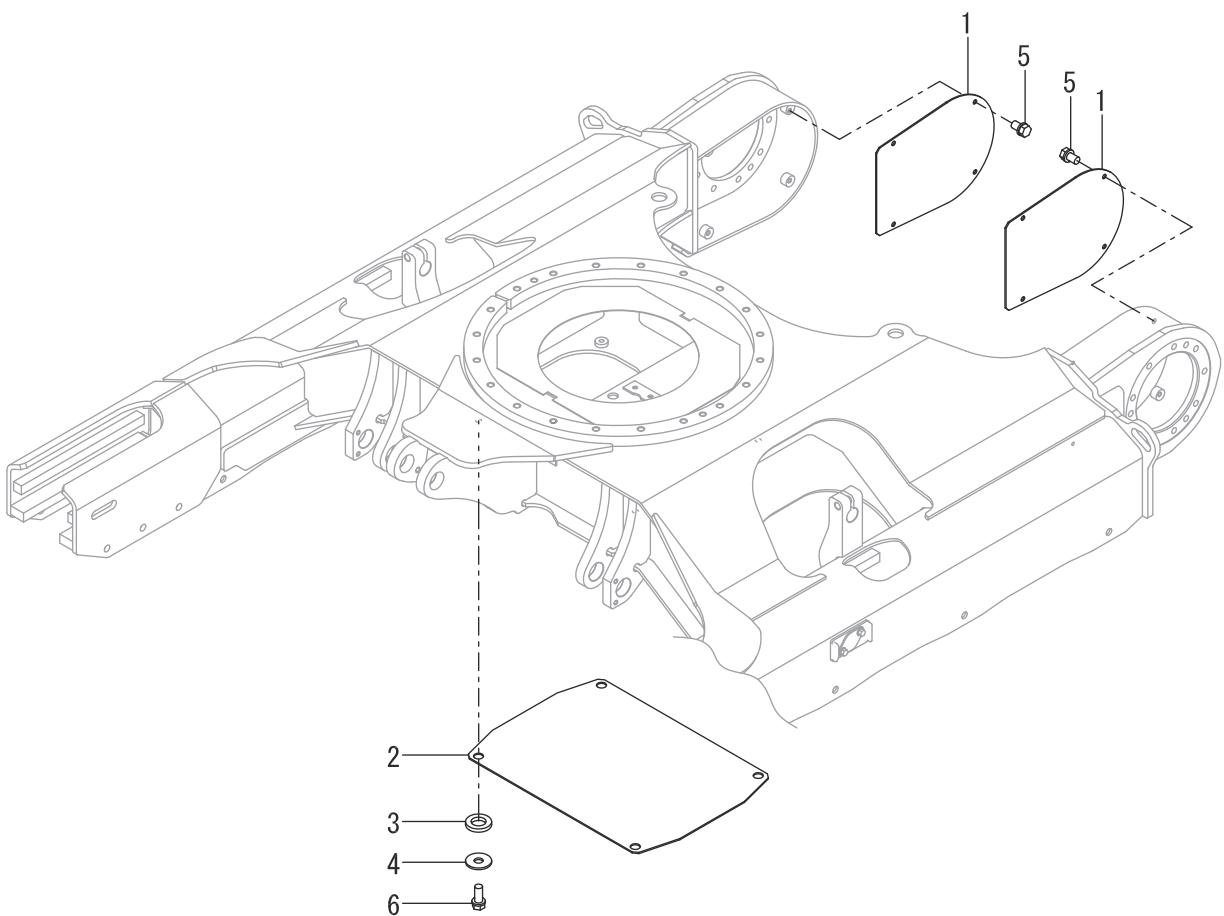
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 75 - COVER (TURNING FRAME)

Ref.

No.	Part No.	Description	Qty.
1	50289099	VALVE COVER	1
2	50289100	OIL PAN COVER	1
3	50287667	COVER/PUMP	1
4	50289101	HYDRAULIC TANK COVER	1
5	186619	BOLT M10X 16 PLATED	4
6	186619	BOLT M10X 16 PLATED	3
7	186619	BOLT M10X 16 PLATED	2
8	186619	BOLT M10X 16 PLATED	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 76 - COVER (TRACK FRAME)



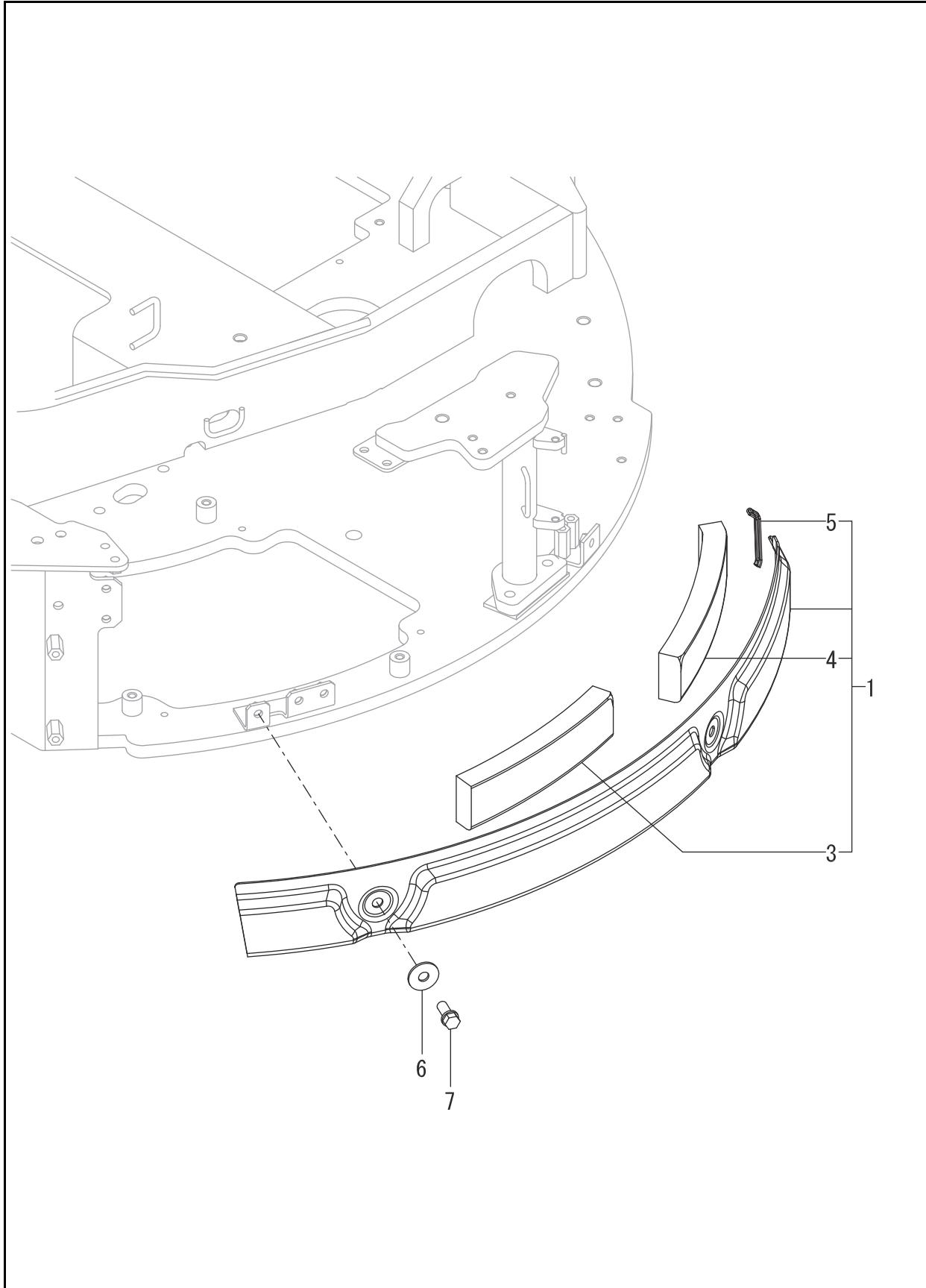
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 76 - COVER (TRACK FRAME)

Ref.

No.	Part No.	Description	Qty.
1	50289092	DRIVE MOTOR COVER	2
2	50283115	COVER	1
3	50280863	RUBBER	4
4	50282388	WASHER 12	4
5	50282515	BOLT W/WASHER M10X20	8
6	50282525	BOLT W/WASHER M12X30	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 77 - FRAME GUARD (LEFT)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 77 - FRAME GUARD (LEFT)

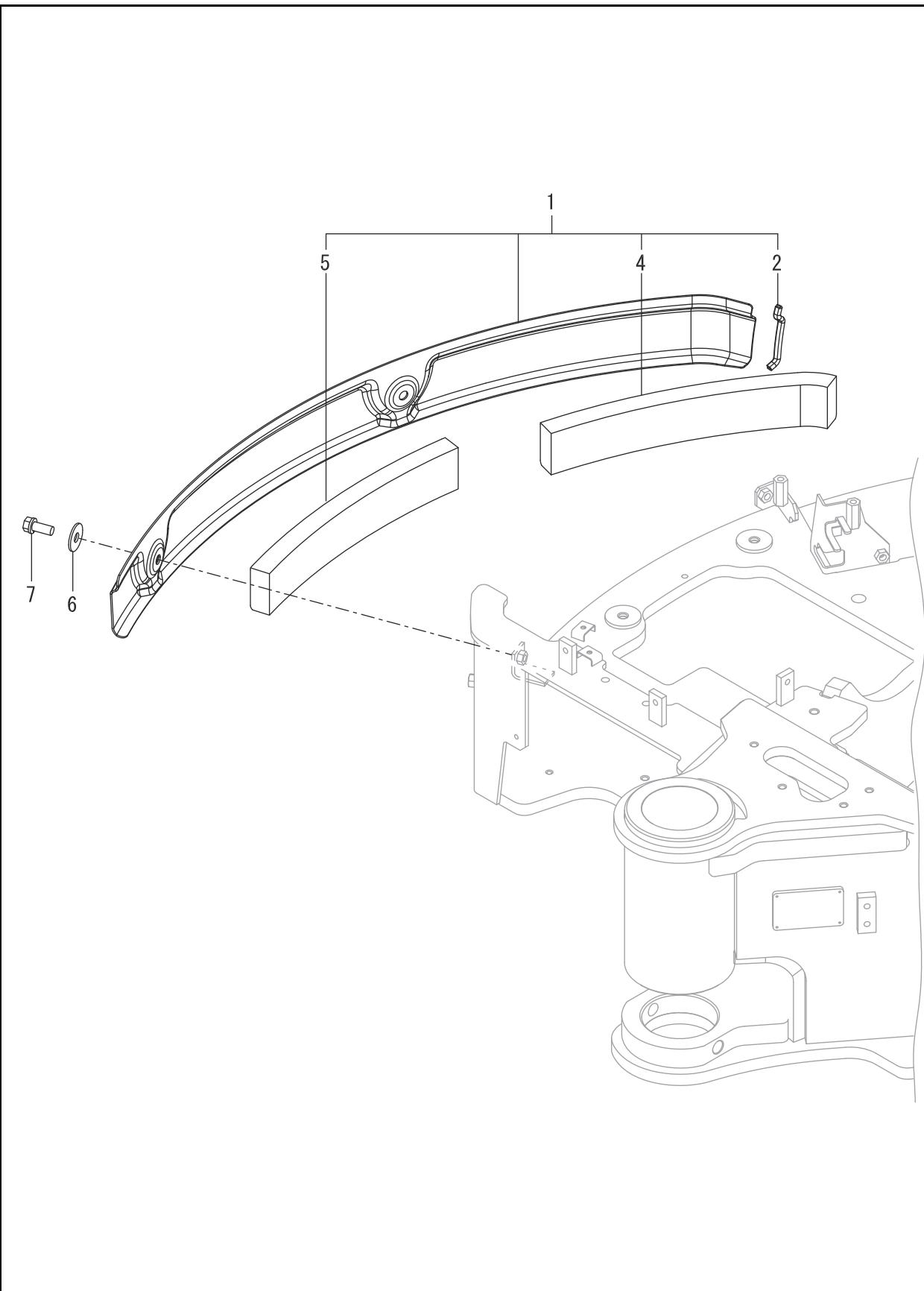
Ref.

No.	Part No.	Description	Qty.
1	50289090	FRAME TRIM LEFT (replacement also requires label 5A)	1
3	50289091	PAD	1
4	50289091	PAD	1
5	50288916	TRIM	1
5A	50281023	LABEL, GREASE CYL. *	1
6	50282387	WASHER 10	2
7	50282516	BOLT W/WASHER M10X25	2

NOTE: * Label shown on Page 4.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 78 - FRAME GUARD (RIGHT)



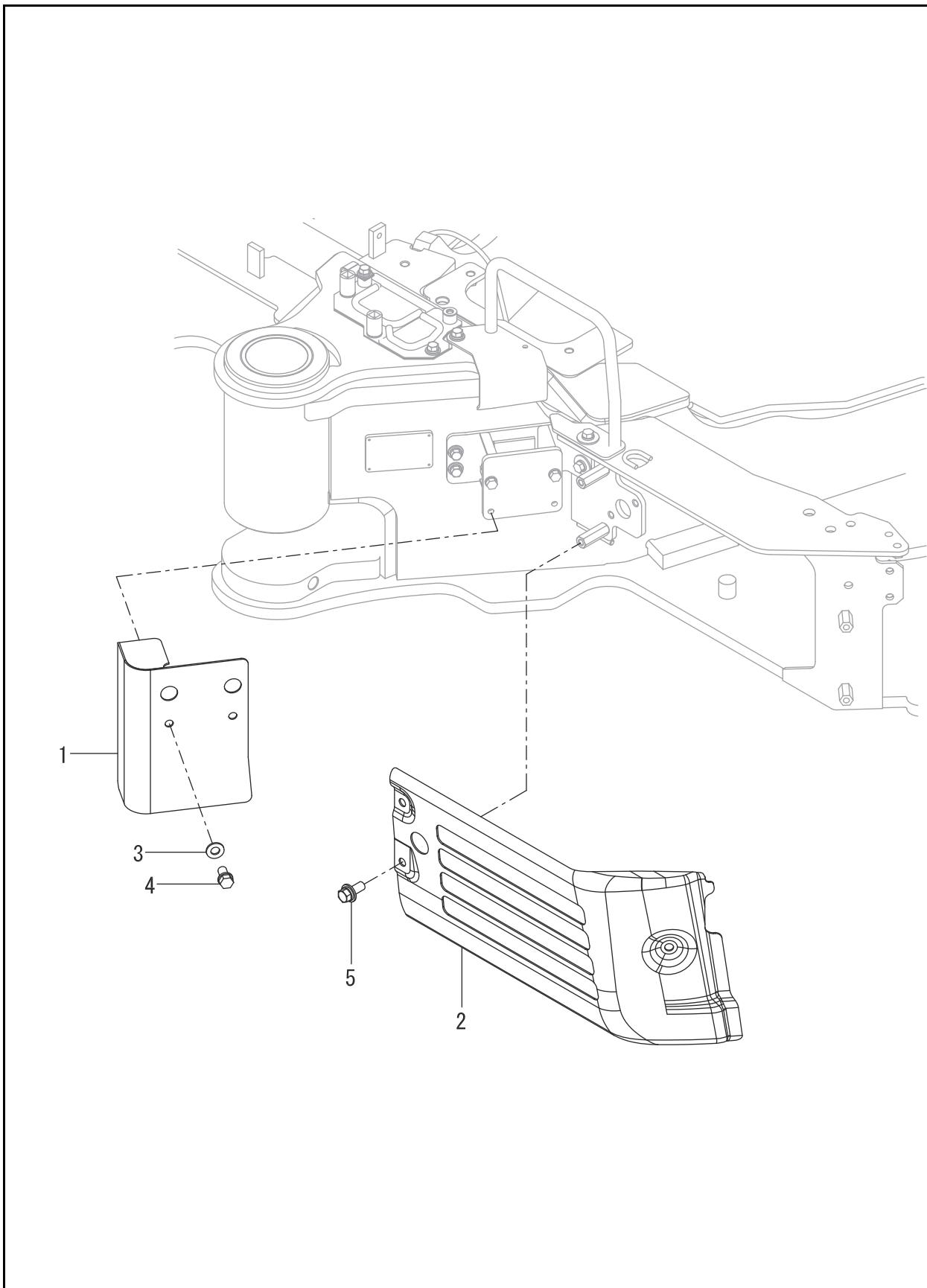
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 78 - FRAME GUARD (RIGHT)

Ref.

No.	Part No.	Description	Qty.
1	50289093	FRAME TRIM RIGHT (replacement also requires label 5A)	1
2	50281049	SEAL 125	1
4	50289094	PAD	1
5	50289094	PAD	1
5A	50281023	LABEL, GREASE CYL. *	1
6	50282387	WASHER 10	2
7	50282516	BOLT W/WASHER M10X25	2

NOTES: * Label shown on Page 4.

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 79 - COVER (TURNING FRAME:FRONT LEFT)

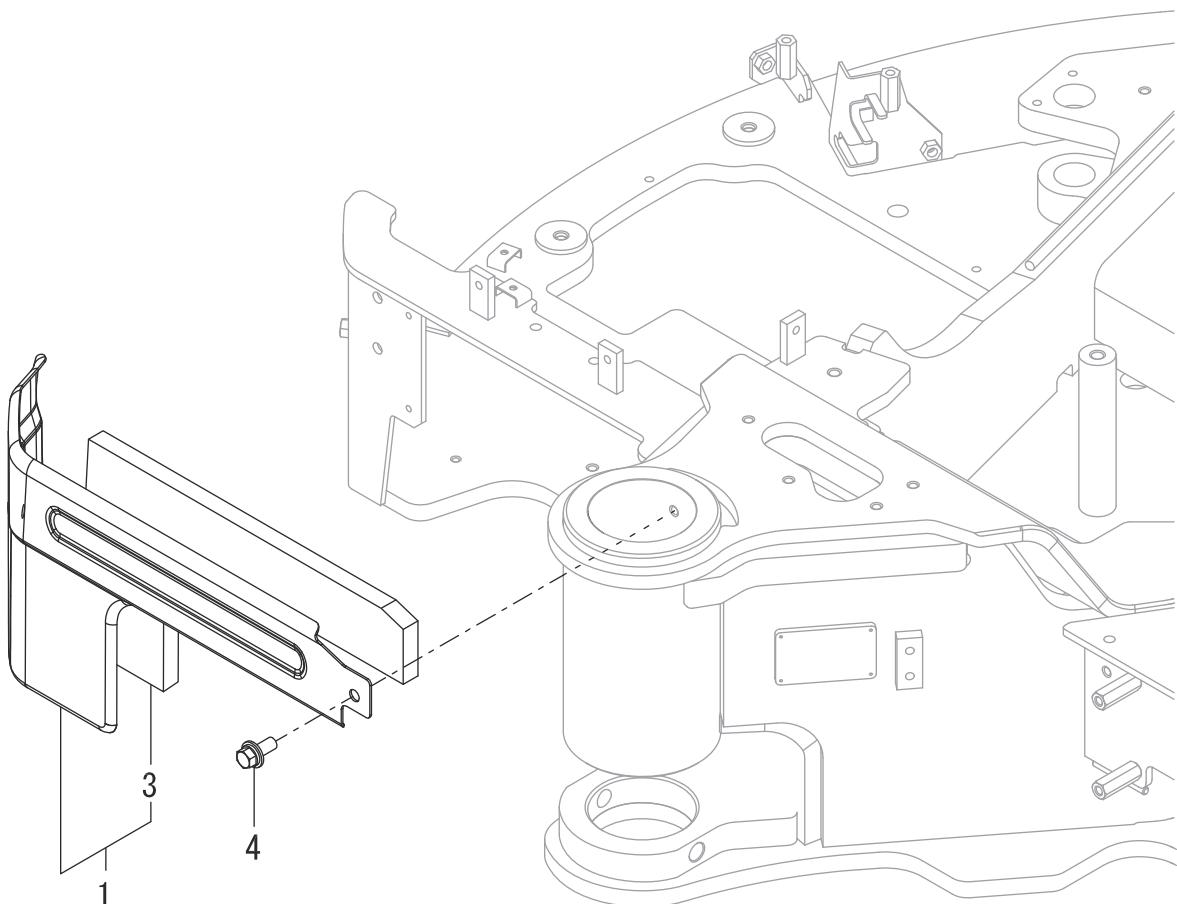


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 79 - COVER (TURNING FRAME:FRONT LEFT)

Ref.

No.	Part No.	Description	Qty.
1	50289095	HOSE COVER	1
2	50289096	COVER	1
3	138111	WASHER/POLISHED	2
4	50282515	BOLT W/WASHER M10X20	2
5	50282539	BOLT 10X25 W/PLW+SPW	3

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 80 - COVER (TURNING FRAME:FRONT RIGHT)



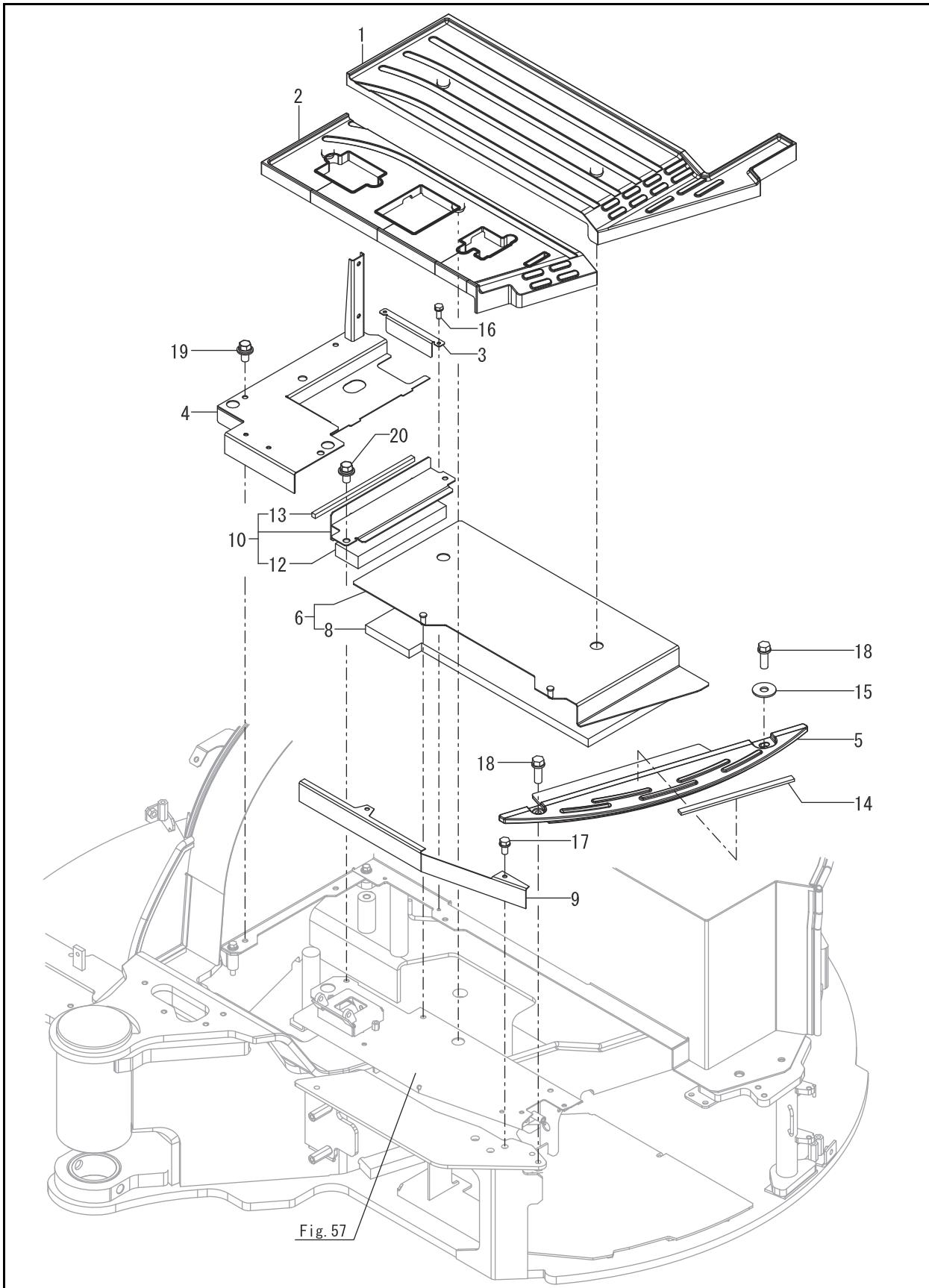
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 80 - COVER (TURNING FRAME:FRONT RIGHT)

Ref.

No.	Part No.	Description	Qty.
1	50289097	COVER	1
3	50289098	PAD	1
4	50282539	BOLT 10X25 W/PLW+SPW	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 81 - STEP (CABIN SPEC.)



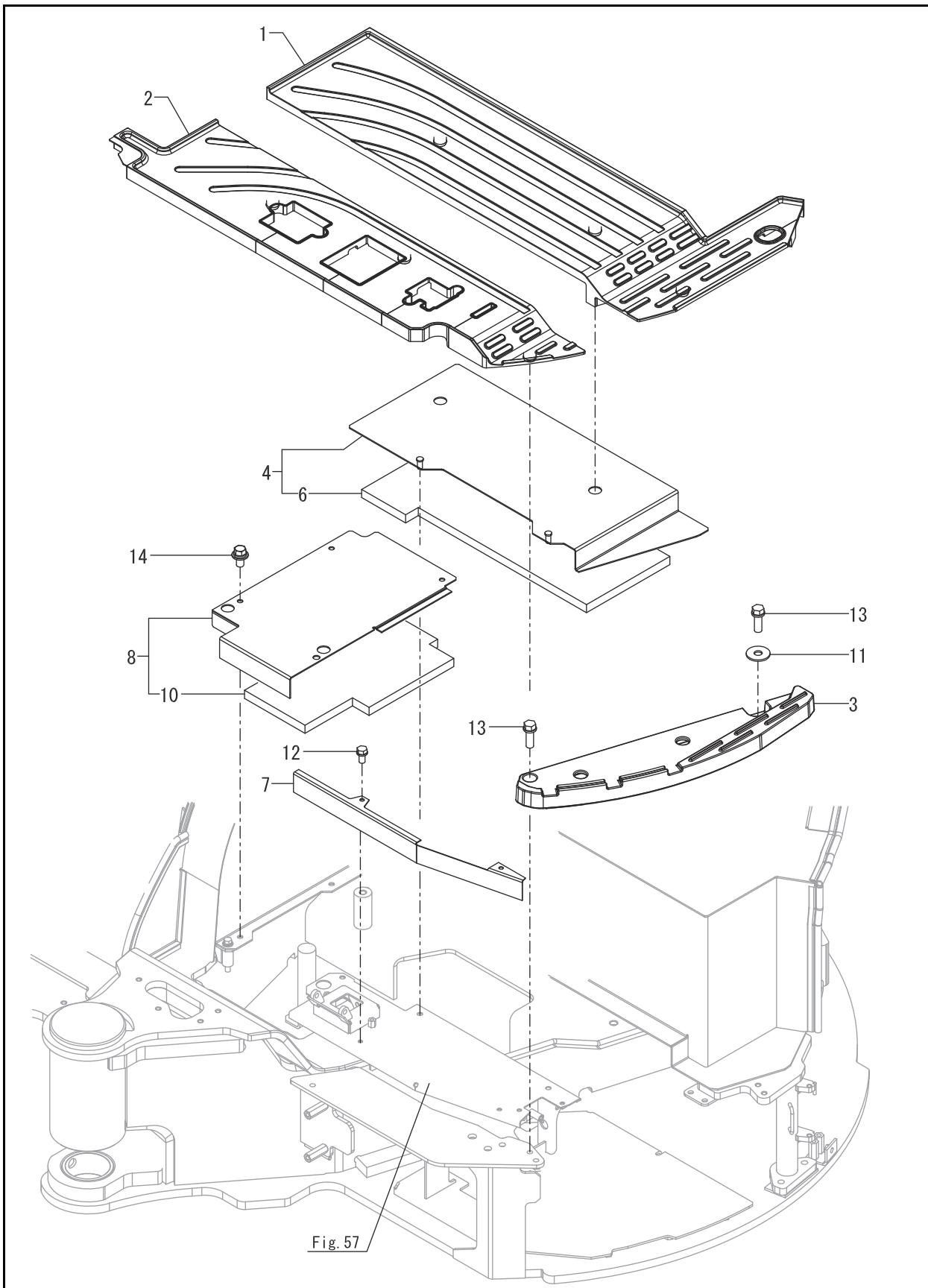
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 81 - STEP (CABIN SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50287684	FLOOR MAT/A CAB	1
2	50287685	FLOOR MAT/B CAB EX	1
3	50287686	PLATE/PARTITION	1
4	50287687	STEP ASSY/R CAB	1
5	50287691	STEP/NON-SLIP C	1
6	50289114	STEP ASSY	1
8	50289115	PAD	1
9	50287692	COVER/F CAB-4P	1
10	50289118	COVER ASSY	1
12	50289119	PAD	1
13	50289120	SEAL	1
14	50287151	SEAT/NON SLIP	1
15	50282387	WASHER 10	1
16	50282502	BOLT M 6X 16	2
17	50282506	BOLT W/WASHER M8X16	2
18	50282517	BOLT M10X 30	2
19	50282538	BOLT M10X 20	3
20	50282538	BOLT M10X 20	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 82 - STEP (CANOPY SPEC.)



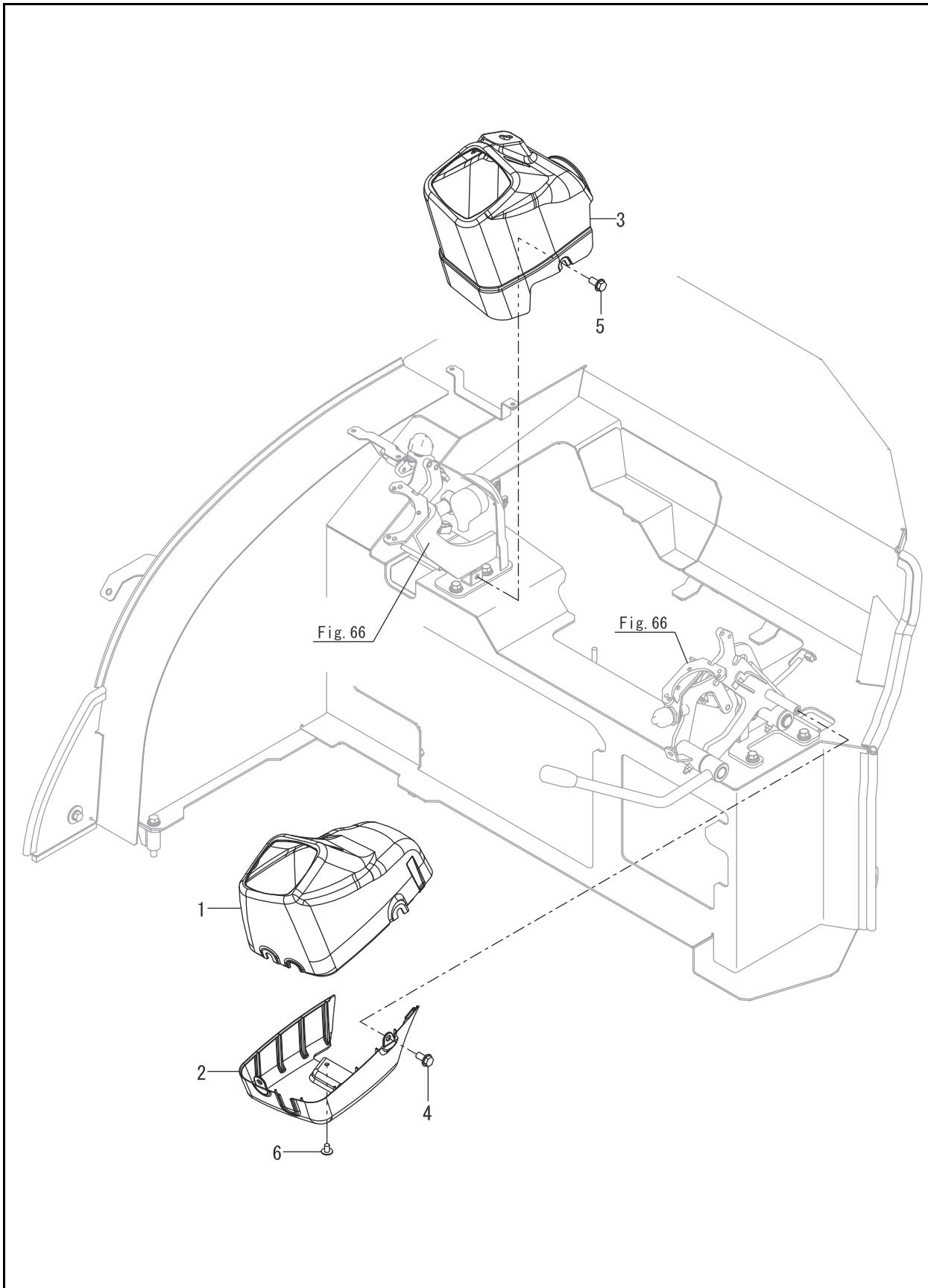
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 82 - STEP (CANOPY SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50287682	FLOOR MAT/A P	1
2	50287683	FLOOR MAT/B 4P EX	1
3	50287690	STEP/NON-SLIP P	1
4	50289114	STEP ASSY	1
6	50289115	PAD	1
7	50287692	COVER/F CAB-4P	1
8	50289117	STEP ASSY	1
10	50289116	PAD	1
11	50282387	WASHER 10	1
12	50282506	BOLT W/WASHER M8X16	2
13	50282517	BOLT M10X 30	2
14	50282538	BOLT M10X 20	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 83 - COVER (LEVER)

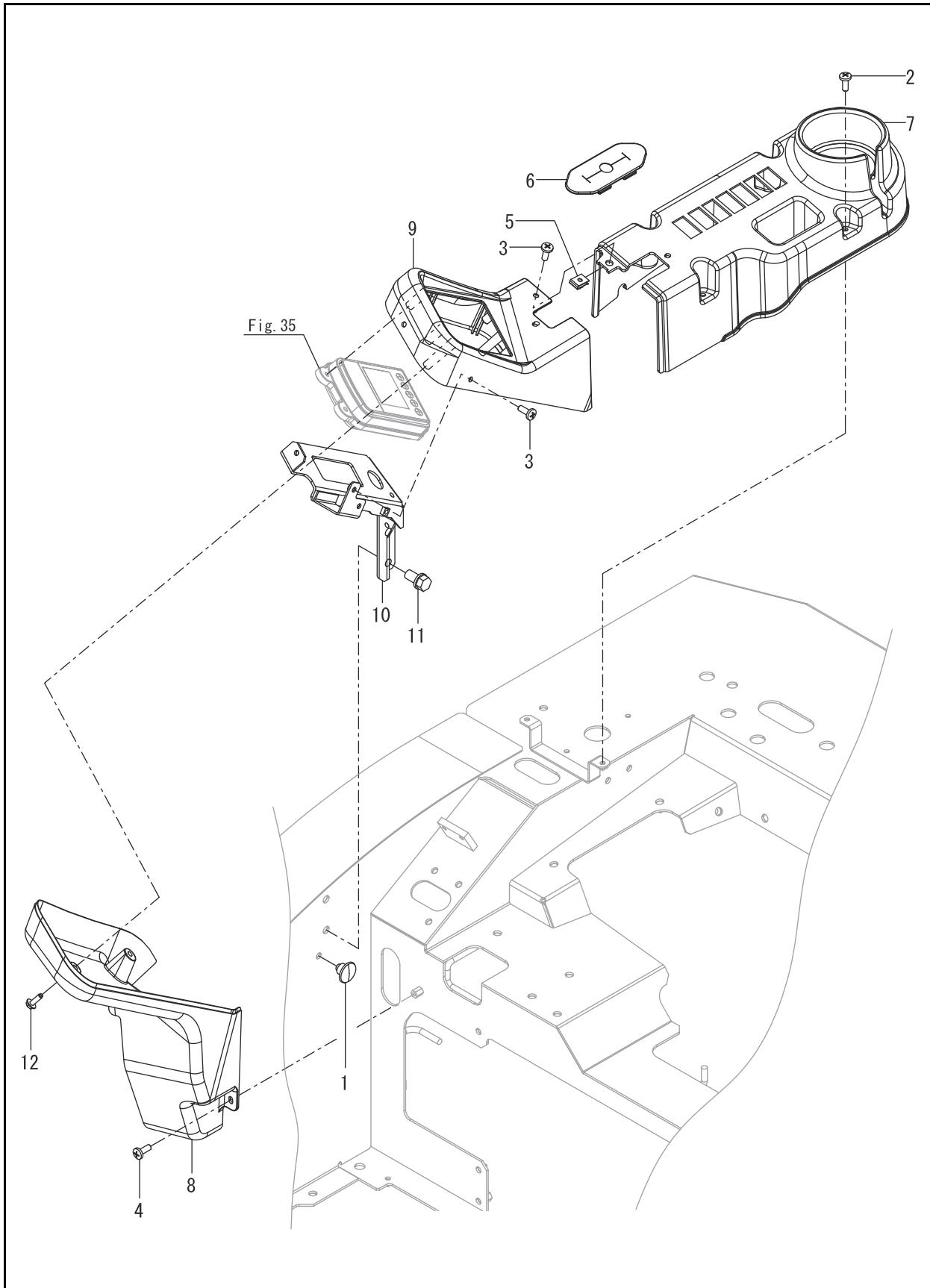


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 83 - COVER (LEVER)

Ref.

No.	Part No.	Description	Qty.
1	50287694	COVER/LEVER L UP	1
2	50287695	COVER/LEVER L LOW	1
3	50287696	COVER/LEVER R	1
4	50281318	BOLT 8X 16	3
5	50281318	BOLT 8X 16	2
6	50288114	RIVET	1

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 84 - COVER (MONITOR:CANOPY SPEC.)

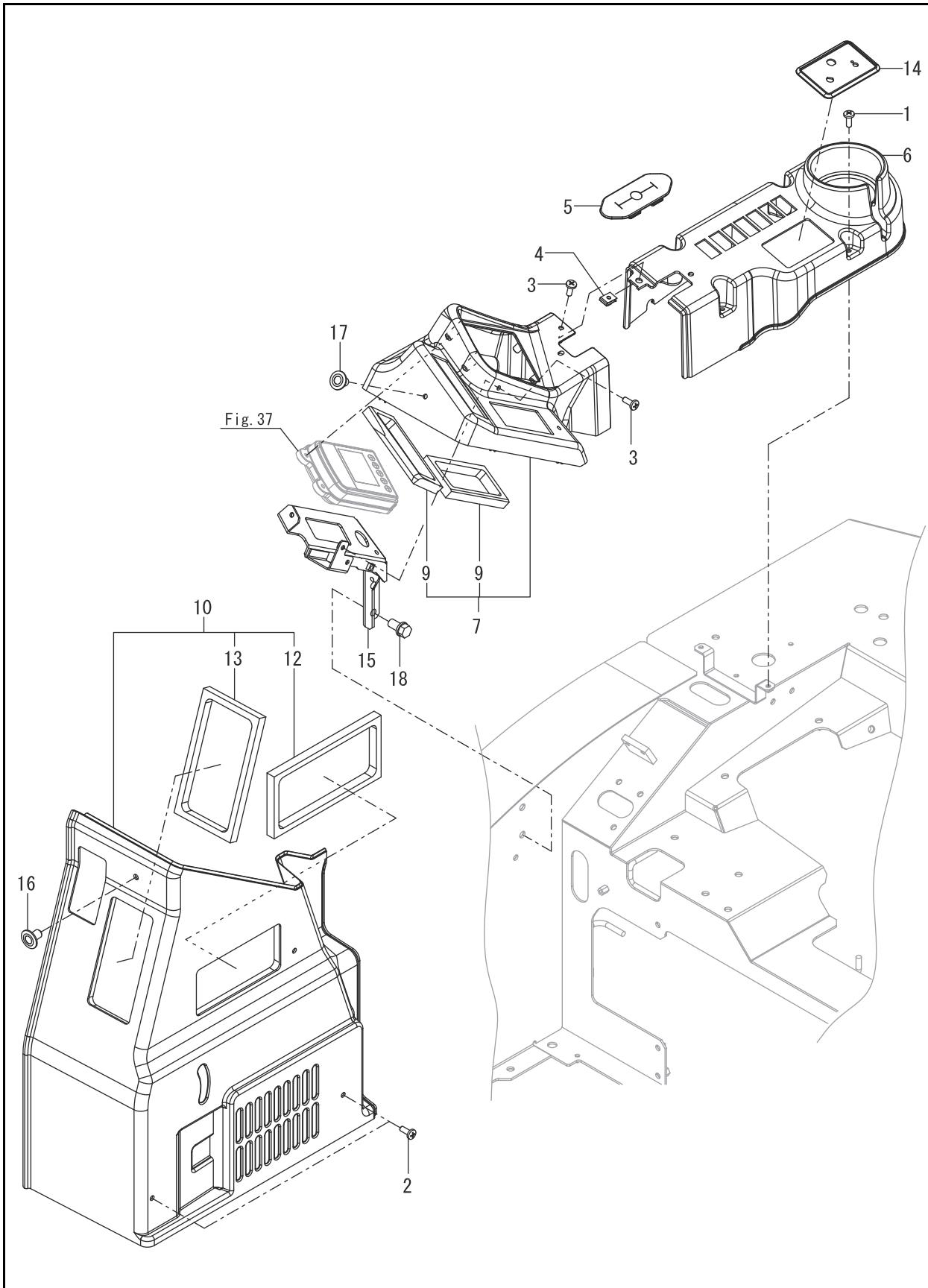


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 84 - COVER (MONITOR:CANOPY SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50281050	CLIP	1
2	50280804	SCREW	4
3	50280804	SCREW	3
4	50280804	SCREW	1
5	50288094	NUT/SPEED	1
6	50287693	GROMMET/BLADE	1
7	50287698	COVER/SWITCH P	1
8	50287699	COVER/INPANE LOW-P	1
9	50287702	COVER/INPANE UP-P	1
10	50287710	STAY ASSY/INPANE	1
11	50282515	BOLT W/WASHER M10X20	2
12	50288179	SCREW	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 85 - COVER (MONITOR:CABIN A/C SPEC.)



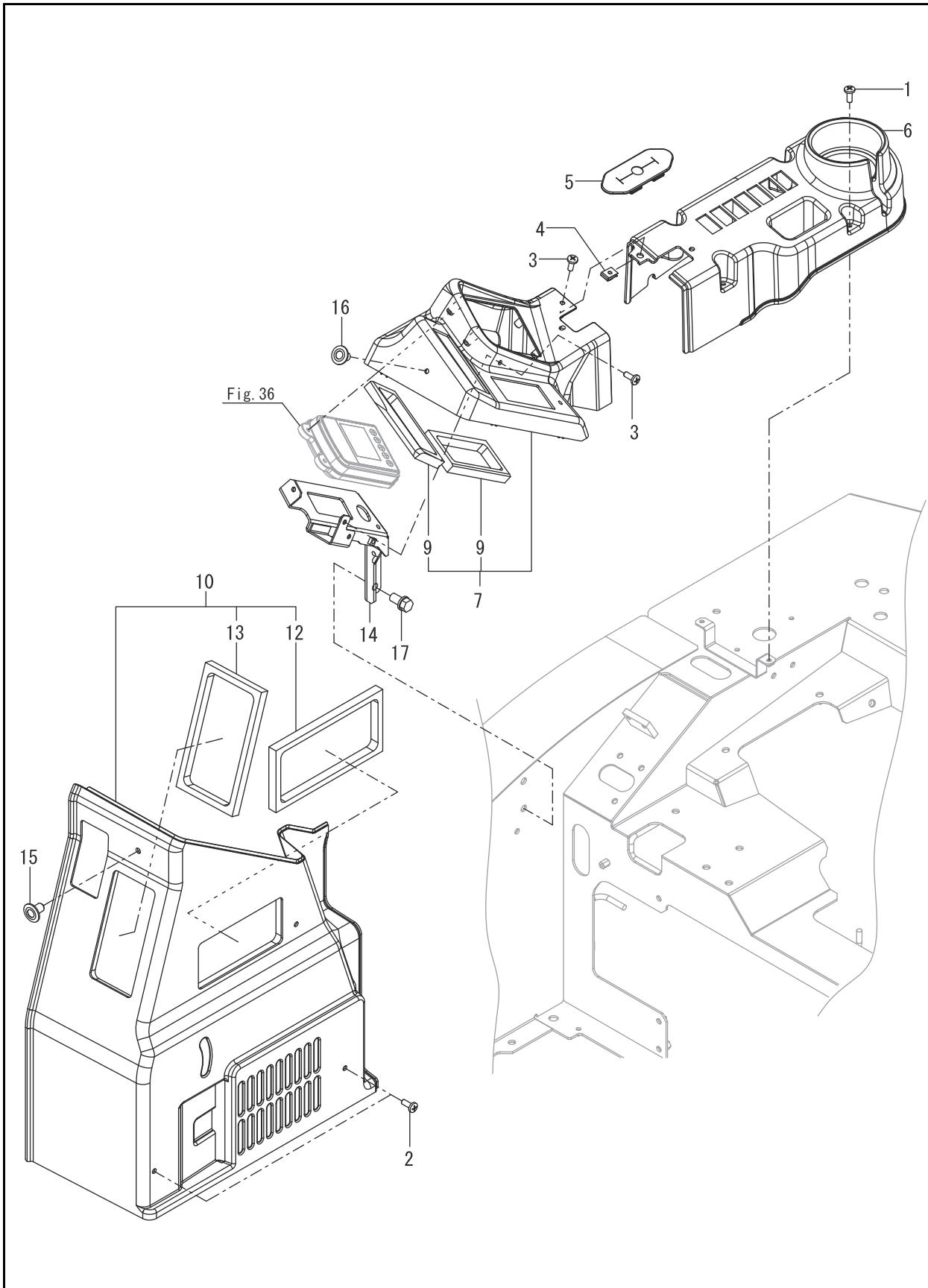
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 85 - COVER (MONITOR:CABIN A/C SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50280804	SCREW	4
2	50280804	SCREW	2
3	50280804	SCREW	2
4	50288094	NUT/SPEED	1
5	50287693	GROMMET/BLADE	1
6	50287697	COVER/SWITCH C	1
7	50287700	COVER ASSY/INPANE C	1
9	50287703	SEAL/DUCT UP	2
10	50287704	COVER ASSY/AC (replacement also requires label 13A)	1
12	50287706	SEAL/DUCT SIDE	1
13	50282366	SEAL, DUCT SIDE	1
13A	50281019	LABEL, MANUAL US *	1
14	50287707	PANEL/AC	1
15	50287710	STAY ASSY/INPANE	1
16	50288114	RIVET	2
17	50288114	RIVET	2
18	50282515	BOLT W/WASHER M10X20	2

NOTES: * Label shown on Page 10.

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 86 - COVER (MONITOR:CABIN HEATER SPEC.)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 86 - COVER (MONITOR:CABIN HEATER SPEC.)

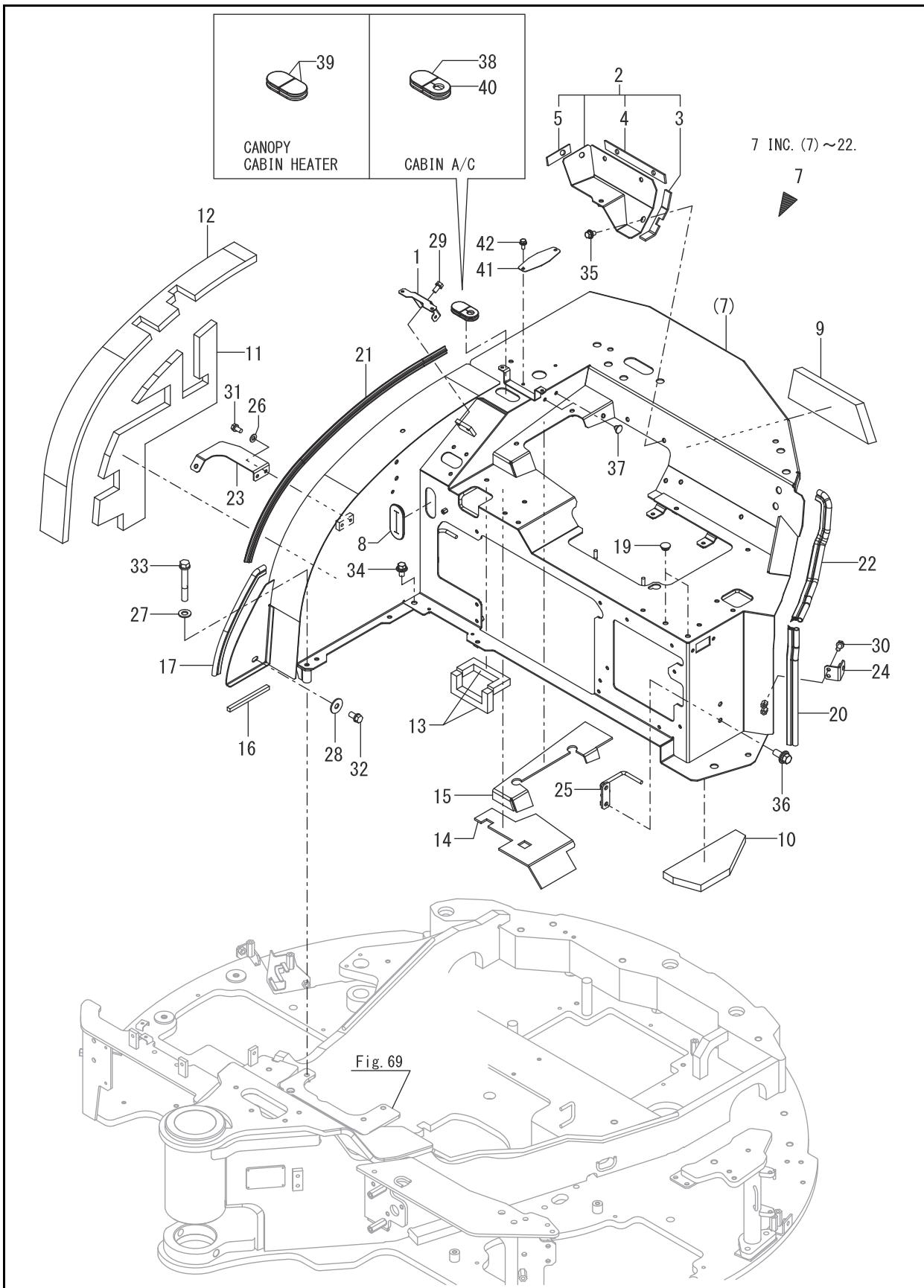
Ref.

No.	Part No.	Description	Qty.
1	50280804	SCREW	4
2	50280804	SCREW	2
3	50280804	SCREW	2
4	50288094	NUT/SPEED	1
5	50287693	GROMMET/BLADE	1
6	50287698	COVER/SWITCH P	1
7	50287700	COVER ASSY/INPANE C	1
9	50287703	SEAL/DUCT UP	2
10	50287704	COVER ASSY/AC (replacement also requires label 13A)	1
12	50287706	SEAL/DUCT SIDE	1
13	50282366	SEAL, DUCT SIDE	1
13A	50281019	LABEL, MANUAL US *	1
14	50287710	STAY ASSY/INPANE	1
15	50288114	RIVET	2
16	50288114	RIVET	2
17	50282515	BOLT W/WASHER M10X20	2

NOTE: * Label shown on Page 10.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 87 - SEAT MOUNT



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 87 - SEAT MOUNT

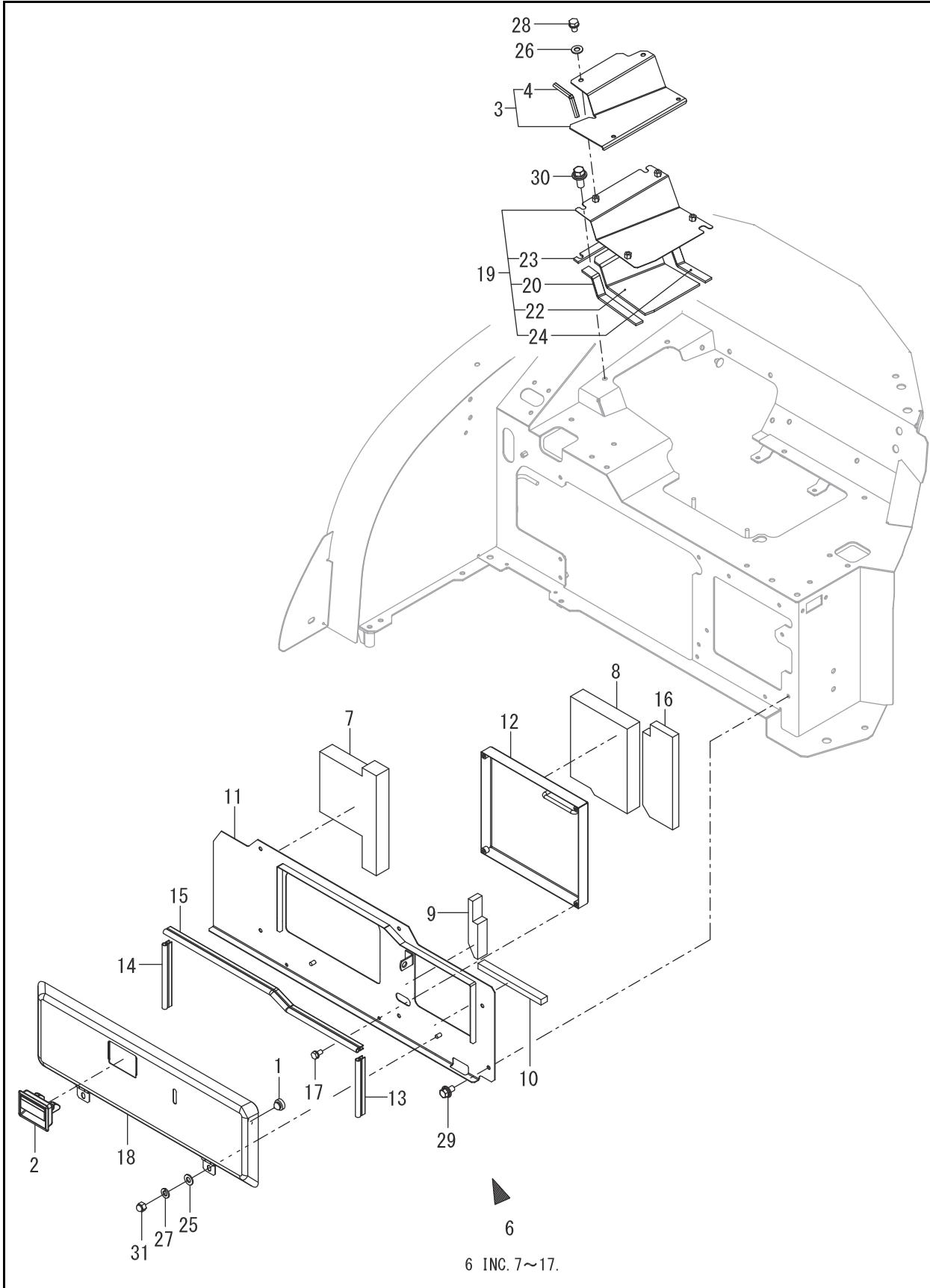
Ref.

No.	Part No.	Description	Qty.
1	50287708	STAY ASSY/COVER	1
2	50289127	COVER ASSY	1
3	50289128	SEAL	1
4	50289129	SEAL	1
5	50289130	SEAL	1
7	50289131	SEAT PLATFORM ASSY (replacement on canopy machines also requires label 22A)	1
8	50287709	GROMMET/CABLE	1
9	50289357	INSULATION PAD	1
10	50289358	INSULATION PAD	1
11	50289359	PAD	1
12	50289360	PAD	1
13	50289361	PARTITION SEAL	2
14	50289362	INSULATION PAD	1
15	50289363	INSULATION PAD	1
16	50289364	SEAL	1
17	50289365	SEAL	1
19	50280948	PLUG	2
20	50288904	RUBBER SEAL	1
21	50288912	RUBBER SEAL	1
22	50287087	RUBBER/SEAL	1
22A	50281019	LABEL, MANUAL US *	1
23	50289132	BRACKET	1
24	50287720	STAY ASSY/BONNET L	1
25	50287904	GUIDE ASSY/HOSE	1
26	50282380	WASHER 8, POLISHED	2
27	138111	WASHER/POLISHED	1
28	50282387	WASHER 10	1
29	50282506	BOLT W/WASHER M8X16	2
30	50282506	BOLT W/WASHER M8X16	2
31	50282506	BOLT W/WASHER M8X16	2
32	50282515	BOLT W/WASHER M10X20	1
33	50282523	BOLT 10X70 W/SP.WSHR	1
34	50282538	BOLT M10X 20	1
35	50282538	BOLT M10X 20	4
36	50282539	BOLT 10X25 W/PLW+SPW	2
37	50281050	CLIP	2
38	50287090	GROMMET (w/cabin only)	1
39	50287090	GROMMET	2
40	50287147	GROMMET 16 X 20 X 4.5 (w/cabin only)	1
41	50287737	PLATE/COVER	1
42	50282531	BOLT M 6X 16	2

NOTE: * Label shown on Page 8 and Page 10.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 88 - COVER (SEAT MOUNT)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 88 - COVER (SEAT MOUNT)

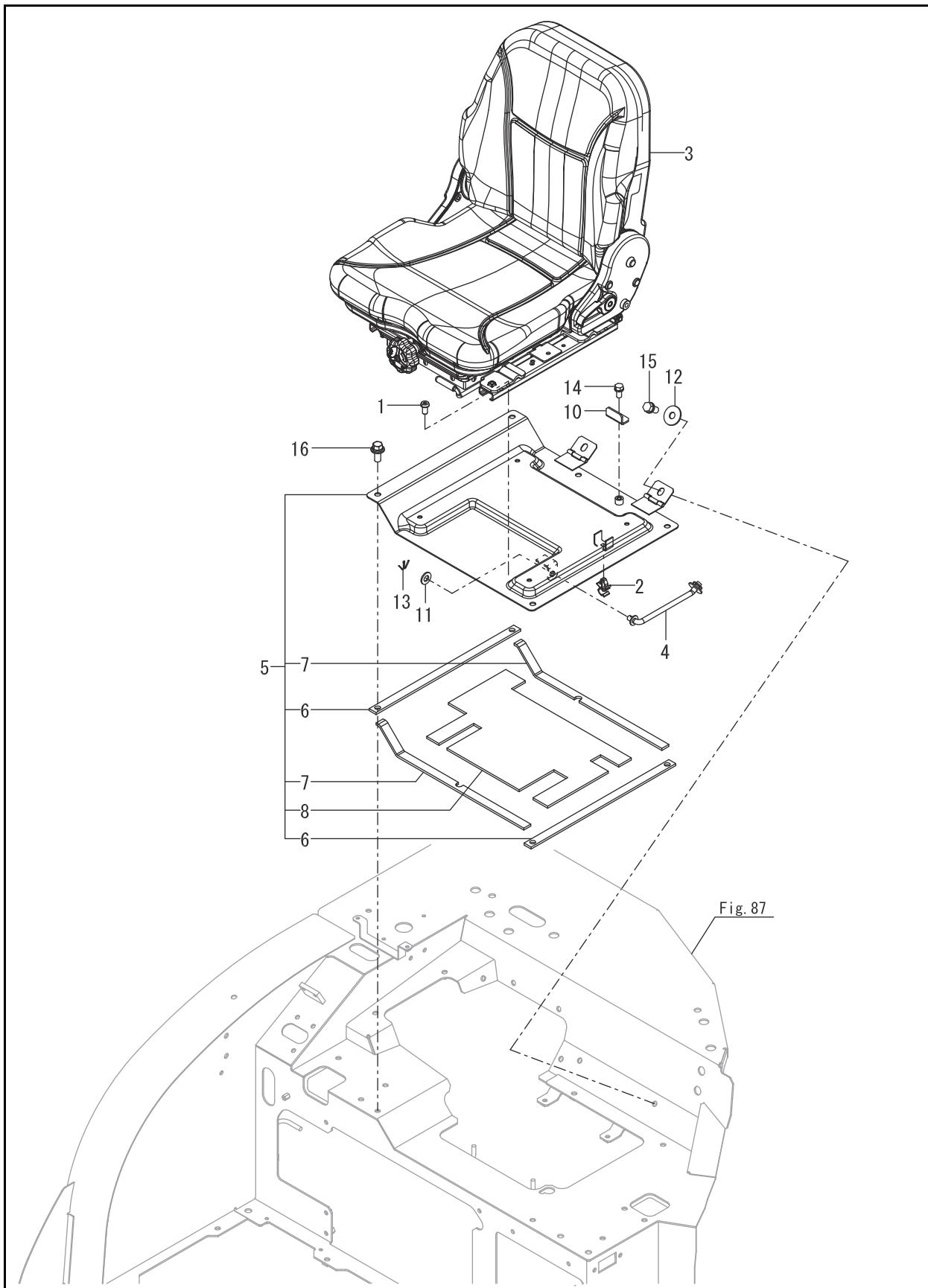
Ref.

No.	Part No.	Description	Qty.
1	50289431	RUBBER PAD	1
2	50280945	HANDLE, LOCK	1
3	50289103	COVER ASSY (replacement also requires labels 5A, 5B)	1
4	50281134	MOLDING	1
5A	50281020	LABEL,SLOPE US *	1
5B	50281033	LABEL, LEVER LOCK US *	1
6	50289133	COVER ASSY	1
7	50289123	INSULATION PAD	1
8	50289124	INSULATION PAD	1
9	50289125	SEAL	1
10	50289126	SEAL	1
11	50289134	STORAGE BOX COVER	1
12	50287723	BOX ASSY/MANUAL	1
13	50287728	SEAL 155	1
14	50287729	SEAL 175	1
15	50285594	SEAL,600	1
16	50289140	INSULATION PAD	1
17	50282501	BOLT M 6X 12	4
18	50288959	STORAGE COVER (replacement also requires labels 18A,8B,18D (w/cabin) or labels 18A,18B,18C,18D (w/cabin))	1
18A	50281172	LABEL, SUPPORT US *	1
18B	50287430	LABEL/SEAT TILT UP *	1
18C	50281030	LABEL, STEERING US * (w/cabin only)	
18D	50281037	LABEL, 2-WAY US *	1
19	50289135	COVER ASSY	1
20	50288921	SEAL	1
22	50289136	INSULATION PAD	1
23	50289137	SEAL	1
24	50289138	SEAL	1
25	50282380	WASHER 8, POLISHED	2
26	50282380	WASHER 8, POLISHED	4
27	50282392	WASHER, 8	2
28	50282505	BOLT M 8X 12	4
29	50282533	BOLT M 8X 16	6
30	50282539	BOLT 10X25 W/PLW+SPW	2
31	50288184	NUT, CAP	2

NOTE: * Labels shown on Page 8 and Page 10.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 89 - SEAT



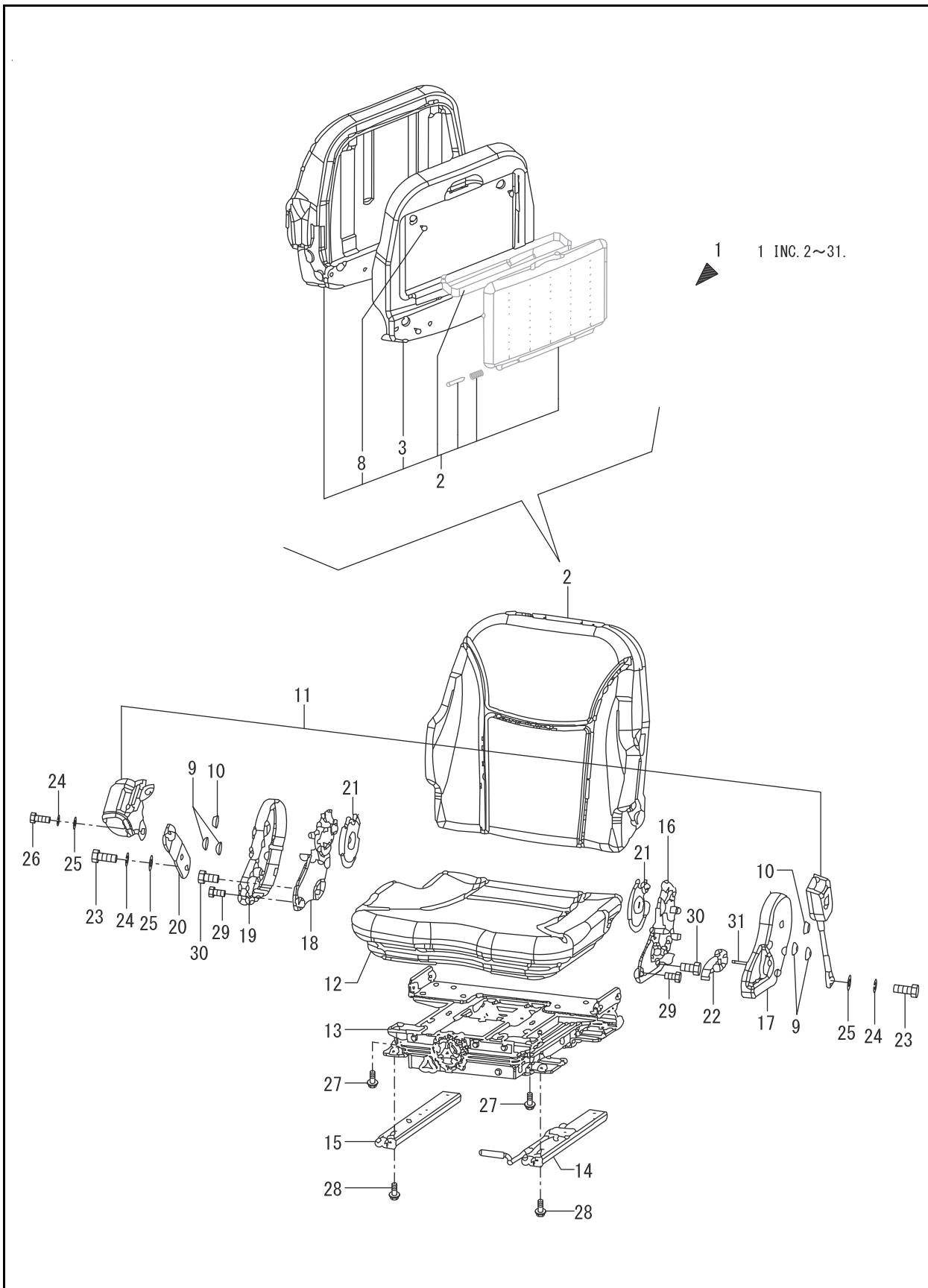
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 89 - SEAT

Ref.

No.	Part No.	Description	Qty.
1	50287122	BOLT M 8 X 16	4
2	50288109	HOLDER/ROD	1
3	50287212	SEAT ASSY/SUS (See Fig. 90 for internal components)	1
4	50287733	ROD ASSY/STOPPER	1
5	50289139	SEAT PLATE ASSY	1
6	50289121	SEAL	2
7	50287712	SEAL/SEAT B	2
8	50289122	INSULATION PAD	1
10	50287736	PLATE/STOPPER	1
11	138111	WASHER/POLISHED	1
12	50282387	WASHER 10	2
13	50282418	COTTER PIN 2.0X20	1
14	50282506	BOLT W/WASHER M8X16	1
15	50282515	BOLT W/WASHER M10X20	2
16	50282539	BOLT 10X25 W/PLW+SPW	5

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 90 - SEAT (INNER PARTS)



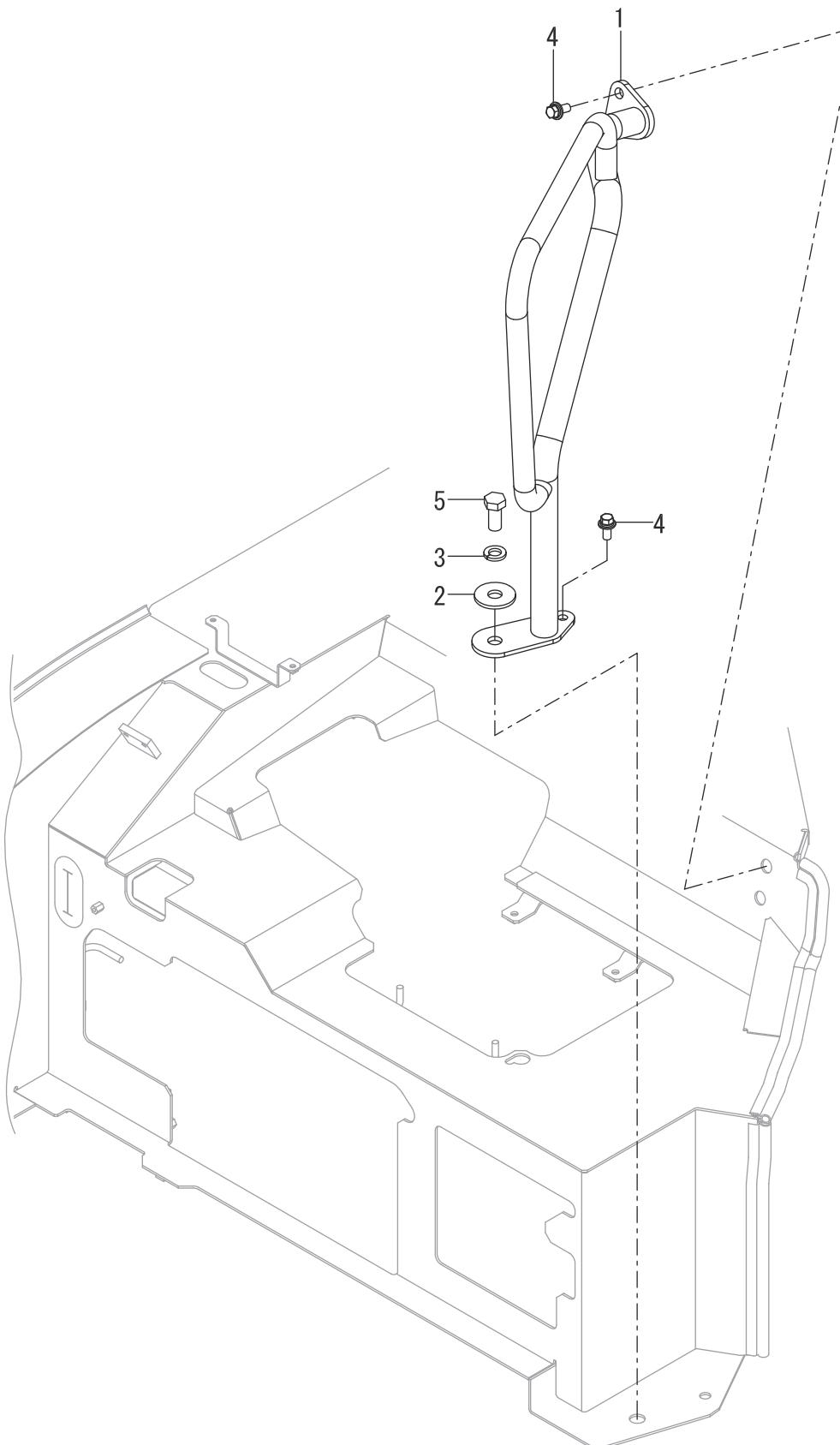
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 90 - SEAT (INNER PARTS)

Ref.

No.	Part No.	Description	Qty.
1	50287212	SEAT ASSY/SUS	1
2	50287208	SEAT ASSY/BACK	1
3	50287209	BOX ASSY	1
8	50288153	SCREW	4
9	50287210	CAP B	4
10	50287211	CAP C	2
11	50287186	BELT ASSY/SEAT	1
12	50287187	SEAT/CUSHION	1
13	50287188	SEAT/SPRING	1
14	50287189	RAIL ASSY	1
15	50287190	RAIL ASSY	1
16	50287191	HINGE ASSY	1
17	50287192	COVER	1
18	50287193	HINGE ASSY	1
19	50287194	COVER	1
20	50287195	BRACKET ASSY	1
21	50287196	COVER	2
22	50287197	LEVER	1
23	50287198	BOLT	2
24	50287199	SPRING	3
25	50287200	WASHER	3
26	50287201	BOLT	1
27	425-34733	BOLT M8 X 16 PLATED	4
28	425-34733	BOLT M8 X 16 PLATED	4
29	186619	BOLT M10X 16 PLATED	6
30	425-35772	BOLT M10 X 25 PLATED	2
31	50288181	SCREW	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 91 - HANDRAIL (LEFT, W/CANOPY)



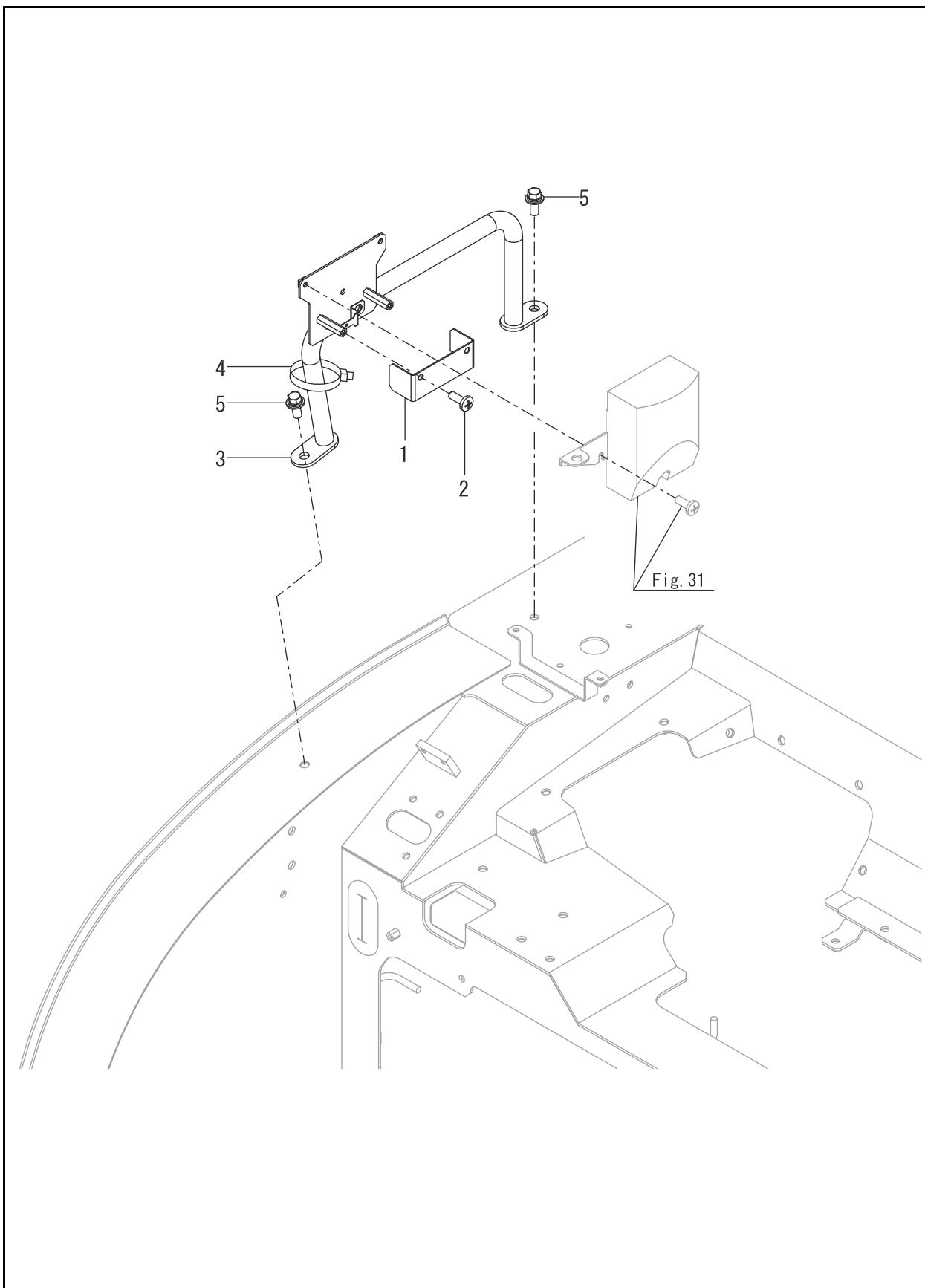
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 91 - HANDRAIL (LEFT, W/CANOPY)

Ref.

No.	Part No.	Description	Qty.
1	50287730	HANDRAIL ASSY L	1
2	50284839	WASHER 16	1
3	50282396	SPRING WASHER 16	1
4	50282539	BOLT 10X25 W/PLW+SPW	3
5	50282569	BOLT M16X 35 PLATED	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 92 - HANDRAIL (RIGHT, W/CANOPY)



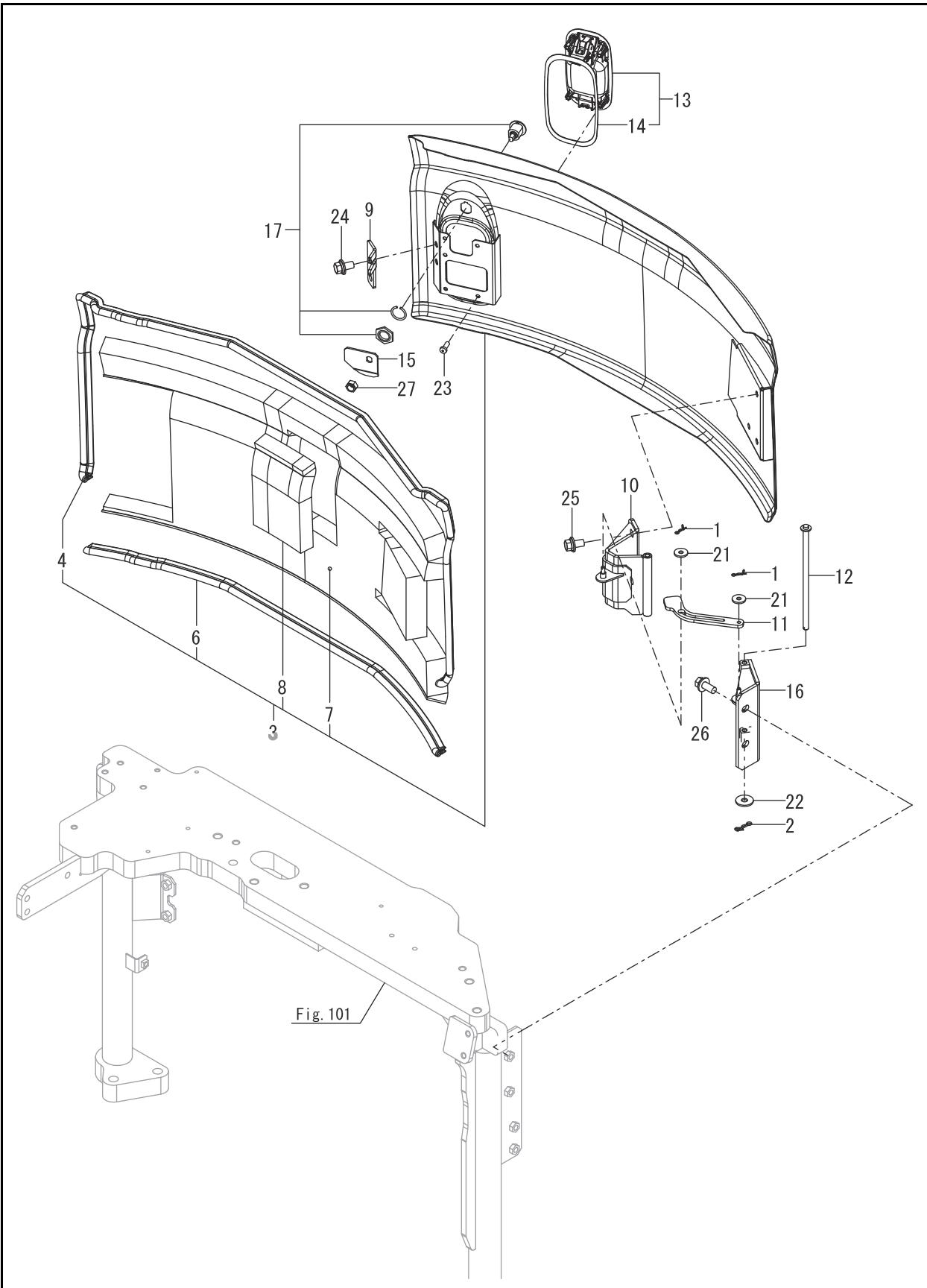
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 92 - HANDRAIL (RIGHT, W/CANOPY)

Ref.

No.	Part No.	Description	Qty.
1	50287556	COVER/CONNECTOR	1
2	50280804	SCREW	2
3	50287731	HANDRAIL ASSY R-Q	1
4	50287069	CLAMP	1
5	50282539	BOLT 10X25 W/PLW+SPW	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 93 - BONNET (REAR)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 93 - BONNET (REAR)

Ref.

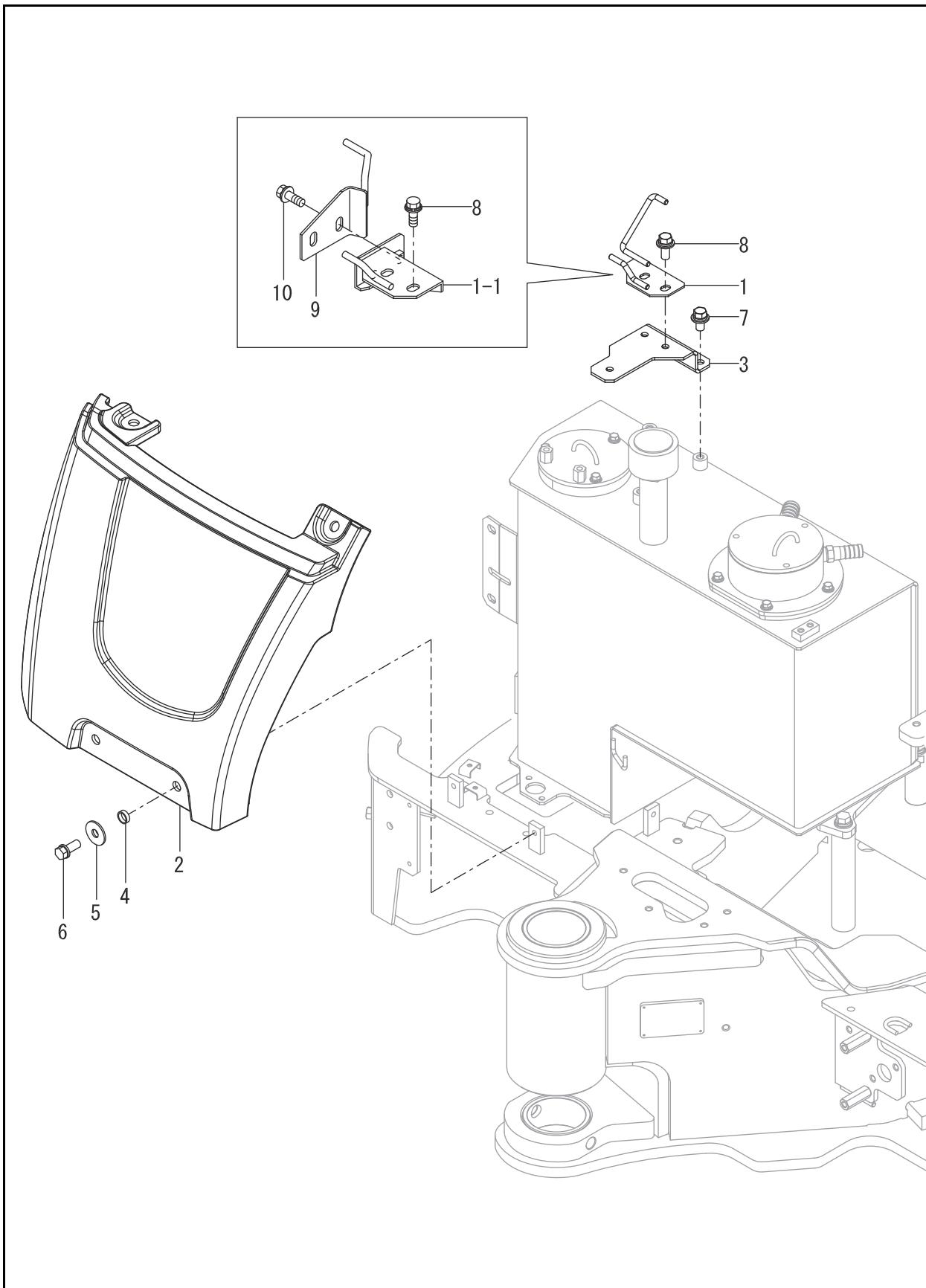
No.	Part No.	Description	Qty.
1	50284017	PIN 6,COME-OFF SNAP	2
2	50289429	SNAP PIN	1
3	50289141	HOOD ASSY (replacement requires labels 8A,8B,8C)	1
4	50284491	SEAL 1800	1
6	50289143	SEAL	1
7	50289147	INSULATION PAD	1
8	50289148	INSULATION PAD	1
8A	50285436	LABEL,SWING AREA US *	1
8B	50281028	LABEL, ENG,COVER US *	1
8C	50281425	LABEL, ENG ROOM *	1
9	50287741	GUIDE/BONNET A	1
10	50289144	HINGE	1
11	50289145	GUIDE	1
12	50289146	HINGE PIN	1
13	50287745	HANDLE/LOCK	1
14	50287216	SEAL	1
15	50289149	LOCK PLATE	1
16	50289163	HINGE	1
17	50287772	CYLINDER ASSY W/O KEY **	1
21	50282385	WASHER 6	2
22	186593	WASHER 8	1
23	50288152	SCREW	4
24	50282538	BOLT M10X 20	2
25	50282539	BOLT 10X25 W/PLW+SPW	2
26	50282539	BOLT 10X25 W/PLW+SPW	2
27	50282576	U-NUT M10	1

NOTE: * Labels shown on Page 4

** Key part number 50288194 (2 keys)

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 95 - BONNET (FRONT)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 95 - BONNET (FRONT)

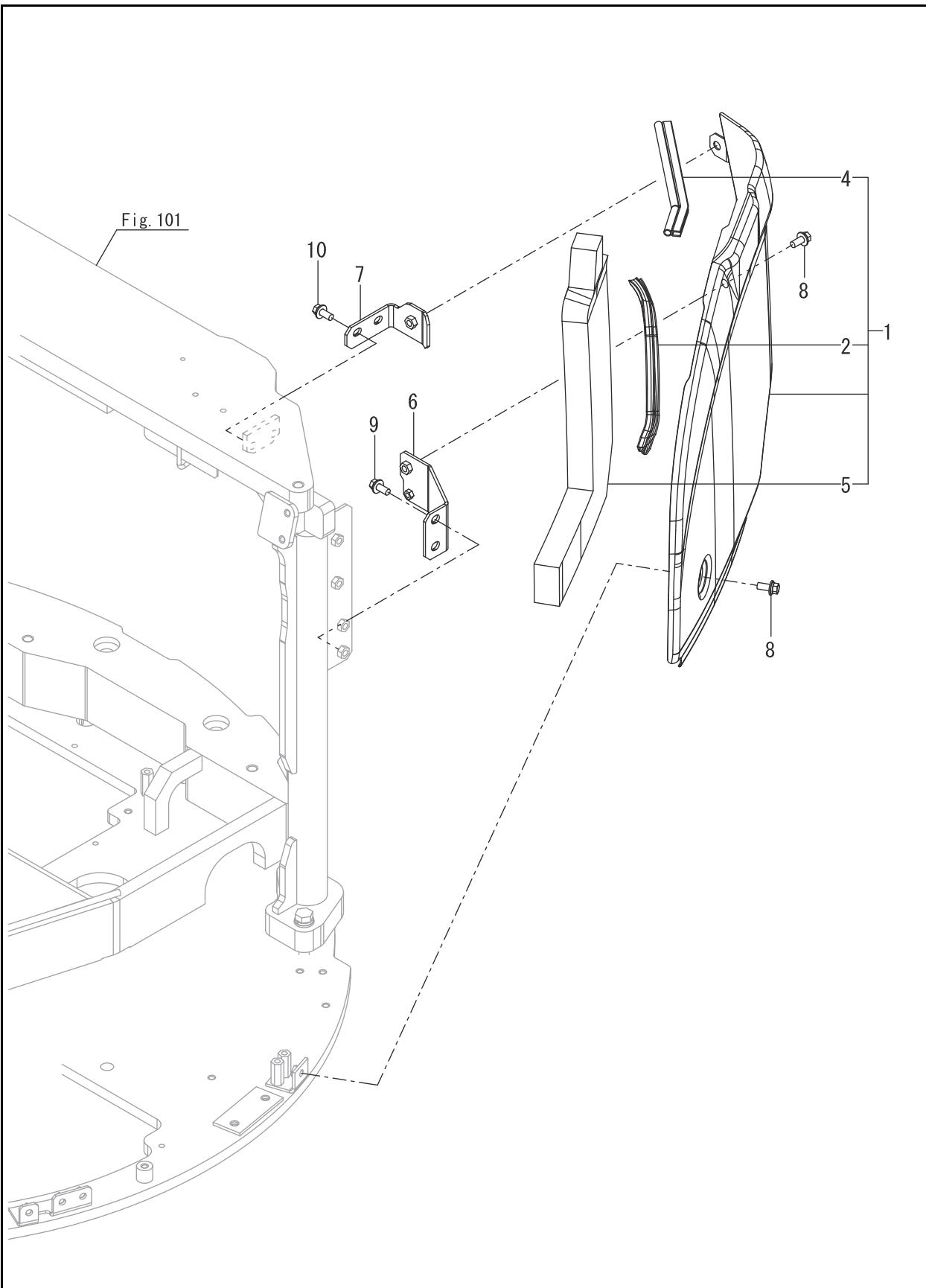
Ref.

No.	Part No.	Description	Qty.
1	50289104	LATCH BRACKET (machines produced before Oct. 2013)	1
1-1	50289105	LATCH BRACKET (machines produced after Oct. 2013) *	1
2	50289424	COVER	1
3	50289150	BRACKET	1
4	50283614	COLOR 13X16X5	4
5	50282387	WASHER 10	4
6	50282516	BOLT W/WASHER M10X25	4
7	50282538	BOLT M10X 20	2
8	50282539	BOLT 10X25 W/PLW+SPW	2
9	50289102	LATCH BRACKET (machines produced after Oct. 2013) *	1
10	50282539	BOLT 10X25 W/PLW+SPW (machines produced after Oct. 2013) *	2

NOTE: * Ref. No. 1-1 can be used to replace Ref. No. 1 if it is installed with Ref. Nos. 9 and 10 as a set.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 96 - BONNET (LEFT)



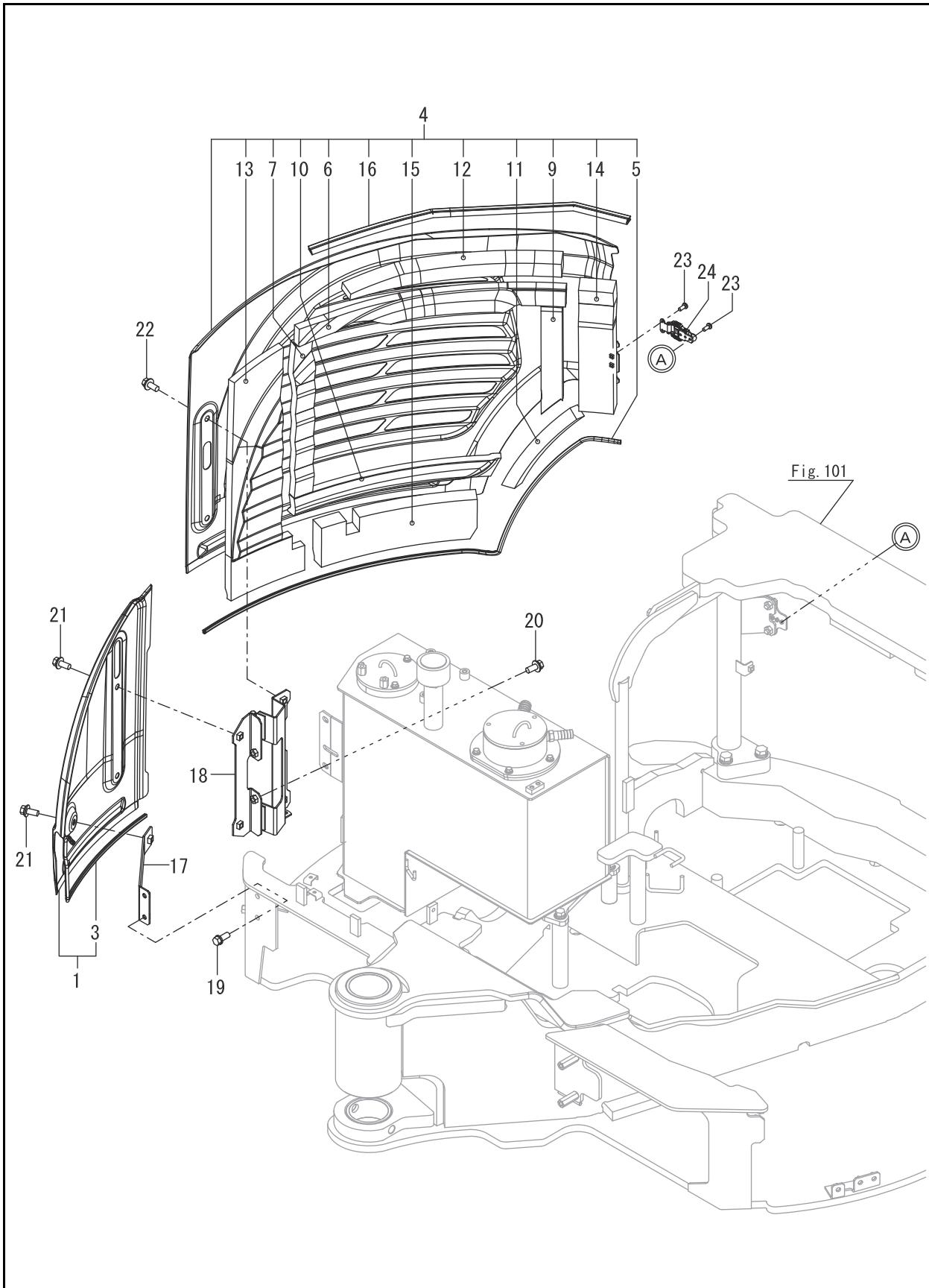
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 96 - BONNET (LEFT)

Ref.

No.	Part No.	Description	Qty.
1	50289151	LEFT COVER ASSY	1
2	50288913	RUBBER SEAL	1
4	50289153	SEAL	1
5	50289154	INSULATION PAD	1
6	50289155	BRACKET	1
7	50289156	BRACKET	1
8	50282539	BOLT 10X25 W/PLW+SPW	3
9	50282539	BOLT 10X25 W/PLW+SPW	2
10	50282539	BOLT 10X25 W/PLW+SPW	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 98 - BONNET (RIGHT)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 98 - BONNET (RIGHT)

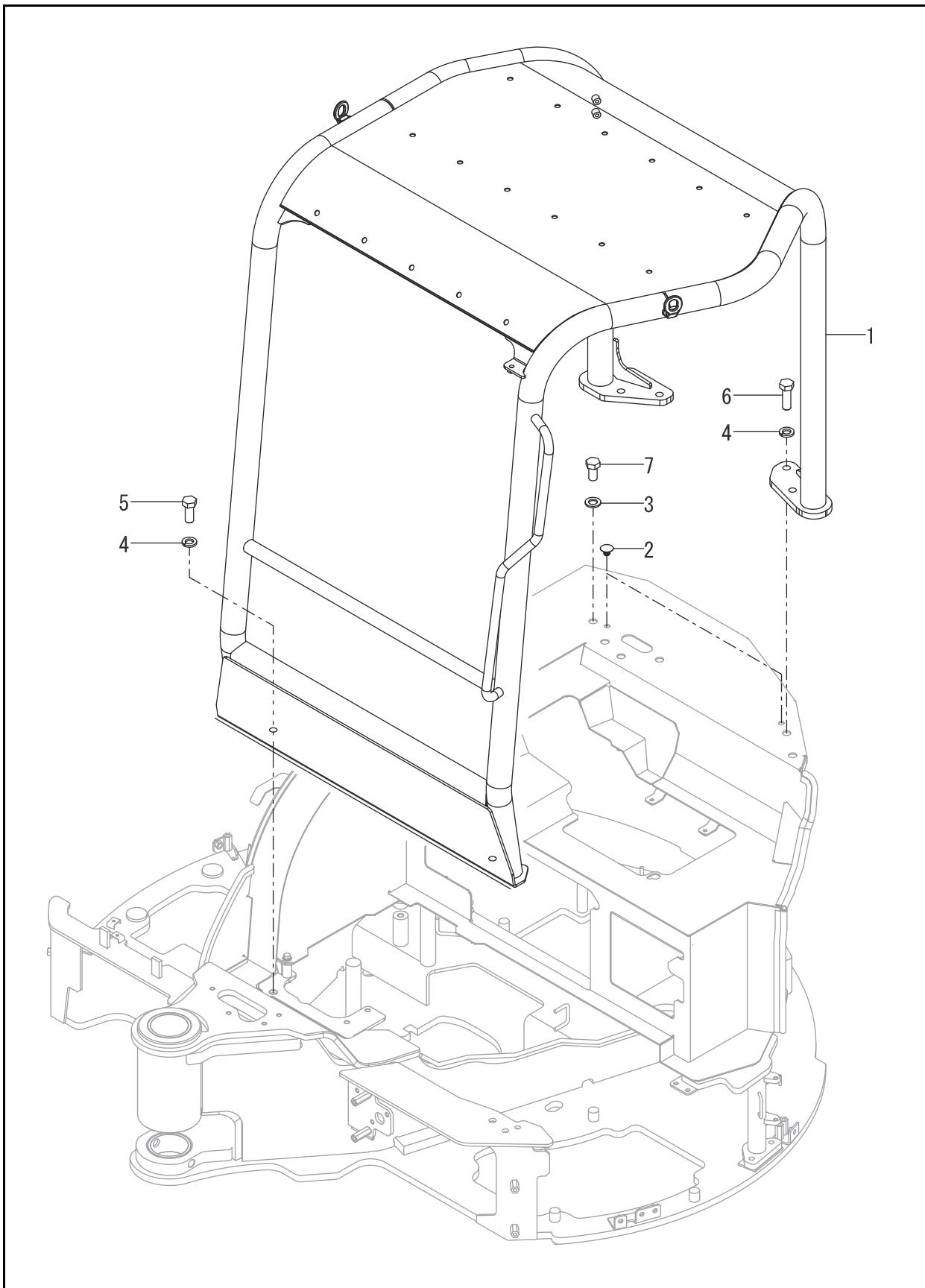
Ref.

No.	Part No.	Description	Qty.
1	50289158	COVER ASSY	1
3	50289375	SEAL	1
4	50289160	COVER ASSY (replacement also requires label 16A)	1
5	50288924	SEAL	1
6	50289366	SEAL	1
7	50289367	SEAL	1
9	50289368	SEAL	1
10	50289369	SEAL	1
11	50289370	SEAL	1
12	50289371	PAD	1
13	50289372	PAD	1
14	50289373	PAD	1
15	50289374	PAD	1
16	50289376	SEAL	1
16A	50281021	LABEL, HYD.OIL TANK *	1
17	50289162	BRACKET	1
18	50287771	HINGE ASSY/BONNET R	1
19	50282516	BOLT W/WASHER M10X25	2
20	50282539	BOLT 10X25 W/PLW+SPW	2
21	50282539	BOLT 10X25 W/PLW+SPW	3
22	50282539	BOLT 10X25 W/PLW+SPW	2
23	50285922	SCREW M5 X 12	5
24	50288191	CLIP/CATCH	1

NOTE: * Label shown on Page 4.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 100 - CANOPY



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 100 - CANOPY

Ref.

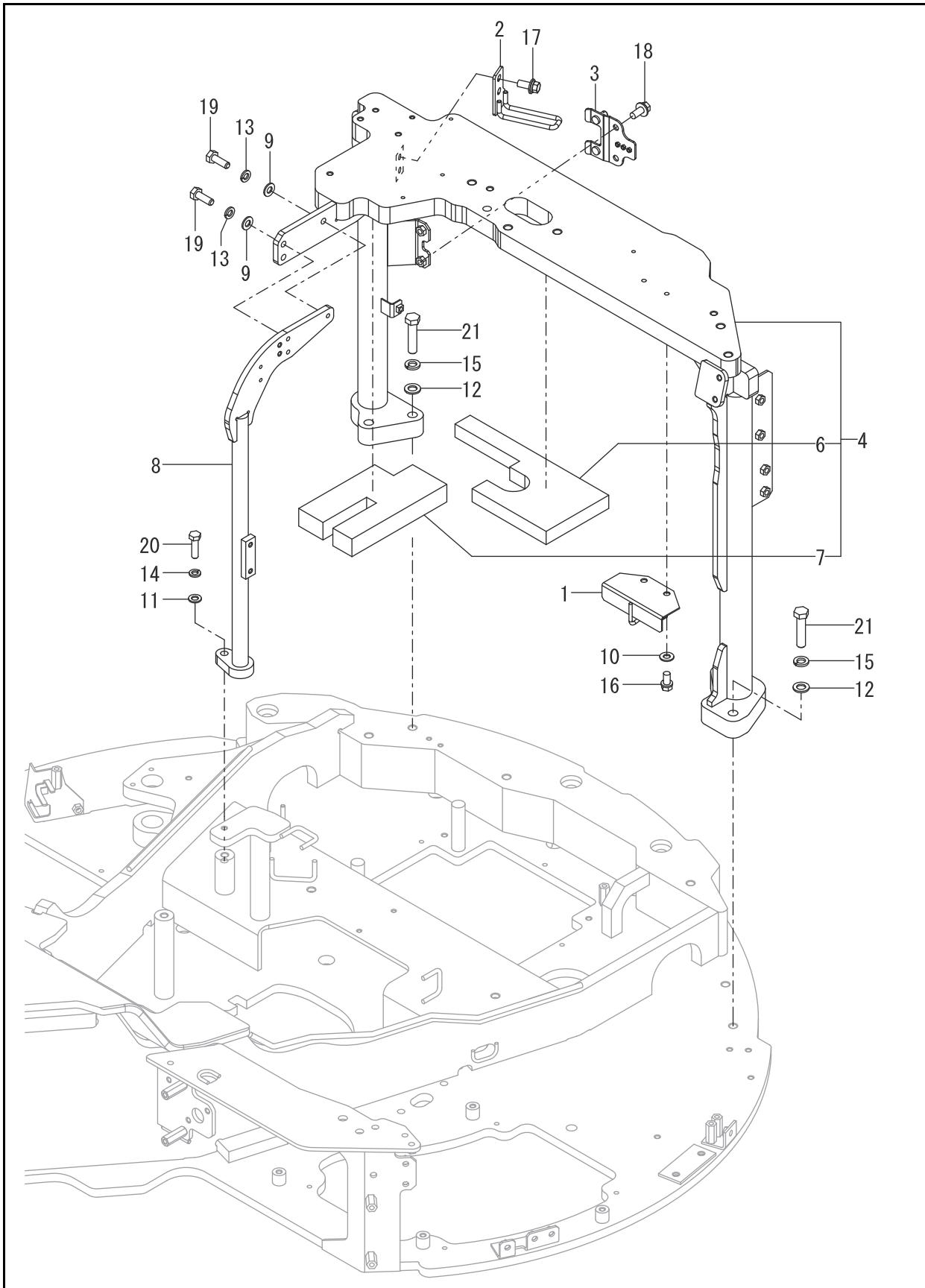
No.	Part No.	Description	Qty.
1	50287776	CANOPY ASSY/ROPS (replacement also requires labels 1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I)	1
1A	50281174	LABEL, PIN US **	1
1B	50281022	LABEL, TRANSPORT US *	1
1C	50281025	LABEL, NEUTRAL US *	1
1D	50281030	LABEL, STEERING US *	1
1E	50281032	LABEL, SEAT BELT US *	1
1F	50289421	LIFT DECAL *	1
1G	50281031	LABEL, ROPS US *	1
1H	50287435	LABEL/WARNING HITCH **	1
1I	50287436	LABEL/SAND US **	1
2	50284234	CLIP, TREE	2
3	50282382	WASHER 16, POLISHED	1
4	50282396	SPRING WASHER 16	6
5	50282552	BOLT 10.9 16X40	2
6	50282553	BOLT, 16 X 50	4
7	50288178	BOLT	1

NOTE: * Labels shown on Page 8.

** Labels shown on Page 12.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 101 - CANOPY MOUNT



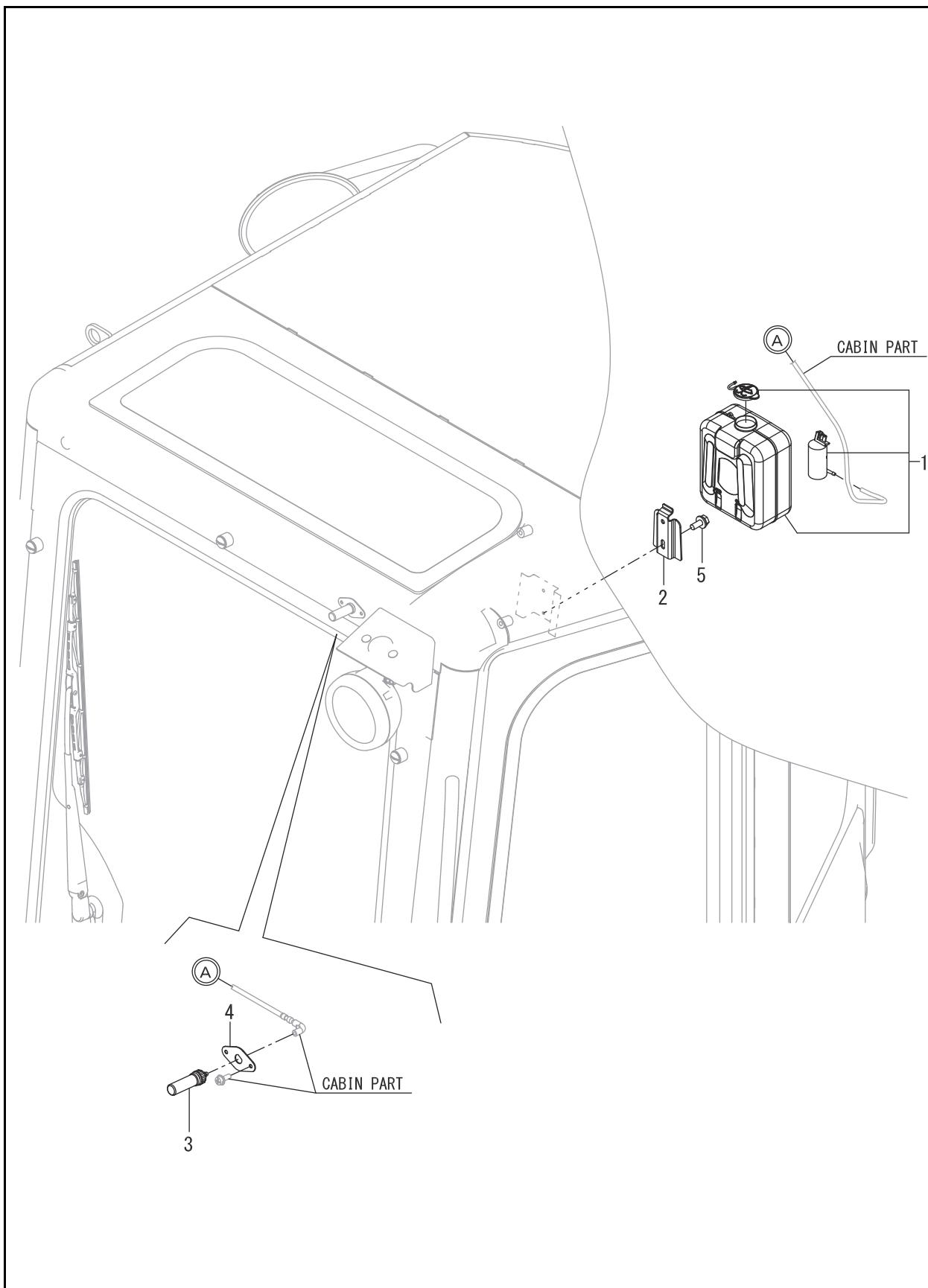
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 101 - CANOPY MOUNT

Ref.

No.	Part No.	Description	Qty.
1	50289056	BRACKET	1
2	50287749	CATCH ASSY/BONNET A	1
3	50287769	BRACKET ASSY/BONNET R	1
4	50289164	CANOPY MOUNT ASSY	1
6	50289165	PAD	1
7	50289166	PAD	1
8	50289167	SUPPORT	1
9	138111	WASHER/POLISHED	3
10	138111	WASHER/POLISHED	2
11	50284041	WASHER 12,POLISHED	1
12	50282382	WASHER 16,POLISHED	4
13	50282393	SPRING WASHER 10	3
14	425-34902	SPRING WASHER 12	1
15	50282396	SPRING WASHER 16	4
16	50282515	BOLT W/WASHER M10X20	2
17	50282539	BOLT 10X25 W/PLW+SPW	2
18	50282539	BOLT 10X25 W/PLW+SPW	2
19	50288172	BOLT	3
20	50285162	BOLT	1
21	50288174	BOLT	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 102 - WINDOW WASHER



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 102 - WINDOW WASHER

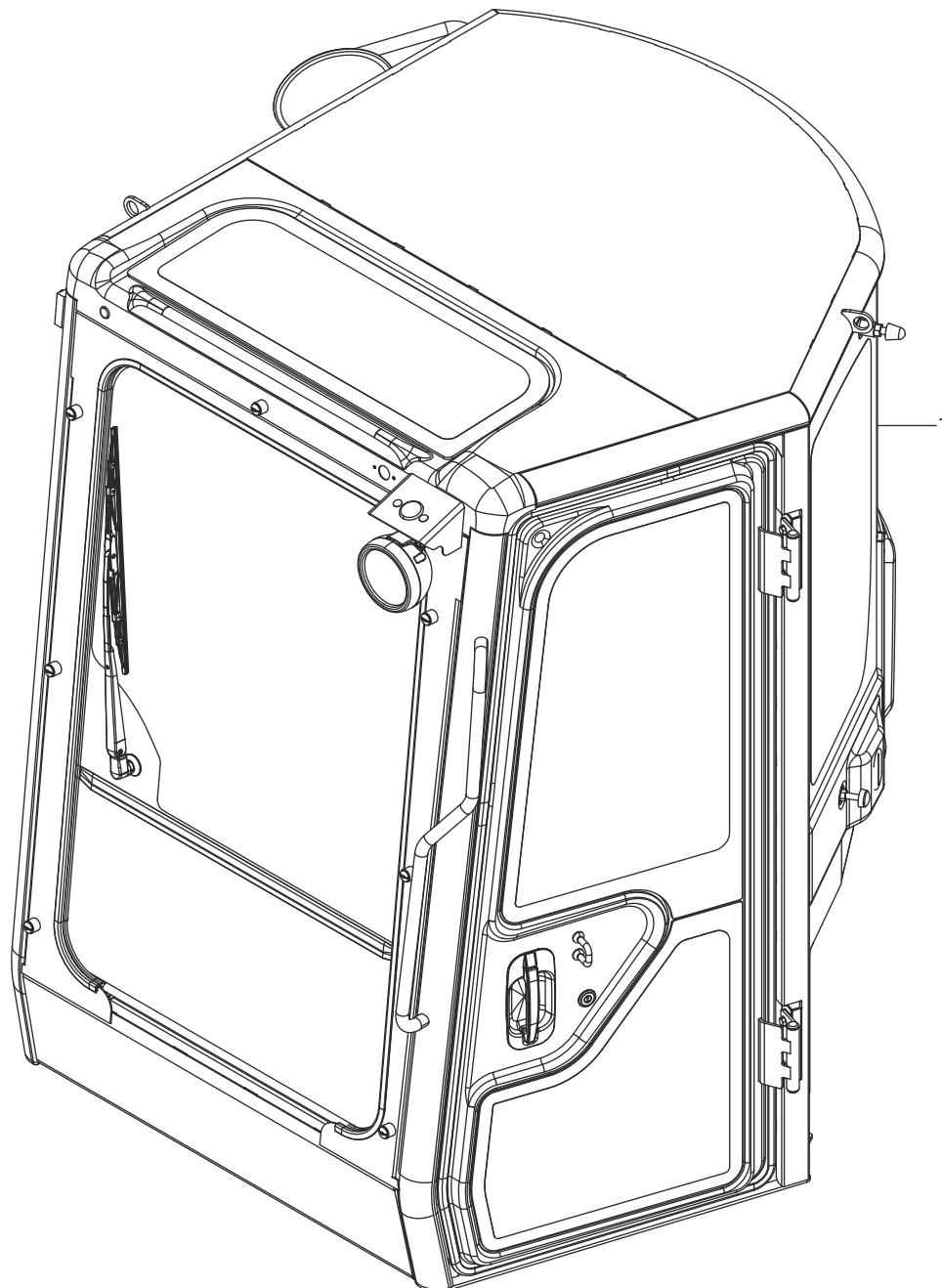
Ref.

No.	Part No.	Description	Qty.
1	50287145	TANK ASSY/WASHER	1
2	186344	BRACKET	1
3	50287150	WASHER NOZZLE	1
4	50287267	PLATE/NOZZLE	1
5	50282531	BOLT M 6X 16	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 103 - CABIN ASSY.

CABIN ASSY
Fig. 103 Ref. No. 1
INC. Fig. 104~111.



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 103 - CABIN ASSY.

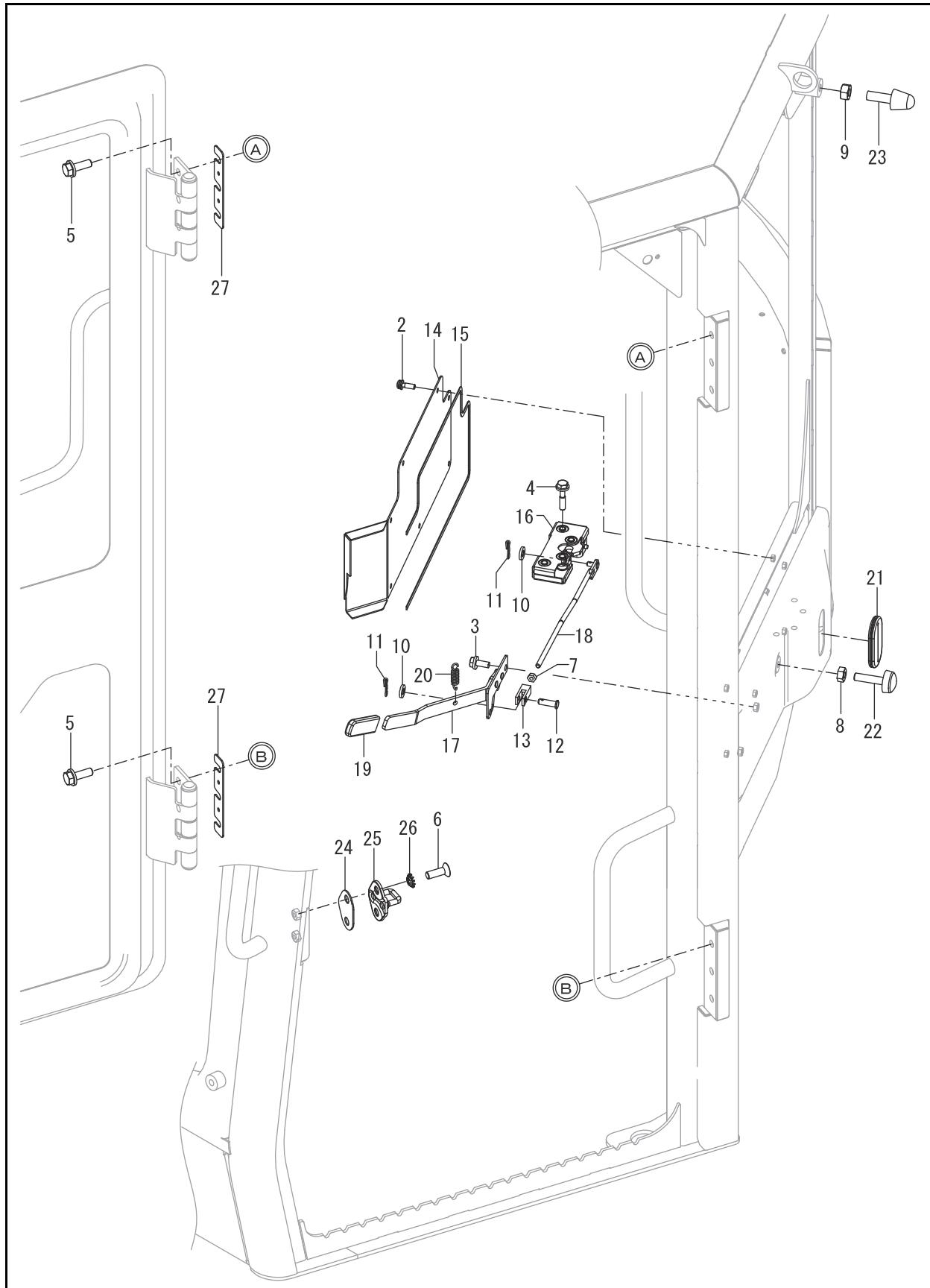
Ref.

No.	Part No.	Description	Qty.
1	50289419	CABIN ASSY (replacement also requires label 3A)	1
3A	50281036	LABEL, WINDOW US *	1

NOTE: * Label shown on Page 10.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 104 - CABIN (DOOR:1)



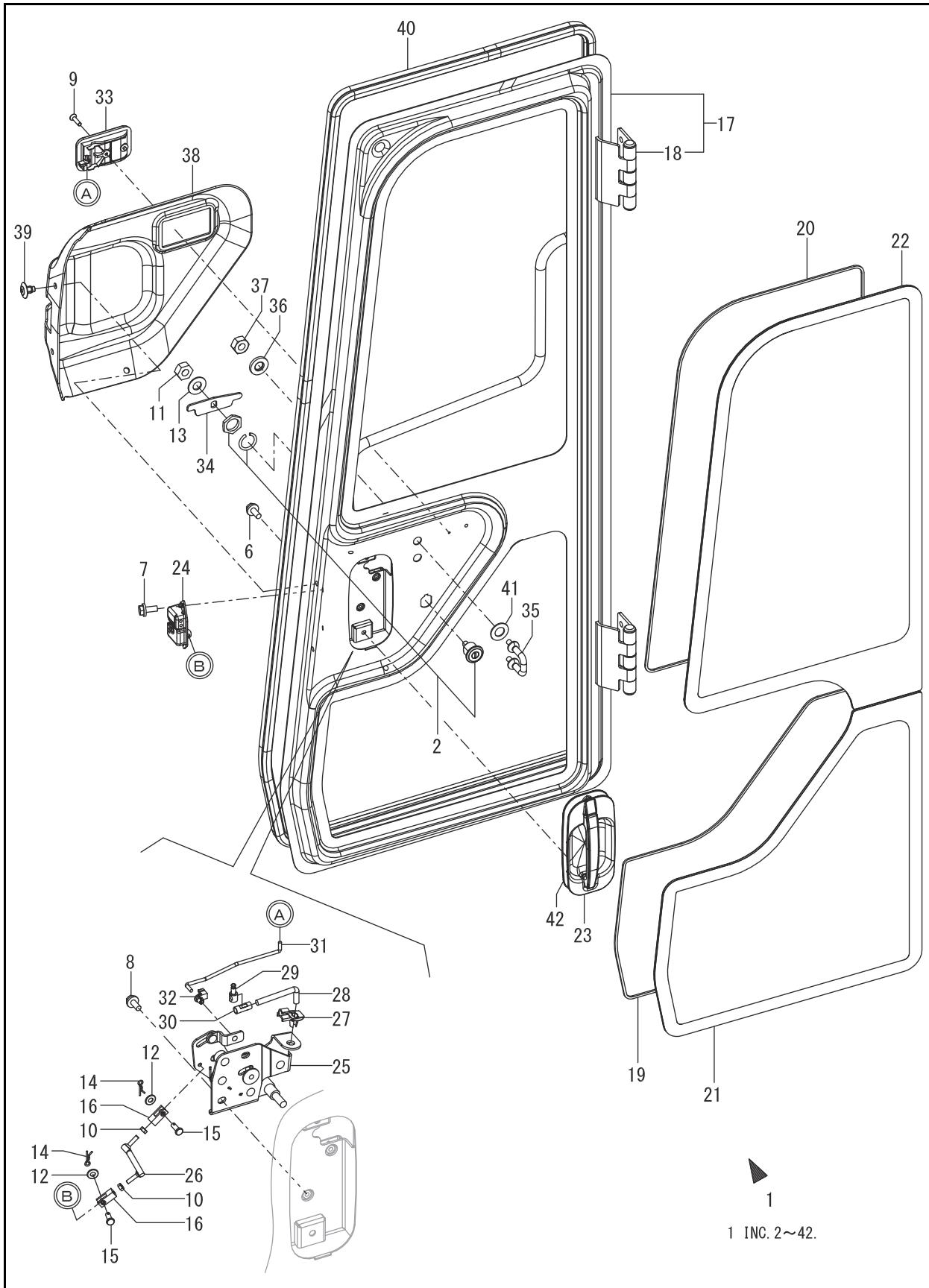
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 104 - CABIN (DOOR:1)

Ref.

No.	Part No.	Description	Qty.
2	50287223	SCREW/SEMS 5 X 16 B	7
3	50287228	BOLT/SEMS 6 X 16	2
4	50287230	BOLT/SEMS 6 X 30	4
5	50287233	BOLT/SEMS 8 X 20	6
6	50287247	SCREW/SOCKET 8 X 25	2
7	50287249	NUT/M6	1
8	50287250	NUT/M10	1
9	50287251	NUT/M12	1
10	50287255	WASHER 6	2
11	50287257	PIN/SNAP 6	2
12	50287259	PIN/FLAT HEAD 6 X 20	1
13	50287261	YOKE 6	1
14	50288080	COVER/CAB L	1
15	50287376	SEAL/COVER L	1
16	50287377	CATCH ASSY/DOOR	1
17	50287378	LEVER ASSY/DOOR	1
18	50287379	ROD ASSY/OPEN LOCK	1
19	50287380	COVER/LEVER	1
20	50287381	SPRING/LOCK LEVER	1
21	50287382	GROMMET/CATCH	1
22	50287383	STOPPER/DOOR	1
23	50287384	STOPPER/DOOR	1
24	50287398	SHIM/STRIKER DOOR	1
25	50287399	STRIKER/DOOR	1
26	50287400	WASHER/TOOTHED LOCK	2
27	50287409	SHIM/HINGE DOOR	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 105 - CABIN (DOOR:2)



1 INC. 2~42.

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 105 - CABIN (DOOR:2)

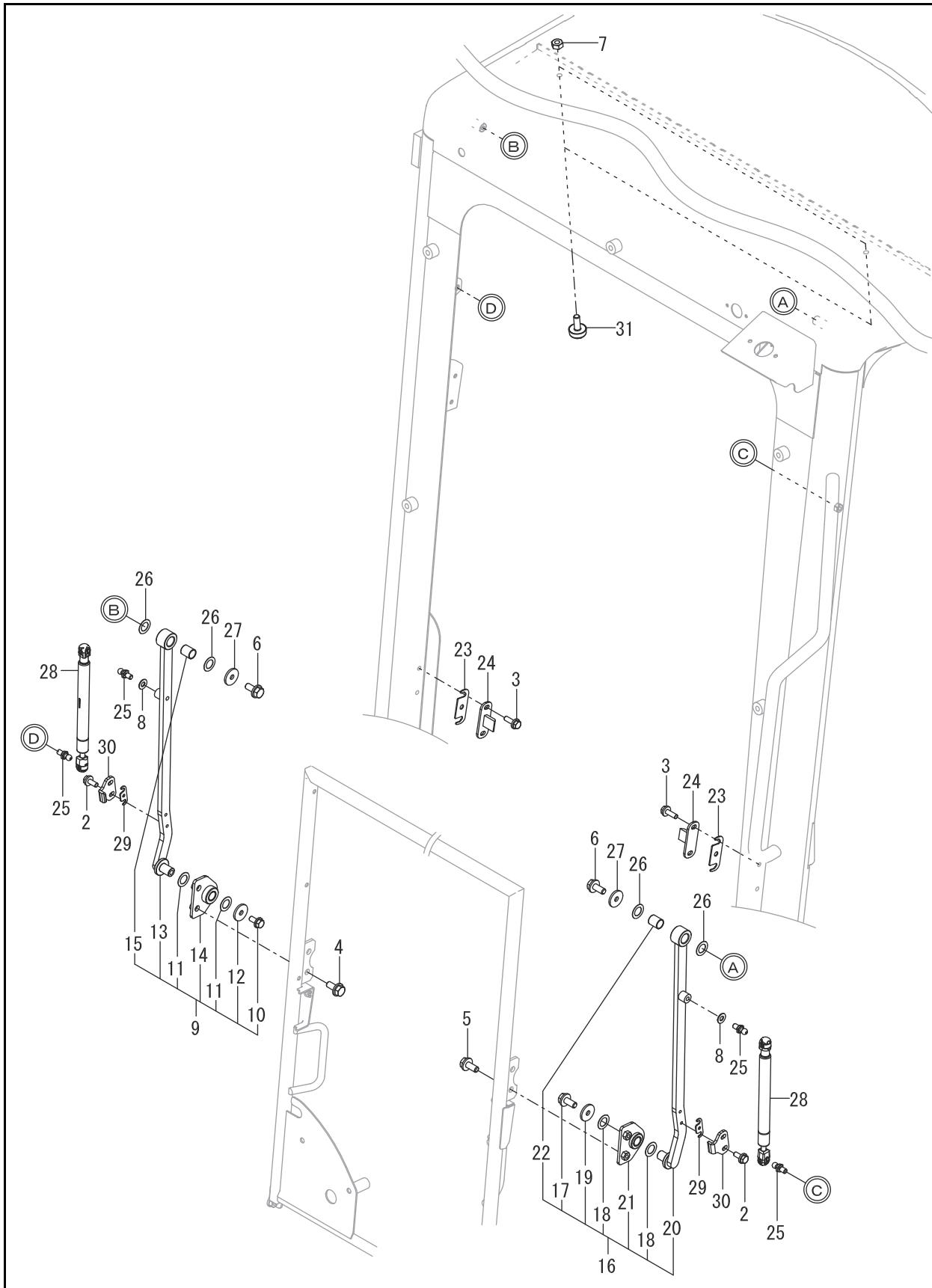
Ref.

No.	Part No.	Description	Qty.
1	50288069	DOOR ASSY/CABIN	1
2	50287772	LOCK W/O KEY *	1
6	50287227	BOLT/SEMS 6 X 12	2
7	50287228	BOLT/SEMS 6 X 16	2
8	50287228	BOLT/SEMS 6 X 16	2
9	50287244	SCREW/FLAT 4 X 14 B	1
10	50287248	NUT/M4	2
11	50287250	NUT/M10	1
12	50287252	WASHER 4	2
13	50287254	WASHER 10	1
14	50287256	PIN/SNAP 4	2
15	50287258	PIN/FLAT HEAD 4 X 12	2
16	50287260	YOKE 4	2
17	50288070	FRAME ASSY/DOOR	1
18	50287272	HINGE/DOOR	2
19	50287273	DAM 1800	1
20	50287274	DAM 2150	1
21	50287275	GLASS DOOR/LOW	1
22	50287276	GLASS/DOOR UP	1
23	50287277	HANDLE ASSY/OUTER	1
24	50287278	LATCH	1
25	50287279	CONTROLLER ASSY/RMT	1
26	50287280	ROD ASSY/LINK LOCK	1
27	50287281	CLIP/ROD 6	1
28	50287282	ROD ASSY/LINK O/H	1
29	50287283	PIN/REGULATE	1
30	50287284	TUBE/ROD 6	1
31	50287285	ROD/LINK I/H-R/M	1
32	50287286	CLIP/ROD 3.5	1
33	50287287	HANDLE/DOOR INNER	1
34	50287288	PLATE/KEY LOCK DOOR	1
35	50287289	STRIKER ASSY/DOOR	1
36	50287290	WASHER 10 BK	2
37	50287291	NUT M10 BK	2
38	50287292	COVER/DOOR INNER	1
39	50287293	RIVET 8	4
40	50287294	SEAL/DOOR	1
41	50287295	WASHER/SEAL 12	2
42	50287376	SEAL/COVER L	1

NOTE: * Key part number 50288194 (2 keys)

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 106 - CABIN (FRONT:WINDOW:1)



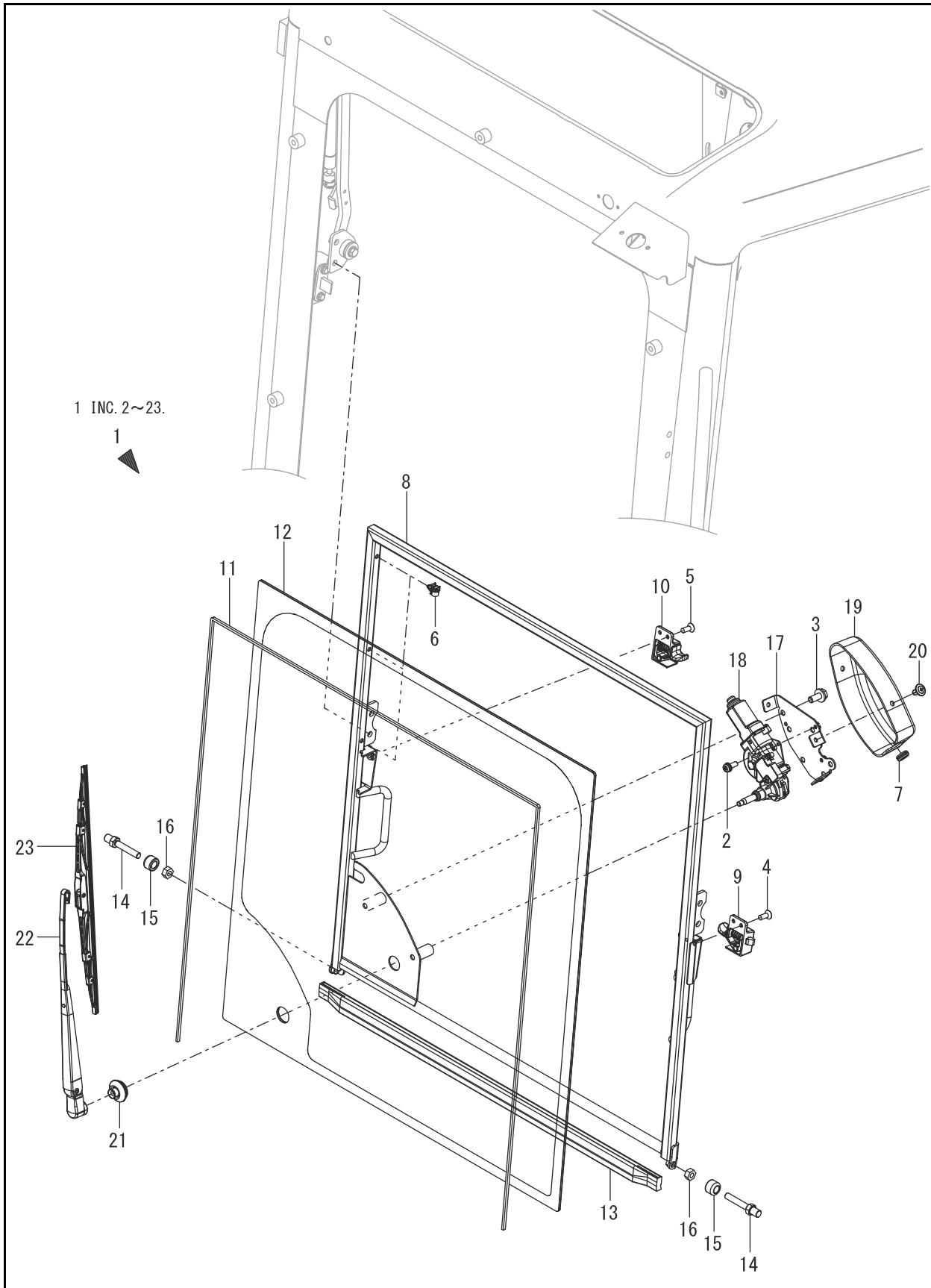
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 106 - CABIN (FRONT:WINDOW:1)

Ref.

No.	Part No.	Description	Qty.
2	50287236	BOLT/SEMS 6 X 16 B	4
3	50287237	BOLT/SEMS 6 X 20 B	4
4	50287238	BOLT/SEMS 8 X 20 B	2
5	50287238	BOLT/SEMS 8 X 20 B	2
6	50287238	BOLT/SEMS 8 X 20 B	2
7	50287250	NUT/M10	2
8	50287253	WASHER 8	2
9	50287331	ARM ASSY/R F/W	1
10	50287238	BOLT/SEMS 8 X 20 B	1
11	50287336	WASHER/THRUST 16	2
12	50287337	WASHER 8.5 X 30 X 3.2	1
13	50287345	ARM ASSY/R	1
14	50287347	BRACKET ASSY/ARM	1
15	50287348	BUSH 17 X 20	1
16	50287332	ARM ASSY/L F/W	1
17	50287238	BOLT/SEMS 8 X 20 B	1
18	50287336	WASHER/THRUST 16	2
19	50287337	WASHER 8.5 X 30 X 3.2	1
20	50287346	ARM ASSY/L	1
21	50287347	BRACKET ASSY/ARM	1
22	50287348	BUSH 17 X 20	1
23	50287333	SHIM/LOCK PLATE	2
24	50287334	STRIKER ASSY F/W	2
25	50287335	BALL/STUD	4
26	50287336	WASHER/THRUST 16	4
27	50287337	WASHER 8.5 X 30 X 3.2	2
28	50287338	SPRING/GAS FRONT G	2
29	50287339	SHIM/STRIKER ARM	2
30	50287340	STRIKER/ARM	2
31	50287341	STOPPER F/W	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 107 - CABIN (FRONT WINDOW:2)



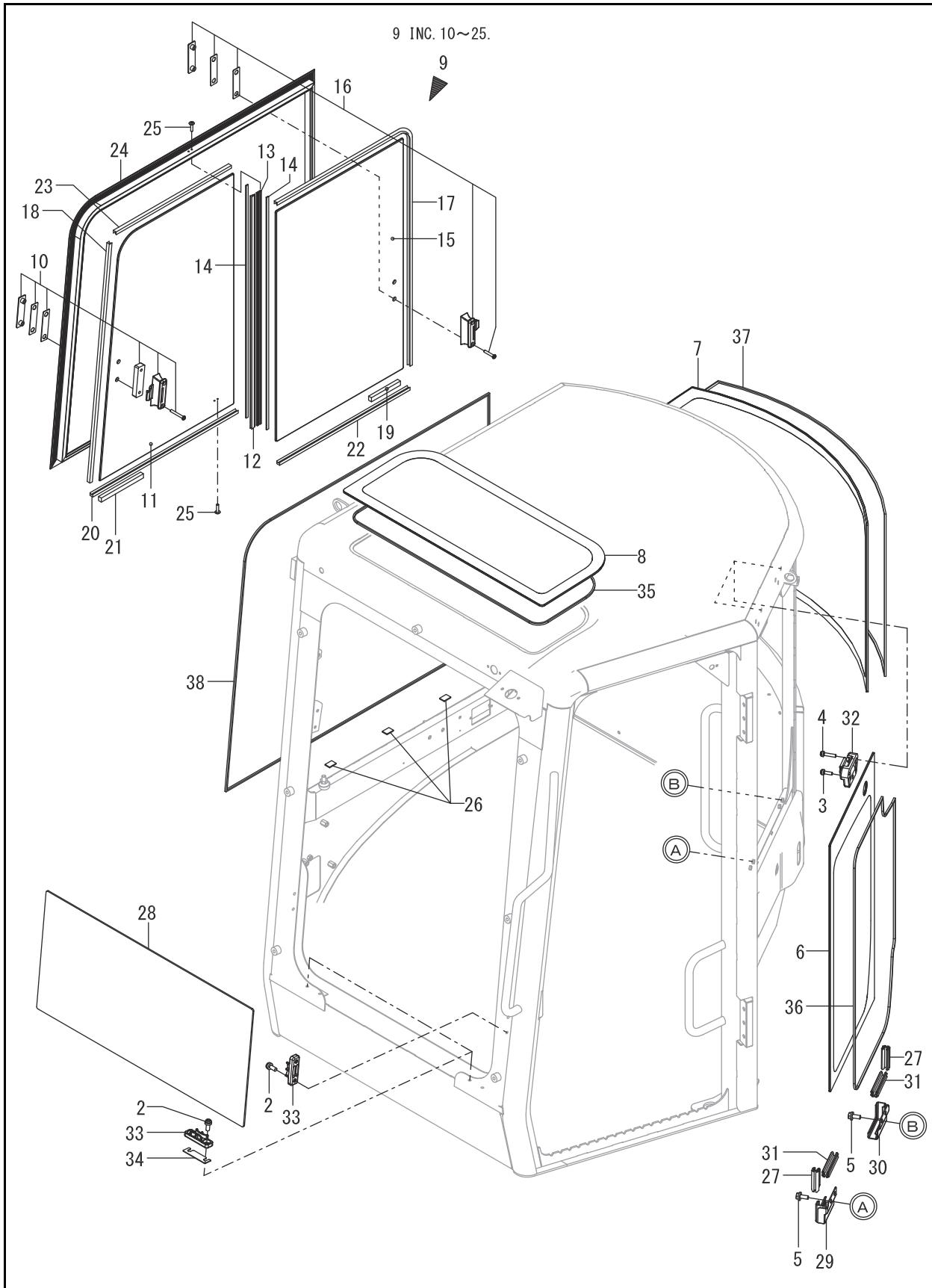
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 107 - CABIN (FRONT WINDOW:2)

Ref.

No.	Part No.	Description	Qty.
1	50287296	WINDOW ASSY/FRONT	1
2	50287218	SCREW/SEMS 5 X 12	3
3	50287232	BOLT/SEMS 8 X 16	2
4	50287246	SCREW/SOCKET 6 X 16	2
5	50287246	SCREW/SOCKET 6 X 16	2
6	50287266	CLAMP/CABLE 5	3
7	50287268	CAP 10	1
8	50287297	FRAME ASSY/FRONT	1
9	50287298	LOCK ASSY/L F/W	1
10	50287299	LOCK ASSY/R F/W	1
11	50287300	DAM 2450	1
12	50287301	GLASS/FRONT UP	1
13	50287302	SEAL/FRONT GLASS	1
14	50287303	BOLT/ROLLER	2
15	50287304	ROLLER 18 X 13	2
16	50287305	NUT M8 BK	2
17	50287306	BRACKET ASSY W/MOTOR	1
18	50287307	MOTOR/WIPER	1
19	50287308	COVER/WIPER MOTOR	1
20	50287309	RIVET 7	3
21	50287310	CAP/WIPER	1
21	50287310	CAP/WIPER	1
22	50287311	ARM/WIPER	1
23	50287312	BLADE/WIPER	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 108 - CABIN (GLASS)



Z45 GEN:2 - COMPACT EXCAVATOR**FIG. 108 - CABIN (GLASS)**

Ref.

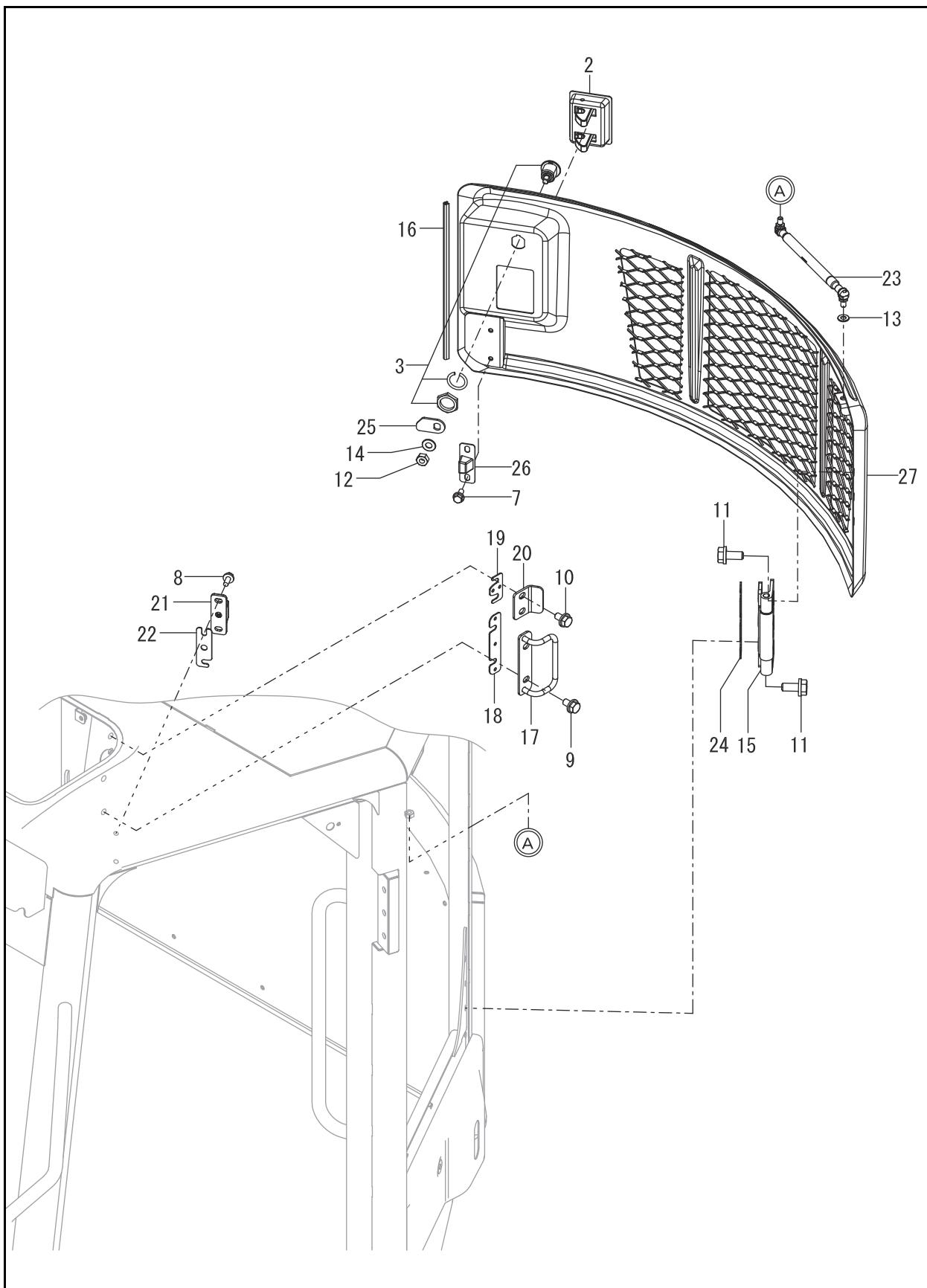
No.	Part No.	Description	Qty.
2	50287220	SCREW/SEMS 6 X 16	8
3	50287224	SCREW/SEMS 6 X 20 B	2
4	50287226	SCREW/SEMS 6 X 30 B	4
5	50287236	BOLT/SEMS 6 X 16 B	4
6	50287342	GLASS/SIDE L	1
7	50287343	GLASS/REAR (replacement also requires label 39A)	1
8	50287344	ROOF/POLYCARBONATE	1
9	50287349	SASH ASSY	1
10	50287350	LOCK ASSY/SASH 37	1
11	50287351	GLASS/SASH FRONT	1
12	50287352	RUBBER/SASH	1
13	50287353	BAR/CENTER	1
14	50287354	SEAL/SASH	2
15	50287355	GLASS/SASH REAR (replacement also requires labels 40A, 40B, 40C, 40D, 40E)	1
16	50287356	LOCK ASSY/SASH 26	1
17	50287357	GLASSRUN 1612	1
18	50287358	GLASSRUN 752	1
19	50287359	STOPPER/SASH A	1
20	50287360	GLASSRUN 844	1
21	50287361	STOPPER/SASH B	1
22	50287362	GLASSRUN 784	1
23	50287363	GLASSRUN 809	1
24	50287364	FRAME ASSY/SASH	1
25	50288180	SCREW	4
26	50287365	SHEET/STOPPER	3
27	50287366	GLASSRUN 40	2
28	50287367	GLASS/FRONT LOWER	1
29	50288078	HOLDER ASSY/GLASS R	1
30	50288079	HOLDER ASSY/GLASS L	1
31	50287368	GLASSRUN 80	2
32	50287369	HOLDER/GLASS	2
33	50287370	SEAT/GLASS	4
34	50287371	SHIM/SEAT GLASS	2
35	50287372	DAM 1900	1
36	50287373	DAM 2300	1
37	50287374	DAM 2900	1
38	50287375	DAM 3550	1
39A	50289421	LIFT DECAL *	1
40A	50281022	LABEL, TRANSPORT US *	1
40B	50281025	LABEL, NEUTRAL US *	1
40C	50281174	LABEL, PIN US **	1
40D	50287435	LABEL/WARNING HITCH **	1
40E	50287436	LABEL/SAND US **	1

NOTE: * Labels shown on Page 10.

** Labels shown on Page 12.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 109 - CABIN (REAR COVER)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 109 - CABIN (REAR COVER)

Ref.

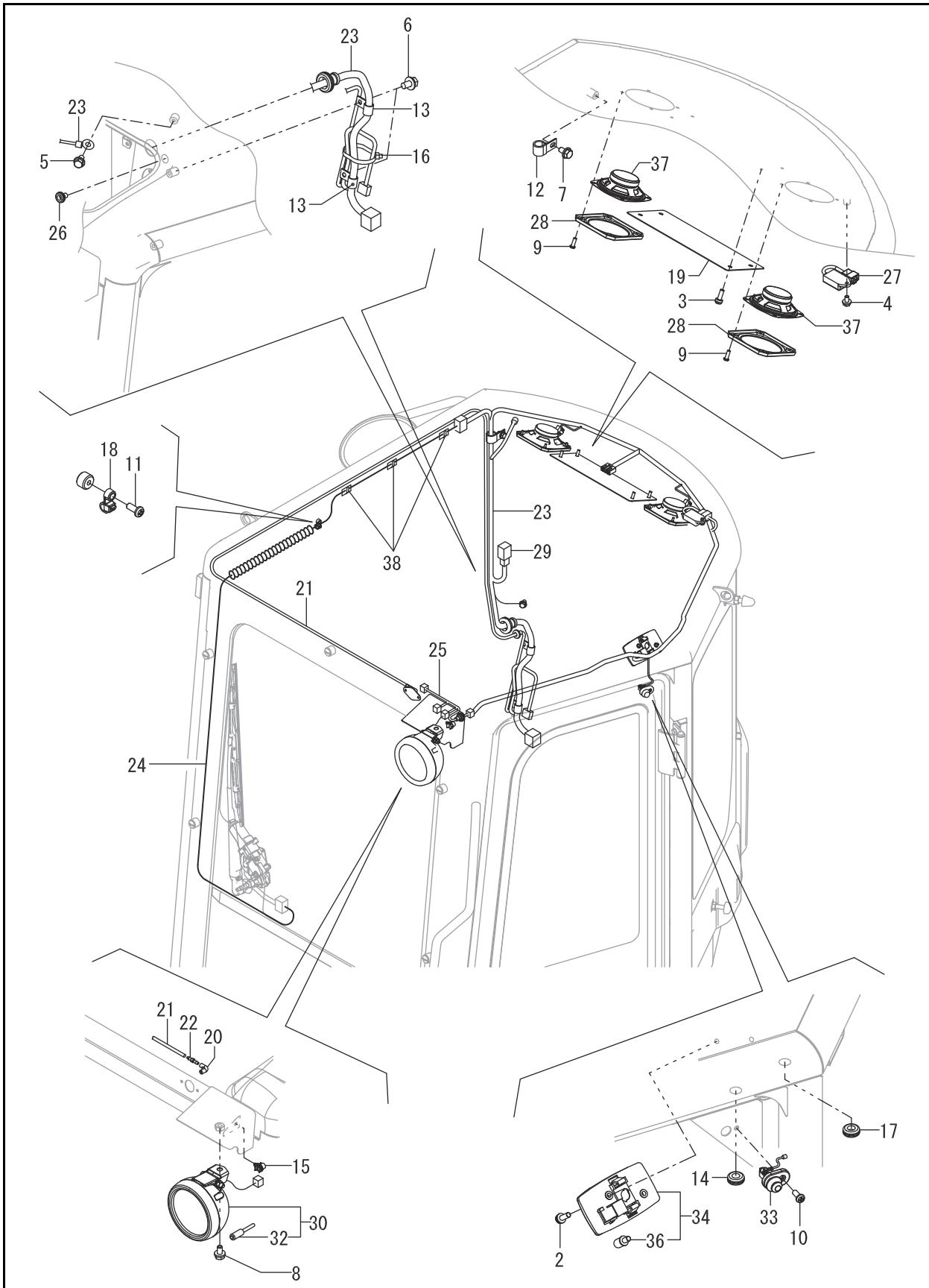
No.	Part No.	Description	Qty.
2	50280945	HANDLE, LOCK	1
3	50287772	CYLINDER ASSY W/O KEY **	1
7	50287228	BOLT/SEMS 6 X 16	2
8	50287229	BOLT/SEMS 6 X 20	2
9	50287232	BOLT/SEMS 8 X 16	2
10	50287232	BOLT/SEMS 8 X 16	2
11	50287234	BOLT/SEMS 10 X 25	6
12	50287250	NUT/M10	1
13	50287253	WASHER 8	1
14	50287254	WASHER 10	1
15	50287148	HINGE/DOOR	1
16	50287328	TRIM/REAR COVER	1
17	50287385	CATCH ASSY/COVER R	1
18	50287386	SHIM/CATCH R COVER	1
19	50287387	SHIM/LOCK PLATE	1
20	50287388	PLATE/LOCK	1
21	50287389	CATCH/DOVE TAIL B	1
22	50287390	SHIM/DOVE TAIL	1
23	50287391	SPRING/GAS REAR COVER	1
24	50287392	SHIM/HINGE REAR	1
25	50287393	PLATE/KEY LOCK	1
26	50287394	CATCH/DOVE TAIL A	1
27	50288081	COVER ASSY/REAR (replacement also requires label 28A)	1
28A	50287431	LABEL/WARNING AC US *	1

NOTE: * Label shown on Page 10

** Key part number 50288194 (2 keys)

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 110 - CABIN (ELECTRIC PART)



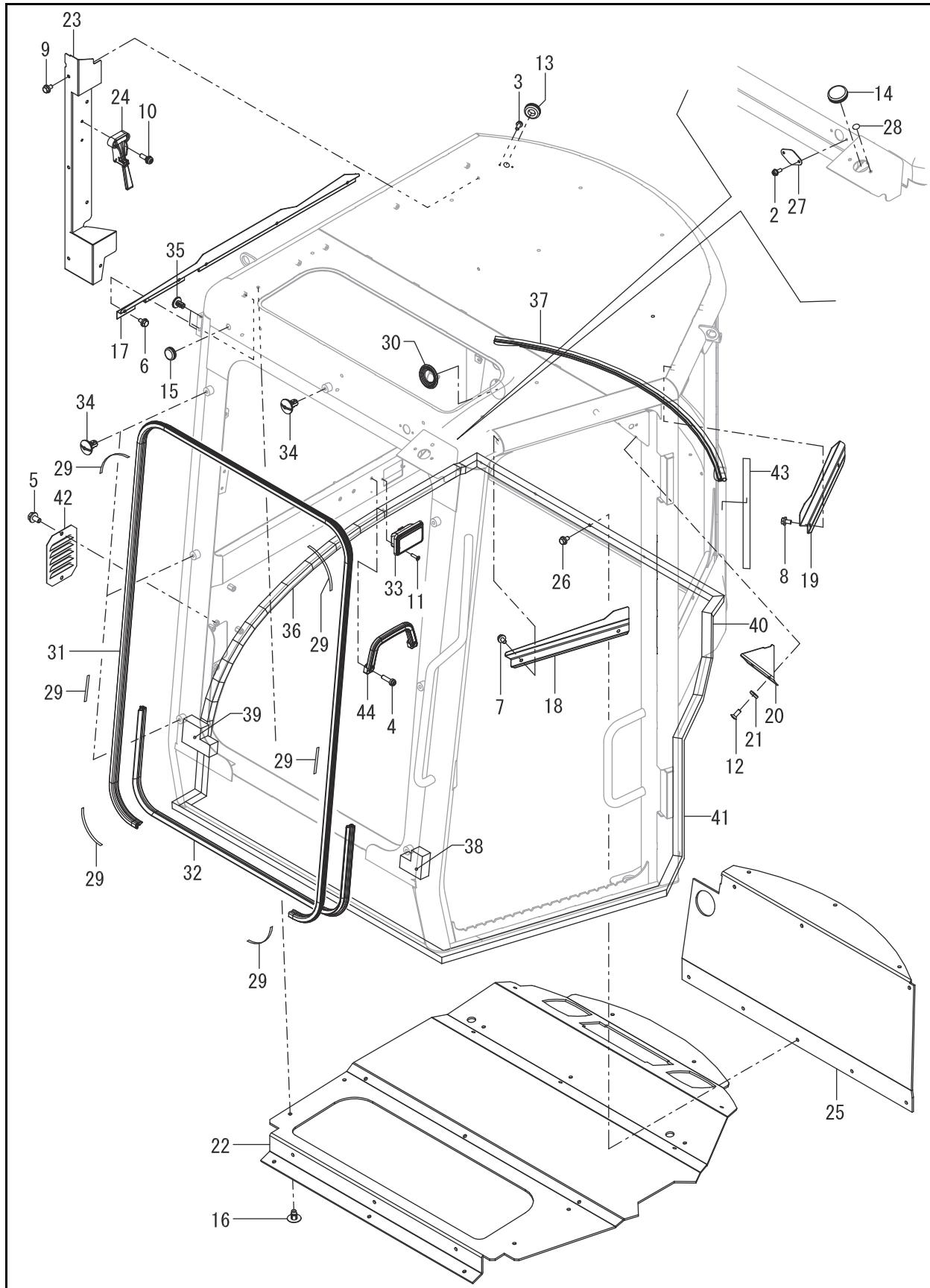
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 110 - CABIN (ELECTRIC PART)

Ref.

No.	Part No.	Description	Qty.
2	50287219	SCREW/SEMS 5 X 16	2
3	50287224	SCREW/SEMS 6 X 20 B	4
4	50287227	BOLT/SEMS 6 X 12	1
5	50287231	BOLT/SEMS 8 X 12	1
6	50287232	BOLT/SEMS 8 X 16	2
7	50287232	BOLT/SEMS 8 X 16	1
8	50287239	BOLT/SEMS 10 X 20 B	1
9	50287240	SCREW/PAN 4 X 12 B	8
10	50287241	SCREW/PAN 5 X 12 B	1
11	50287241	SCREW/PAN 5 X 12 B	1
12	50287262	CLIP/HOSE 14	1
13	50287263	CLIP/HOSE 17	2
14	50287264	GROMMET 10	1
15	50287265	CLAMP/CABLE 3	1
16	50287266	CLAMP/CABLE 5	1
17	50287268	CAP 10	1
18	50287314	CLIP/HARNESS	1
19	50288076 50840407	COVER/RADIO LESS (shown) RADIO KIT (w/ antenna)(not shown)	1 1
20	50287319	JOINT/WASHER	1
21	50287320	HOSE/WASHER	1
22	50288942	NON-RETURN VALVE	1
23	50288945	CAB MAIN WIRE HARNESS	1
24	50287330	HARNESS/WIPER MOTOR	1
25	50287410	HARNESS/WORK LAMP	1
26	50287411	GROMMET 15 X 21 X 8	1
27	160891	RELAY 10 A	1
28	50288121	COVER/SPEAKER	2
29	50288120	RELAY CA-1A	1
30	50288110	LAMP/WORKING	1
32	50286744	BULB 12V 55W	1
33	50288104	SWITCH/LAMP	1
34	50288106	LAMP ASSY/ROOM	1
36	50288108	BULB	1
37	50288115	SPEAKER	2
38	50288190	STAPLE P-25	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 111 - CABIN (ACCESSORY)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 111 - CABIN (ACCESSORY)

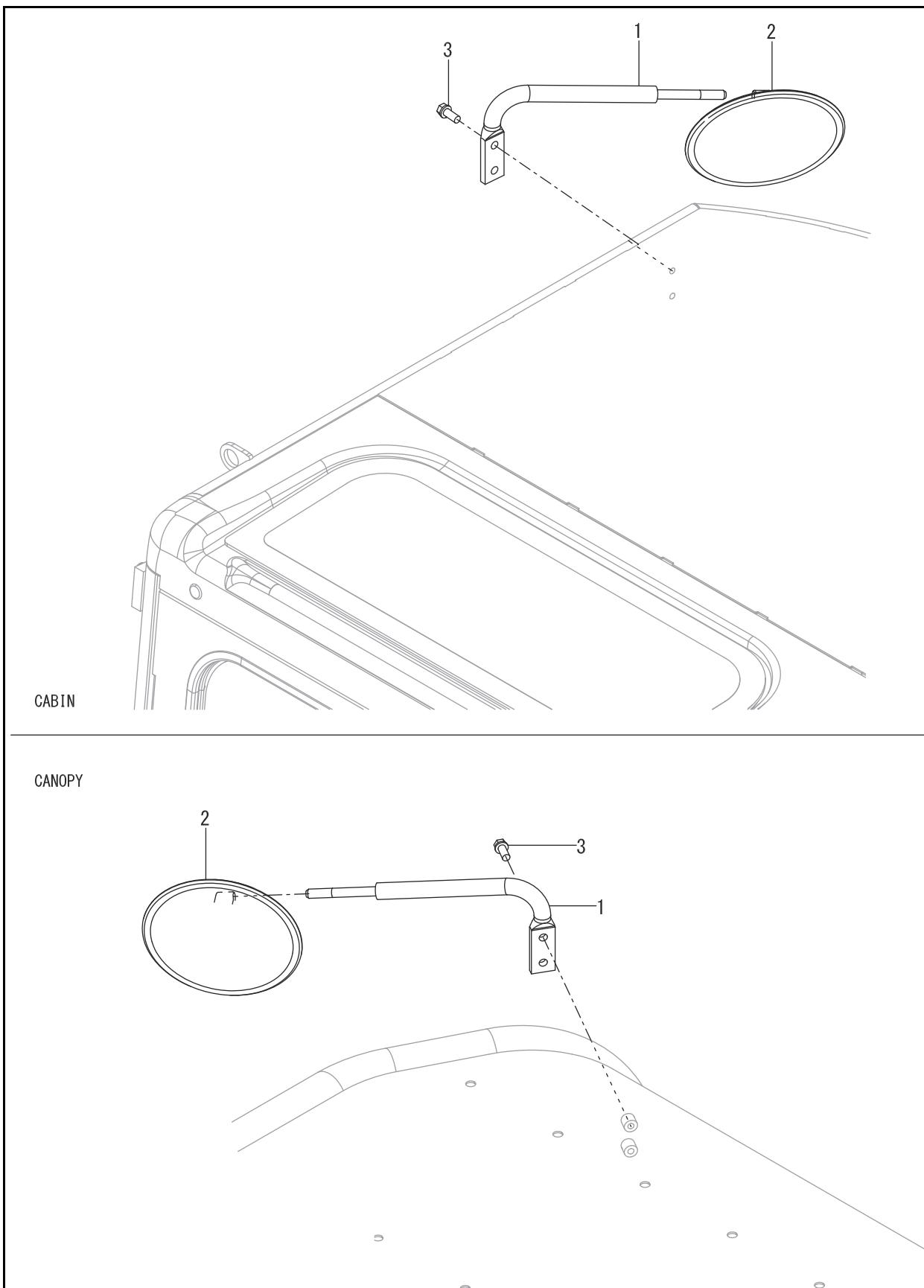
Ref.

No.	Part No.	Description	Qty.
2	50287221	SCREW/SEMS 4 X 12 B	2
3	50287222	SCREW/SEMS 4 X 16 B	2
4	50287225	SCREW/SEMS 6 X 25 B	2
5	50287232	BOLT/SEMS 8 X 16	2
6	50287235	BOLT/SEMS 6 X 12 B	5
7	50287235	BOLT/SEMS 6 X 12 B	2
8	50287235	BOLT/SEMS 6 X 12 B	2
9	50287235	BOLT/SEMS 6 X 12 B	6
10	50287242	SCREW/PAN 5 X 16 B	2
11	50287243	SCREW/FLAT 4 X 16	2
12	50287245	SCREW/ROUND 6 X 16	2
13	50287268	CAP 10	1
14	50287269	CAP 25	1
15	50288941	CAP	1
16	50287293	RIVET 8	23
17	50288071	COVER/CAB TOP R	1
18	50288072	COVER/CAB TOP LF	1
19	50288073	COVER/CAB TOP LR	1
20	50288074	COVER/DOOR SWITCH	1
21	50287313	WASHER/6 DRESSING	2
22	50287315	PAD/ROOF	1
23	50288075	COVER/ASSY/HARNESS (replacement also requires labels 45A, 45B)	1
24	50287316	HAMMER	1
25	50287317	PAD/REAR	1
26	50287318	CLIP/TREE 6	11
27	50288077	PLATE/NOZZLE LESS	1
28	50287321	SEAL/14 GRAY	2
29	50287322	TAPE/BUTYL	6
30	50288944	GROMMET	1
31	50287395	SEAL 3450	1
32	50287396	SEAL 1570	1
33	50287397	ASHTRAY	1
34	50287401	PLUG M10	7
35	50287401	PLUG M10	2
36	50287402	SEAL/CABIN 1360	1
37	50287403	SEAL 950	1
38	50287404	SEAL/FRONT R	1
39	50287405	SEAL/FRONT L	1
40	50287406	SEAL/CABIN 500	1
41	50287407	SEAL/CABIN 430	1
42	50288082	LOUVER	1
43	50287408	TAPE/REAR COVER	1
44	50288095	GRIP	1
45A	50281032	LABEL, SEAT BELT US *	1
45B	50281031	LABEL, ROPS US *	1

NOTE: * Labels shown on Page 10.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 112 - REARVIEW MIRROR



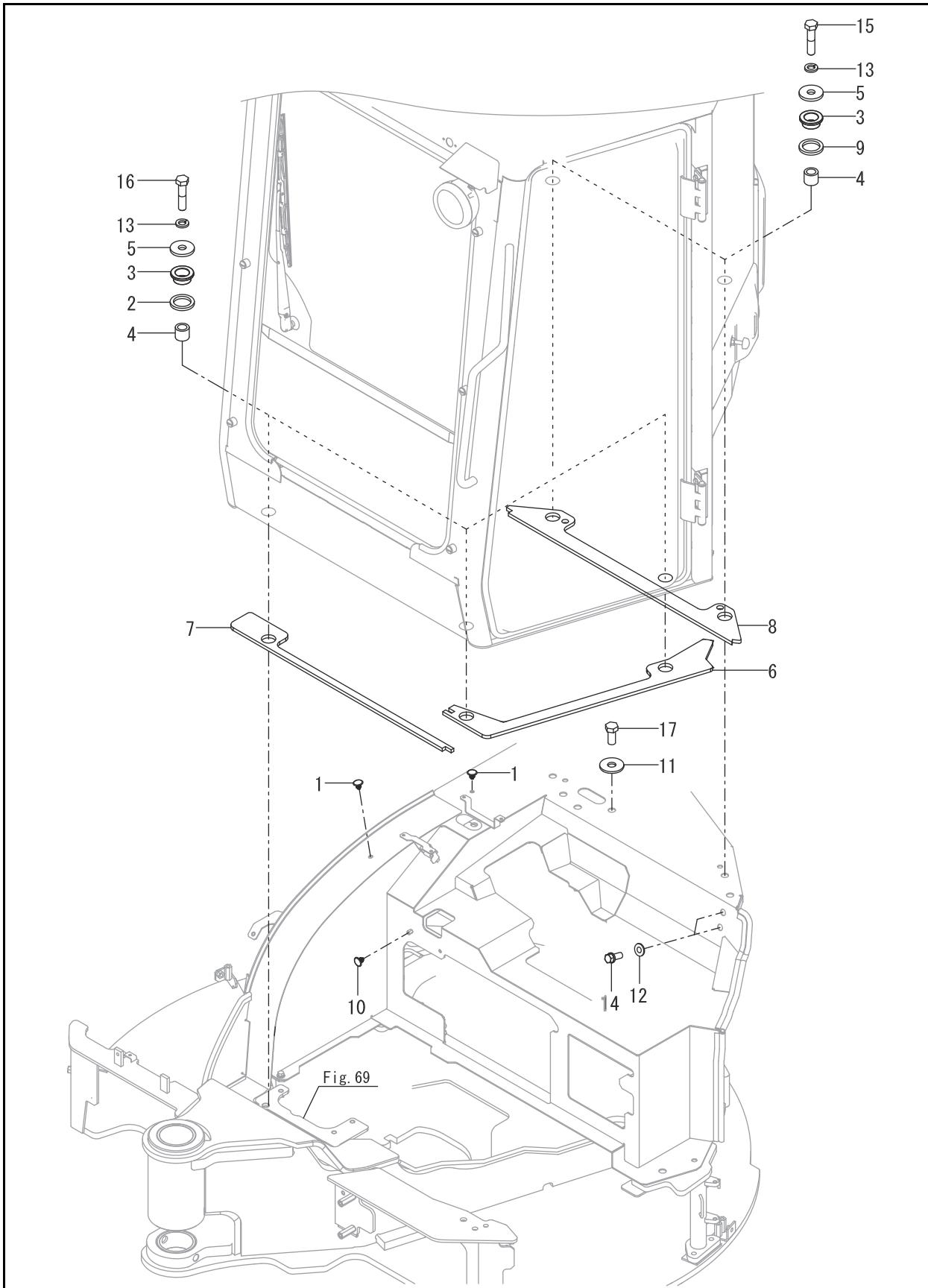
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 112 - REARVIEW MIRROR

Ref.

No.	Part No.	Description	Qty.
1	50287171	BRACKET ASSY/MIRROR	1
2	50281414	REARVIEW MIRROR	1
3	50282516	BOLT W/WASHER M10X25	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 113 - CABIN MOUNT

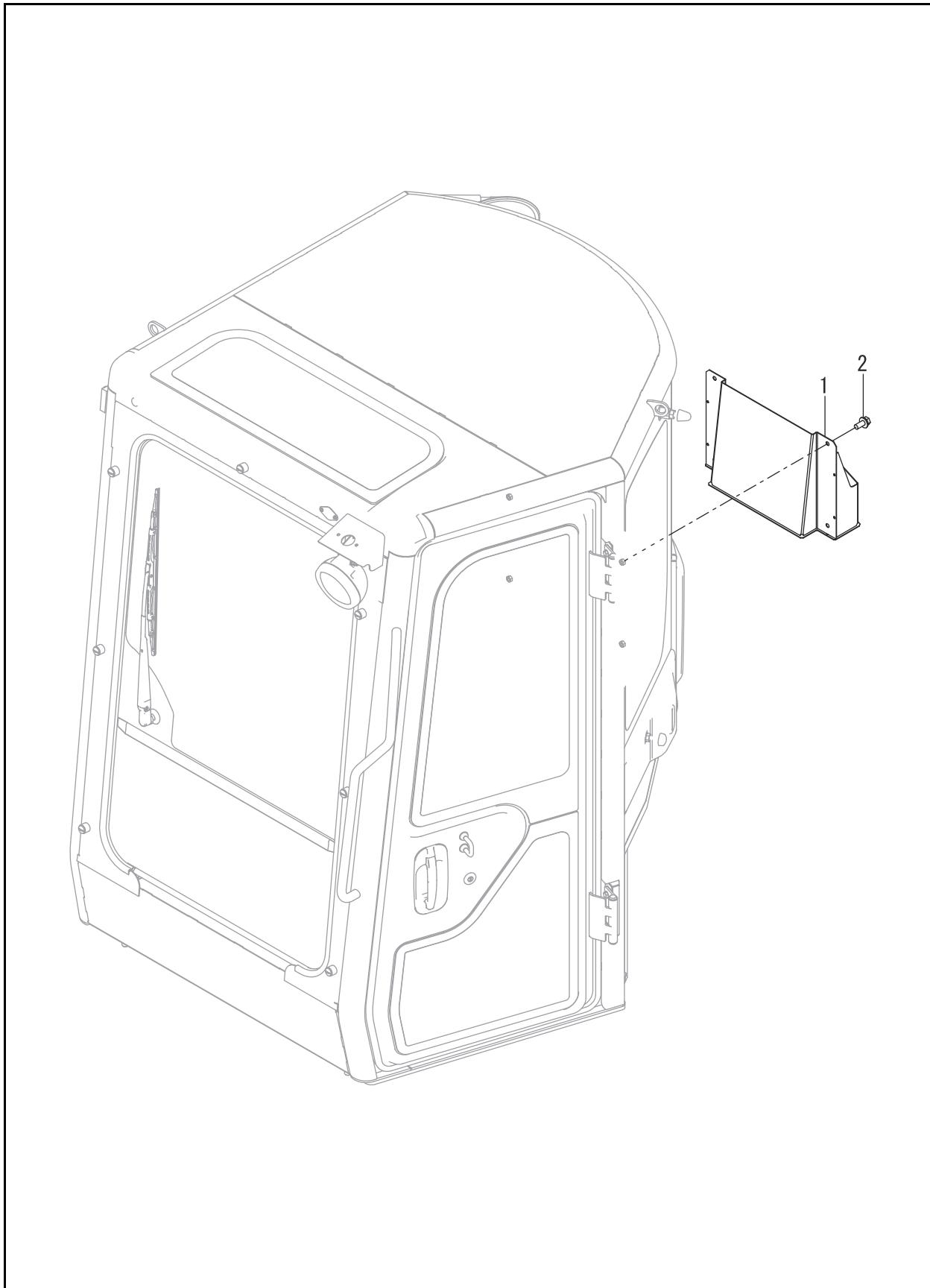


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 113 - CABIN MOUNT

Ref.

No.	Part No.	Description	Qty.
1	50280782	CLIP	2
2	50283629	WASHER52X38X6	3
3	50283630	GROMET 30X36X50	5
4	50283631	COLLER 20X30X26	5
5	50283632	WASHER52X17X6	5
6	50287323	PAD/CAB SIDE	1
7	50287324	PAD/CAB FRONT	1
8	50287325	PAD/CAB REAR	1
9	50287326	WASHER 39 X 52 X 3.2	2
10	50288083	CLIP/TREE 5	1
11	50282382	WASHER 16,POLISHED	1
12	50282387	WASHER 10	2
13	50282396	SPRING WASHER 16	5
14	50282514	BOLT M10X 16	2
15	50284110	BOLT 16*55	2
16	50288174	BOLT	3
17	50288178	BOLT	1

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 114 - BOX (CABIN HEATER SPEC.)



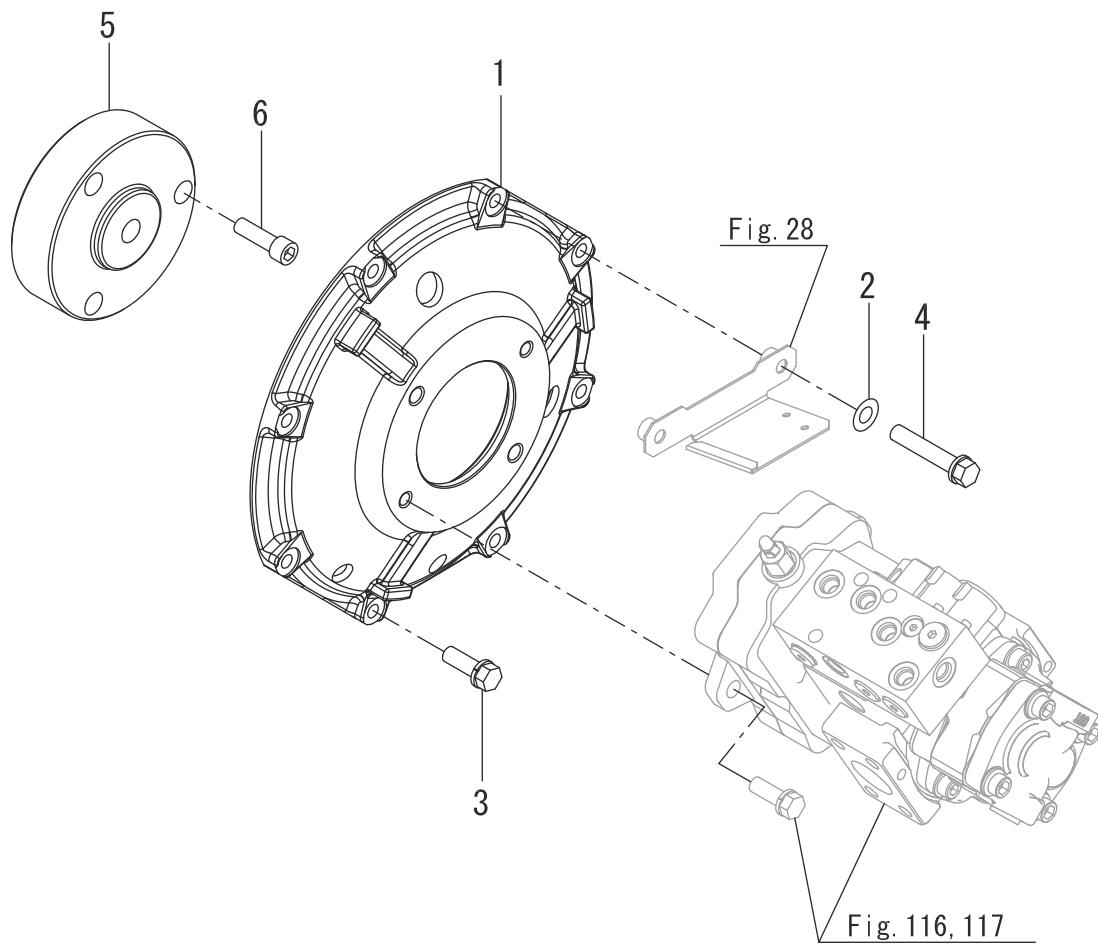
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 114 - BOX (CABIN HEATER SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50288943	HEATER BOX	1
2	50282534	BOLT M 8X 20	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 115 - HYD. OIL PUMP MOUNT

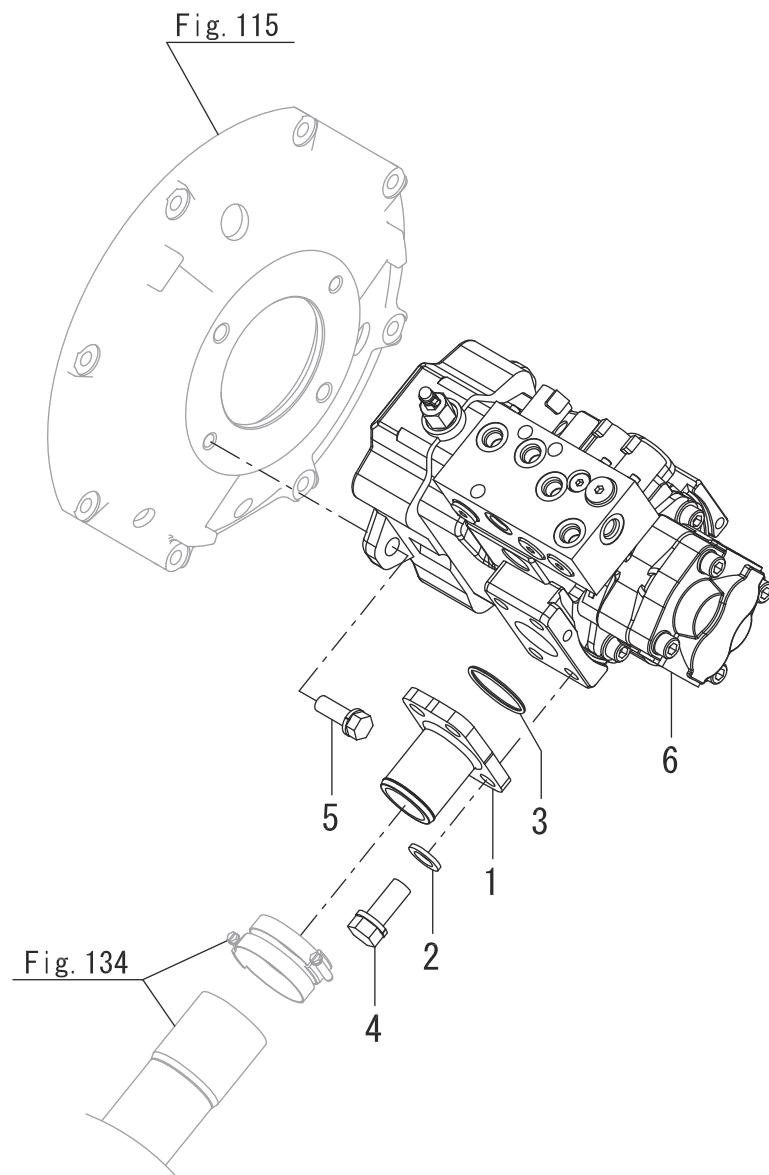


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 115 - HYD. OIL PUMP MOUNT

Ref.

No.	Part No.	Description	Qty.
1	50289168	FLYWHEEL COVER	1
2	138111	WASHER/POLISHED	2
3	50282517	BOLT M10X 30	6
4	50282521	BOLT M10X 50	2
5	50282802	COUPLING	1
6	50284137	BOLT M12 X 40	3

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 116 - HYD. OIL PUMP (QUICK COUPLER SPEC.)



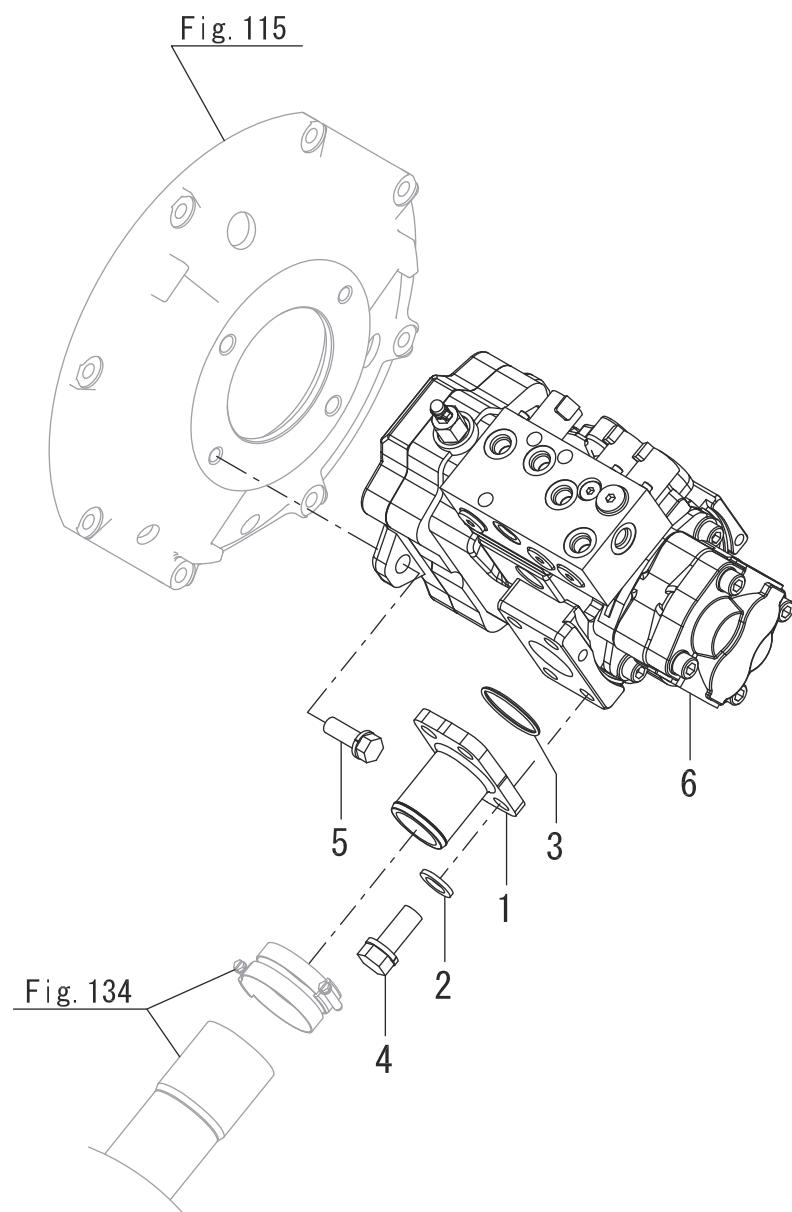
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 116 - HYD. OIL PUMP (QUICK COUPLER SPEC.)

Ref.

No.	Part No.	Description	Qty.
1	50282806	FLANGE	1
2	50282378	WASHER 12	4
3	50284082	O-RING 1A G-45.0	1
4	50282525	BOLT W/WASHER M12X30	4
5	50284102	BOLT M12 X 35	2
6	50289243	PUMP ASSY	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 117 - HYD. OIL PUMP (ESS & QUICK COUPLER SPEC., W/ CABIN ONLY)



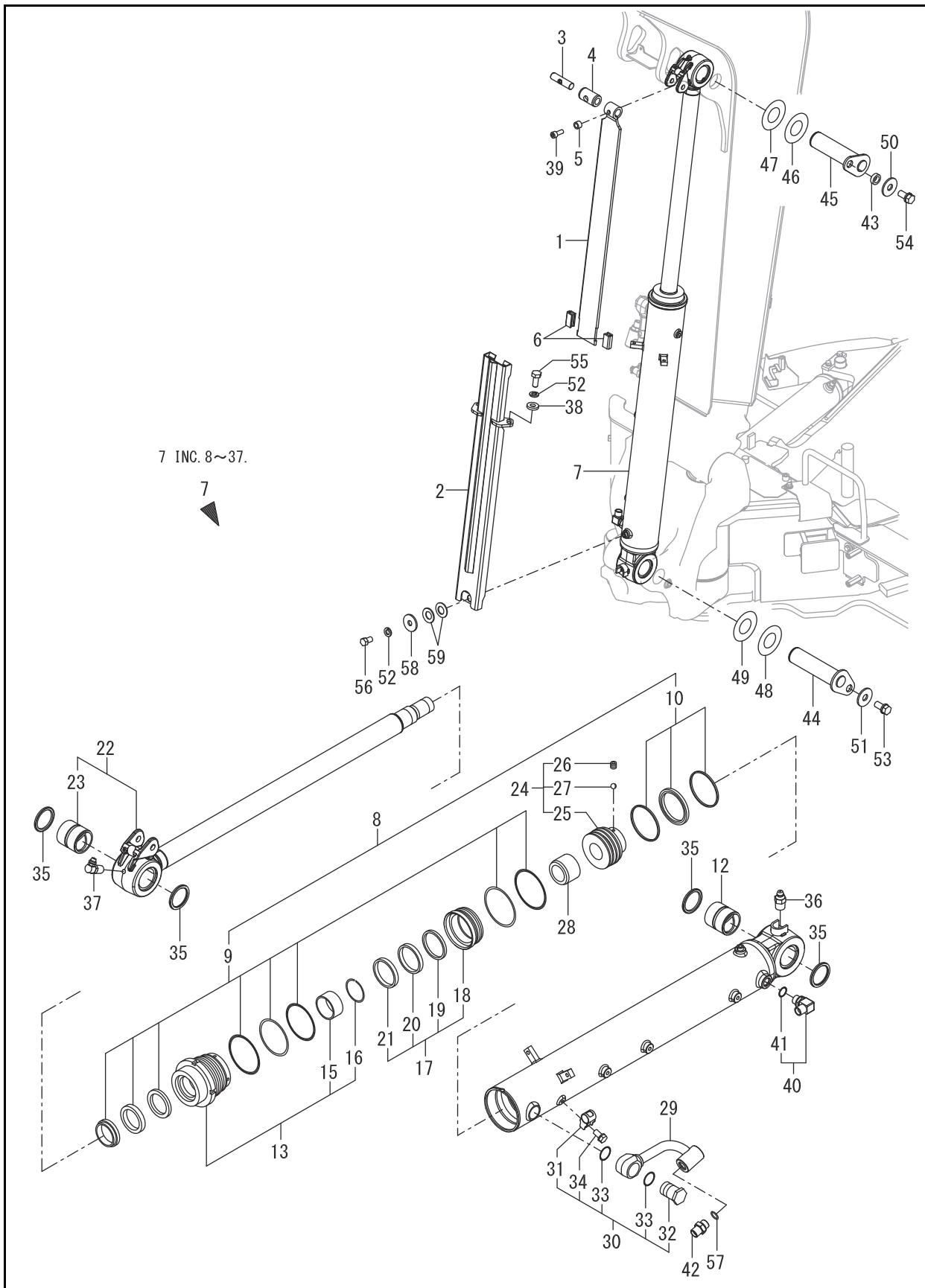
Z45 GEN:2 - COMPACT EXCAVATOR**FIG. 117 - HYD. OIL PUMP (ESS & QUICK COUPLER SPEC., W/ CABIN ONLY)**

Ref.

No.	Part No.	Description	Qty.
1	50282806	FLANGE	1
2	50282378	WASHER 12	4
3	50284082	O-RING 1A G-45.0	1
4	50282525	BOLT W/WASHER M12X30	4
5	50284102	BOLT M12 X 35	2
6	50289244	PUMP ASSY	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 118 - BOOM CYLINDER

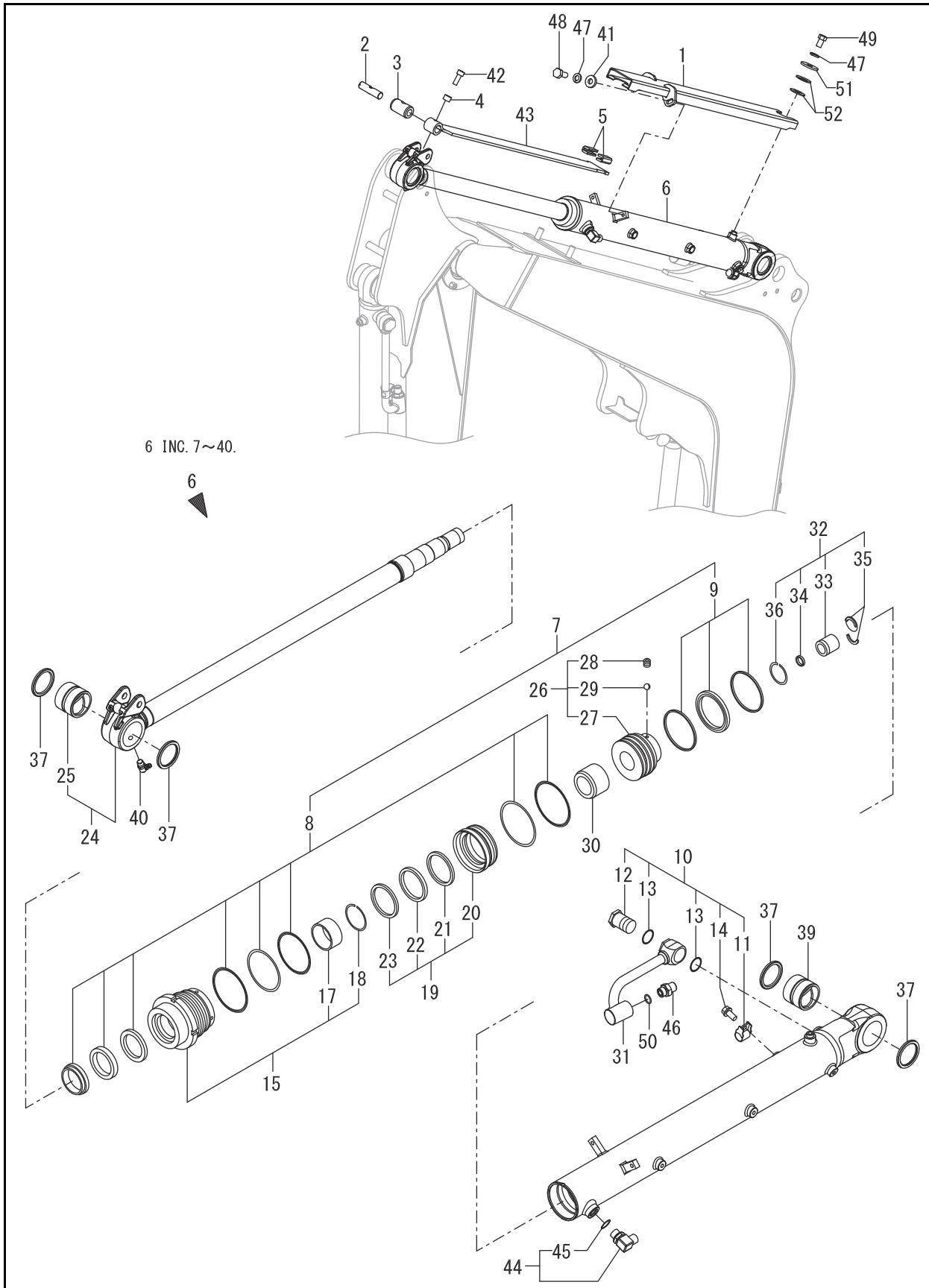


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 118 - BOOM CYLINDER

Ref.	No.	Part No.	Description	Qty.	Ref.	No.	Part No.	Description	Qty.
	1	50289169	CYLINDER GUARD	1		50	50282388	WASHER 12	1
	2	50289170	GUIDE ASSY	1		51	50282388	WASHER 12	1
	3	50283319	SHAFT,14X54	1		52	50282393	SPRING WASHER 10	3
	4	50283320	GROMMET	1		53	50284101	BOLT M12 X 25	1
	5	50283344	SPACER	1		54	50284101	BOLT M12 X 25	1
	6	50283321	SLIDE GUIDE	2		55	50284106	BOLT M10 X 25	2
	7	50289179	BOOM CYLINDER ASSY	1		56	50284117	BOLT M10 X 16 PLATED	1
	8	50289174	CYLINDER SEAL KIT	1		57	50282609	O RING	1
	9	50289195	CYLINDER HEAD SEAL KIT	1		58	50282617	WASHER,BRAKE ARM	1
	10	50289196	CYLINDER PISTON SEAL KIT	1		59	50282620	SPRING 16	2
	12	50289180	BUSHING	1					
	13	50289181	CYLINDER GLAND ASSY	1					
	15	50288939	HEAD BUSHING	1					
	16	50288940	SNAP RING	1					
	17	50289182	HOLDER ASSY	1					
	18	50289183	HOLDER	1					
	19	50289184	SPACER	1					
	20	50289185	CUSHION SEAL	1					
	21	50289186	COLLAR	1					
	22	50289187	CYLINDER ROD ASSY	1					
	23	50289180	BUSHING	1					
	24	50289188	CYLINDER PISTON ASSY	1					
	25	50289189	CYLINDER PISTON	1					
	26	50288937	SCREW M8	1					
	27	50289434	STEEL BALL 7/32	1					
	28	50289190	BEARING CUSHION	1					
	29	50289191	PIPE	1					
	30	50289192	PLUG ASSY	1					
	31	50289193	TUBE HOLDER	1					
	32	50289211	PLUG	1					
	33	50282479	O-RING 1B P-26.0	2					
	34	50282506	BOLT W/WASHER M8X16	1					
	35	50288936	DUST SEAL	4					
	36	50282497	NIPPLE PT1/8,GREASE	1					
	37	50282499	NIPPLE C,GREASE	1					
	38	50283985	COLLOR	2					
	39	50283655	BOLT M16X16	1					
	40	50280814	CONNECTOR 1/2L	1					
	41	50282474	O-RING 1B P-18.0	1					
	42	50280778	CONNECTOR	1					
	43	50280892	SPACER	1					
	44	50289342	PIN	1					
	45	50289342	PIN	1					
	46	50280899	SHIM 50X90X0.5	1					
	47	50280900	SHIM 50X90X1.2	1					
	48	50288908	SHIM	1					
	49	50288909	SHIM	1					

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 119 - ARM CYLINDER

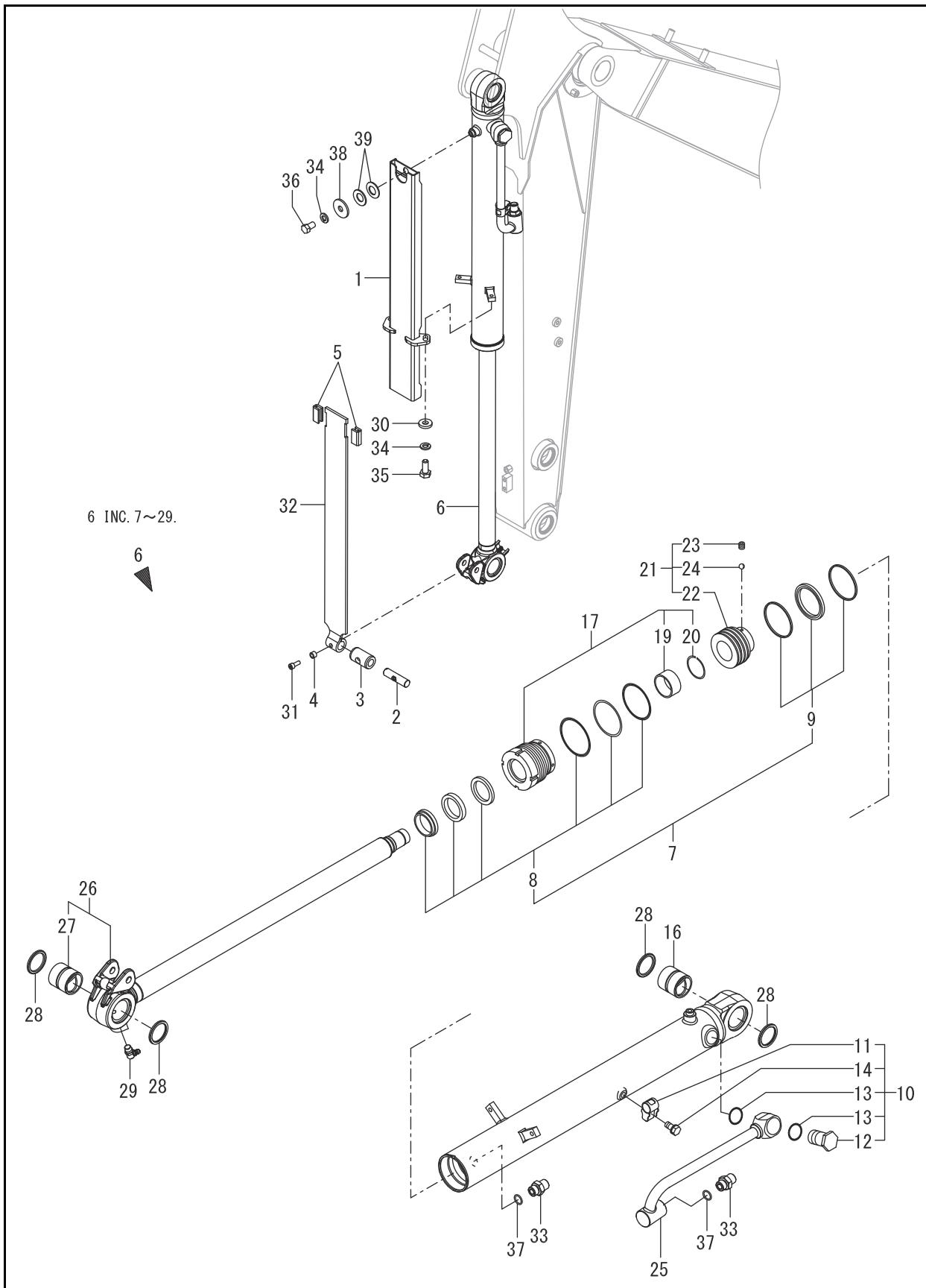


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 119 - ARM CYLINDER

Ref.	No.	Part No.	Description	Qty.	Ref.	No.	Part No.	Description	Qty.
	1	50289171	GUIDE ASSY	1		50	50282609	O RING	1
	2	50283319	SHAFT,14X54	1		51	50282617	WASHER, BRAKE ARM	1
	3	50283320	GROMMET	1		52	50282620	SPRING 16	2
	4	50283344	SPACER	1					
	5	50283321	SLIDE GUIDE	2					
	6	50289209	DIPPER ARM CYLINDER	1					
	7	50289175	CYLINDER SEAL KIT	1					
	8	50289212	CYLINDER HEAD SEAL KIT	1					
	9	50289213	CYLINDER PISTON SEAL KIT	1					
	10	50289192	PLUG ASSY	1					
	11	50289193	TUBE HOLDER	1					
	12	50289211	PLUG	1					
	13	50282479	O-RING 1B P-26.0	2					
	14	50282506	BOLT W/WASHER M8X16	1					
	15	50289198	CYLINDER HEAD ASSY	1					
	17	50288939	HEAD BUSHING	1					
	18	50288940	SNAP RING	1					
	19	50289199	HOLDER ASSY	1					
	20	50289200	HOLDER	1					
	21	50289201	SPACER	1					
	22	50289202	CUSHION SEAL	1					
	23	50289203	COLLAR	1					
	24	50289204	CYLINDER ROD ASSY	1					
	25	50288938	BUSHING	1					
	26	50289205	PISTON ASSY	1					
	27	50289206	PISTON	1					
	28	50288937	SCREW M8	1					
	29	50289434	STEEL BALL 7/32	1					
	30	50289207	BEARING CUSHION	1					
	31	50289208	PIPE	1					
	32	50288931	CYLINDER CUSHION	1					
	33	50288932	CUSHION PLUNGER	1					
	34	50288933	CUSHION SEAL	1					
	35	50288934	CUSHION STOPPER	2					
	36	50288935	SNAP RING	1					
	37	50288936	DUST SEAL	4					
	39	50288938	BUSHING	1					
	40	50282499	NIPPLE C,GREASE	1					
	41	50283985	COLLOR	2					
	42	50283655	BOLT M16X16	1					
	43	50283325	SLIDE PLATE	1					
	44	50280814	CONNECTOR 1/2L	1					
	45	50282474	O-RING 1B P-18.0	1					
	46	50280778	CONNECTOR	1					
	47	50282393	SPRING WASHER 10	3					
	48	50284106	BOLT M10 X 25	2					
	49	50284117	BOLT M10 X 16 PLATED	1					

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 120 - BUCKET CYLINDER



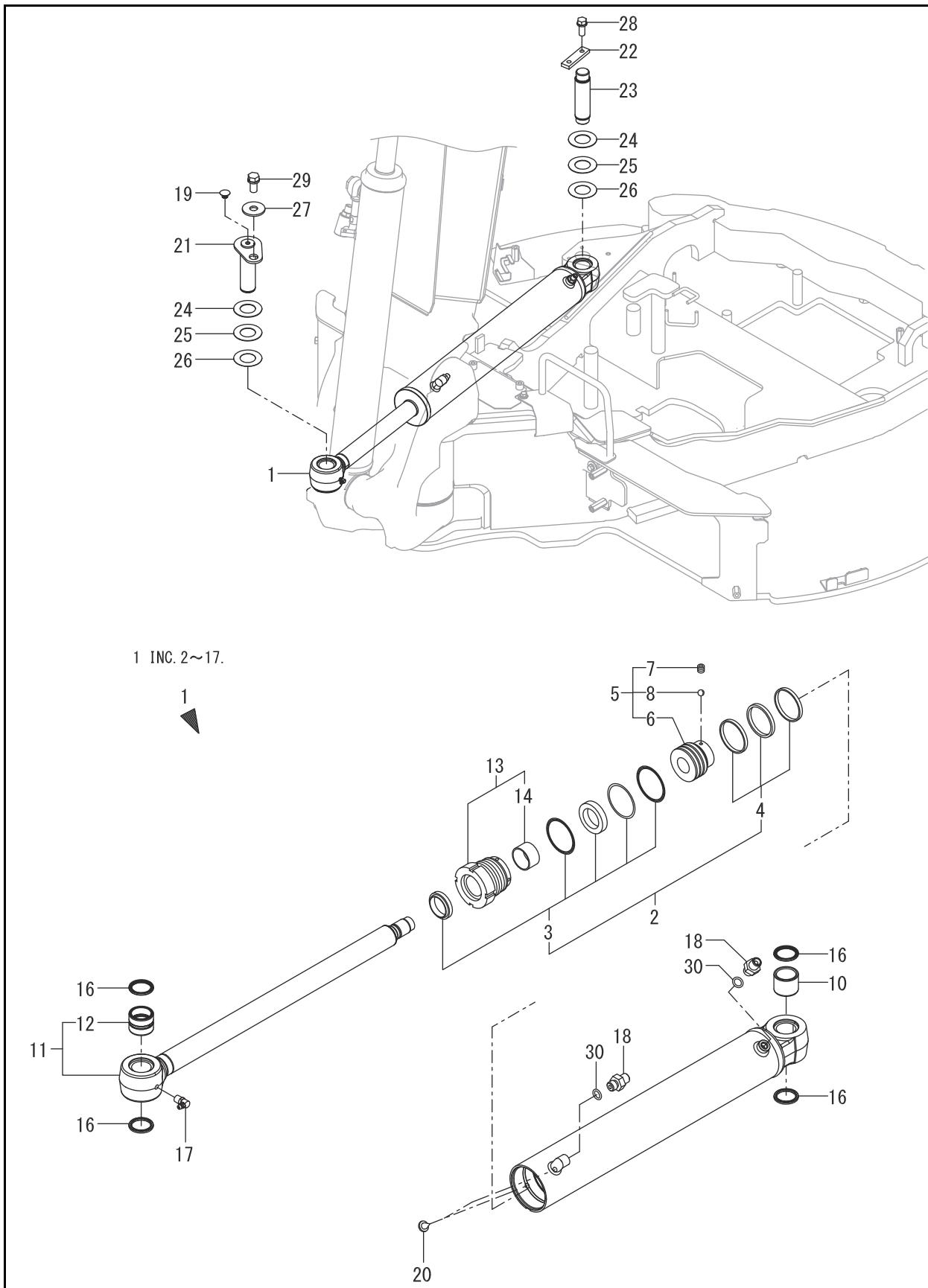
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 120 - BUCKET CYLINDER

Ref.

No.	Part No.	Description	Qty.
1	50289172	GUIDE ASSY	1
2	50283319	SHAFT,14X54	1
3	50283320	GROMMET	1
4	50283344	SPACER	1
5	50283321	SLIDE GUIDE	2
6	50289214	BUCKET CYLINDER ASSY	1
7	50289176	CYLINDER SEAL KIT	1
8	50289228	CYLINDER HEAD SEAL KIT	1
9	50289229	CYLINDER PISTON SEAL KIT	1
10	50289192	PLUG ASSY	1
11	50289193	TUBE HOLDER	1
12	50289211	PLUG	1
13	50282479	O-RING 1B P-26.0	2
14	50282506	BOLT W/WASHER M8X16	1
16	50289215	BUSHING	1
17	50289216	CYLINDER HEAD ASSY	1
19	50289217	BUSHING	1
20	50289218	SNAP RING	1
21	50289219	CYLINDER PISTON ASSY	1
22	50289220	CYLINDER PISTON	1
23	50288937	SCREW M8	1
24	50289434	STEEL BALL 7/32	1
25	50289221	PIPE	1
26	50289222	CYLINDER ROD ASSY	1
27	50289223	BUSHING	1
28	50289224	DUST SEAL	4
29	50282499	NIPPLE C,GREASE	1
30	50283985	COLLOR	2
31	50283655	BOLT M16X16	1
32	50283657	PLATE, SLIDE	1
33	50280778	CONNECTOR	2
34	50282393	SPRING WASHER 10	3
35	50284106	BOLT M10 X 25	2
36	50284117	BOLT M10 X 16 PLATED	1
37	50282609	O RING	2
38	50282617	WASHER, BRAKE ARM	1
39	50282620	SPRING 16	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 121 - SWING CYLINDER



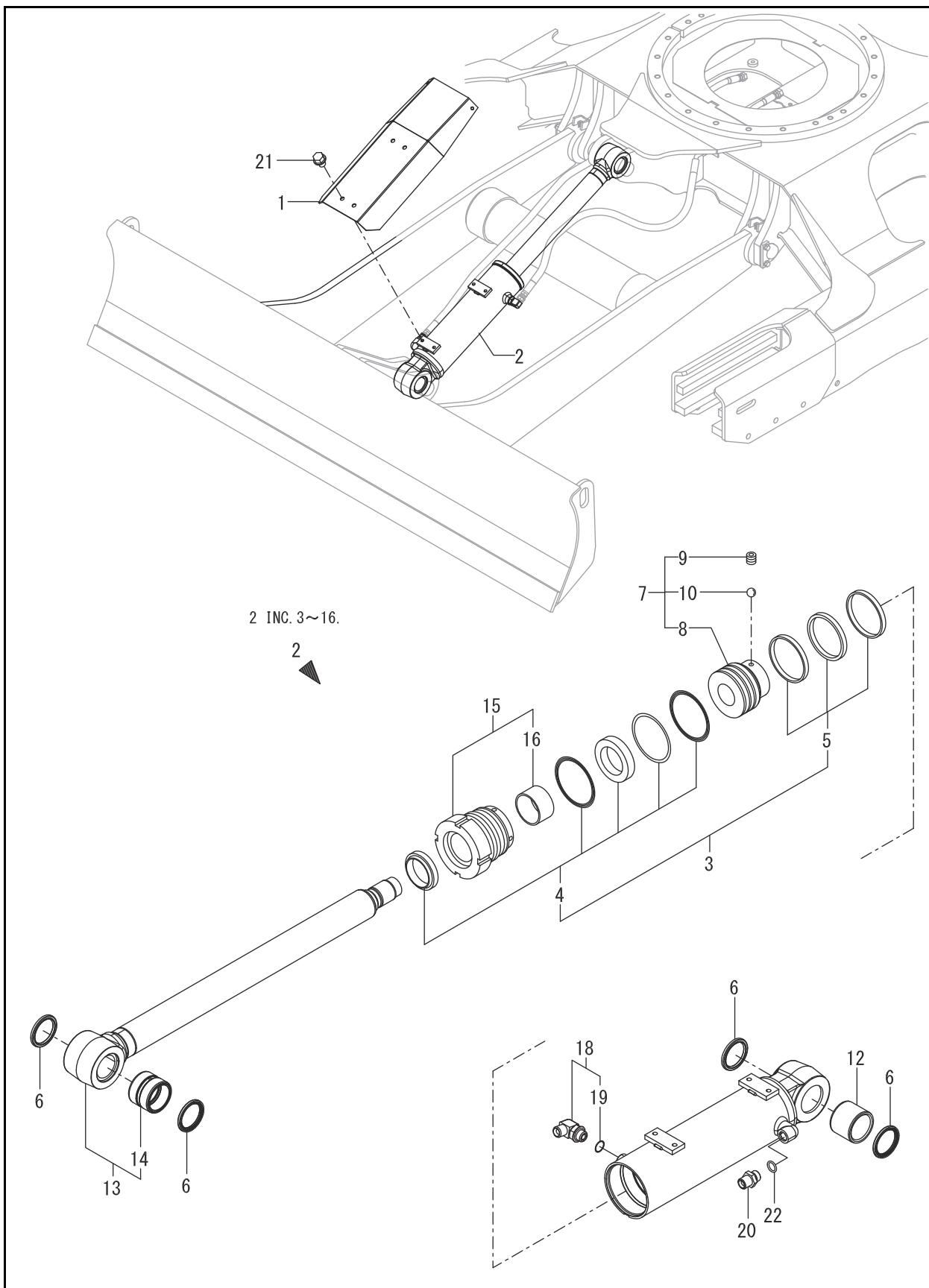
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 121 - SWING CYLINDER

Ref.

No.	Part No.	Description	Qty.
1	50289230	SWING CYLINDER ASSY	1
2	50289177	CYLINDER SEAL KIT	1
3	50289235	CYLINDER HEAD SEAL KIT	1
4	50289236	CYLINDER PISTON SEAL KIT	1
5	50289227	CYLINDER PISTON ASSY	1
6	50289210	PISTON	1
7	50288937	SCREW M8	1
8	50289434	STEEL BALL 7/32	1
10	50289231	BUSHING	1
11	50289444	CYLINDER ROD ASSY	1
12	50289232	BUSHING	1
13	50289233	CYLINDER HEAD ASSY	1
14	50289194	BUSHING	1
16	50289234	DUST SEAL	4
17	50282499	NIPPLE C,GREASE	1
18	50280792	JOINT PF1/4	2
19	50280920	TREE CLIP	1
20	50280920	TREE CLIP	2
21	50289344	PIN	1
22	50283905	PLATE	1
23	50289345	PIN	1
24	50282812	SHIM 40X75X0.5	4
25	50282813	SHIM 40X75X1.2	4
26	50282814	SHIM 40X75X1.6	4
27	50282388	WASHER 12	1
28	50282516	BOLT W/WASHER M10X25	2
29	50284101	BOLT M12 X 25	1
30	50282607	PACKING, 11.0	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 122 - BLADE CYLINDER



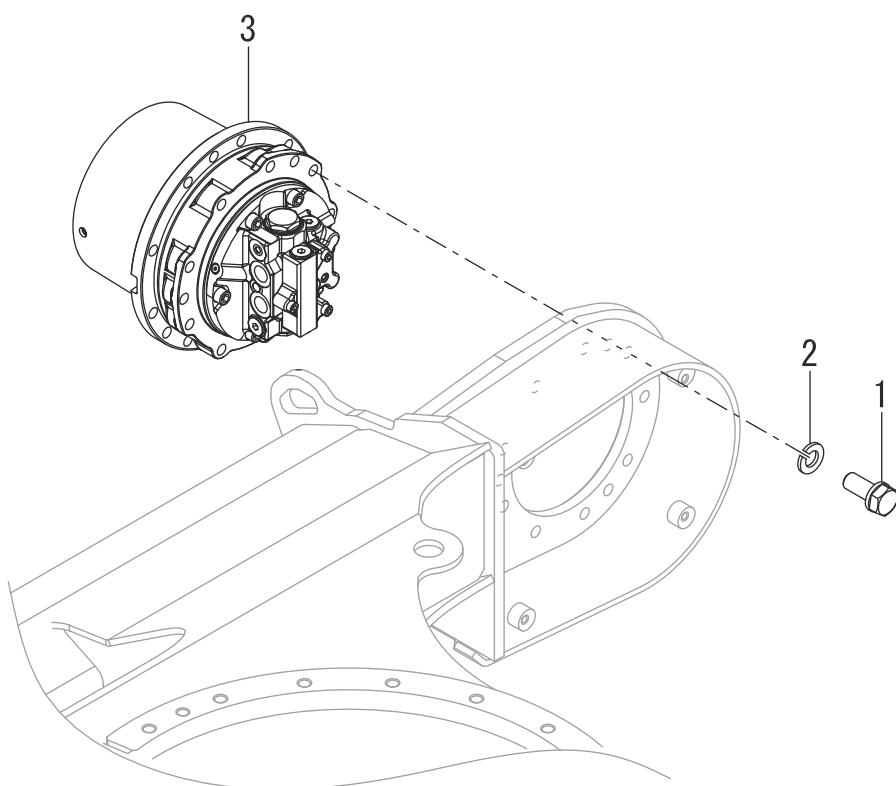
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 122 - BLADE CYLINDER

Ref.

No.	Part No.	Description	Qty.
1	50289173	CYLINDER GUARD	1
2	50289377	BLADE CYLINDER ASSY	1
3	50289178	CYLINDER SEAL KIT	1
4	50289241	CYLINDER HEAD SEAL KIT	1
5	50289242	CYLINDER PISTON SEAL KIT	1
6	50289197	DUST SEAL	4
7	50289225	CYLINDER PISTON ASSY	1
8	50289226	CYLINDER PISTON	1
9	50289240	SCREW	1
10	50289435	STEEL BALL 1/4	1
12	50289237	BUSHING	1
13	50289378	CYLINDER ROD ASSY	1
14	50289237	BUSHING	1
15	50289239	CYLINDER HEAD ASSY	1
16	50289238	BUSHING	1
18	50280823	JOINT 90-3/8 ASSY	1
19	50288156	O-RING	1
20	50288914	ADAPTER FITTING	1
21	50282558	BOLT M10X 12 PLATED	4
22	50282608	O RING P 14.0 HNBR	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 123 - TRAVEL MOTOR



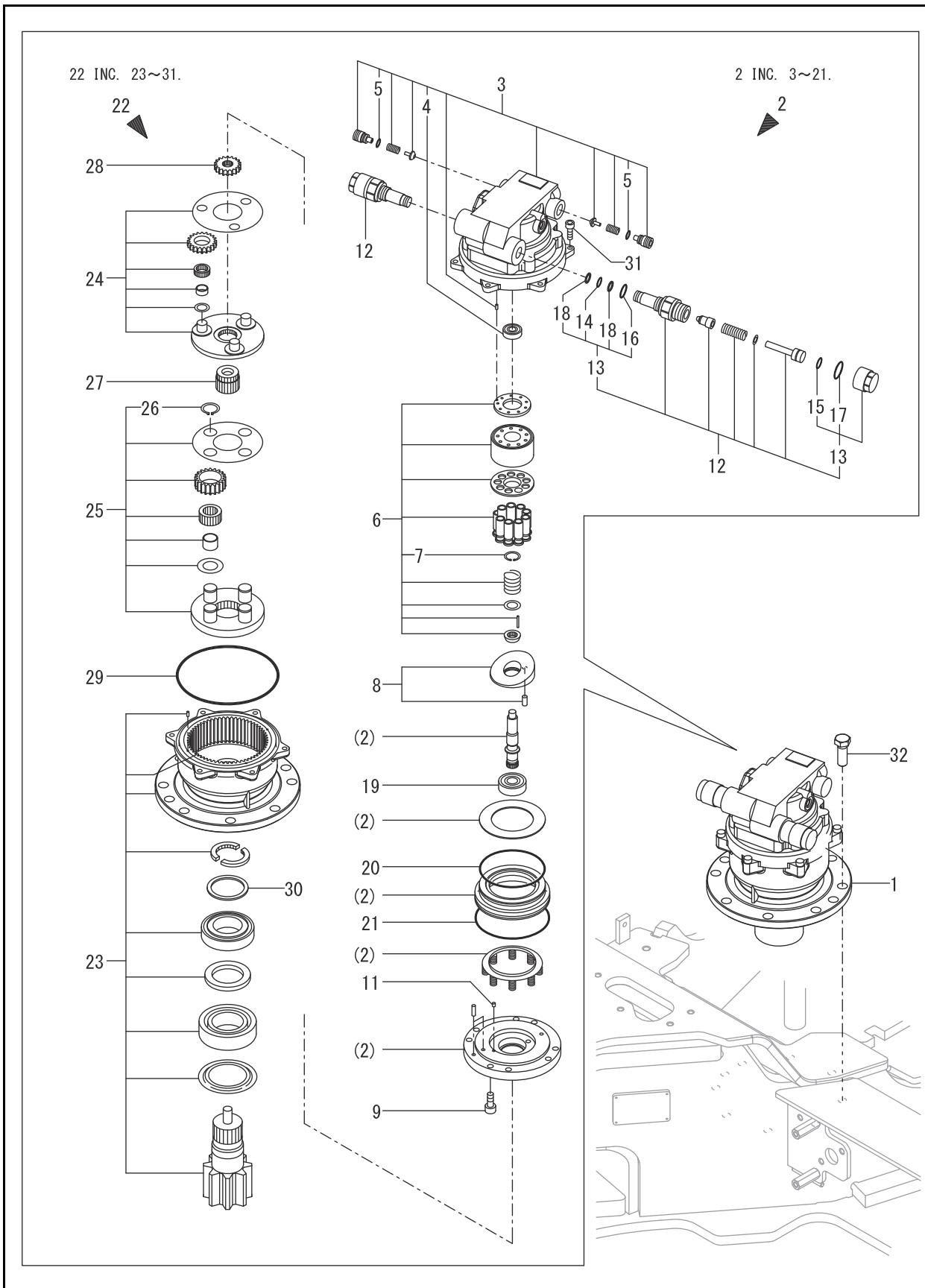
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 123 - TRAVEL MOTOR

Ref.

No.	Part No.	Description	Qty.
1	50281066	BOLT 14X35	24
2	188712	SPRING/WASHER 14	24
3	50289245	TRAVEL MOTOR	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 124 - TURNING MOTOR



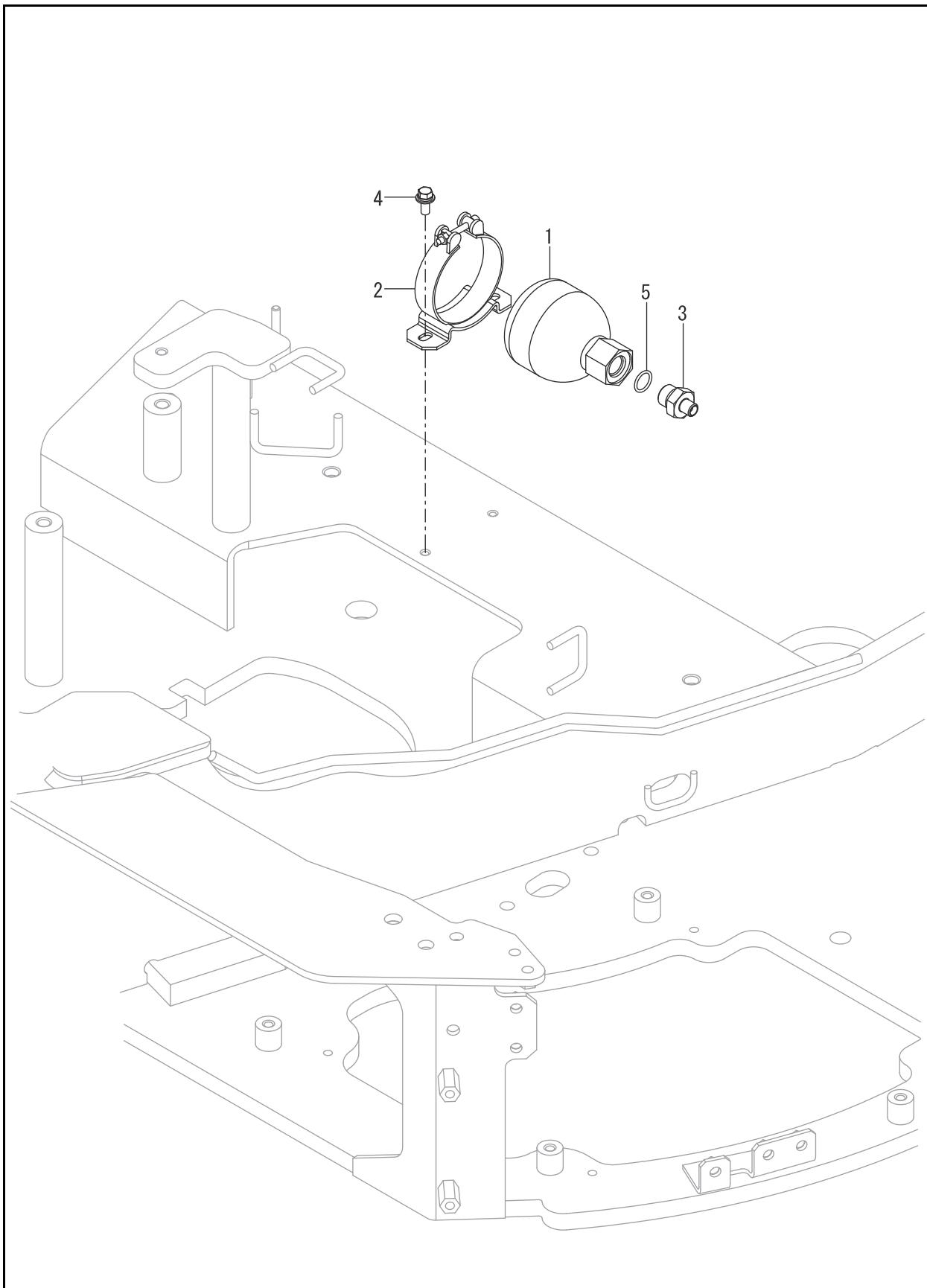
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 124 - TURNING MOTOR

Ref.

No.	Part No.	Description	Qty.
1	50289404	SWING MOTOR ASSY	1
2	50289415	SWING MOTOR	1
3	50289405	MOTOR BODY ASSY	1
4	50289433	BALL BEARING	1
5	50282470	O-RING 1B P-11.0	2
6	50289406	CYLINDER ASSY	1
7	50288903	SNAP RING	1
8	50289407	SWASH PLATE ASSY	1
9	50289414	SCREW	8
11	50286466	FILTER	1
12	50283216	VALVE ASSY	2
13	50283174	SEAL KIT	2
14	50288156	O-RING	2
15	50282474	O-RING 1B P-18.0	2
16	50284079	O-RING 1B P-22.0	2
17	50284080	O-RING 1B P-28.0	2
18	50284088	RING	4
19	50284072	BALL BEARING	1
20	50284085	O-RING, 1B G110	1
21	50289438	O-RING	1
22	50289416	REDUCTION GEAR ASSY	1
23	50289408	PINION KIT	1
24	50289409	CARRIER KIT	1
25	50289410	CARRIER KIT	1
26	203148	CIRCLIP 22	4
27	50289411	GEAR	1
28	50289412	GEAR	1
29	50289413	O-RING	1
30	50282880	RING	1
31	50284134	BOLT M8 X 25	6
32	50281146	BOLT	10

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 125 - ACCUMULATOR



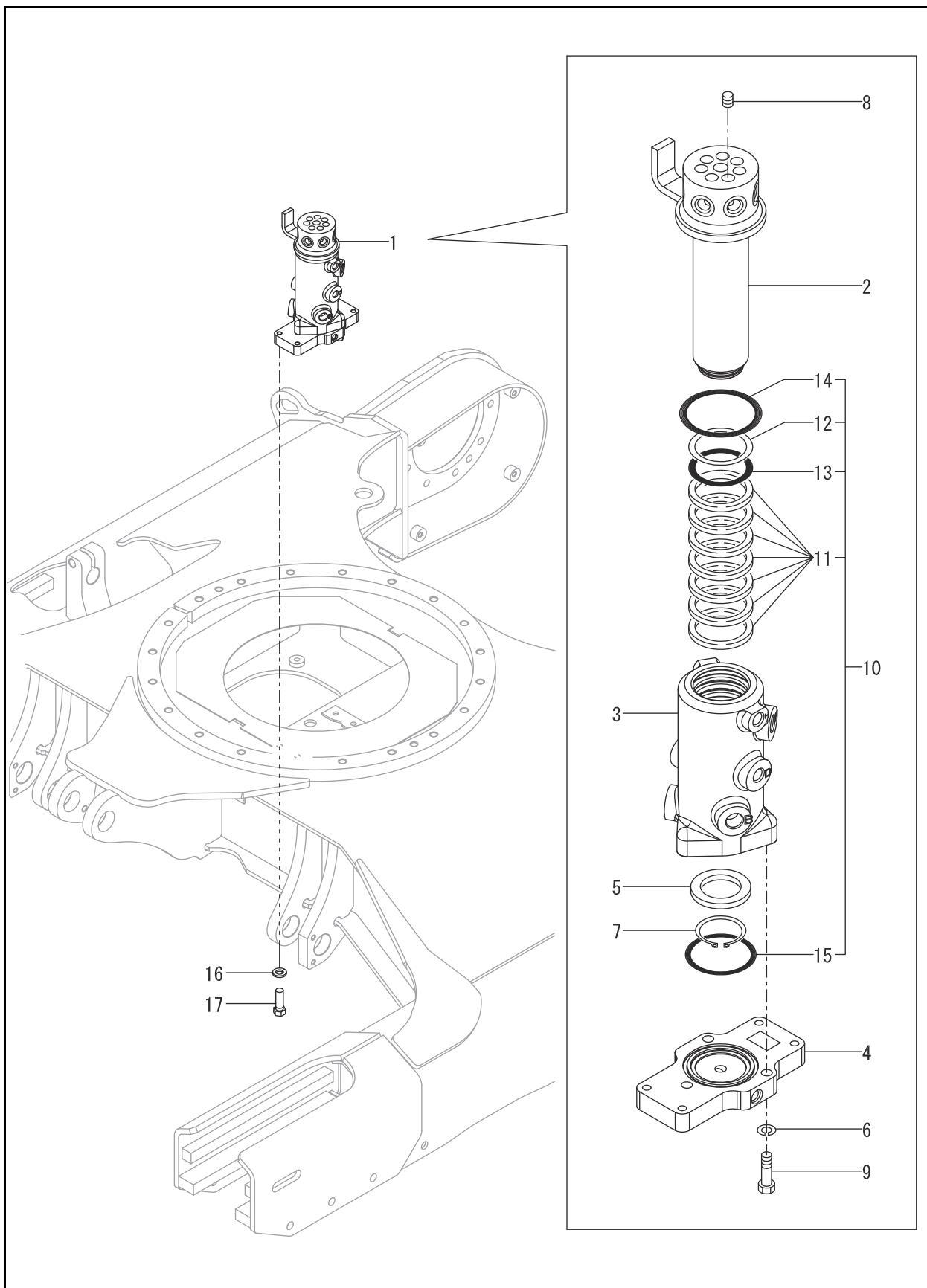
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 125 - ACCUMULATOR

Ref.

No.	Part No.	Description	Qty.
1	50288794	ACCUMULATOR	1
2	50288795	CLAMP	1
3	50281014	CONNECTOR	1
4	50282534	BOLT M 8X 20	2
5	50282609	O RING	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 126 - SWIVEL JOINT



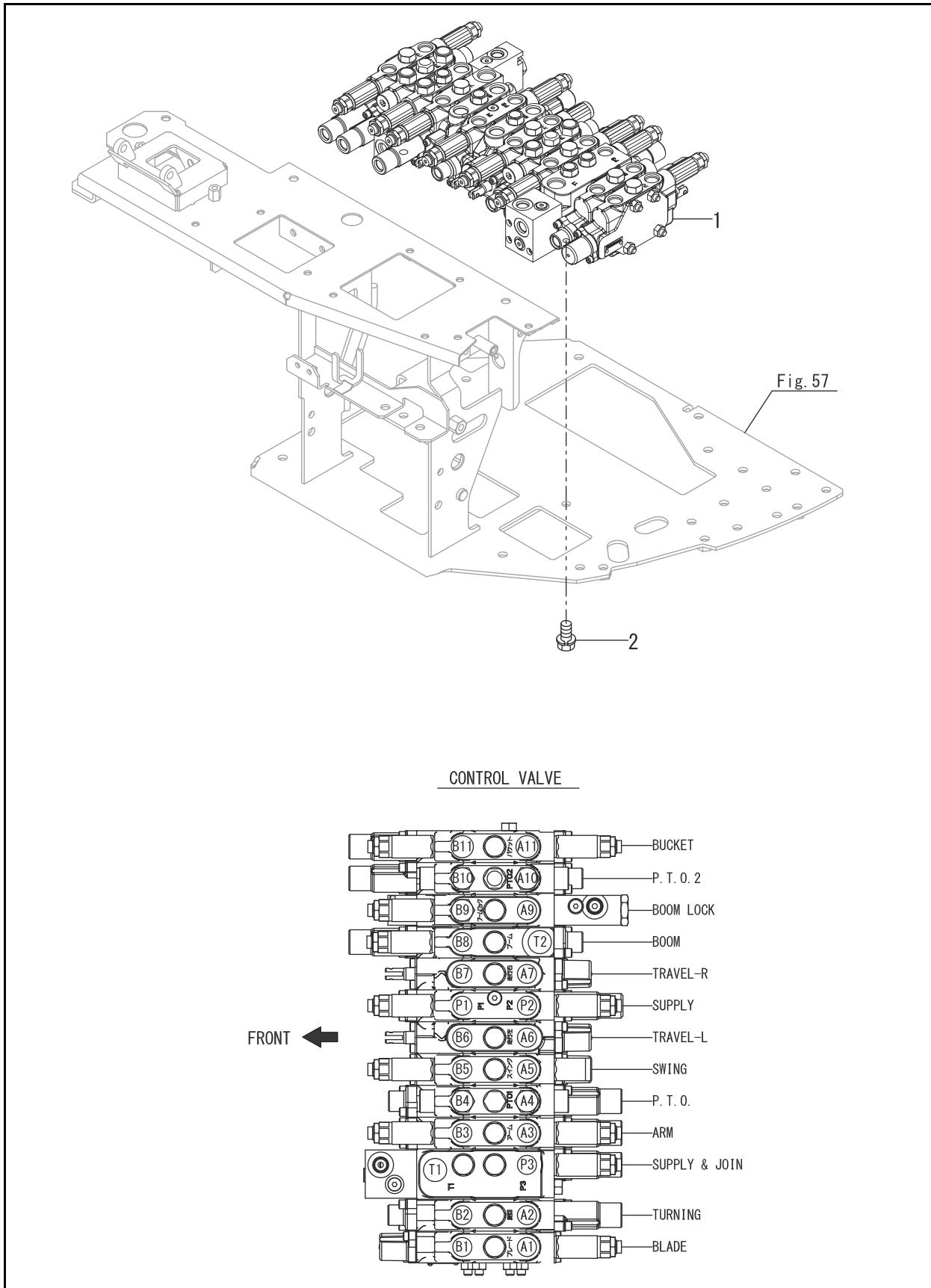
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 126 - SWIVEL JOINT

Ref.

No.	Part No.	Description	Qty.
1	50287413	JOINT ASSY/SWIVEL	1
2	50287414	SHAFT ASSY/SWIVEL	1
3	50287415	HUB/SWIVEL	1
4	50287416	FLANGE/SWIVEL	1
5	50287417	SPACER/SWIVEL	1
6	50282393	SPRING WASHER 10	3
7	50284046	CIRCLIP 45	1
8	425-35678	PLUG PT 1/4 SCREW	7
9	50284107	BOLT M10 X 35	3
10	50287420	SEAL KIT/SWIVEL	1
11	50287418	SEAL/SWIVEL	7
12	50287419	RING/BACKUP T3 55	1
13	50288157	O-RING	1
14	50288158	O-RING	1
15	50288162	O-RING	1
16	50282393	SPRING WASHER 10	4
17	50287810	BOLT M10X30	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 127 - CONTROL VALVE



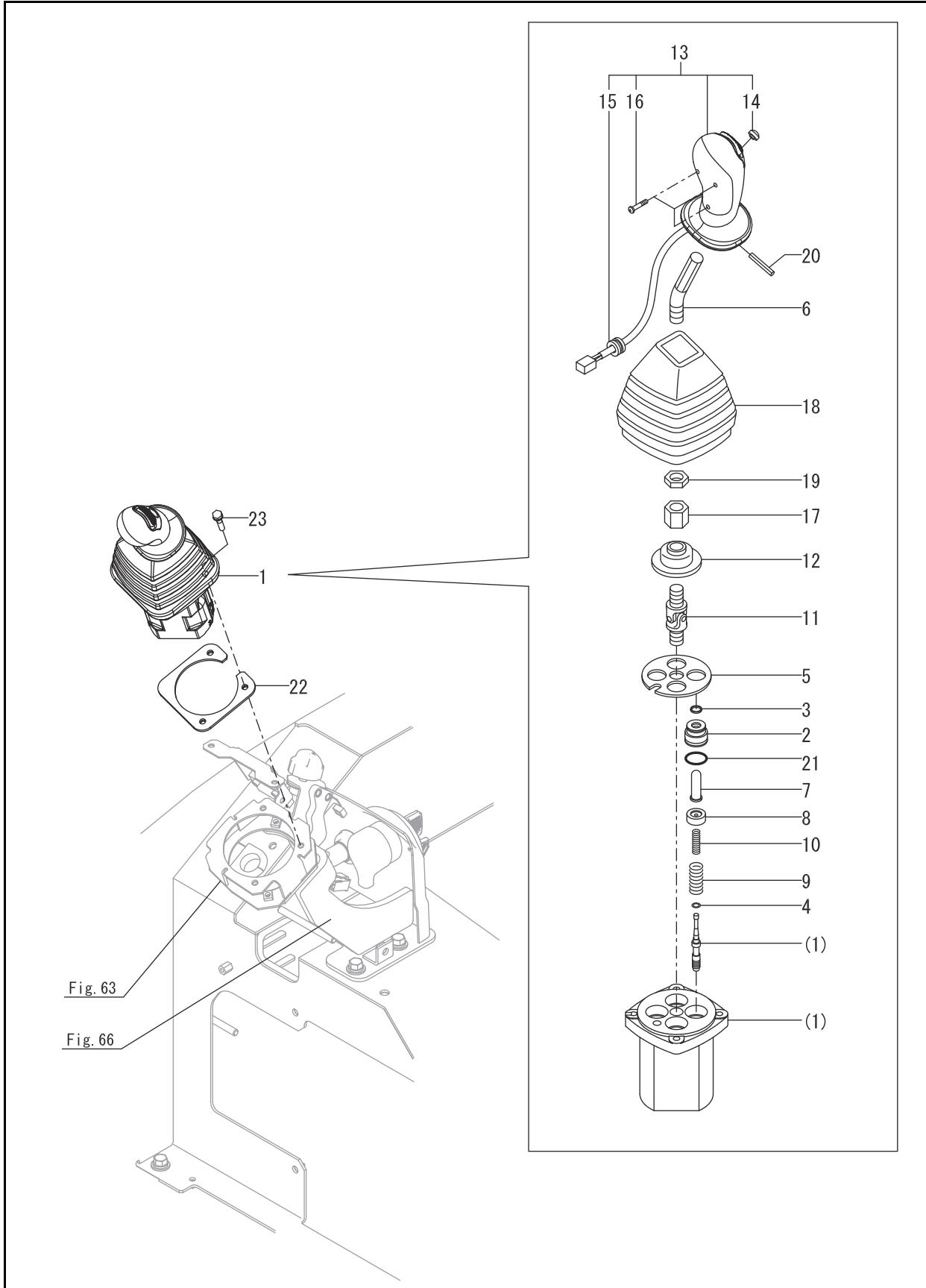
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 127 - CONTROL VALVE

Ref.

No.	Part No.	Description	Qty.
1	50289246	MAIN CONTROL VALVE ASSY *	1
2	50282514	BOLT M10X 16	3

NOTE: * See Figures 172-178 for individual segment components.

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 128 - REMOTE CONTROL VALVE (RIGHT)

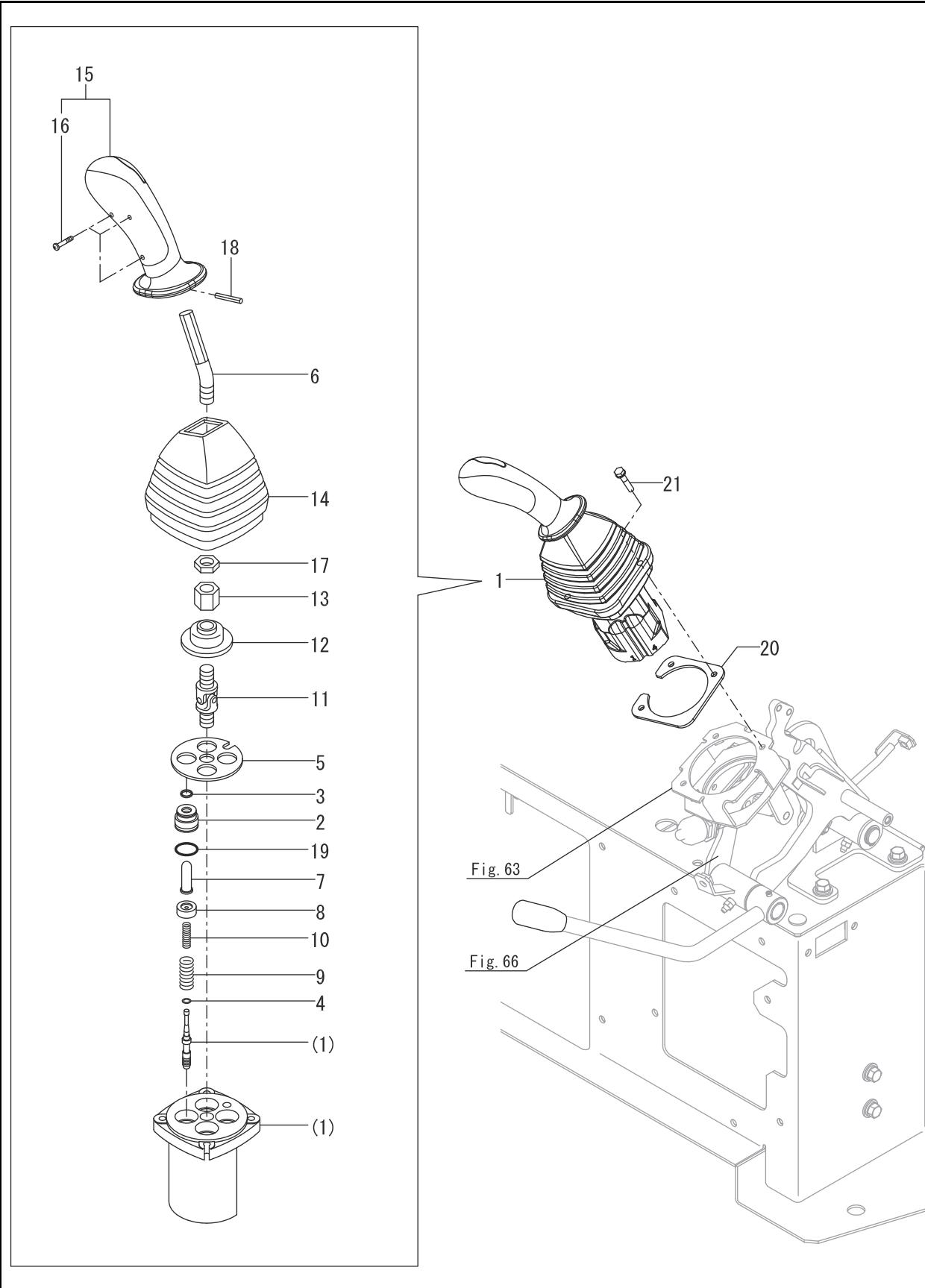


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 128 - REMOTE CONTROL VALVE (RIGHT)

Ref.

No.	Part No.	Description	Qty.
1	50287847	VALVE ASSY/R-PB	1
2	50285262	PLUG	4
3	50285263	SEAL	4
4	50285264	WASHER	4
5	50285716	PLATE	1
6	50287849	LEVER	1
7	50285717	ROD,PUSH	4
8	50285718	SEAT,SPRING	4
9	50285719	SPRING	4
10	50285720	SPRING	4
11	50285721	JOINT	1
12	50285722	PLATE,CIRCULAR	1
13	50287850	HANDLE ASSY/PB	1
14	50288960	SWITCH COVER	1
15	50285724	BUSHING	1
16	50289432	SCREW 3.0X16	3
17	50285723	NUT,ADJUSTING	1
18	50285725	BELLOWS	1
19	50285729	NUT,LOCK	1
20	50285732	PIN,SPRING	1
21	50282475	O-RING 1B P-20.0	4
22	50285855	PLATE CMP(VALVE	1
23	50284097	BOLT M6 X 30	3

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 129 - REMOTE CONTROL VALVE (LEFT)



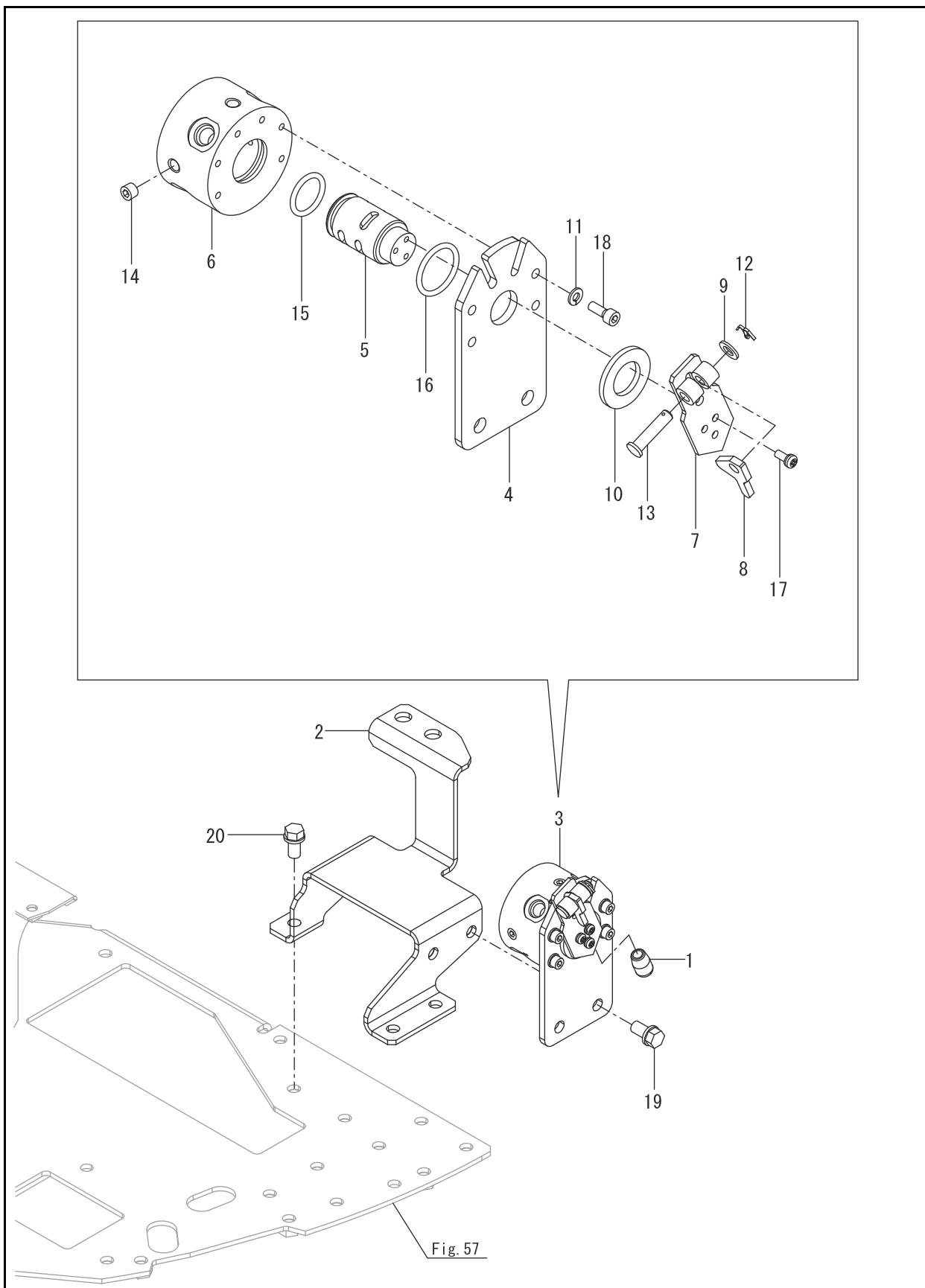
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 129 - REMOTE CONTROL VALVE (LEFT)

Ref.

No.	Part No.	Description	Qty.
1	50287848	VALVE ASSY/L-N	1
2	50285262	PLUG	4
3	50285263	SEAL	4
4	50285264	WASHER	4
5	50285716	PLATE	1
6	50287849	LEVER	1
7	50285717	ROD,PUSH	4
8	50285718	SEAT,SPRING	4
9	50285719	SPRING	4
10	50285720	SPRING	4
11	50285721	JOINT	1
12	50285722	PLATE,CIRCULAR	1
13	50285723	NUT,ADJUSTING	1
14	50285725	BELLOWS	1
15	50287851	HANDLE ASSY/N	1
16	50289432	SCREW 3.0X16	3
17	50285729	NUT,LOCK	1
18	50285732	PIN,SPRING	1
19	50282475	O-RING 1B P-20.0	4
20	50285855	PLATE CMP(VALVE	1
21	50284097	BOLT M6 X 30	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 130 - 2-WAY VALVE



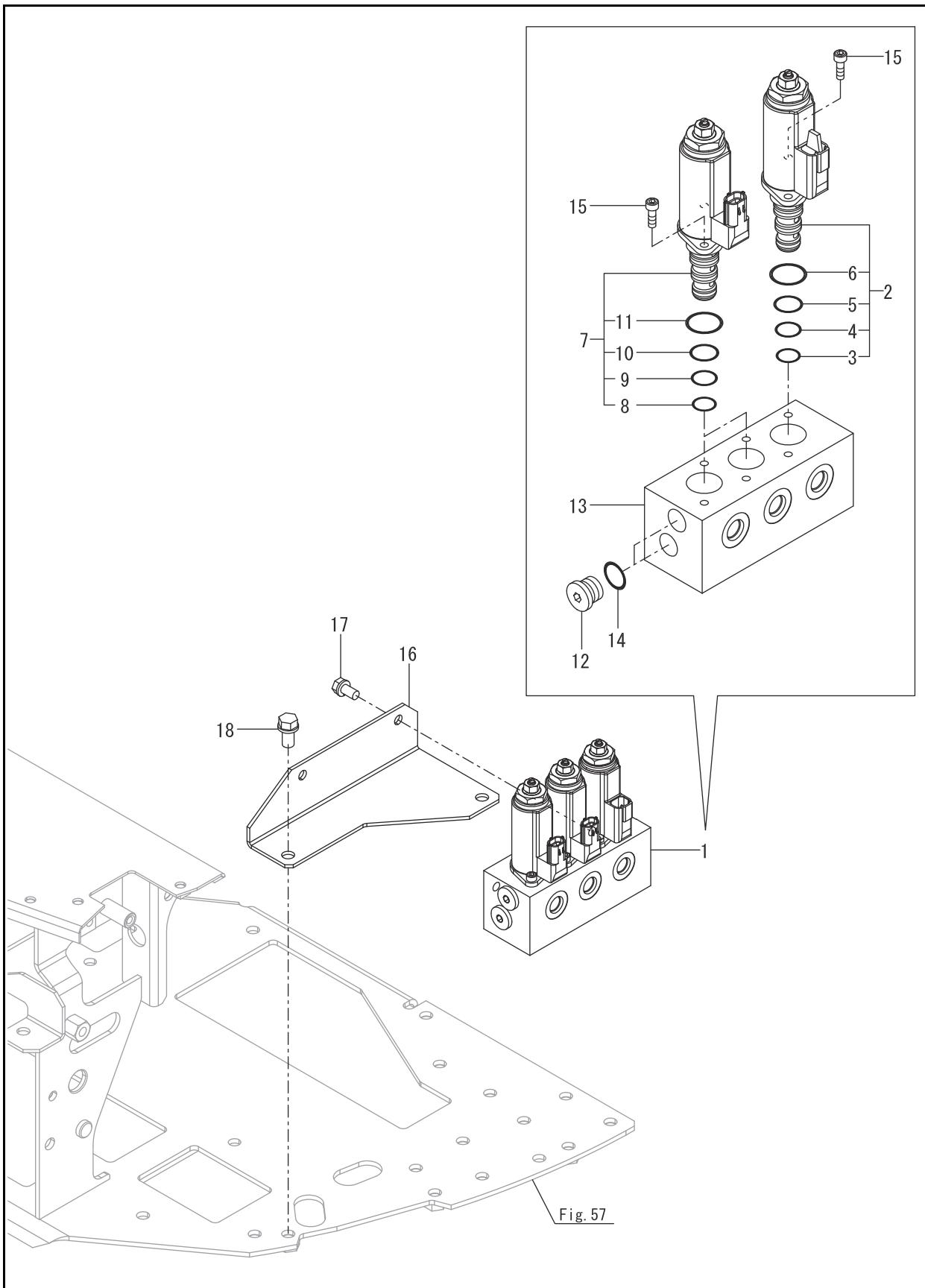
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 130 - 2-WAY VALVE

Ref.

No.	Part No.	Description	Qty.
1	50280849	KNOB 6.5X18X35	1
2	50287845	BRACKET ASSY/2-WAY	1
3	50287852	VALVE ASSY/2-WAY	1
4	50287846	STAY/2-WAY	1
5	50281040	SHAFT	1
6	50281041	BLOCK,VALVE	1
7	50281427	LEVER	1
8	50281428	PLATE,LOCK	1
9	138515	WASHER 8	1
10	50282384	WASHER 24, POLISHED	1
11	425-34891	SPRING WASHER 6	4
12	50282417	COTTER PIN 2.0X16	1
13	50282421	PIN 8X 30	1
14	50282447	PLUG PT1/8,SCREW	4
15	50282460	O-RING 1A P-25.0	1
16	425-34745	O-RING 1A P-32.0	1
17	425-36271	SCREW M 5 X 12	3
18	50282581	BOLT M 6X 16	4
19	50282515	BOLT W/WASHER M10X20	2
20	50282515	BOLT W/WASHER M10X20	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 131 - SOLENOID VALVE (P.T.O.:ESS SPEC., W/ CABIN ONLY)



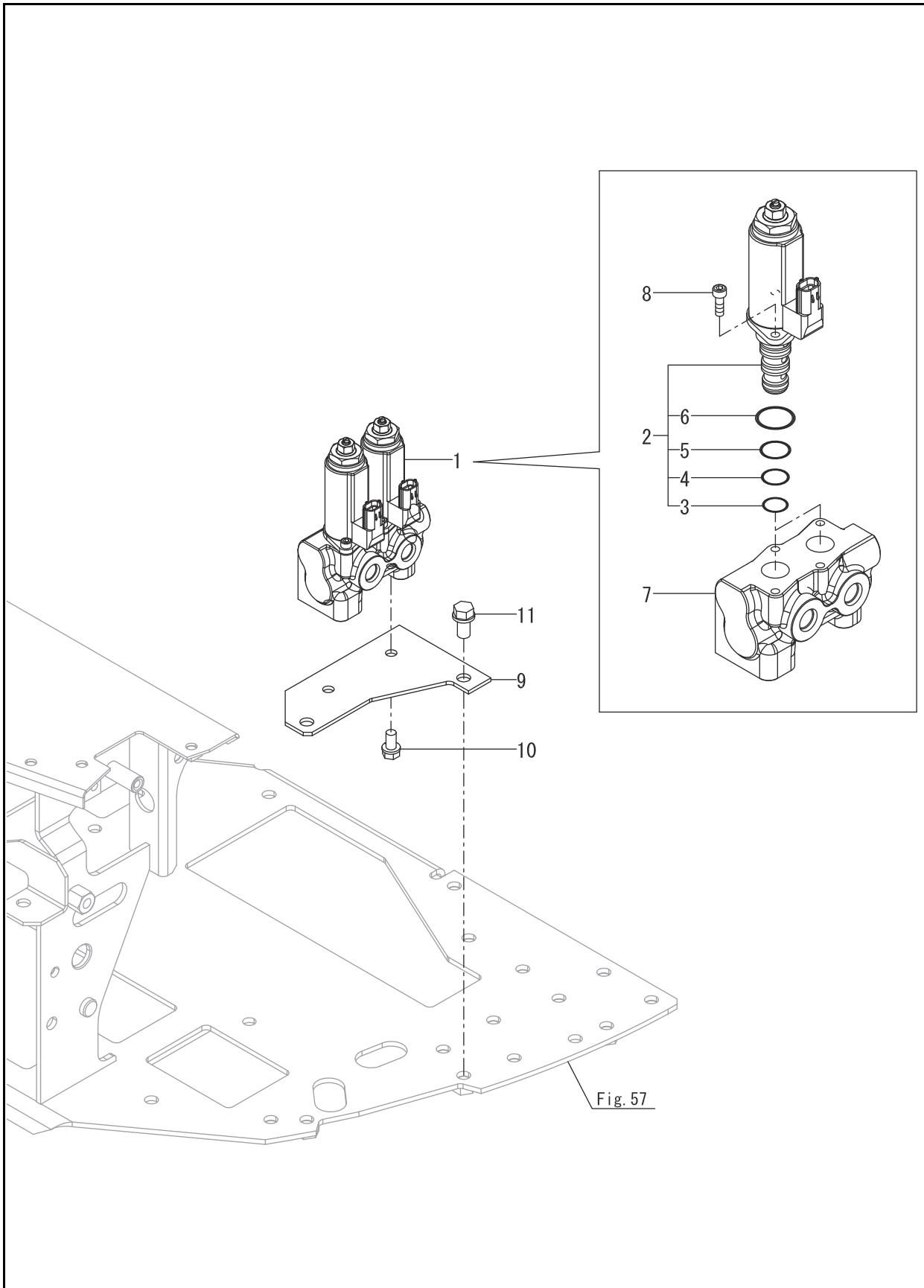
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 131 - SOLENOID VALVE (P.T.O.:ESS SPEC., W/ CABIN ONLY)

Ref.

No.	Part No.	Description	Qty.
1	50287854	VALVE ASSY/PPP	1
2	50288961	CARTRIDGE ASSY P0.7A	1
3	50288966	O-RING	1
4	50288967	O-RING	1
5	50288968	O-RING	1
6	50282475	O-RING 1B P-20.0	1
7	50288962	CARTRIDGE ASSY P1.6A	2
8	50288966	O-RING	2
9	50288967	O-RING	2
10	50288968	O-RING	2
11	50282475	O-RING 1B P-20.0	2
12	50281475	PLUG	2
13	50288964	SOLENOID VALVE BLOCK	1
14	50282470	O-RING 1B P-11.0	2
15	425-35914	BOLT 5M X 12	6
16	50287858	STAY/SOL 3 K	1
17	50282506	BOLT W/WASHER M8X16	2
18	50282515	BOLT W/WASHER M10X20	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 132 - SOLENOID VALVE (P.T.O.)



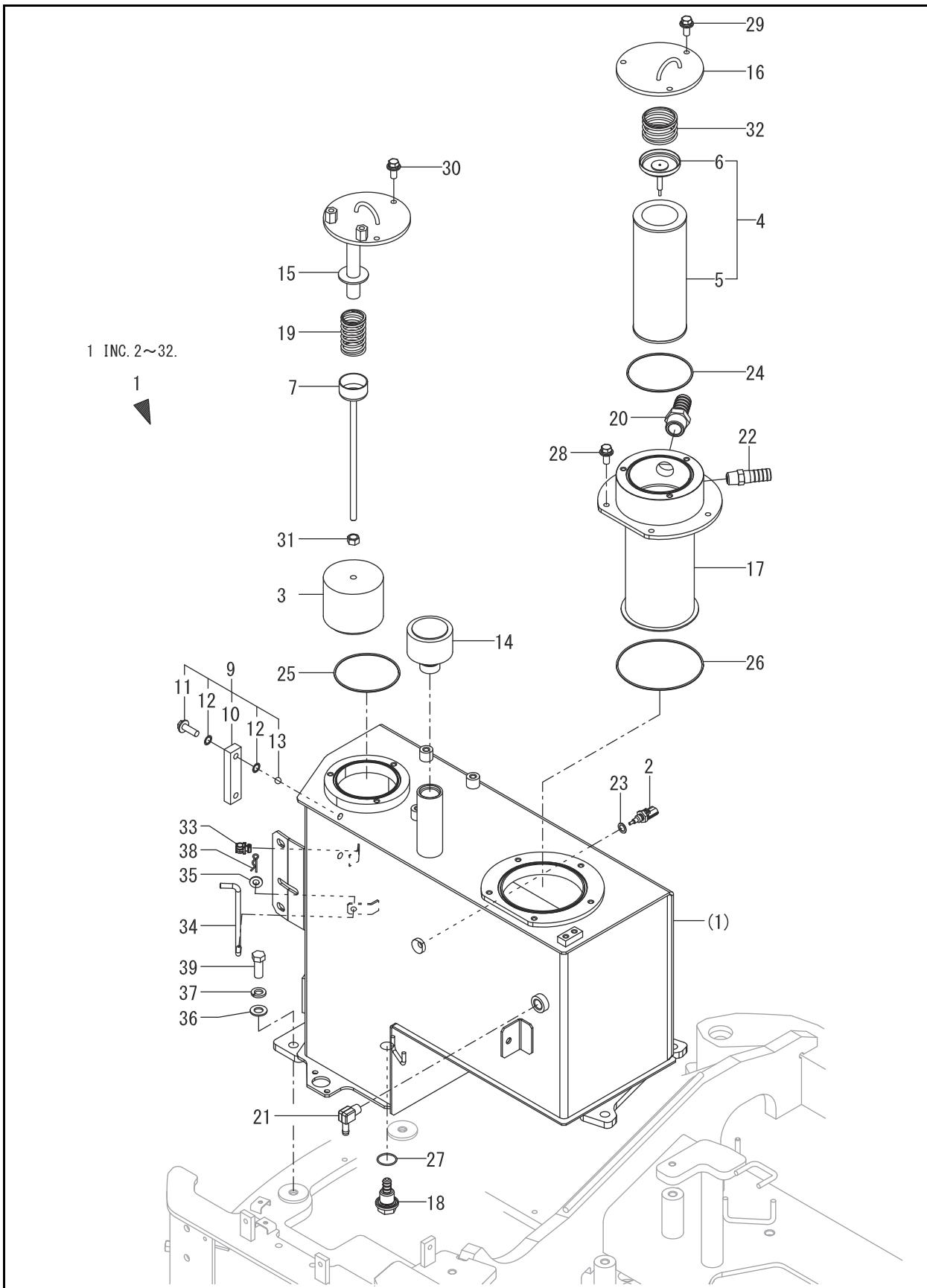
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 132 - SOLENOID VALVE (P.T.O.)

Ref.

No.	Part No.	Description	Qty.
1	50287853	VALVE ASSY/PP	1
2	50288962	CARTRIDGE ASSY P1.6A	2
3	50288966	O-RING	2
4	50288967	O-RING	2
5	50288968	O-RING	2
6	50282475	O-RING 1B P-20.0	2
7	50288963	SOLENOID VALVE BLOCK	1
8	50288965	BOLT 10.9 M5X12	4
9	50287857	STAY/SOL 2 K	1
10	50282506	BOLT W/WASHER M8X16	2
11	50282515	BOLT W/WASHER M10X20	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 133 - HYD. OIL TANK



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 133 - HYD. OIL TANK

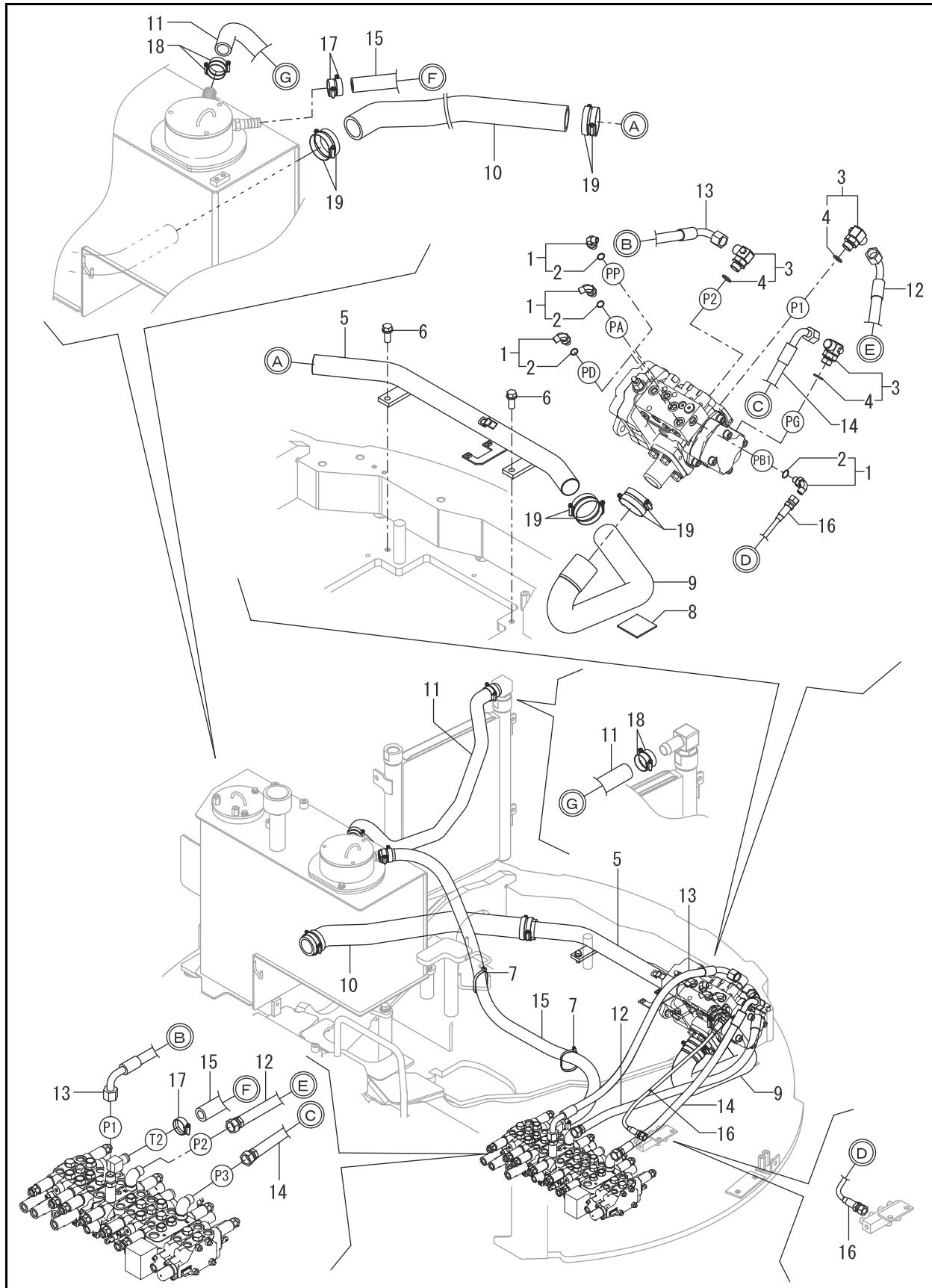
Ref.

No.	Part No.	Description	Qty.
1	50288983	HYDRAULIC TANK ASSY (replacement also requires label 32A)	1
2	197635	THERMOMETER	1
3	50287073	FILTER/SUCTION	1
4	50282821	FILTER ASSY, RETURN	1
5	50282822	ELEMENT	1
6	50282731	VALVE ASSY, BYPASS	1
7	50289441	FILTER ROD	1
9	50287123	GAUGE ASSY/OIL	1
10	50288917	LEVEL GAUGE	1
11	50281103	BOLT M10	2
12	50281104	O-RING	4
13	50288243	FLOAT	1
14	50289417	BREATHER	1
15	50289249	COVER ASSY	1
16	50288905	INTAKE COVER	1
17	50289250	RETURN FILTER CASE	1
18	50280969	PLUG 24	1
19	50280777	SPRING, STRAINER	1
20	50280976	NIPPLE, HOSE	1
21	50280903	ELBOW	1
22	50287097	NIPPLE 08/HOSE	1
23	425-35959	SEAL WASHER 12S	1
24	50284083	O-RING 1A G-105.0	1
25	50284083	O-RING 1A G-105.0	1
26	50289437	O-RING	1
27	50282493	O-RING 1A S-30.0	1
28	50282534	BOLT M 8X 20	5
29	50282534	BOLT M 8X 20	3
30	50282534	BOLT M 8X 20	3
31	50282597	NUT 10	1
32	50284152	SPRING, SIDE CLUTCH	1
32A	50288980	HYDRAULIC TANK DECAL *	1
33	50282365	HOLDER, ROD 8	1
34	50289157	HOOK	1
35	50282380	WASHER 8, POLISHED	1
36	50284042	WASHER 14, POLISHED	4
37	188712	SPRING/WASHER 14	4
38	50282415	SNAP PIN (JASO 8)	1
39	50282567	BOLT M14X 35 PLATED	4

NOTE: * Label shown on Page 6.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 134 - HYD. OIL PIPING (TANK-PUMP, CONTROL VALVE)



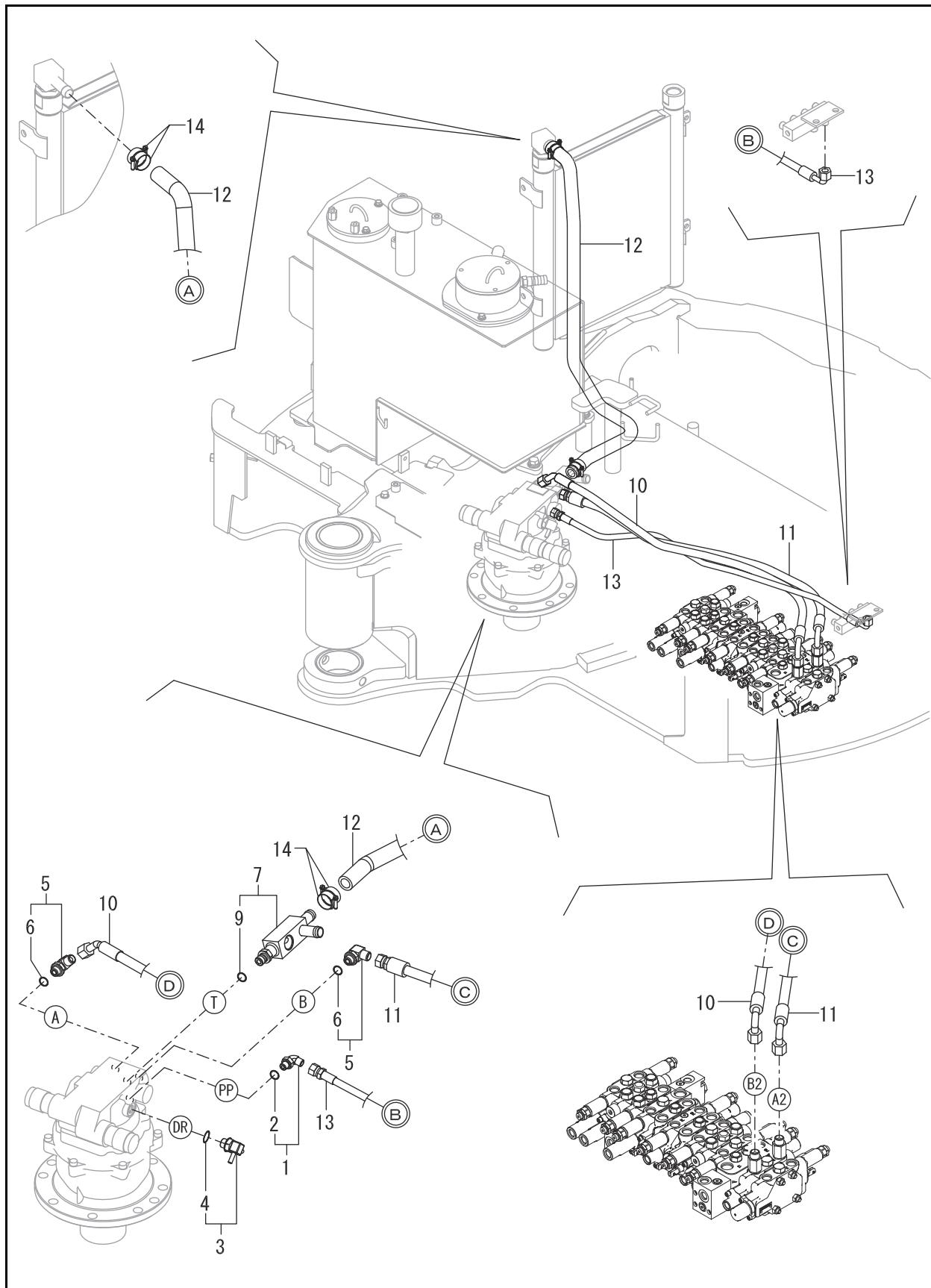
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 134 - HYD. OIL PIPING (TANK-PUMP, CONTROL VALVE)

Ref.

No.	Part No.	Description	Qty.
1	50287862	ELBOW/G1/4	4
2	50282607	PACKING, 11.0	4
3	50283775	ELBOW 90G1/2-G1/2	3
4	50282609	O RING	3
5	50289264	SUCTION TUBE ASSY	1
6	50282516	BOLT W/WASHER M10X25	2
7	50280798	BAND 300	2
8	50281056	RUBBER PLATE	1
9	50289277	SUCTION HOSE	1
10	50289278	SUCTION HOSE	1
11	50289279	HOSE	1
12	50289280	HP HOSE	1
13	50289281	HP HOSE	1
14	50289282	HP HOSE	1
15	50289297	HP HOSE	1
16	50289314	HP HOSE	1
17	50282429	HOSE CLAMP 35	3
18	50282430	CLIP 41,HOSE	4
19	50284063	CLIP, HOSE	8

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 135 - HYD. OIL PIPING (CONTROL VALVE-TURNING MOTOR)

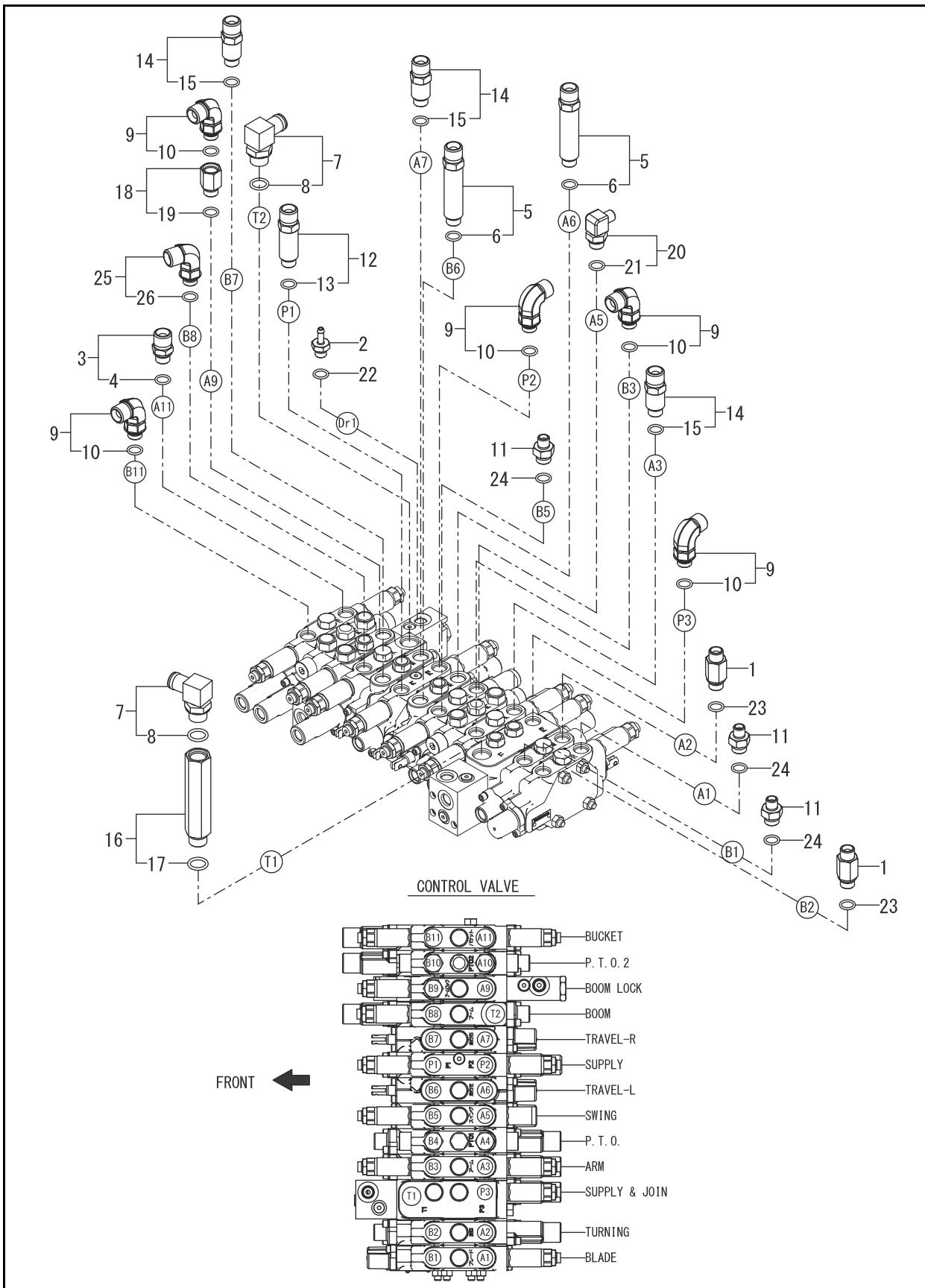


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 135 - HYD. OIL PIPING (CONTROL VALVE-TURNING MOTOR)

Ref.

No.	Part No.	Description	Qty.
1	50287862	ELBOW/G1/4	1
2	50282607	PACKING, 11.0	1
3	50284776	NIPPLE G3/8	1
4	50288156	O-RING	1
5	50280823	JOINT 90-3/8 ASSY	2
6	50288156	O-RING	2
7	50289267	CONNECTOR ASSY	1
9	50282608	O RING P 14.0 HNBR	1
10	50289292	HP HOSE	1
11	50289293	HP HOSE	1
12	50289307	HOSE	1
13	50289315	HP HOSE	1
14	50282429	HOSE CLAMP 35	4

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 136 - HYD. OIL PIPING (CONTROL VALVE:FITTING, 1)



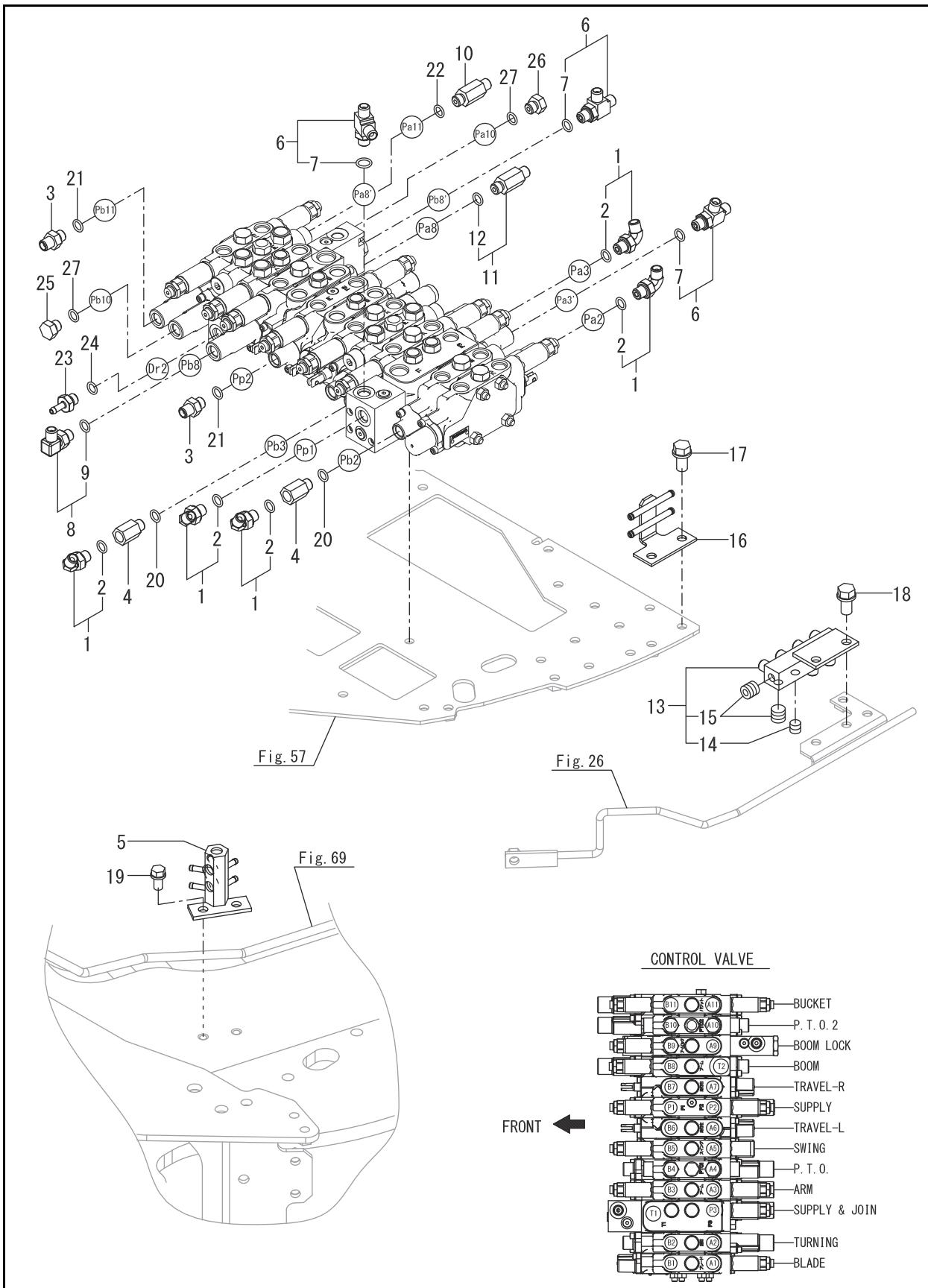
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 136 - HYD. OIL PIPING (CONTROL VALVE:FITTING, 1)

Ref.

No.	Part No.	Description	Qty.
1	50287864	CONNECTOR/G3/8-3/8	2
2	50287865	NIPPLE/G1/4	1
3	50287868	CONNECTOR/G1/2-3/8	1
4	50282608	O RING P 14.0 HNBR	1
5	50287869	CONNECTOR/L G1/2-3/8	2
6	50282608	O RING P 14.0 HNBR	2
7	50287088	ELBOW	2
8	50282474	O-RING 1B P-18.0	2
9	50287871	ELBOW/45 G1/2-3/8	5
10	50282608	O RING P 14.0 HNBR	5
11	50282716	CONNECTOR	3
12	50287872	CONNECTOR/M G1/2-3/8	1
13	50282608	O RING P 14.0 HNBR	1
14	50287873	CONNECTOR/S G1/2-3/8	3
15	50282608	O RING P 14.0 HNBR	3
16	50287875	ADAPTER/G1/2	1
17	50282609	O RING	1
18	50287899	ADAPTER/G3/8	1
19	50282608	O RING P 14.0 HNBR	1
20	50280815	CONNECTOR 3/8-1/4L	1
21	50288156	O-RING	1
22	50282607	PACKING, 11.0	1
23	50282608	O RING P 14.0 HNBR	2
24	50282608	O RING P 14.0 HNBR	3
25	50287871	ELBOW/45 G1/2-3/8	1
26	50282608	O RING P 14.0 HNBR	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 137 - HYD. OIL PIPING (CONTROL VALVE:FITTING, 2)



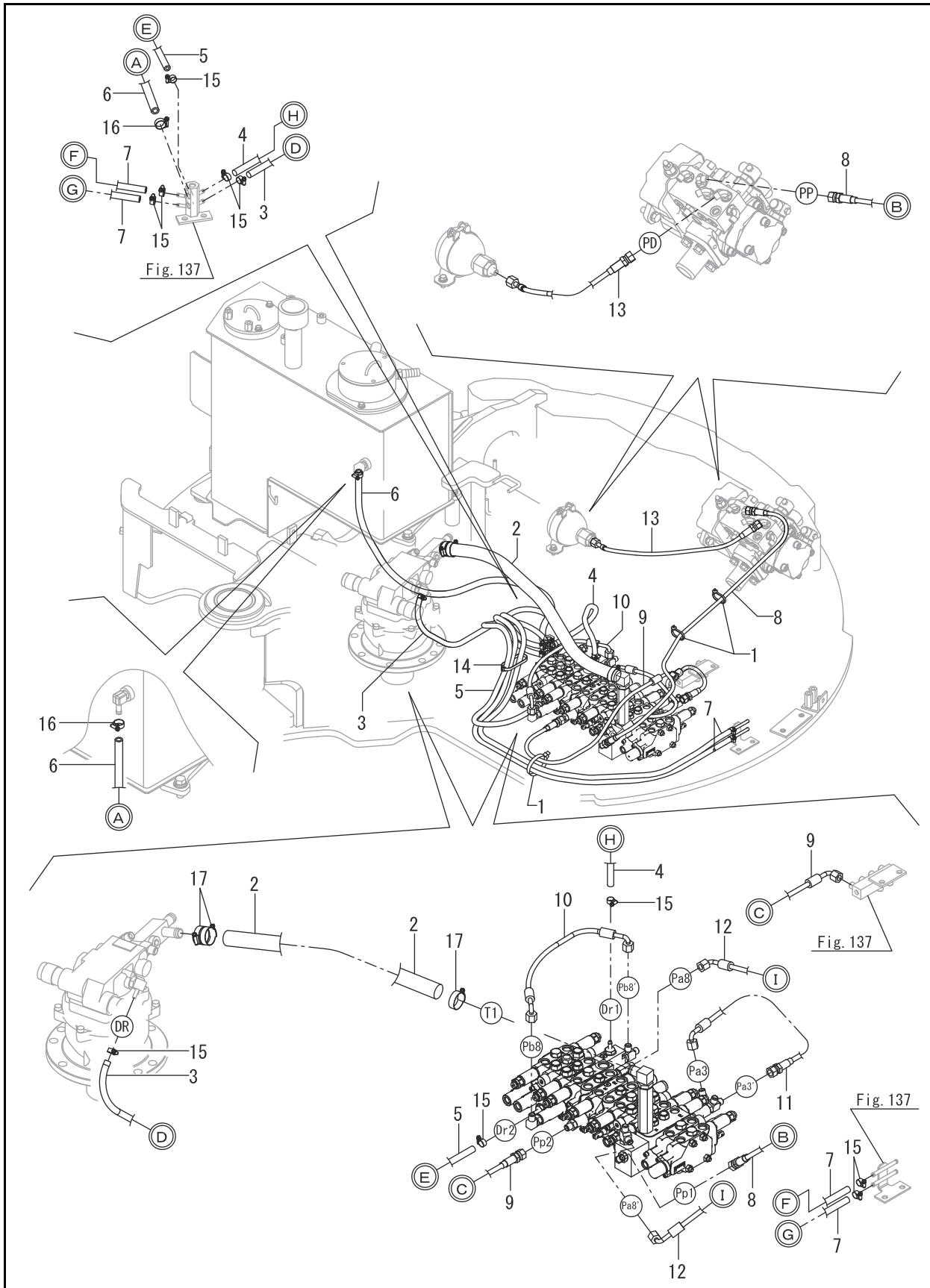
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 137 - HYD. OIL PIPING (CONTROL VALVE:FITTING, 2)

Ref.

No.	Part No.	Description	Qty.
1	50287862	ELBOW/G1/4	5
2	50282607	PACKING, 11.0	5
3	50280792	JOINT PF1/4	2
4	50281007	CONNECTOR	2
5	50287100	BLOCK/DRAIN	1
6	50280875	JOINT 3-1/4 ASSY	3
7	50282607	PACKING, 11.0	3
8	50281489	ELBOW,90G1/4-0.6	1
9	50282607	PACKING, 11.0	1
10	50280919	CONNECTOR 1/4-1/4	1
11	50281491	CONNECTOR G1/4L-0.6	1
12	50282607	PACKING, 11.0	1
13	50283783	PILOT BLOCK	1
14	50282447	PLUG PT1/8,SCREW	1
15	425-35678	PLUG PT 1/4 SCREW	2
16	50287880	CONNECTOR ASSY	1
17	50282515	BOLT W/WASHER M10X20	2
18	50282515	BOLT W/WASHER M10X20	2
19	50282515	BOLT W/WASHER M10X20	2
20	50282607	PACKING, 11.0	2
21	50282607	PACKING, 11.0	2
22	50282607	PACKING, 11.0	1
23	50287865	NIPPLE/G1/4	1
24	50282607	PACKING, 11.0	1
25	50283780	PILOT PLUG A	1
26	50283781	PILOT PLUG B	1
27	50282607	PACKING, 11.0	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 138 - HYD. OIL PIPING (CONTROL VALVE-RETURN, DRAIN)



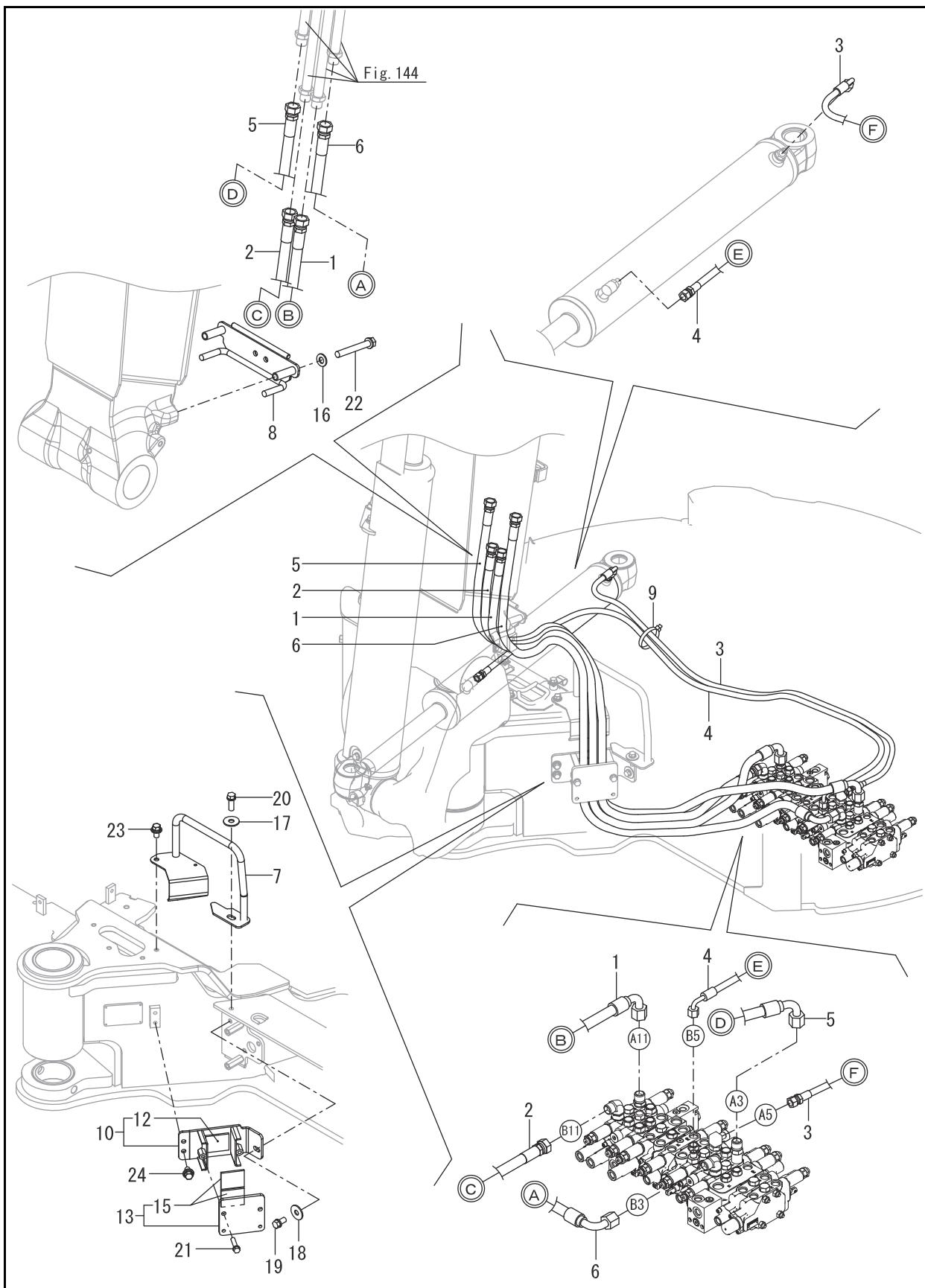
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 138 - HYD. OIL PIPING (CONTROL VALVE-RETURN, DRAIN)

Ref.

No.	Part No.	Description	Qty.
1	50282352	BAND	3
2	50289296	HP HOSE	1
3	50289309	HP HOSE	1
4	50289310	HP HOSE	1
5	50289311	HP HOSE	1
6	50289312	HP HOSE	1
7	50289313	HP HOSE	2
8	50289316	HP HOSE	1
9	50289318	HP HOSE	1
10	50287948	HOSE F403CC040S	1
11	50287950	HOSE H603BC023S	1
12	50287951	HOSE F403CC056	1
13	50289319	HP HOSE	1
14	50280791	CLAMP 350	1
15	425-34918	CLAMP 13	10
16	50282426	HOSE CLAMP 16	2
17	50282429	HOSE CLAMP 35	3

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 139 - HYD. OIL PIPING (CONTROL VALVE-BOOM BULKHEAD, SWING)



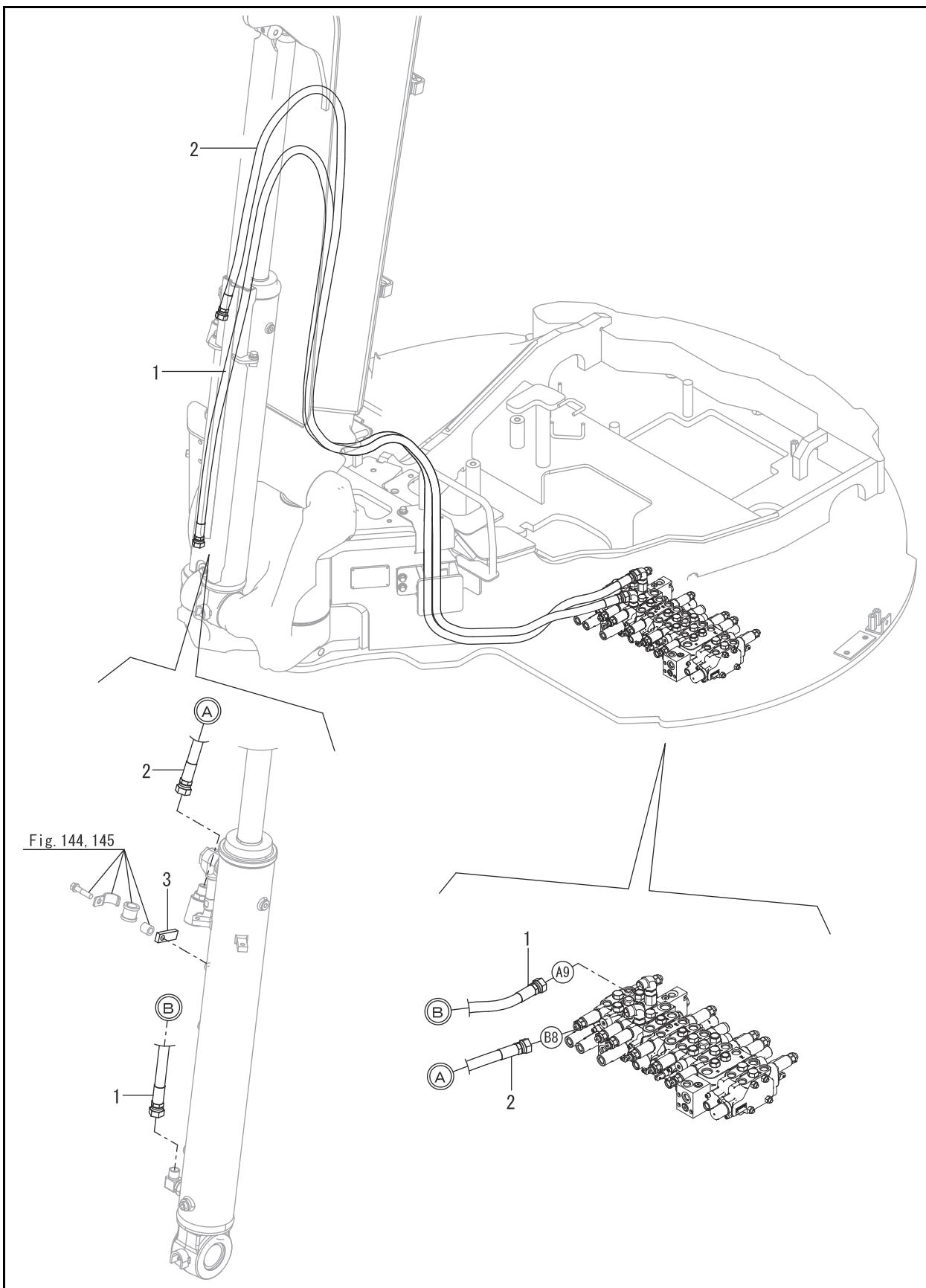
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 139 - HYD. OIL PIPING (CONTROL VALVE-BOOM BULKHEAD, SWING)

Ref.

No.	Part No.	Description	Qty.
1	50289283	HP HOSE	1
2	50289284	HP HOSE	1
3	50289288	HP HOSE	1
4	50289289	HP HOSE	1
5	50289290	HP HOSE	1
6	50289291	HP HOSE	1
7	50289335	HOSE GUIDE	1
8	50289336	HOSE GUIDE	1
9	50280798	BAND 300	1
10	50289338	HOSE BRACKET ASSY	1
12	50287992	CLAMP/HOSE	1
13	50289339	HOSE SUPPORT ASSY	1
15	50287992	CLAMP/HOSE	1
16	138111	WASHER/POLISHED	2
17	50282387	WASHER 10	1
18	50282387	WASHER 10	1
19	50282515	BOLT W/WASHER M10X20	1
20	50282517	BOLT M10X 30	1
21	50282520	BOLT M10X 45	2
22	50289445	BOLT M10X75	2
23	50282538	BOLT M10X 20	1
24	50282538	BOLT M10X 20	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 141 - HYD. OIL PIPING (CONTROL VALVE-BOOM CYLINDER)



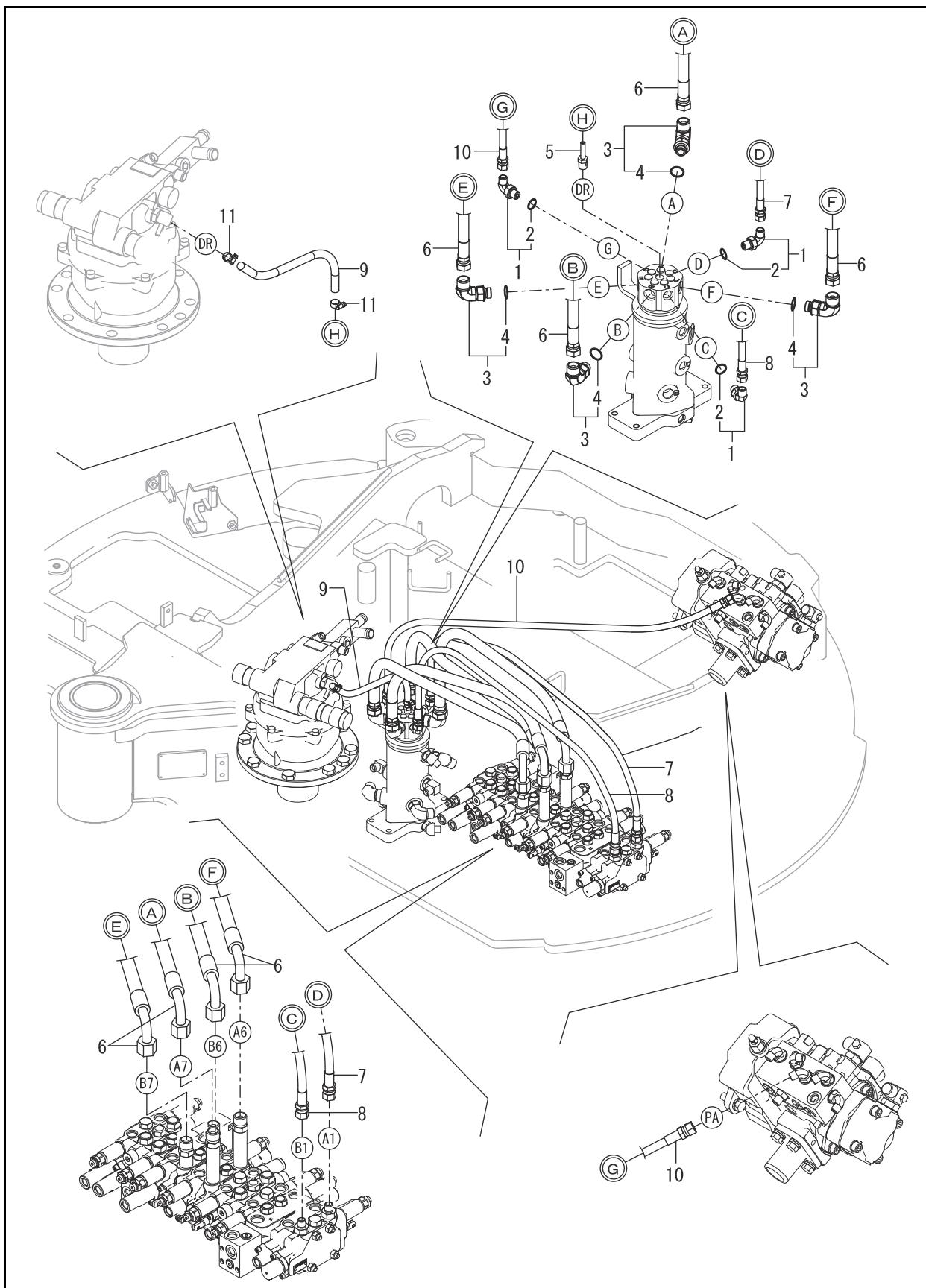
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 141 - HYD. OIL PIPING (CONTROL VALVE-BOOM CYLINDER)

Ref.

No.	Part No.	Description	Qty.
1	50289285	HP HOSE	1
2	50289286	HP HOSE	1
3	50288971	CLAMP BRACKET	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 142 - HYD. OIL PIPING (CONTROL VALVE-SWIVEL JOINT)

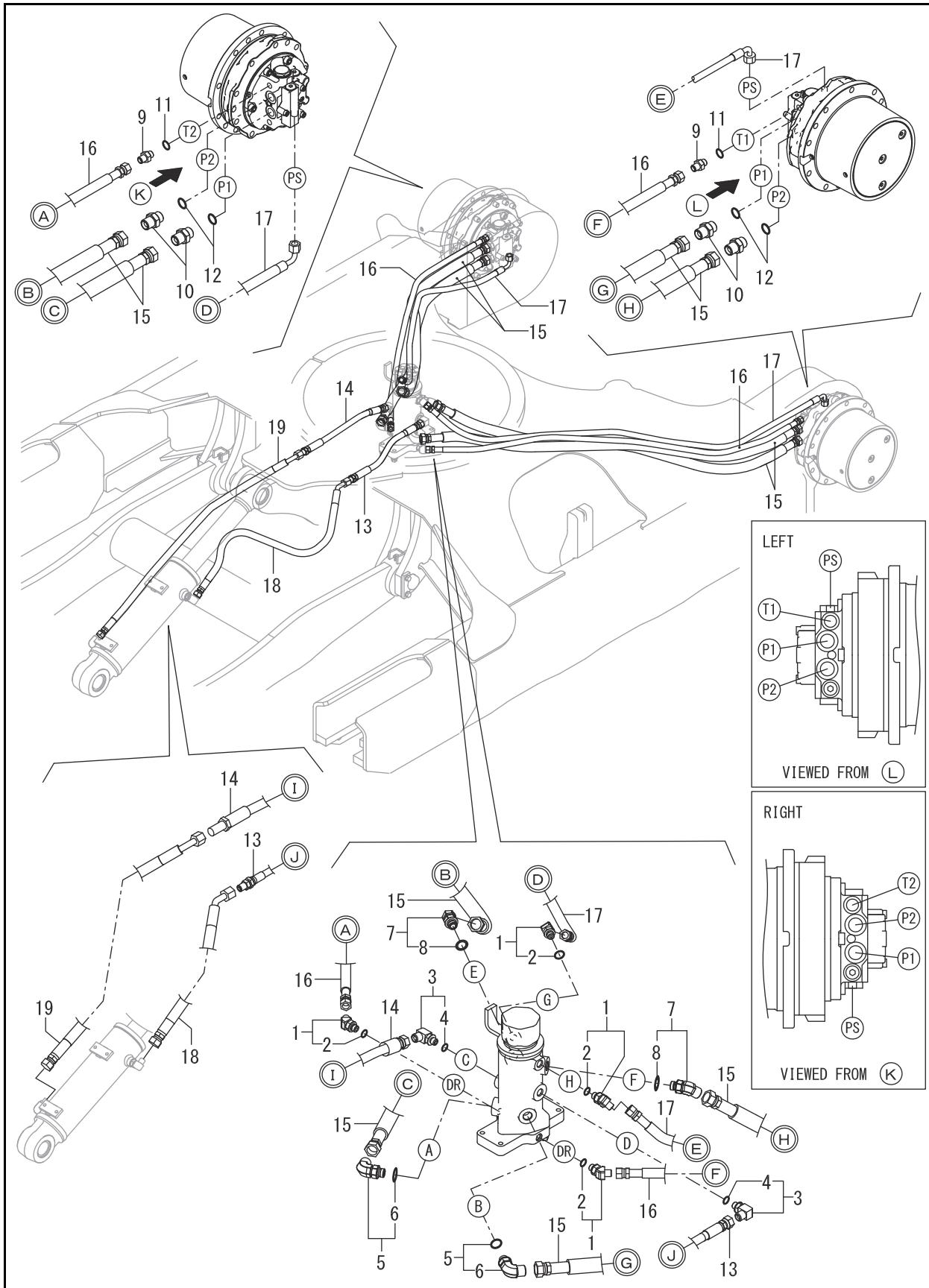


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 142 - HYD. OIL PIPING (CONTROL VALVE-SWIVEL JOINT)

Ref.

No.	Part No.	Description	Qty.
1	50287862	ELBOW/G1/4	3
2	50282607	PACKING, 11.0	3
3	50287871	ELBOW/45 G1/2-3/8	4
4	50282608	O RING P 14.0 HNBR	4
5	50282732	NIPPLE	1
6	50289287	HP HOSE	4
7	50289294	HP HOSE	1
8	50289295	HP HOSE	1
9	50289308	HP HOSE	1
10	50289317	HP HOSE	1
11	425-34918	CLAMP 13	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 143 - HYD. OIL PIPING (TRAVEL FRAME)



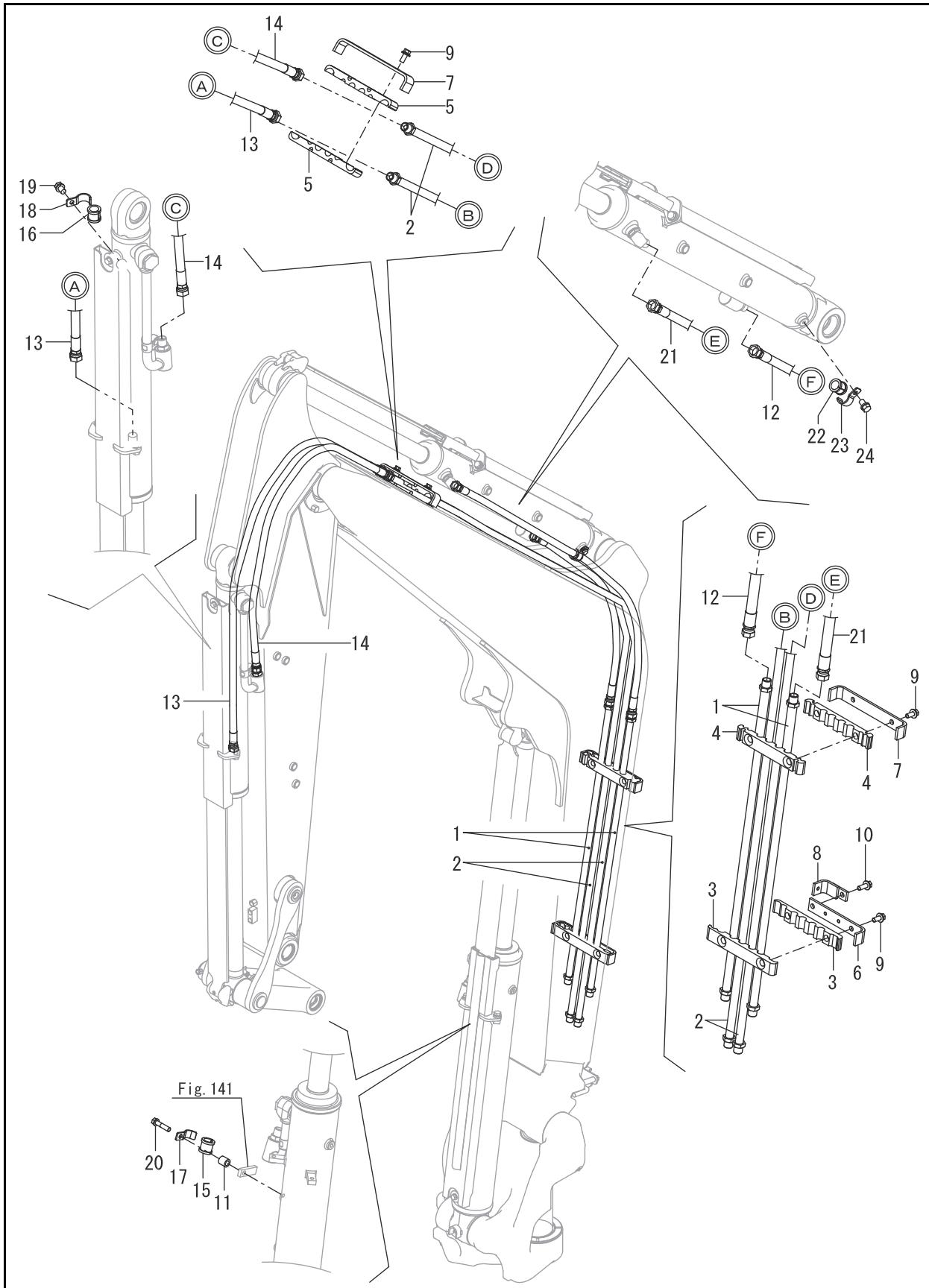
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 143 - HYD. OIL PIPING (TRAVEL FRAME)

Ref.

No.	Part No.	Description	Qty.
1	50280905	CONNECTOR PF1/4-45	4
2	50282607	PACKING, 11.0	4
3	50282820	CONNECTOR	2
4	50282470	O-RING 1B P-11.0	2
5	50287871	ELBOW/45 G1/2-3/8	2
6	50282608	O RING P 14.0 HNBR	2
7	50287871	ELBOW/45 G1/2-3/8	2
8	50282608	O RING P 14.0 HNBR	2
9	50282716	CONNECTOR	2
10	50280778	CONNECTOR	4
11	50282608	O RING P 14.0 HNBR	2
12	50282609	O RING	4
13	50289298	HP HOSE	1
14	50289299	HP HOSE	1
15	50289300	HP HOSE	4
16	50289301	HP HOSE	2
17	50289302	HP HOSE	2
18	50289379	HP HOSE	1
19	50289380	HP HOSE	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 144 - HYD. OIL PIPING (ARM CYLINDER, BUCKET CYLINDER)



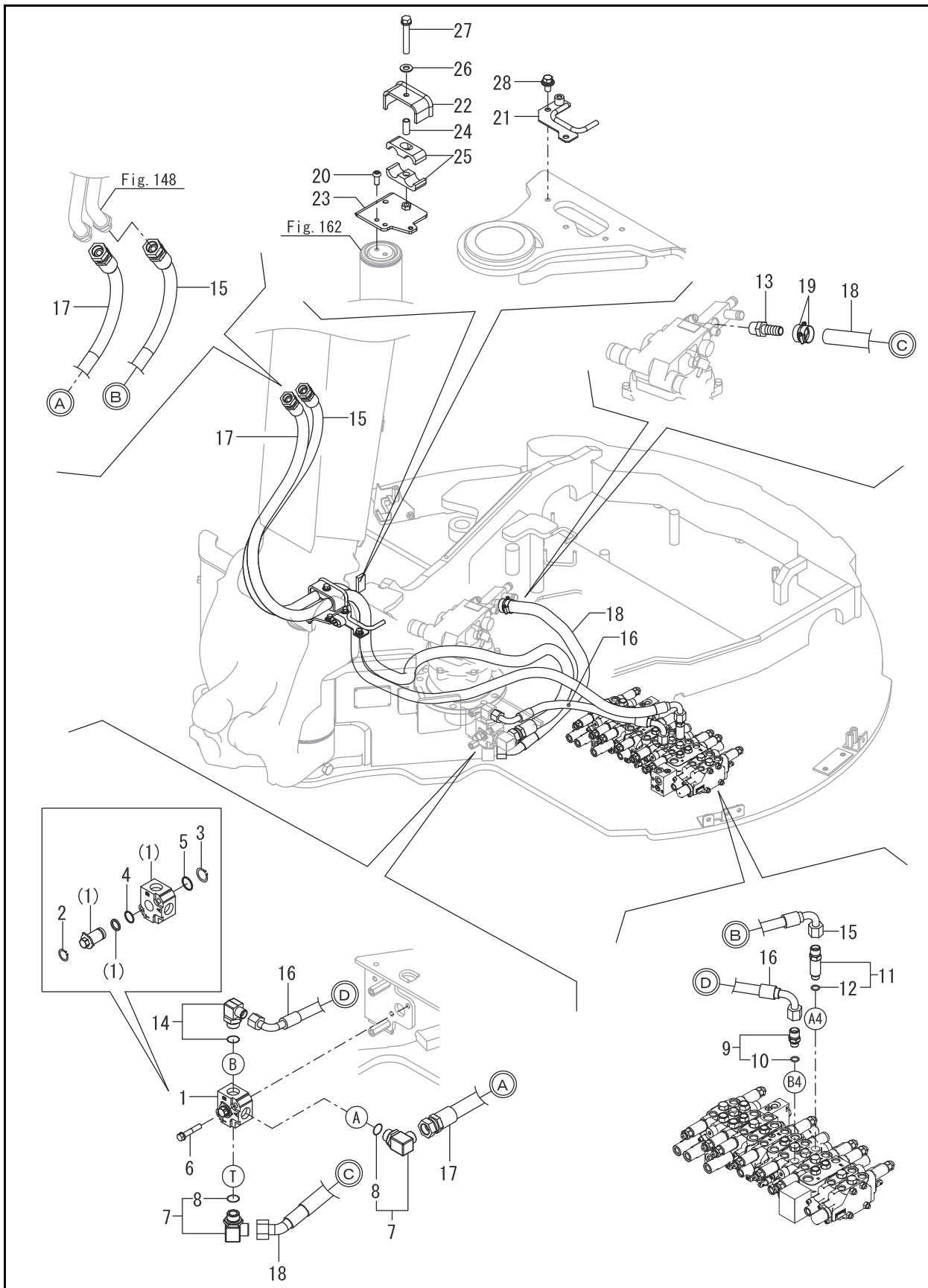
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 144 - HYD. OIL PIPING (ARM CYLINDER, BUCKET CYLINDER)

Ref.

No.	Part No.	Description	Qty.
1	50289251	DIPPER TUBE ASSY	2
2	50289253	BUCKET TUBE ASSY	2
3	50287885	RUBBER/CLAMP A	2
4	50287886	RUBBER/CLAMP B	2
5	50289259	RUBBER CLAMP	2
6	50287888	CLAMP/TUBE A	1
7	50287890	CLAMP/TUBE B	2
8	50287892	CLAMP ASSY/BOOM	1
9	50282539	BOLT 10X25 W/PLW+SPW	5
10	50285904	BOLT M10 X 30	1
11	50283787	COLLER 12.2X20X20	1
12	50289303	HP HOSE	1
13	50289305	HP HOSE	1
14	50289306	HP HOSE	1
15	50288969	RUBBER HOSE CLAMP	1
16	50288969	RUBBER HOSE CLAMP	1
17	50288970	HOSE CLAMP	1
18	50288970	HOSE CLAMP	1
19	50282514	BOLT M10X 16	1
20	50282520	BOLT M10X 45	1
21	50289304	HP HOSE	1
22	50288969	RUBBER HOSE CLAMP	1
23	50288970	HOSE CLAMP	1
24	50282514	BOLT M10X 16	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 146 - HYD. OIL PIPING (P.T.O.:CONTROL VALVE-BOOM)



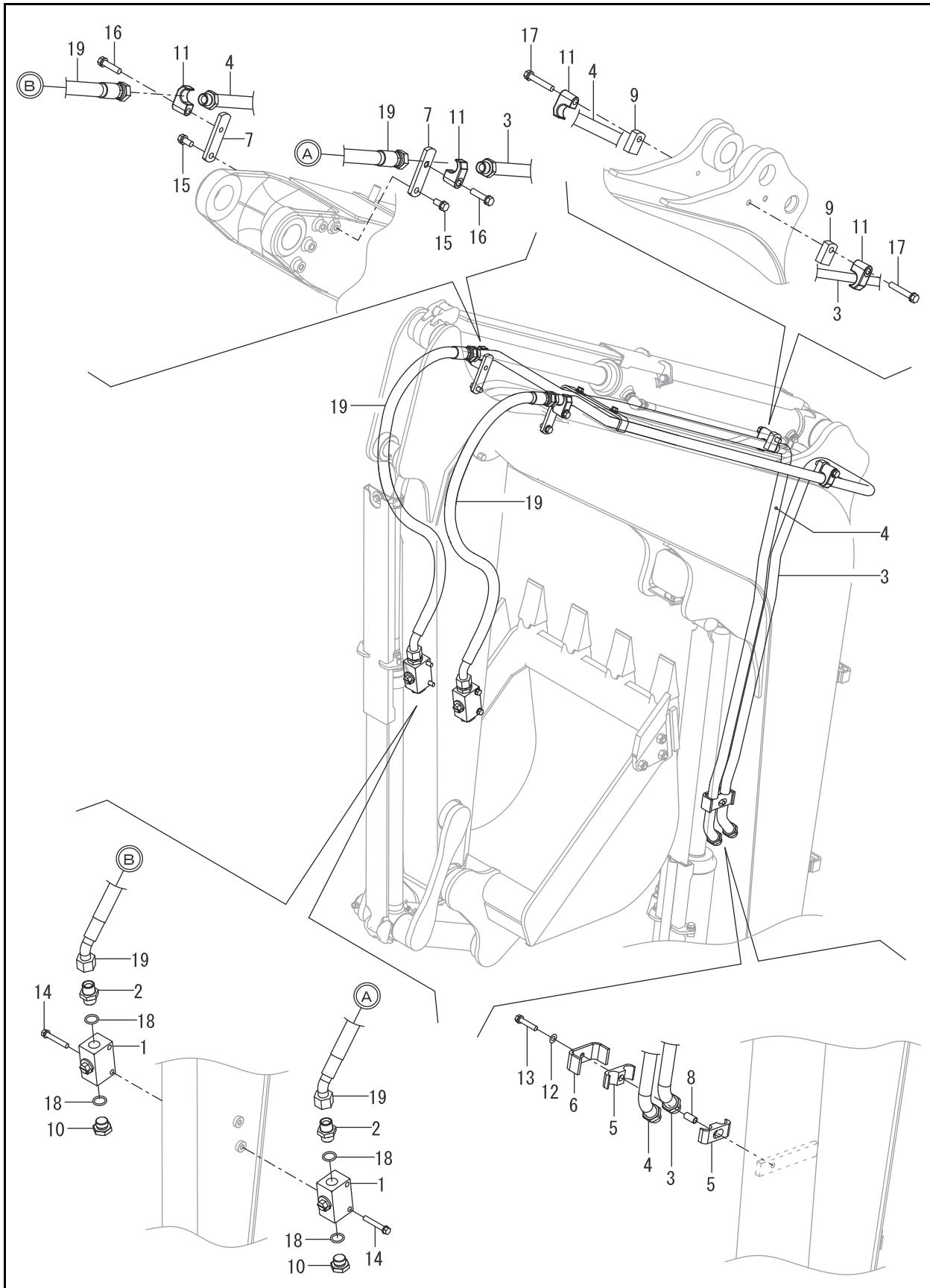
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 146 - HYD. OIL PIPING (P.T.O.:CONTROL VALVE-BOOM)

Ref.

No.	Part No.	Description	Qty.
1	50283667	VALVE ASSY,SELECOR	1
2	50282398	CIRCLIP 21	1
3	50282399	CIRCLIP 25S	1
4	50282476	O-RING 1B P 21	1
5	50282478	O-RING 1B P-25.0	1
6	50282522	BOLT M10X 55	2
7	50287077	CONNECTOR 3/4 L	2
8	50282477	O-RING 1B P-24.0	2
9	50287868	CONNECTOR/G1/2-3/8	1
10	50282608	O RING P 14.0 HNBR	1
11	50287872	CONNECTOR/M G1/2-3/8	1
12	50282608	O RING P 14.0 HNBR	1
13	50288911	FITTING	1
14	50284401	ELBOW ASSY	1
15	50289323	HP HOSE	1
16	50289324	HP HOSE	1
17	50289325	HP HOSE	1
18	50289326	HOSE	1
19	50282429	HOSE CLAMP 35	2
20	50288920	BOLT	2
21	50289269	PTO GUIDE	1
22	50289270	HOSE CLAMP	1
23	50289275	CLAMP BASE	1
24	50287126	COLLAR	1
25	50288918	RUBBER CLAMP	2
26	138111	WASHER/POLISHED	1
27	50288169	BOLT	1
28	50282538	BOLT M10X 20	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 148 - HYD. OIL PIPING (P.T.O.:BOOM-ARM END)



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 148 - HYD. OIL PIPING (P.T.O.:BOOM-ARM END)

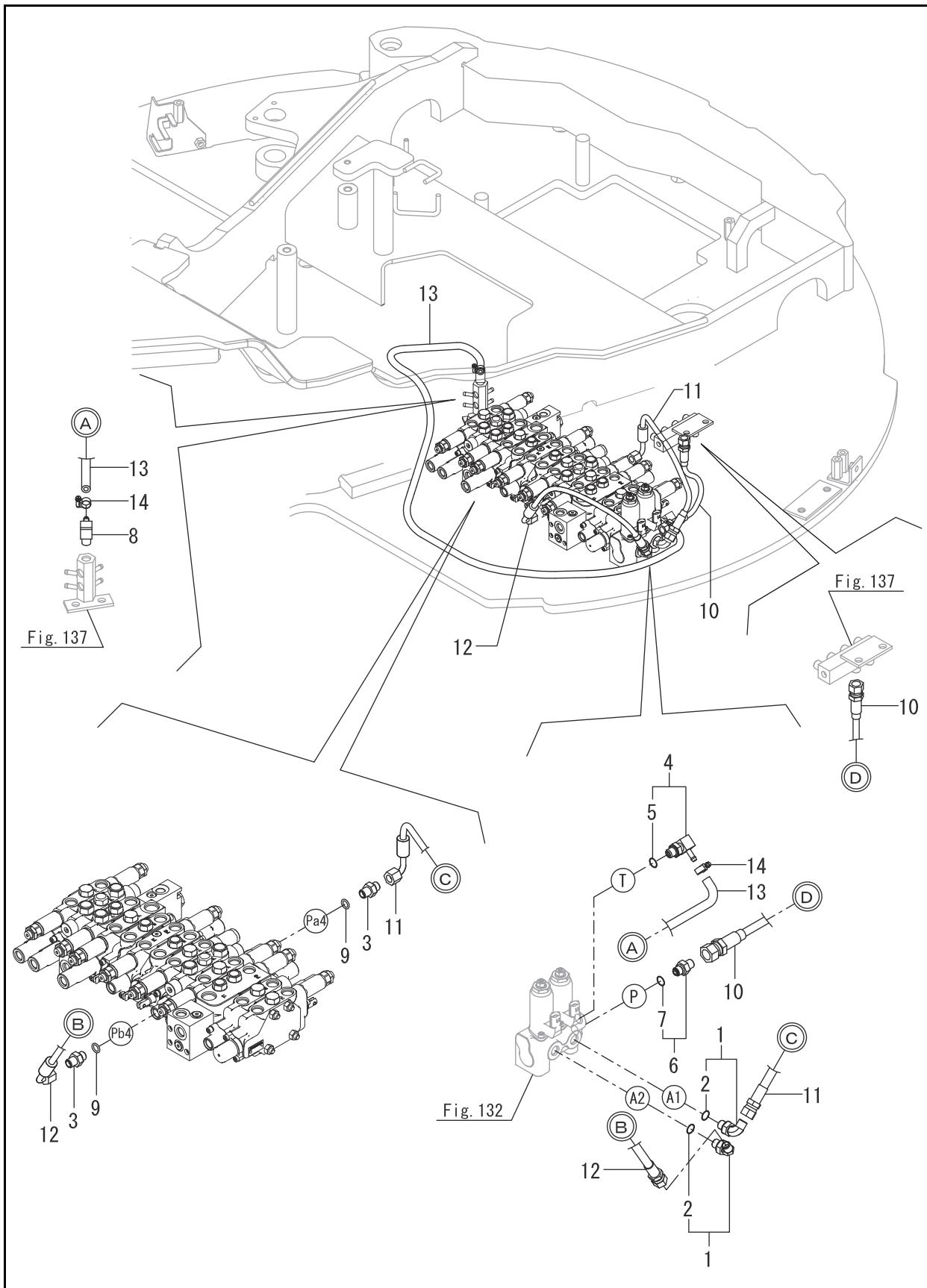
Ref.

No.	Part No.	Description	Qty.
1	50289248	STOP VALVE *	2
2	50280824	JOINT PF3/4	2
3	50289255	PTO TUBE ASSY LEFT	1
4	50289257	PTO TUBE ASSY RIGHT	1
5	50288928	RUBBER CLAMP	2
6	50288929	TUBE CLAMP	1
7	50287894	STAY/CLAMP PTO	2
8	50280978	COLLAR, CLAMP	1
9	50286185	PLATE	2
10	50289442	PLUG	2
11	50286167	CLAMP, 3/4	4
12	138111	WASHER/POLISHED	1
13	50282521	BOLT M10X 50	1
14	50288169	BOLT	4
15	50284101	BOLT M12 X 25	2
16	50285903	BOLT M12 X 50	2
17	50282529	BOLT 12X70 W/SP.WSHR	2
18	50282610	PACKING, 24.0	4
19	50289327	HP HOSE	2

NOTE: * For flat-faced quick-connect coupler service parts, see
Page 322.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 150 - HYD. OIL PIPING (P.T.O.:SOLENOID VALVE)



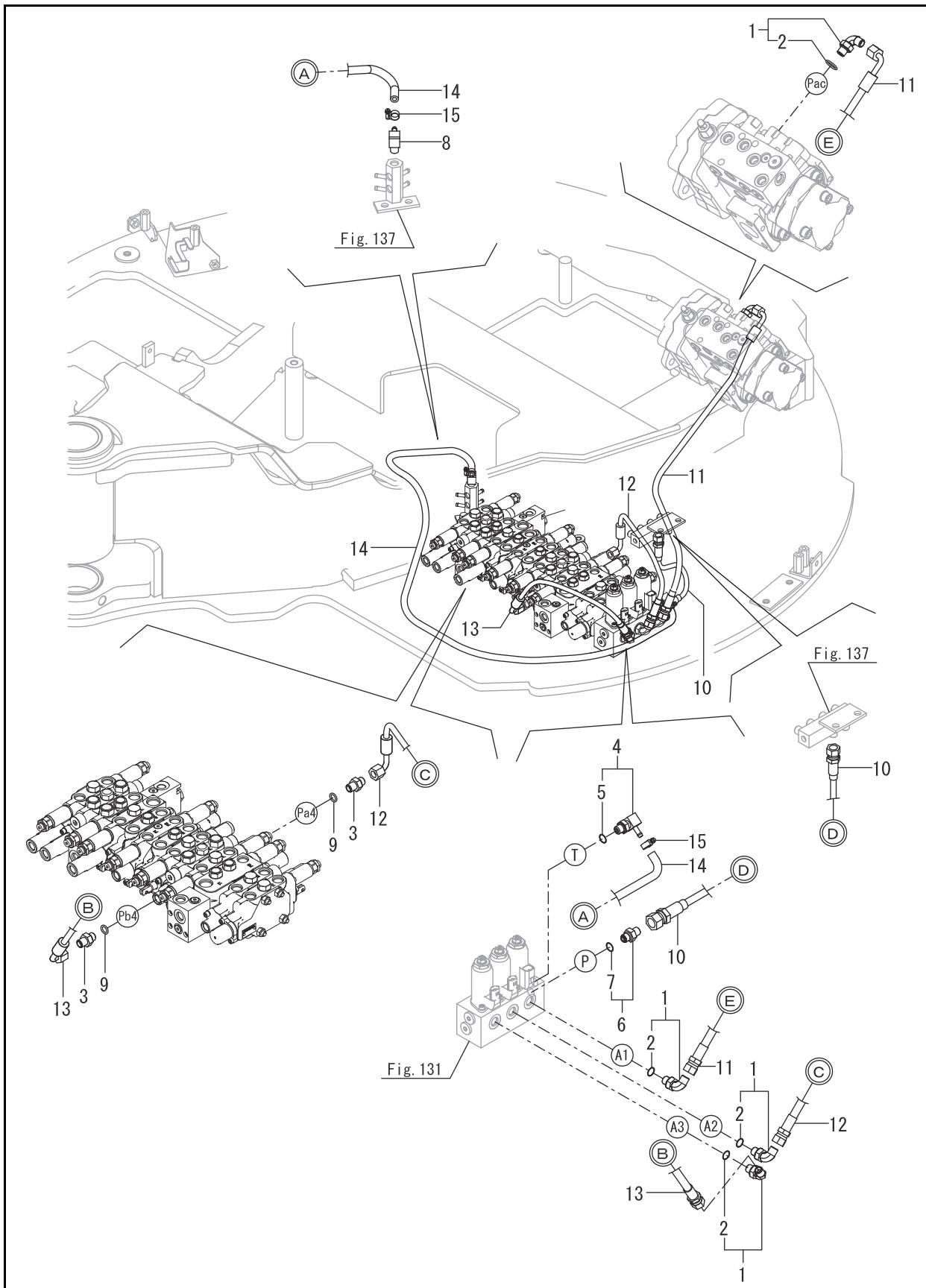
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 150 - HYD. OIL PIPING (P.T.O.:SOLENOID VALVE)

Ref.

No.	Part No.	Description	Qty.
1	50287862	ELBOW/G1/4	2
2	50282607	PACKING, 11.0	2
3	50280792	JOINT PF1/4	2
4	50287138	NIPPLE/ELBOW	1
5	50282470	O-RING 1B P-11.0	1
6	50287874	CONNECTOR/FILT G1/4	1
7	50282607	PACKING, 11.0	1
8	50282842	NIPPLE	1
9	50282607	PACKING, 11.0	2
10	50287966	HOSE H603BB029S	1
11	50287968	HOSE F403BC041S	1
12	50287969	HOSE F403BC047S	1
13	50289329	HOSE	1
14	425-34918	CLAMP 13	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 151 - HYD. OIL PIPING (P.T.O.:SOLENOID VALVE, ESS SPEC., W/ CAB ONLY)



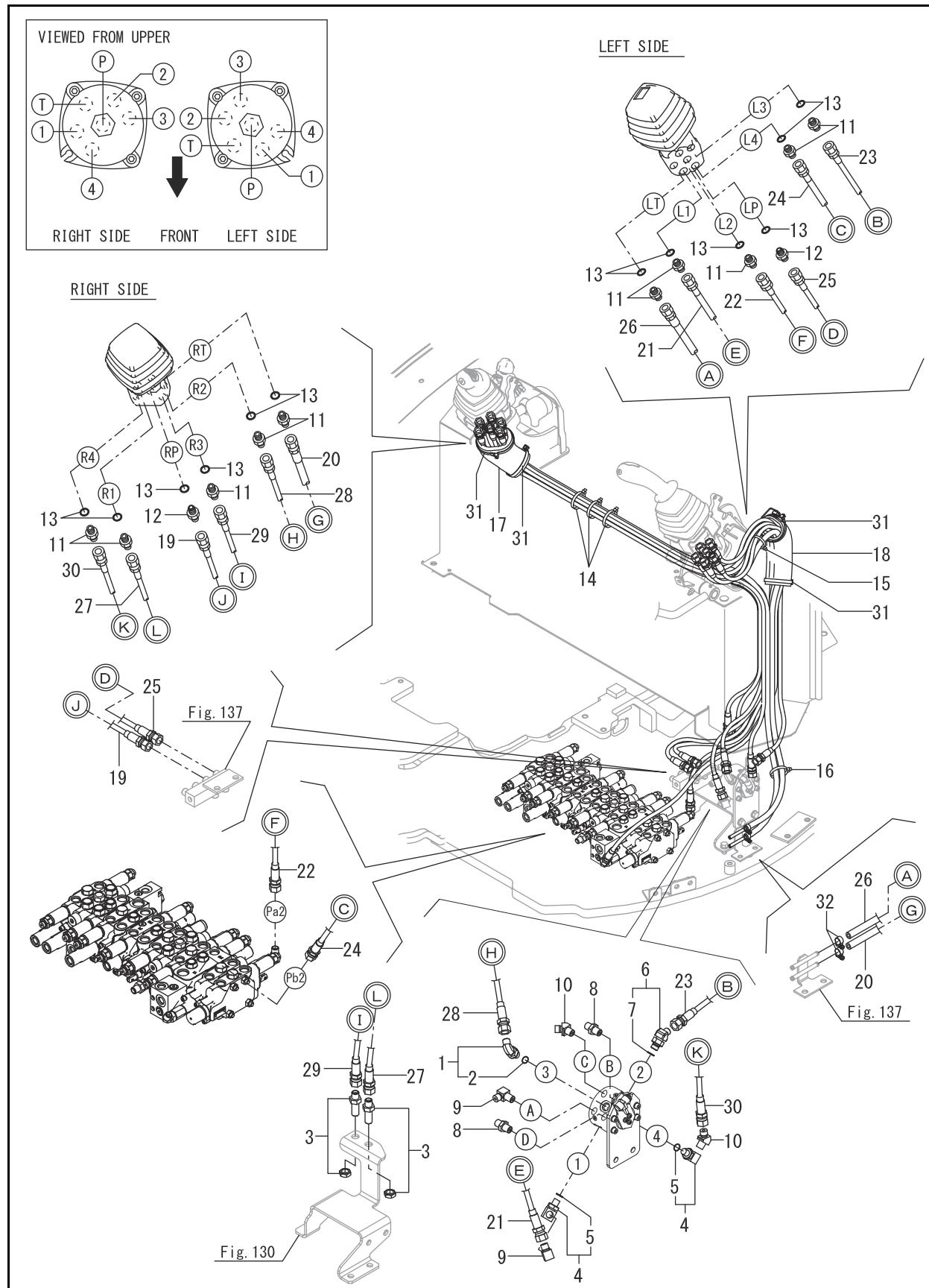
Z45 GEN:2 - COMPACT EXCAVATOR**FIG. 151 - HYD. OIL PIPING (P.T.O.:SOLENOID VALVE, ESS SPEC., W/ CAB ONLY)**

Ref.

No.	Part No.	Description	Qty.
1	50287862	ELBOW/G1/4	4
2	50282607	PACKING, 11.0	4
3	50280792	JOINT PF1/4	2
4	50287138	NIPPLE/ELBOW	1
5	50282470	O-RING 1B P-11.0	1
6	50287874	CONNECTOR/FILT G1/4	1
7	50282607	PACKING, 11.0	1
8	50282842	NIPPLE	1
9	50282607	PACKING, 11.0	2
10	50287966	HOSE H603BB029S	1
11	50289328	HP HOSE	1
12	50287968	HOSE F403BC041S	1
13	50287969	HOSE F403BC047S	1
14	50289329	HOSE	1
15	425-34918	CLAMP 13	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 152 - CONTROL PIPING (1)



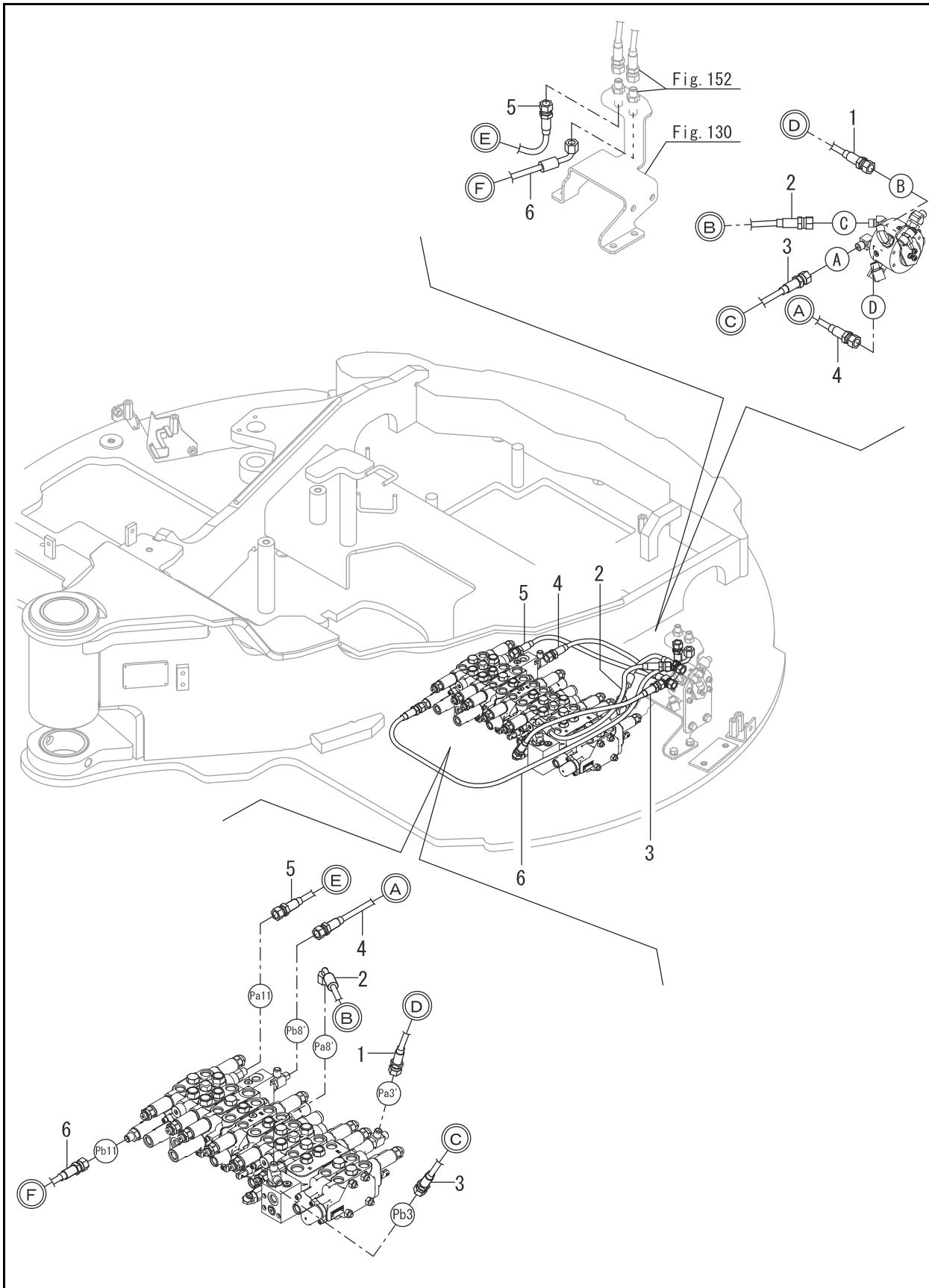
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 152 - CONTROL PIPING (1)

Ref.

No.	Part No.	Description	Qty.
1	50287862	ELBOW/G1/4	1
2	50282607	PACKING, 11.0	1
3	50280841	JOINT	2
4	50280806	ELBOW PF1/4	2
5	50282470	O-RING 1B P-11.0	2
6	50280905	CONNECTOR PF1/4-45	1
7	50282607	PACKING, 11.0	1
8	50282438	JOINT RGI1/4	2
9	50282441	JOINT 90RGI1/4	2
10	50282443	JOINT 45RGI1/4	2
11	50280792	JOINT PF1/4	10
12	50281106	CONNECTOR PF1/4	2
13	50282607	PACKING, 11.0	12
14	50280798	BAND 300	3
15	50280798	BAND 300	1
16	50282838	CLIP 400,HOSE	1
17	50282972	SOUND SHIELD,HOSE	1
18	50283069	SOUND SHIELD,HOSE	1
19	50287953	HOSE F403BB165S	1
20	50287954	HOSE G804BY165S	1
21	50287977	HOSE F403BB110S	1
22	50287978	HOSE F403BB113S	1
23	50287979	HOSE F403BB095S	1
24	50287980	HOSE F403BB138S	1
25	50287981	HOSE F403BB110S	1
26	50287982	HOSE G804BY115S	1
27	50287983	HOSE F403BB140S	1
28	50287984	HOSE F403BB148S	1
29	50287985	HOSE F403BB136S	1
30	50287986	HOSE F403BB148S	1
31	50282709	CLAMP B	4
32	425-34918	CLAMP 13	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 153 - CONTROL PIPING (2)



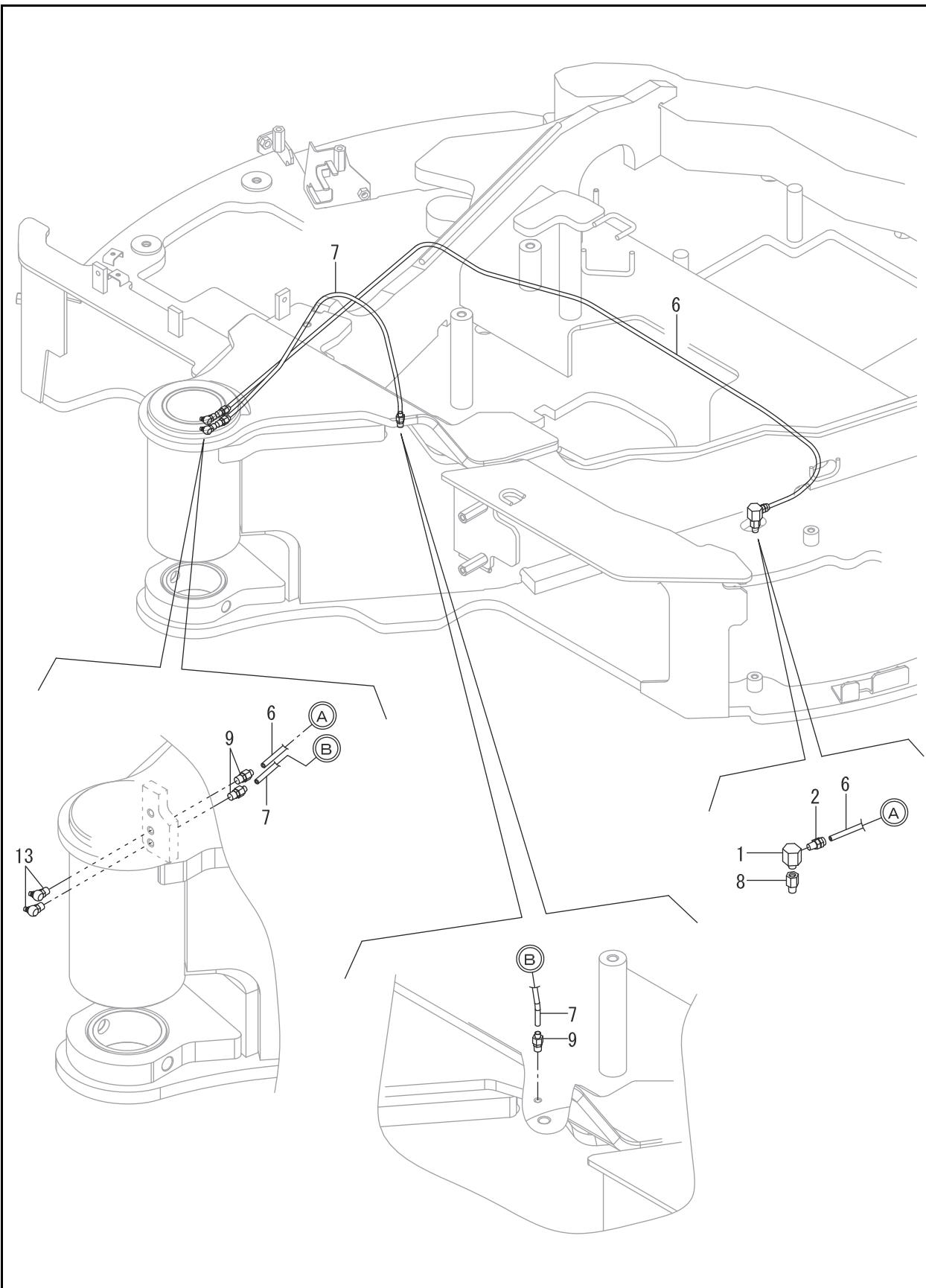
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 153 - CONTROL PIPING (2)

Ref.

No.	Part No.	Description	Qty.
1	50287971	HOSE F403BC023	1
2	50287972	HOSE F403BC044	1
3	50287973	HOSE F403BB047S	1
4	50287974	HOSE F403BB047S	1
5	50287975	HOSE F403BB050S	1
6	50287976	HOSE F403BC101S	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 154 - GREASING

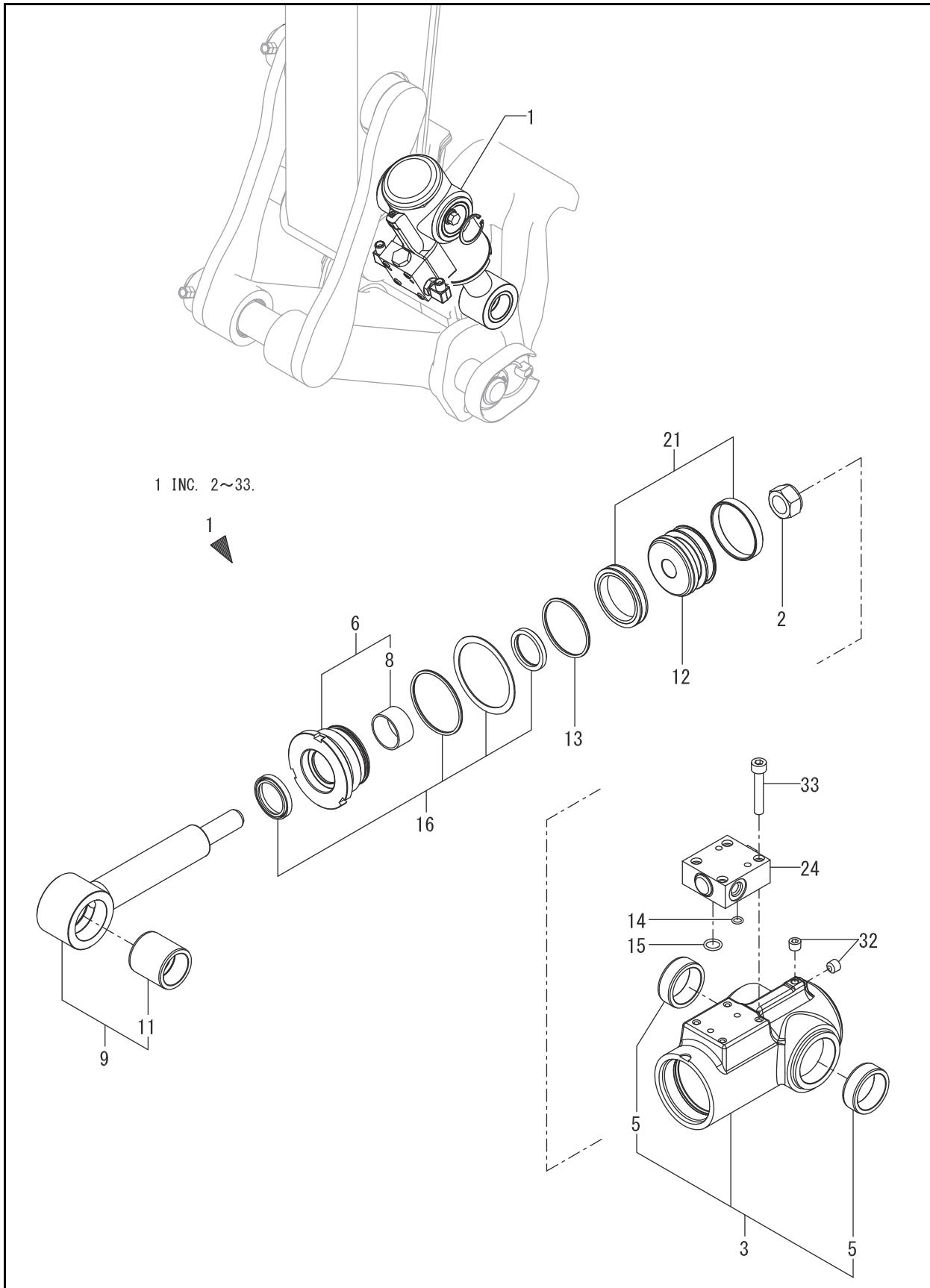


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 154 - GREASING

Ref.

No.	Part No.	Description	Qty.
1	50288902	ELBOW	1
2	50288906	GREASE FITTING	1
6	50289273	HOSE	1
7	50289274	HOSE	1
8	50285308	FITTING, GREASE	1
9	50281493	JOINT,GREASE	3
13	50282498	NIPPLE B,GREASE	2

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 155 - QUICK COUPLER (HITCH CYLINDER)

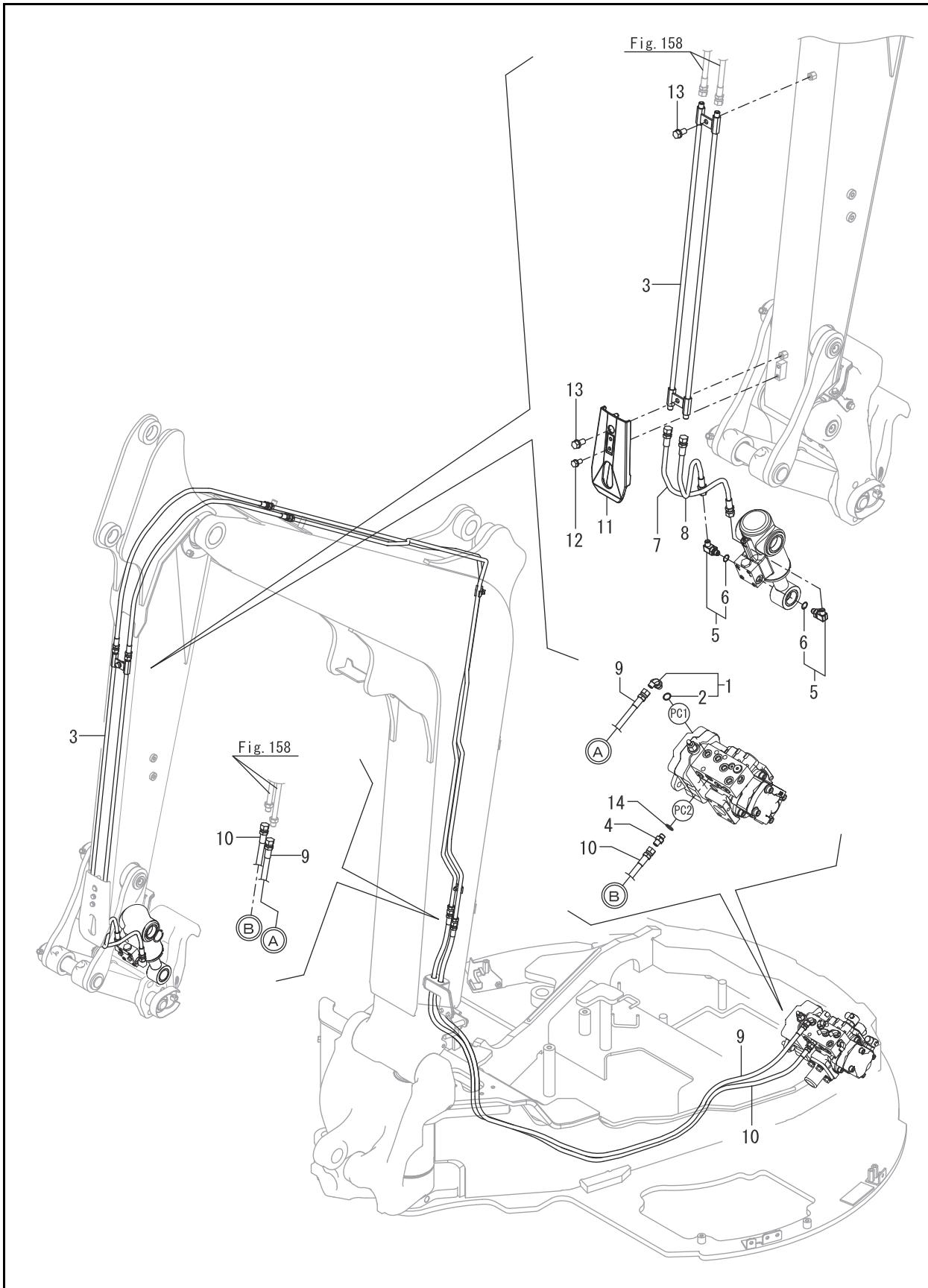


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 155 - QUICK COUPLER (HITCH CYLINDER)

Ref.

No.	Part No.	Description	Qty.
1	50283286	CYLINDER, HITCH	1
2	50282730	NUT M20	1
5	50283293	BUSHING	2
6	50283288	HEAD	1
8	50284093	BUSHING 35X20	1
9	50283289	ROD ASSY, HITCH	1
11	50283292	BUSHING	1
12	50283290	PISTON	1
13	50283291	WASHER	1
14	50281374	O-RING P8	1
15	50281375	O-RING P14	1
16	50283294	SEAL SET,HEAD	1
21	50283295	SEAL SET, PISTON	1
24	50283277	VALVE ASSY, OPERATE	1
32	50282446	PLUG, PT1/16	2
33	50282582	BOLT M 6X 30	4

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 156 - QUICK COUPLER (HYD. OIL PIPING:1)

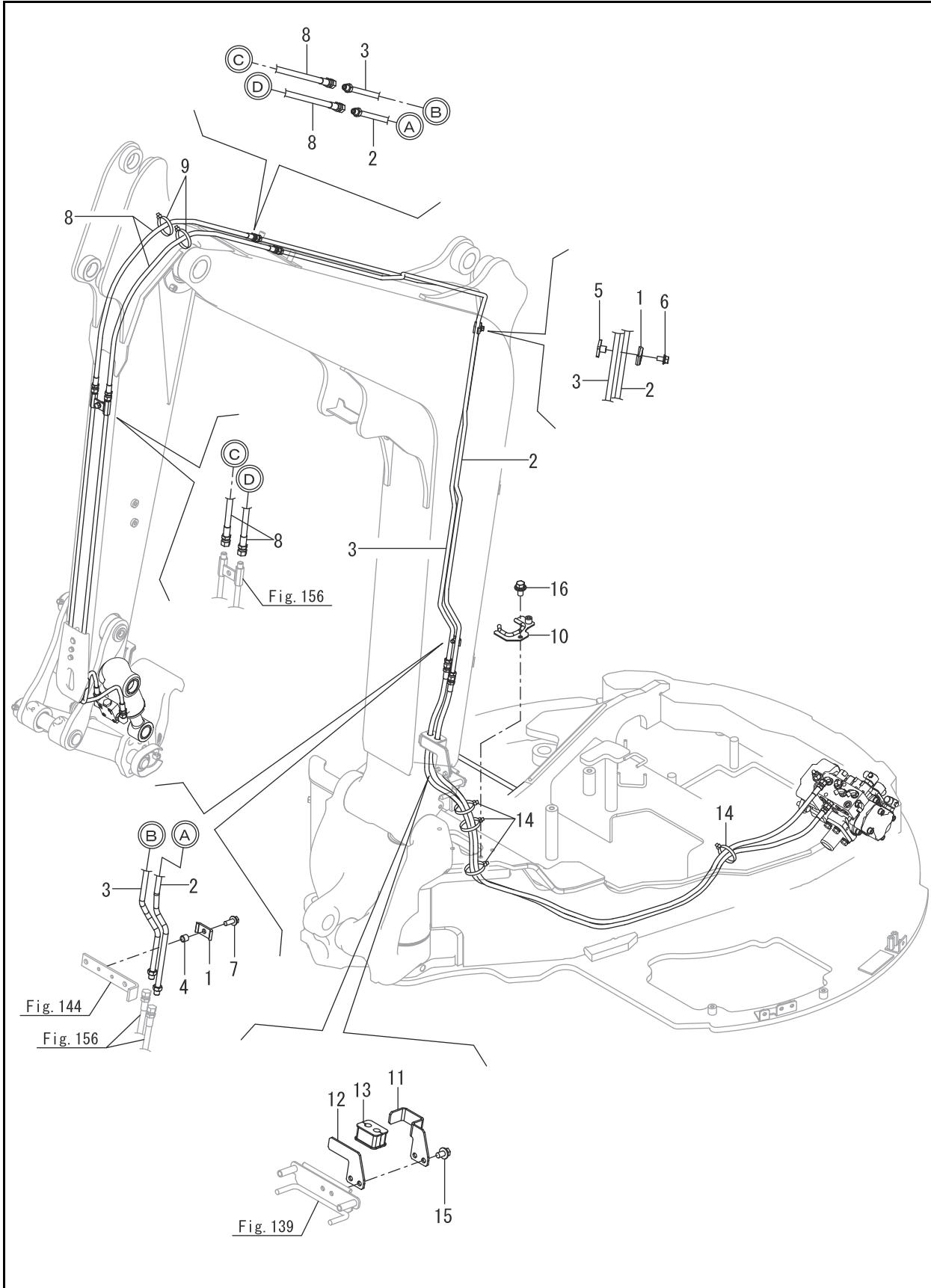


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 156 - QUICK COUPLER (HYD. OIL PIPING:1)

Ref.

No.	Part No.	Description	Qty.
1	50287862	ELBOW/G1/4	1
2	50282607	PACKING, 11.0	1
3	50286235	HITCH TUBE	1
4	50280792	JOINT PF1/4	1
5	50283278	ELBOW PF1/4-PF1/4	2
6	50282470	O-RING 1B P-11.0	2
7	50281377	HOSE	1
8	50283279	HOSE	1
9	50289320	HP HOSE	1
10	50289321	HP HOSE	1
11	50286237	COVER ASSY	1
12	50282506	BOLT W/WASHER M8X16	2
13	50282515	BOLT W/WASHER M10X20	2
14	50282607	PACKING, 11.0	1

Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 158 - QUICK COUPLER (HYD. OIL PIPING:2)



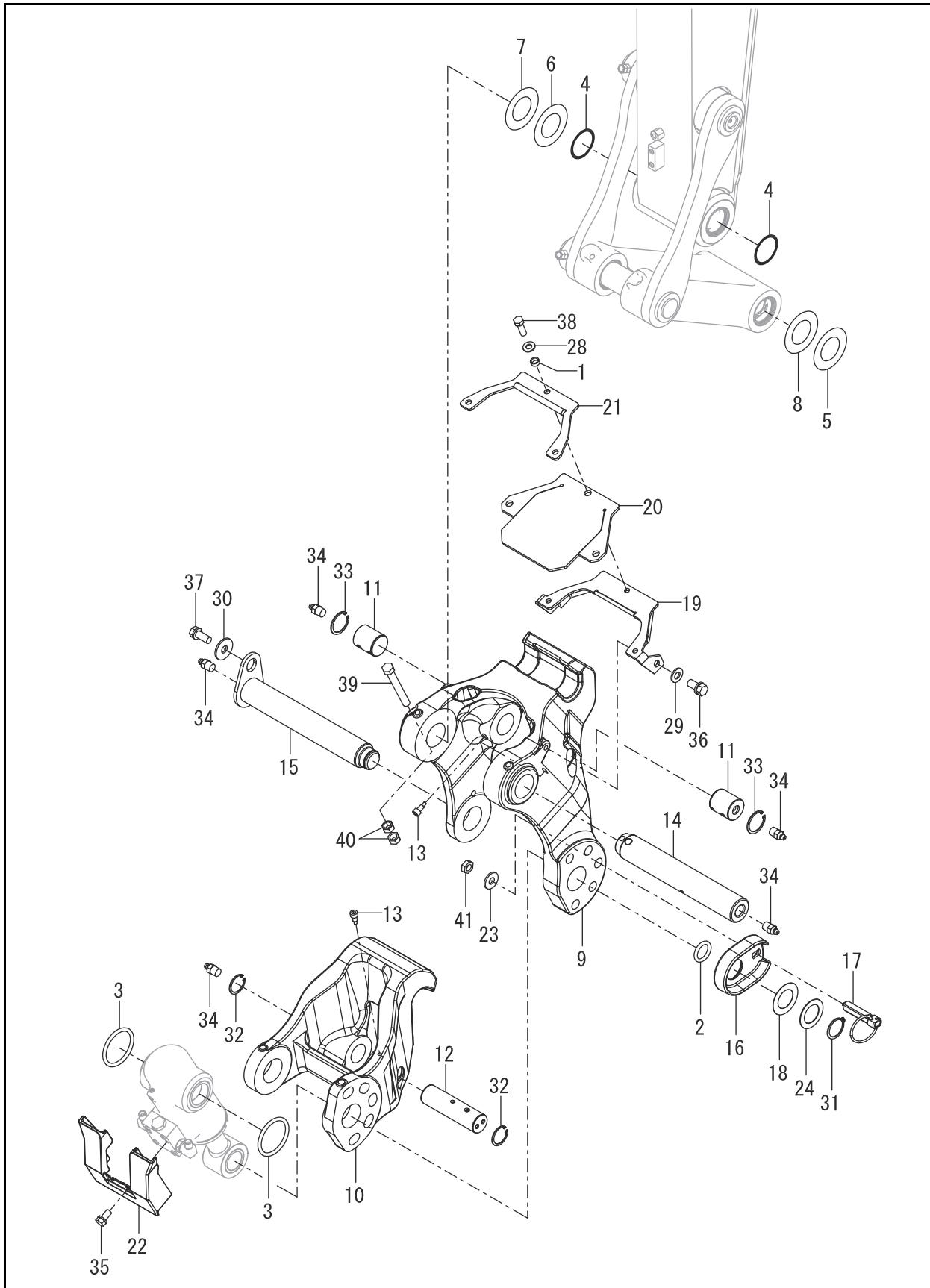
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 158 - QUICK COUPLER (HYD. OIL PIPING:2)

Ref.

No.	Part No.	Description	Qty.
1	50280772	PLATE	2
2	50289260	HITCH TUBE ASSY LEFT	1
3	50289262	HITCH TUBE ASSY RIGHT	1
4	50280808	COLLAR 9X11	1
5	50289268	TUBE CLAMP	1
6	50282533	BOLT M 8X 16	1
7	425-35026	BOLT M8 X 25	1
8	50289322	HP HOSE	2
9	50282709	CLAMP B	2
10	50289272	GUIDE	1
11	50289330	CLAMP	1
12	50289332	CLAMP	1
13	50289334	RUBBER CLAMP	1
14	50280791	CLAMP 350	4
15	50282538	BOLT M10X 20	2
16	50282538	BOLT M10X 20	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 160 - QUICK COUPLER (BODY)



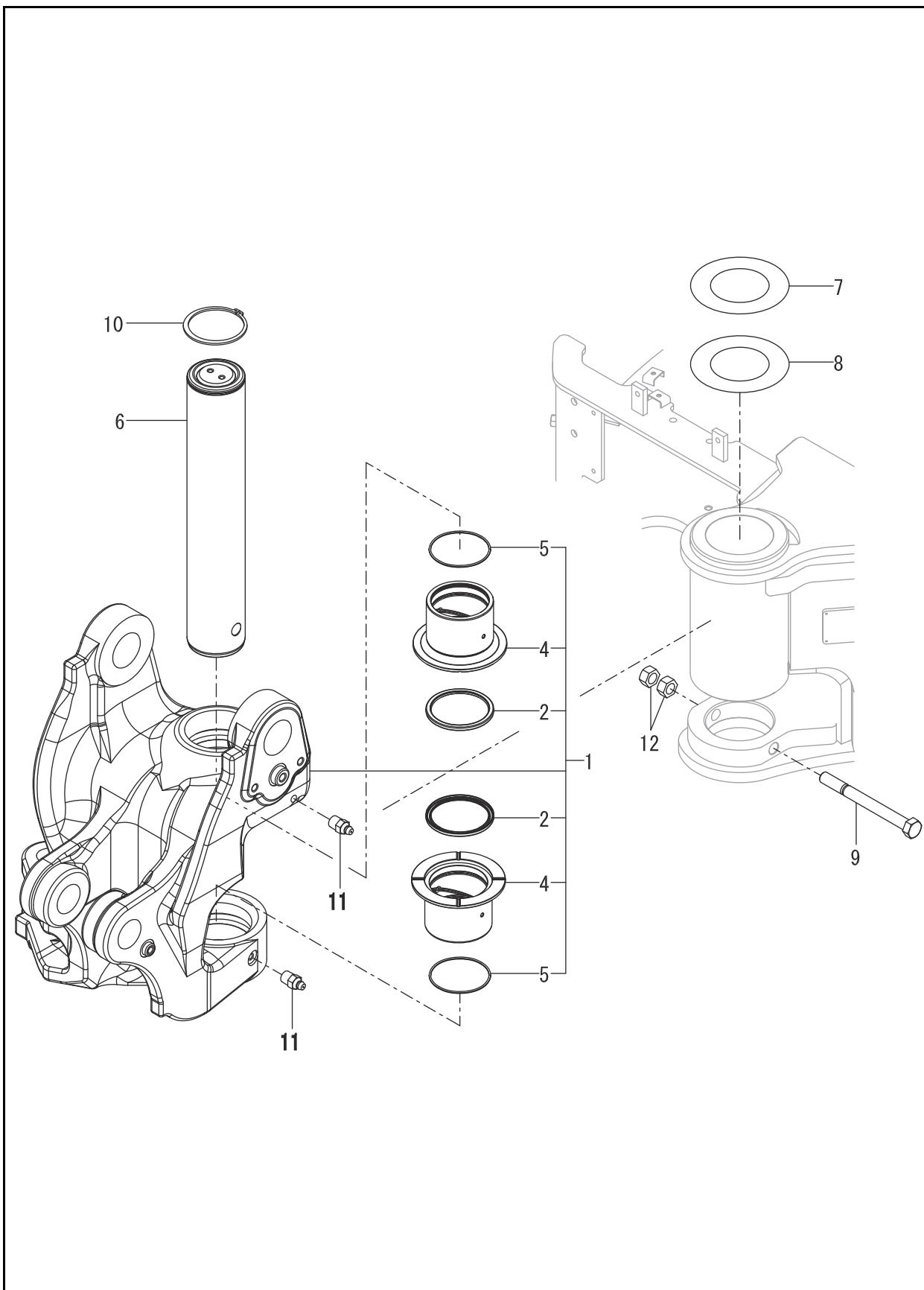
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 160 - QUICK COUPLER (BODY)

Ref.

No.	Part No.	Description	Qty.
1	50281363	COLLER 9X4	3
2	50280793	O-RING 27X5.7	1
3	50282818	O-RING	2
4	50282718	O-RING 81X8	2
5	50282809	SHIM 45X1.2	1
6	50282809	SHIM 45X1.2	1
7	50282810	SHIM 45X80X1.2	1
8	50282810	SHIM 45X80X1.2	1
9	50286239	BRACKET	1
10	50286241	BRACKET	1
11	50283306	PIN	2
12	50283307	PIN	1
13	50283280	BOLT	3
14	50283308	PIN	1
15	50283309	PIN 45 X 299	1
16	50286227	LOCK PLATE	1
17	50283311	PIN ASSY, LOCK	1
18	50281378	COLLAR 35.5X55X1.2	1
19	50286243	GUARD ASSY	1
20	50283313	PLATE, RUBBER	1
21	50286245	PLATE ASSY	1
22	50286247	COVER ASSY	1
23	50283282	WASHER 6.4X15.5X1.5	1
24	50282733	SHIM 35	1
28	50282380	WASHER 8, POLISHED	3
29	138111	WASHER/POLISHED	2
30	50282388	WASHER 12	1
31	50282400	CIRCLIP 35	1
32	50282406	CIRCLIP 35	2
33	50284048	CIRCLIP 40(H)	2
34	50282497	NIPPLE PT1/8,GREASE	5
35	50282506	BOLT W/WASHER M8X16	2
36	50282515	BOLT W/WASHER M10X20	2
37	50282525	BOLT W/WASHER M12X30	1
38	50285910	BOLT M8 X 25 PLATED	3
39	50284123	BOLT M10 X 80 PLATED	1
40	50282597	NUT 10	2
41	425-34984	LOCK NUT M6 PLATED	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 162 - BOOM BRACKET



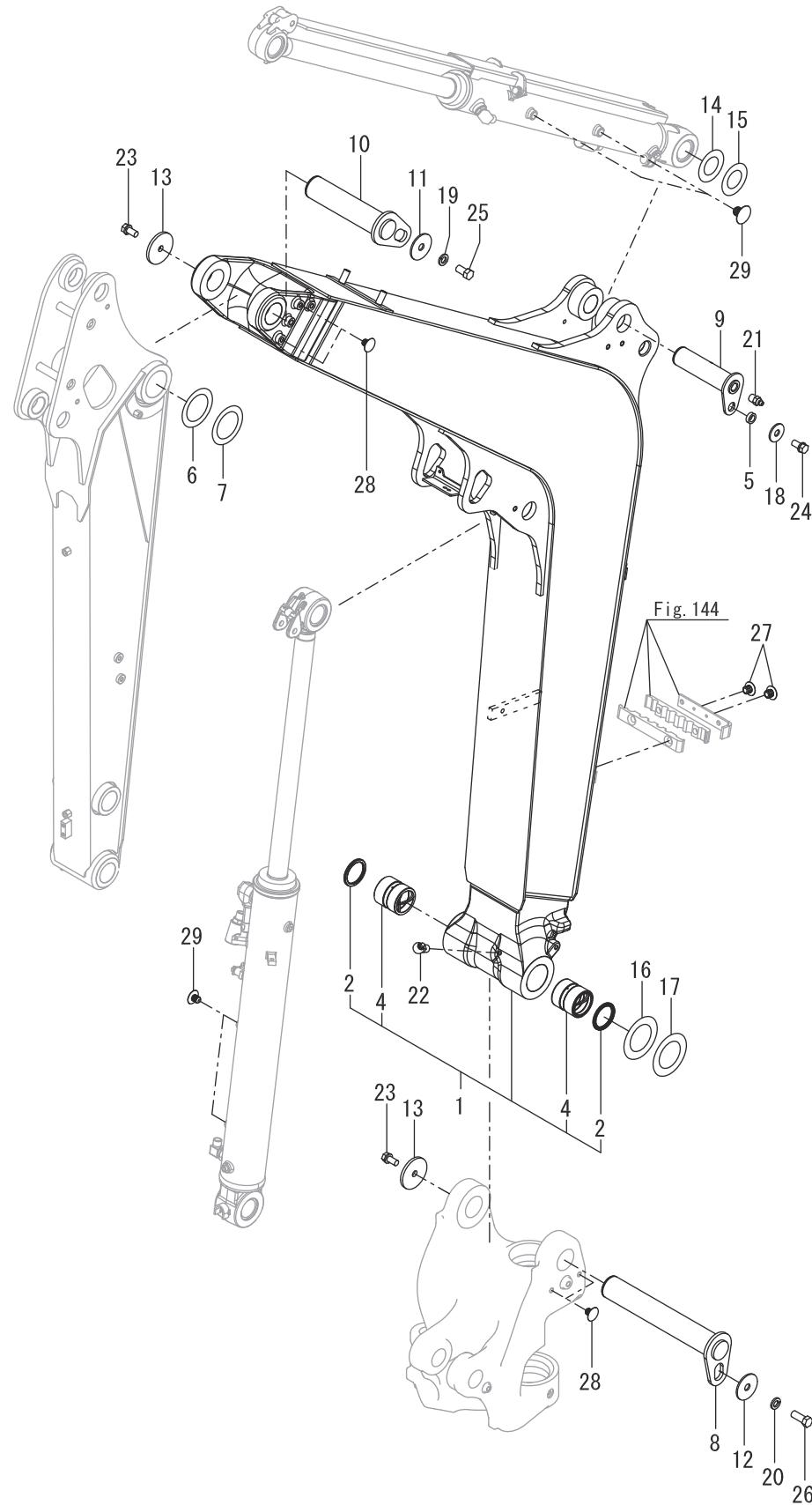
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 162 - BOOM BRACKET

Ref.

No.	Part No.	Description	Qty.
1	50289346	BOOM BRACKET ASSY	1
2	50287127	DUST SEAL 90 X 105 X 6	2
4	50289348	BUSHING	2
5	50289436	O-RING	2
6	50289349	PIN	1
7	50289350	SHIM	1
8	50289351	SHIM	1
9	50287130	BOLT 18 X 190	1
10	50288150	RING	1
11	50282497	NIPPLE PT1/8,GREASE	2
12	50282600	NUT M18	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 164 - BOOM



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 164 - BOOM

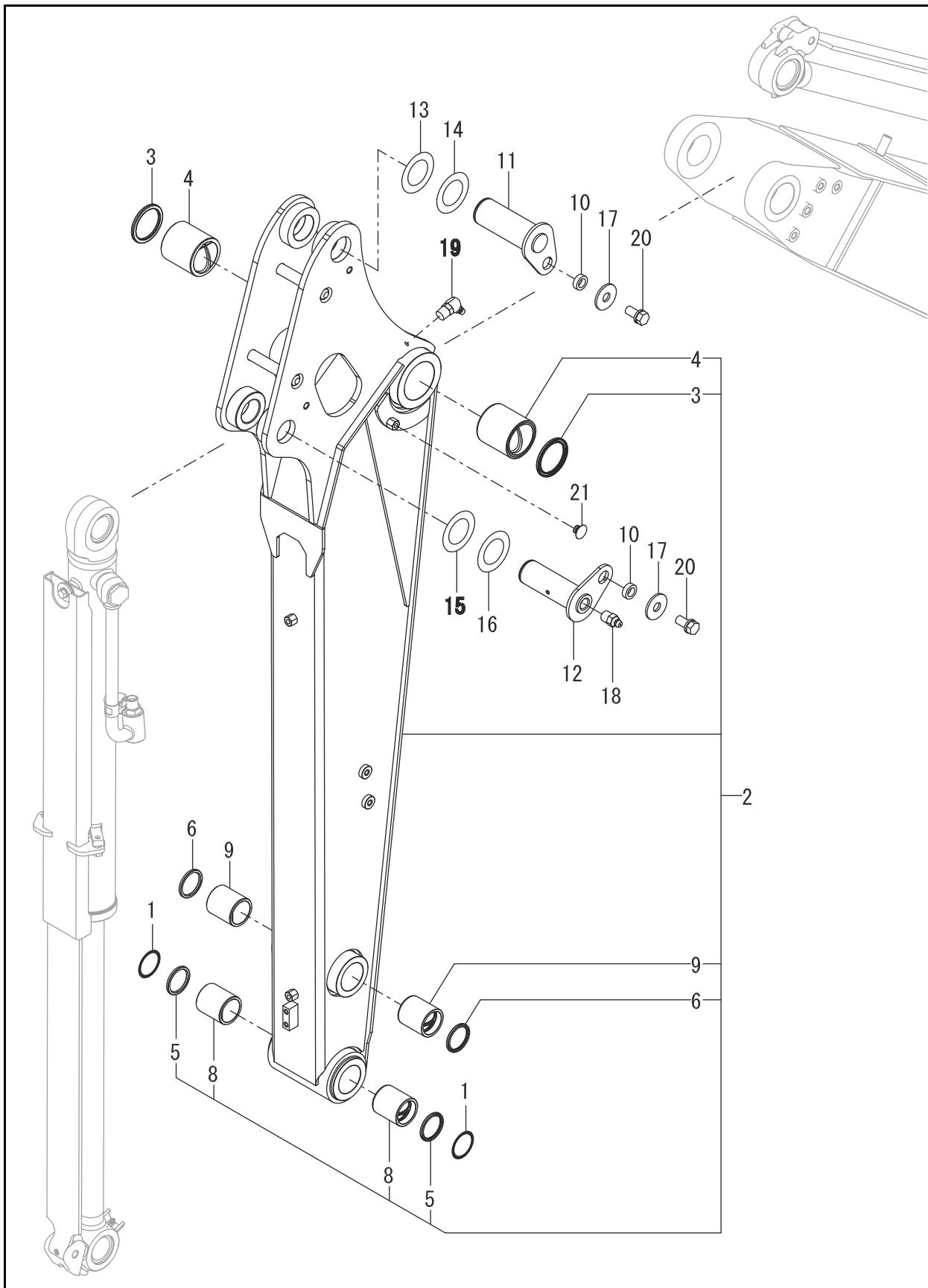
Ref.

No.	Part No.	Description	Qty.
1	50289340	BOOM ASSY (replacement also requires label 4A)	1
2	50280749	SEAL 60 X 75 X 5	2
4	50287142	BUSH	2
4A	50282884	LABEL, BOOM US *	2
5	50280892	SPACER	1
6	50280910	SHIM 60X110X0.8	1
7	50280911	SHIM	1
8	50289341	PIN	1
9	50289343	PIN	1
10	50283900	PIN 60 X 255 CMP	1
11	50280991	WASHER	1
12	50280991	WASHER	1
13	50282752	WASHER	2
14	50280899	SHIM 50X90X0.5	1
15	50280900	SHIM 50X90X1.2	1
16	50287578	SHIM	1
17	50287587	SHIM	1
18	50282388	WASHER 12	1
19	188712	SPRING/WASHER 14	1
20	188712	SPRING/WASHER 14	1
21	50282497	NIPPLE PT1/8,GREASE	1
22	50282498	NIPPLE B,GREASE	1
23	50284101	BOLT M12 X 25	2
24	50284101	BOLT M12 X 25	1
25	50282566	BOLT M14X 25 PLATED	1
26	50282567	BOLT M14X 35 PLATED	1
27	50281050	CLIP	2
28	50284234	CLIP, TREE	4
29	50280920	TREE CLIP	4

NOTE: * Label shown on Page 4.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 166 - ARM



Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 166 - ARM

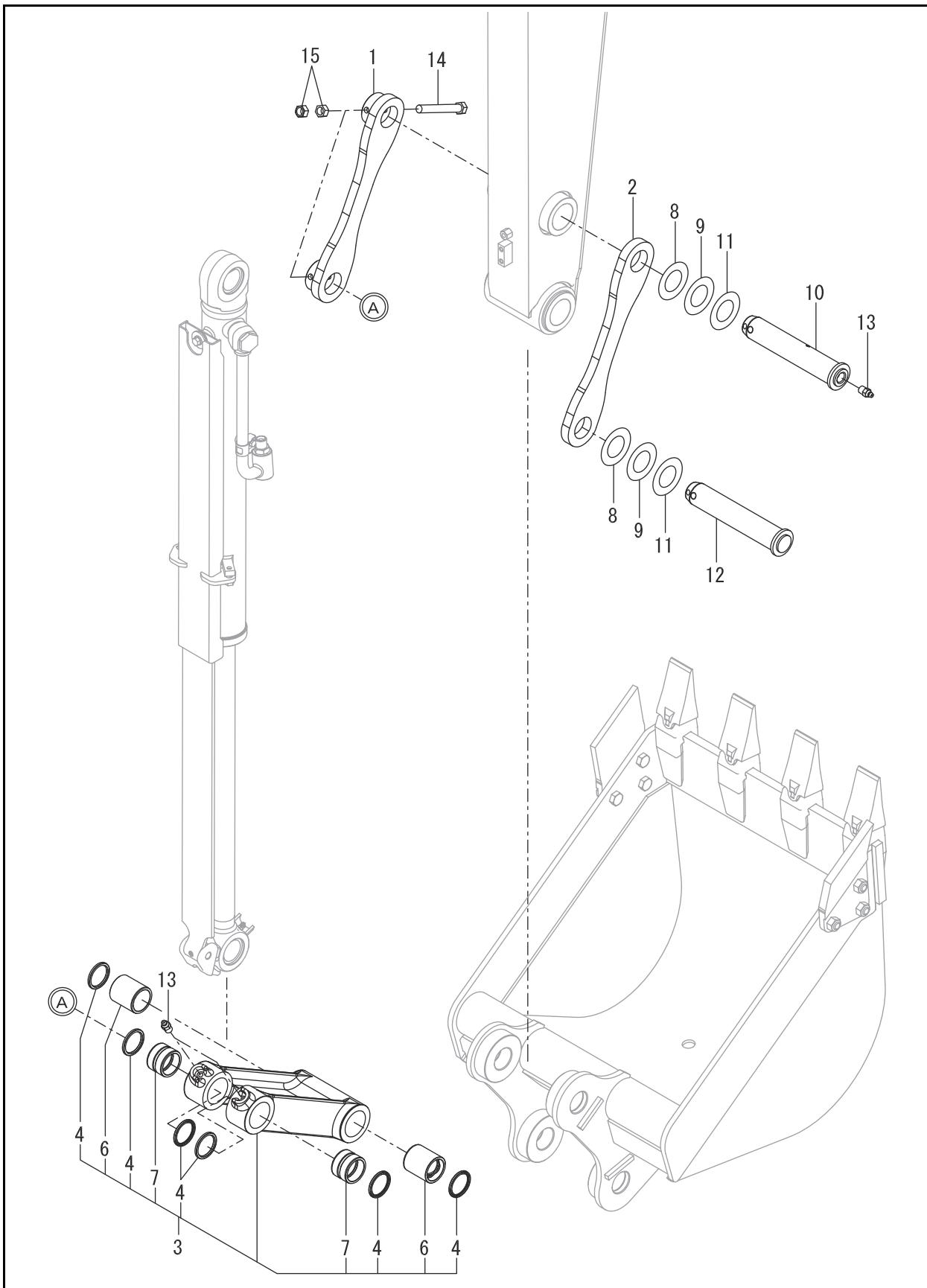
Ref.

No.	Part No.	Description	Qty.
1	50282718	O-RING 81X8	2
2	50287827	DIPPER ARM ASSY, 1450 (replacement also requires labels 9A, 9B)	1
3	50280749	SEAL 60 X 75 X 5	2
4	50282904	BUSHING 60X75	2
5	50282817	SEAL 45X55X4, DUST	2
6	50282817	SEAL 45X55X4, DUST	2
8	50282687	BUSH, PIN	2
9	50282687	BUSH, PIN	2
9A	50281176	LABEL, FINGER US *	1
9B	50281181	LABEL,LOCK PIN US *	1
10	50280892	SPACER	2
11	50287822	PIN 50X135	1
12	50287825	PIN 45X135	1
13	50280899	SHIM 50X90X0.5	1
14	50280900	SHIM 50X90X1.2	1
15	50282809	SHIM 45X1.2	1
16	50282810	SHIM 45X80X1.2	1
17	50282388	WASHER 12	2
18	50282497	NIPPLE PT1/8,GREASE	1
19	50282498	NIPPLE B,GREASE	1
20	50284101	BOLT M12 X 25	2
21	50280920	TREE CLIP	1

NOTE: * Labels shown on Page 12.

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 168 - BUCKET ARM & LINK



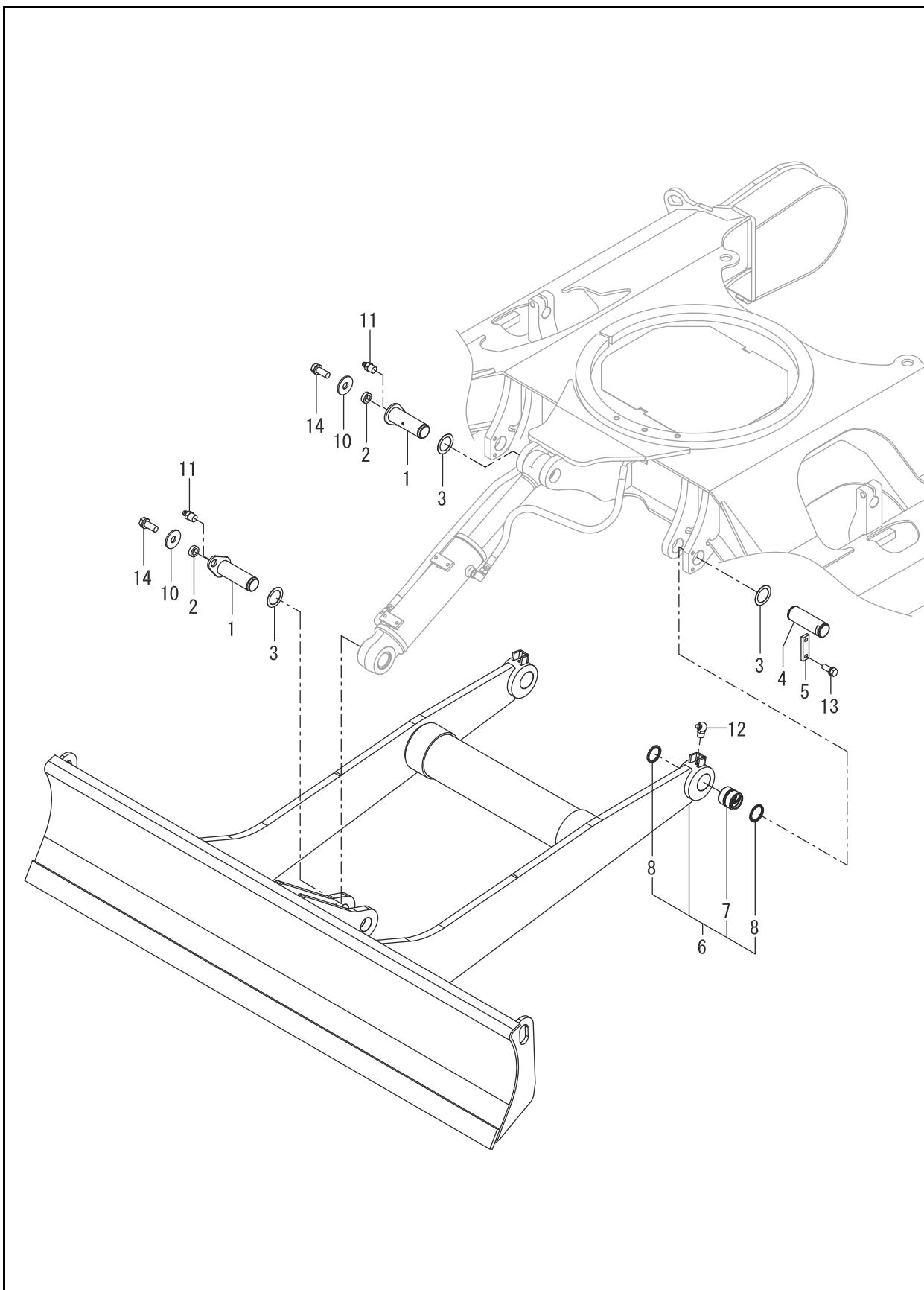
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 168 - BUCKET ARM & LINK

Ref.

No.	Part No.	Description	Qty.
1	50286207	BUCKET ARM ASSY	1
2	50286209	BUCKET ARM	1
3	50286211	BUCKET LINK	1
4	50282817	SEAL 45X55X4, DUST	6
6	50282687	BUSH, PIN	2
7	50282688	BUSH, PIN	2
8	50282809	SHIM 45X1.2	2
9	50282810	SHIM 45X80X1.2	2
10	50283199	PIN 45 X 217 (A)	1
11	50282811	SHIM 45X80X1.6	2
12	50283200	PIN 45 X 217	1
13	50282497	NIPPLE PT1/8, GREASE	3
14	50284123	BOLT M10 X 80 PLATED	2
15	50282597	NUT 10	4

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 170 - BLADE



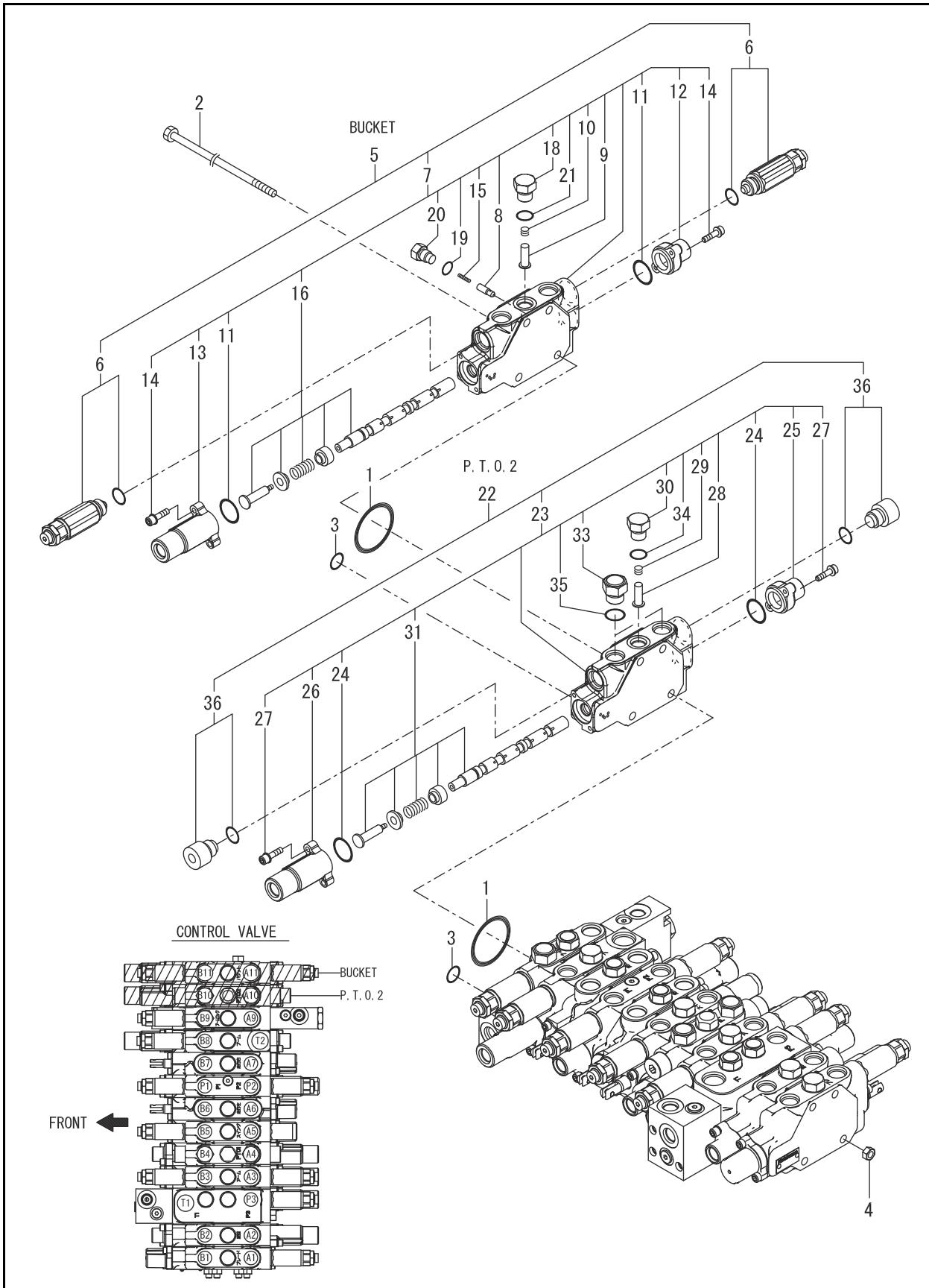
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 170 - BLADE

Ref.

No.	Part No.	Description	Qty.
1	50287814	PIN 45X132	2
2	50280892	SPACER	2
3	50282689	SHIM 45X1	4
4	50282873	PIN 45 X 120	2
5	50282717	PLATE, LOCK	2
6	50287816	DOZER BLADE	1
7	50287818	BUSHING 45X55X50	2
8	50282817	SEAL 45X55X4, DUST	4
10	50282388	WASHER 12	2
11	50282497	NIPPLE PT1/8,GREASE	2
12	50282498	NIPPLE B,GREASE	2
13	50282516	BOLT W/WASHER M10X25	4
14	50282525	BOLT W/WASHER M12X30	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 172 - (127A) CONTROL VALVE (2/8)



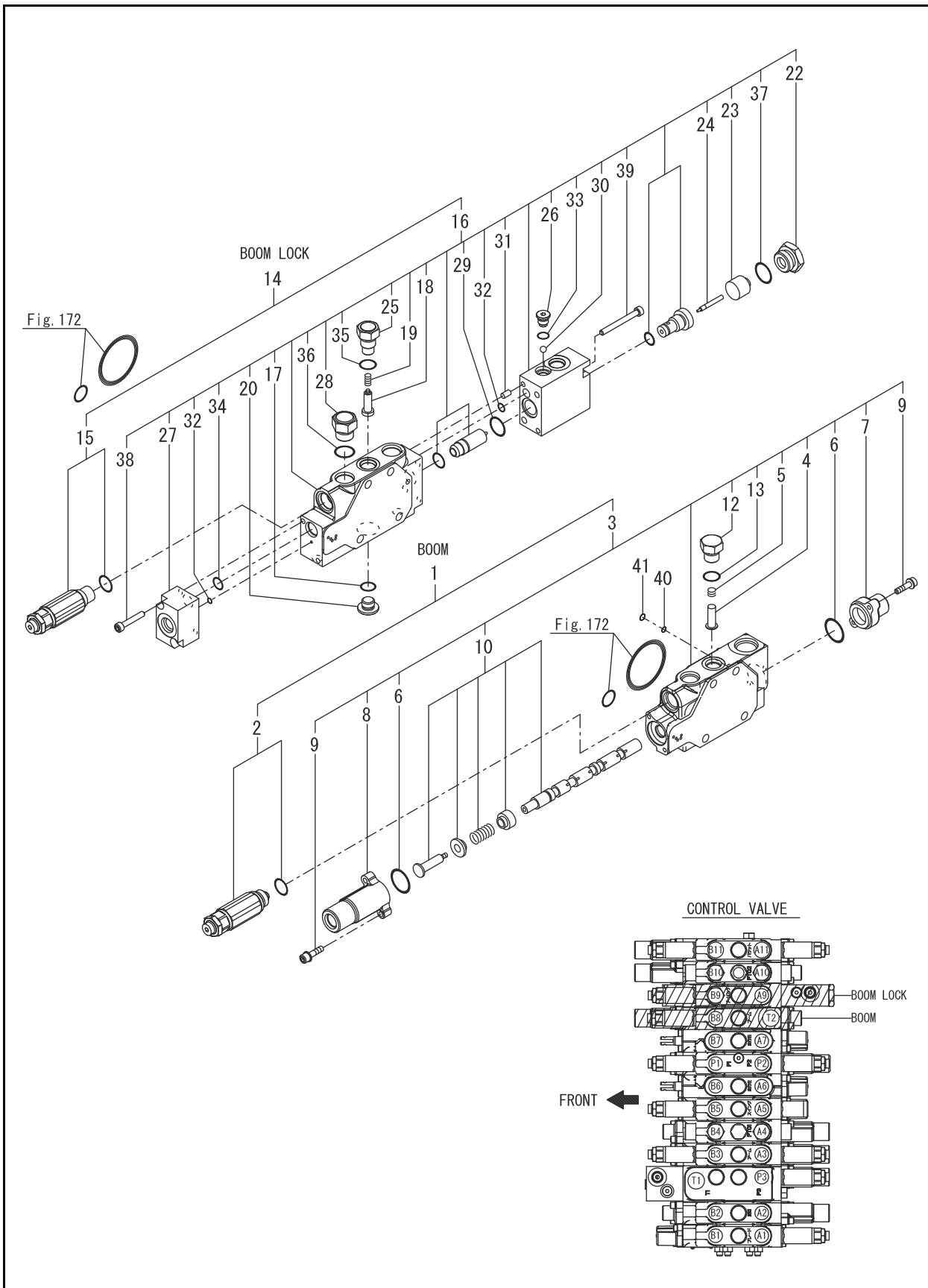
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 172 - (127A) CONTROL VALVE (2/8)

Ref.

No.	Part No.	Description	Qty.
1	50285391	PACKING G 4	12
2	50283729	BOLT L=412	4
3	50286594	O-RING	12
4	50282596	NUT M 8	4
5	50287791	VALVE ASSY/BUCKET	1
6	50287589	VALVE ASSY/OVERLOAD	2
7	50287793	SECTION ASSY/BUCKET	1
8	50283265	CHECK VALVE	1
9	50283052	CHECK VALVE	1
10	50283053	SPRING, CHECK VALVE	1
11	50283055	PACKING S 22	2
12	50283056	COVER B1, PILOT	1
13	50283057	COVER A1, PILOT	1
14	50283058	SWP HEX.BOLT 5X20	4
15	50282819	SPRING,CHECK	1
16	50286528	BUCKET SPOOL ASSY	1
18	50283065	STAY, CHECK VALVE	1
19	50283719	O-RING AS568-904	1
20	50283721	STAY, CHECK VALVE	1
21	50282470	O-RING 1B P-11.0	1
22	50286550	PTO 2 SECTION ASSY	1
23	50286540	PTO 2 SECTION ASSY	1
24	50283055	PACKING S 22	2
25	50283056	COVER B1, PILOT	1
26	50283057	COVER A1, PILOT	1
27	50283058	SWP HEX.BOLT 5X20	4
28	50283254	CHECK VALVE	1
29	50283255	SPRING, CHECK VALVE	1
30	50283256	STAY, CHECK VALVE	1
31	50286527	PTO 2 SPOOL ASSY	1
33	50283750	STAY,CHECK V(SC3A	2
34	50282470	O-RING 1B P-11.0	1
35	50288156	O-RING	2
36	50283730	RELIEF VALVE PLUG AS	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 173 - (127B) CONTROL VALVE (3/8)



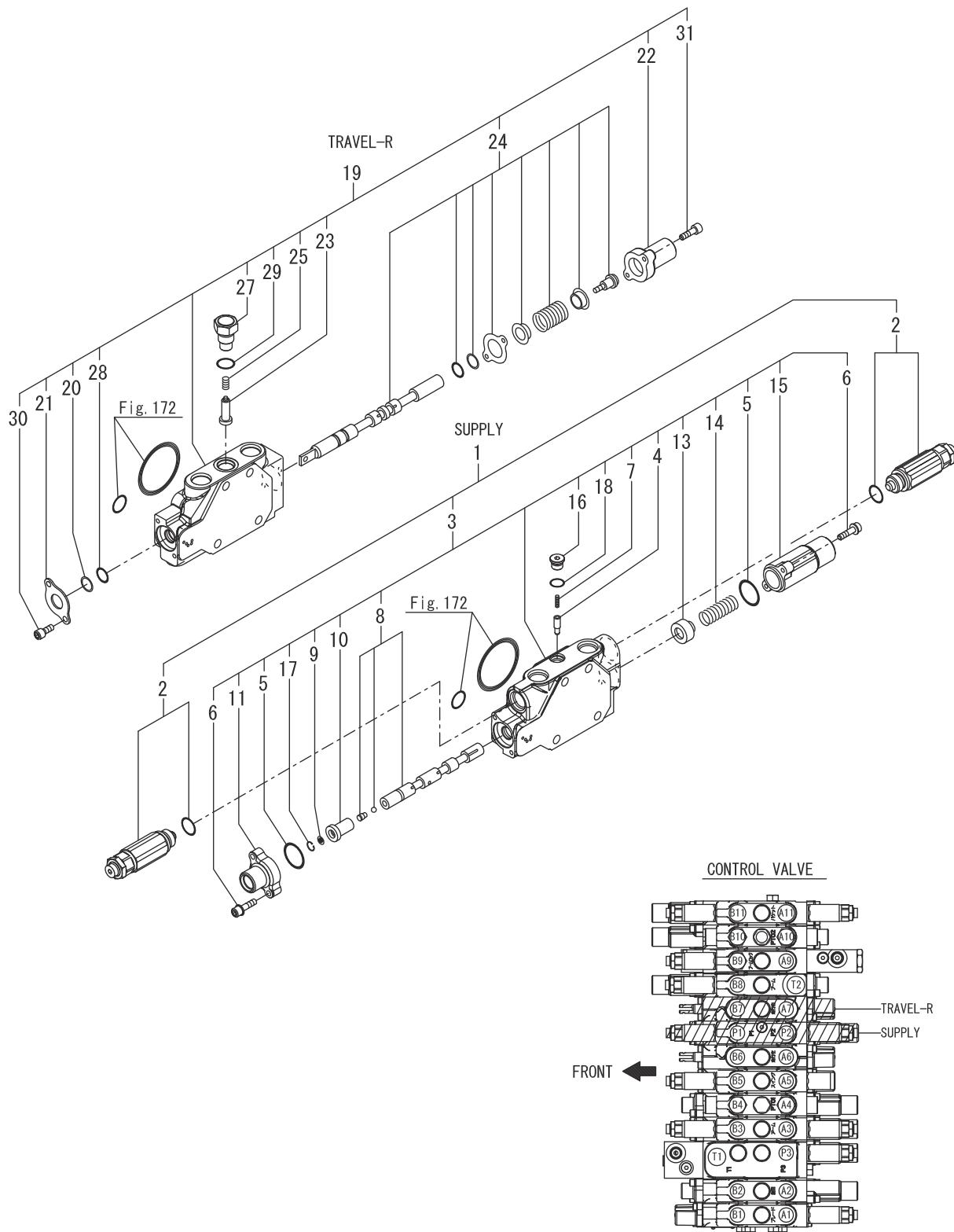
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 173 - (127B) CONTROL VALVE (3/8)

Ref.

No.	Part No.	Description	Qty.
1	50287775	VALVE ASSY/BOOM	1
2	50287589	VALVE ASSY/OVERLOAD	1
3	50287784	SECTION ASSY/BOOM	1
4	50283052	CHECK VALVE	1
5	50283053	SPRING, CHECK VALVE	1
6	50283055	PACKING S 22	2
7	50283056	COVER B1, PILOT	1
8	50283057	COVER A1, PILOT	1
9	50283058	SWP HEX.BOLT 5X20	4
10	50287788	SPOOL ASSY/BOOM	1
12	50283065	STAY, CHECK VALVE	1
13	50282470	O-RING 1B P-11.0	1
14	50287634	VALVE ASSY/LOCK	1
15	50284318	OVERLOAD 300/5	1
16	50287622	SECTION ASSY/LOCK	1
17	50283678	O-RING 1B S16	1
18	50283059	CHECK VALVE	1
19	50283060	SPRING, CHECK VALVE	1
20	50283697	PLUG,M12X1.25	1
22	50283707	BUSHING PF1/2X1/4	1
23	50283708	PISTON B	1
24	50283709	PISTON A1	1
25	50283066	STAY, CHECK VALVE	1
26	50283716	STAY,BALL	1
27	50283717	BODY,DISCHARGE	1
28	50283750	STAY,CHECK V(SC3A	1
29	50283756	O-RING AS 1B17	1
30	50283757	STEEL BALE 7MM	1
31	50284053	PARALLEL PIN, M5X10	2
32	197795	O-RING 1A P-6.0	2
33	50282468	O-RING 1B P-8.0	1
34	50282469	O-RING 1B P-10.0	1
35	50282470	O-RING 1B P-11.0	1
36	50288156	O-RING	1
37	50282474	O-RING 1B P-18.0	1
38	50284130	BOLT M5 X 30	2
39	50284133	BOLT M6 X 65	2
40	50285892	O-RING 1B P- 9.0	1
41	50282469	O-RING 1B P-10.0	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 174 - (127C) CONTROL VALVE (4/8)



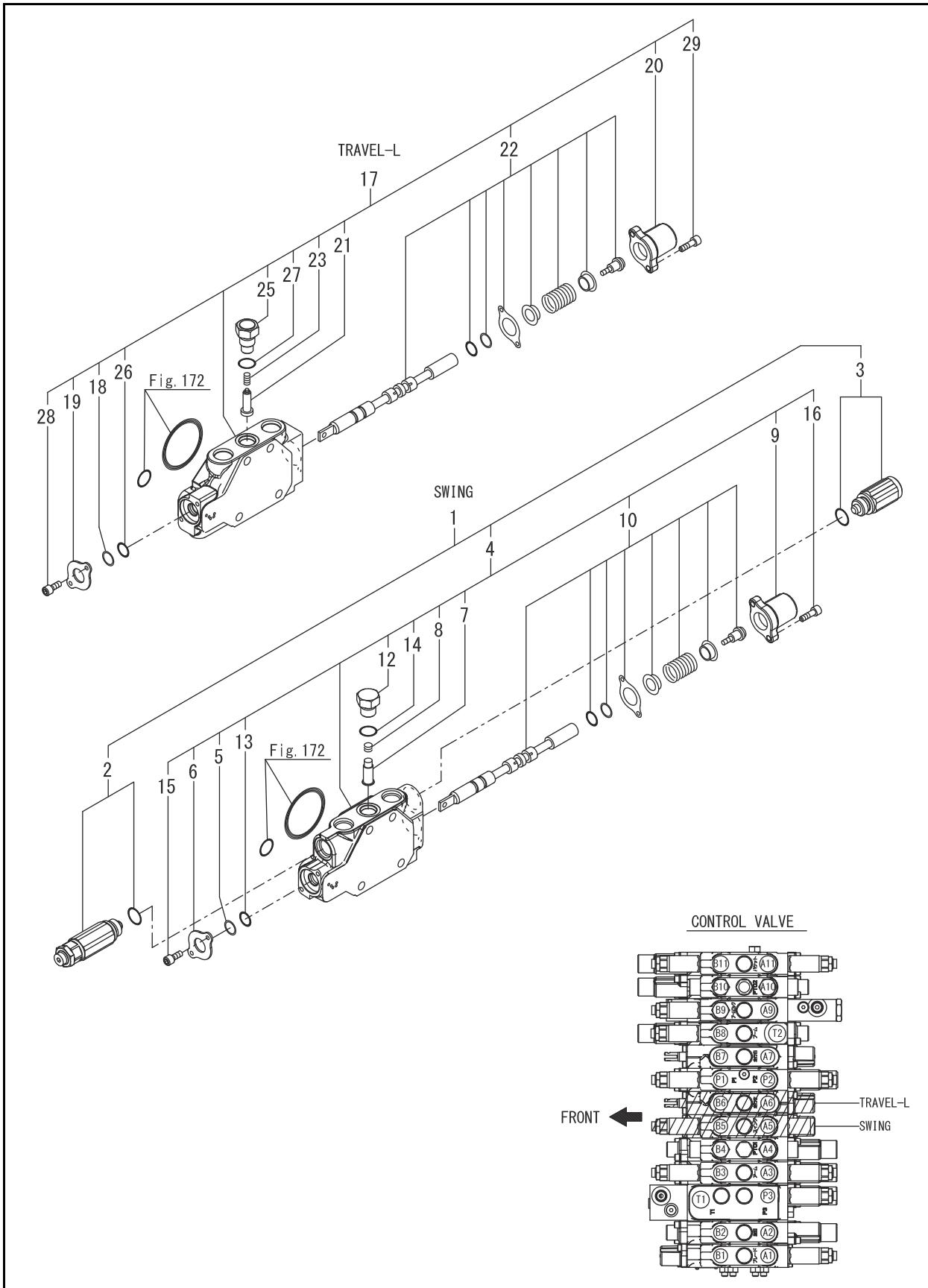
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 174 - (127C) CONTROL VALVE (4/8)

Ref.

No.	Part No.	Description	Qty.
1	50287593	SECTION ASSY/INLET	1
2	50287591	VALVE ASSY/RELIEF	2
3	50286536	INLET SECTION ASSY	1
4	50283265	CHECK VALVE	1
5	50283055	PACKING S 22	2
6	50283058	SWP HEX.BOLT 5X20	4
7	50282819	SPRING,CHECK	1
8	50283687	SPOOL ASSY, INLET	1
9	50283688	FILTER	1
10	50283689	PISTON	1
11	50283690	COVER B5, PILOT	1
13	50283062	SEAT, SPRING	1
14	50283063	SPRING,RETURN	1
15	50283064	COVER A2, PILOT	1
16	50283068	PLUG,PF1/8	1
17	50283722	CIRCLIP,C	1
18	50282468	O-RING 1B P-8.0	1
19	50287773	SECTION ASSY/TRAVEL2	1
20	50283050	DUST WIPER	1
21	50283051	BRACKET, OIL SEAL	1
22	50283054	CAP,SPRING	1
23	50283059	CHECK VALVE	1
24	50287774	SPOOL ASSY/TRAVEL	1
25	50283060	SPRING, CHECK VALVE	1
27	50283066	STAY, CHECK VALVE	1
28	425-34776	O-RING 1A P-12.0	1
29	50282470	O-RING 1B P-11.0	1
30	197813	BOLT M5X10	2
31	50284129	BOLT 5X18	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 175 - (127D) CONTROL VALVE (5/8)



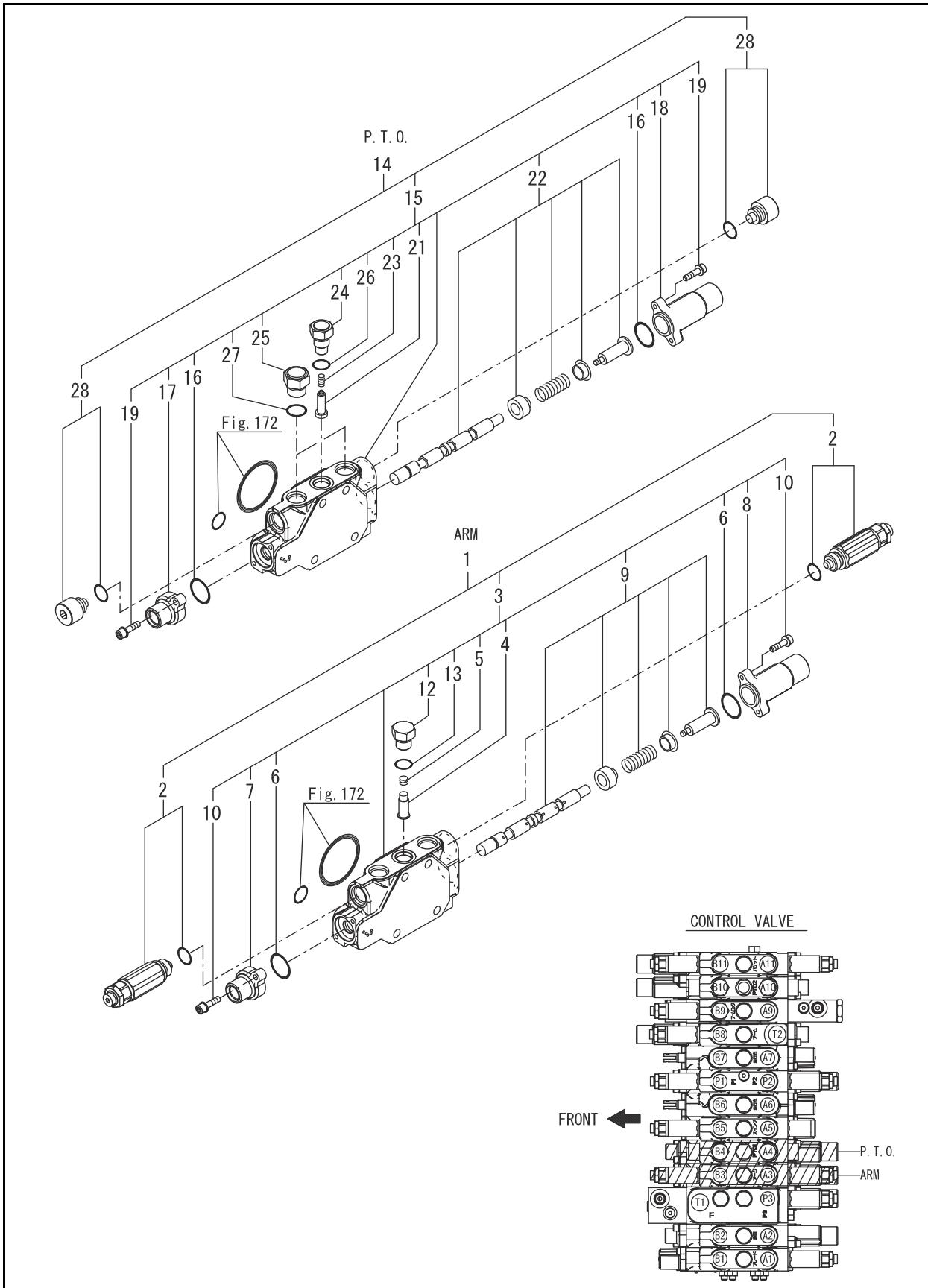
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 175 - (127D) CONTROL VALVE (5/8)

Ref.

No.	Part No.	Description	Qty.
1	50287753	VALVE ASSY/B SWING	1
2	50287589	VALVE ASSY/OVERLOAD	1
3	50284267	ANTI-CAVITATION	1
4	50287761	SECTION ASSY/B SWING	1
5	50283050	DUST WIPER	1
6	50283051	BRACKET, OIL SEAL	1
7	50283052	CHECK VALVE	1
8	50283053	SPRING, CHECK VALVE	1
9	50283054	CAP,SPRING	1
10	50286524	SWING SPOOL ASSY	1
12	50283065	STAY, CHECK VALVE	1
13	425-34776	O-RING 1A P-12.0	1
14	50282470	O-RING 1B P-11.0	1
15	197813	BOLT M5X10	2
16	50284129	BOLT 5X18	2
17	50287764	SECTION ASSY/TRAVEL1	1
18	50283050	DUST WIPER	1
19	50283051	BRACKET, OIL SEAL	1
20	50283054	CAP,SPRING	1
21	50283059	CHECK VALVE	1
22	50287774	SPOOL ASSY/TRAVEL	1
23	50283060	SPRING, CHECK VALVE	1
25	50283066	STAY, CHECK VALVE	1
26	425-34776	O-RING 1A P-12.0	1
27	50282470	O-RING 1B P-11.0	1
28	197813	BOLT M5X10	2
29	50284129	BOLT 5X18	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 176 - (127E) CONTROL VALVE (6/8)



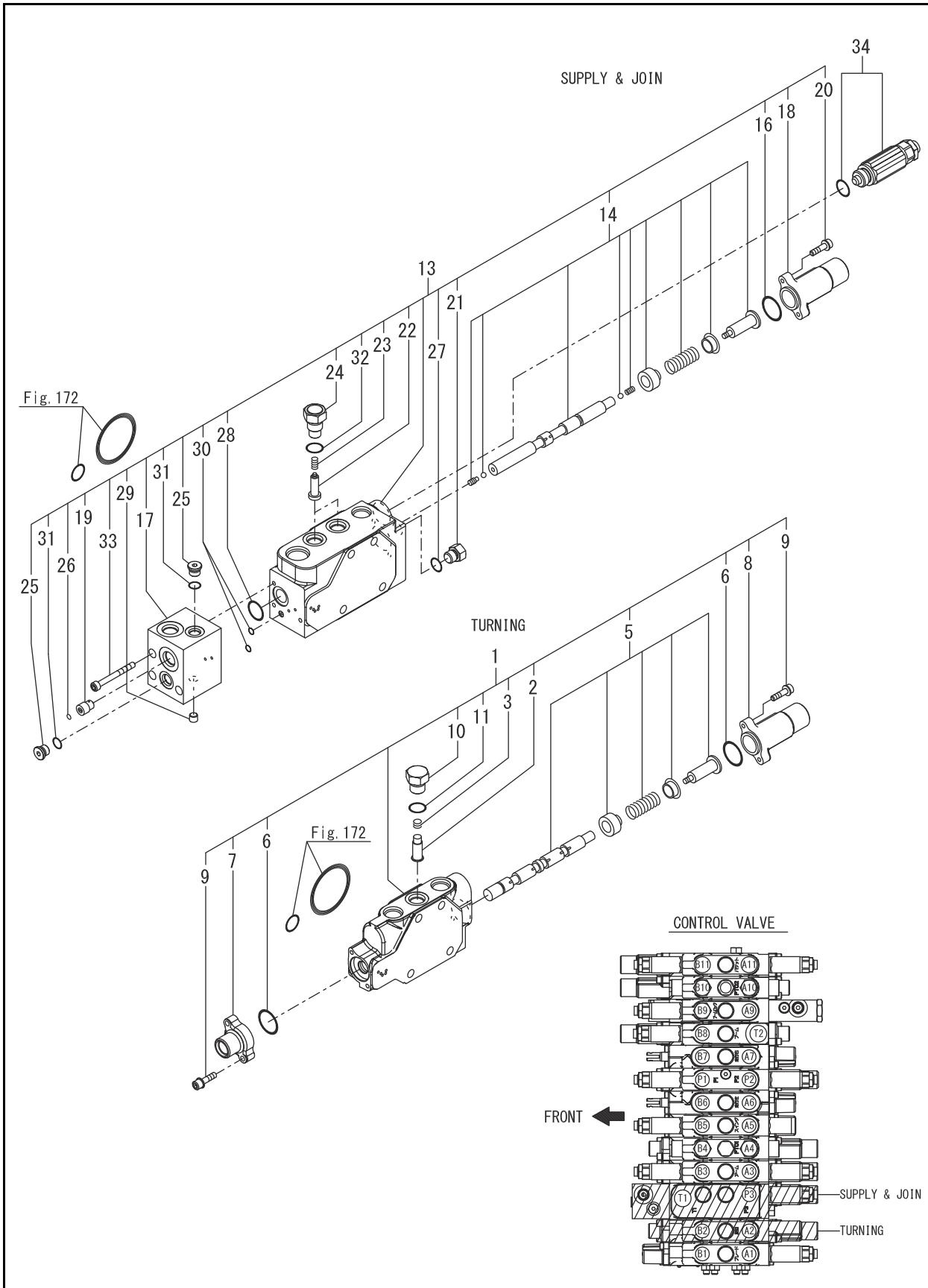
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 176 - (127E) CONTROL VALVE (6/8)

Ref.

No.	Part No.	Description	Qty.
1	50287726	VALVE ASSY/ARM	1
2	50287589	VALVE ASSY/OVERLOAD	2
3	50287735	SECTION ASSY/ARM	1
4	50283052	CHECK VALVE	1
5	50283053	SPRING, CHECK VALVE	1
6	50283055	PACKING S 22	2
7	50283056	COVER B1, PILOT	1
8	50283057	COVER A1, PILOT	1
9	50287740	SPOOL ASSY/ARM	1
10	50283058	SWP HEX.BOLT 5X20	4
12	50283065	STAY, CHECK VALVE	1
13	50282470	O-RING 1B P-11.0	1
14	50287628	VALVE ASSY/PTO	1
15	50287615	SECTION ASSY/PTO	1
16	50283055	PACKING S 22	2
17	50283056	COVER B1, PILOT	1
18	50283057	COVER A1, PILOT	1
19	50283058	SWP HEX.BOLT 5X20	4
21	50283254	CHECK VALVE	1
22	50287619	SPOOL ASSY/PTO	1
23	50283255	SPRING, CHECK VALVE	1
24	50283256	STAY, CHECK VALVE	1
25	50283750	STAY,CHECK V(SC3A	2
26	50282470	O-RING 1B P-11.0	1
27	50288156	O-RING	2
28	50283730	RELIEF VALVE PLUG AS	2

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 177 - (127F) CONTROL VALVE (7/8)



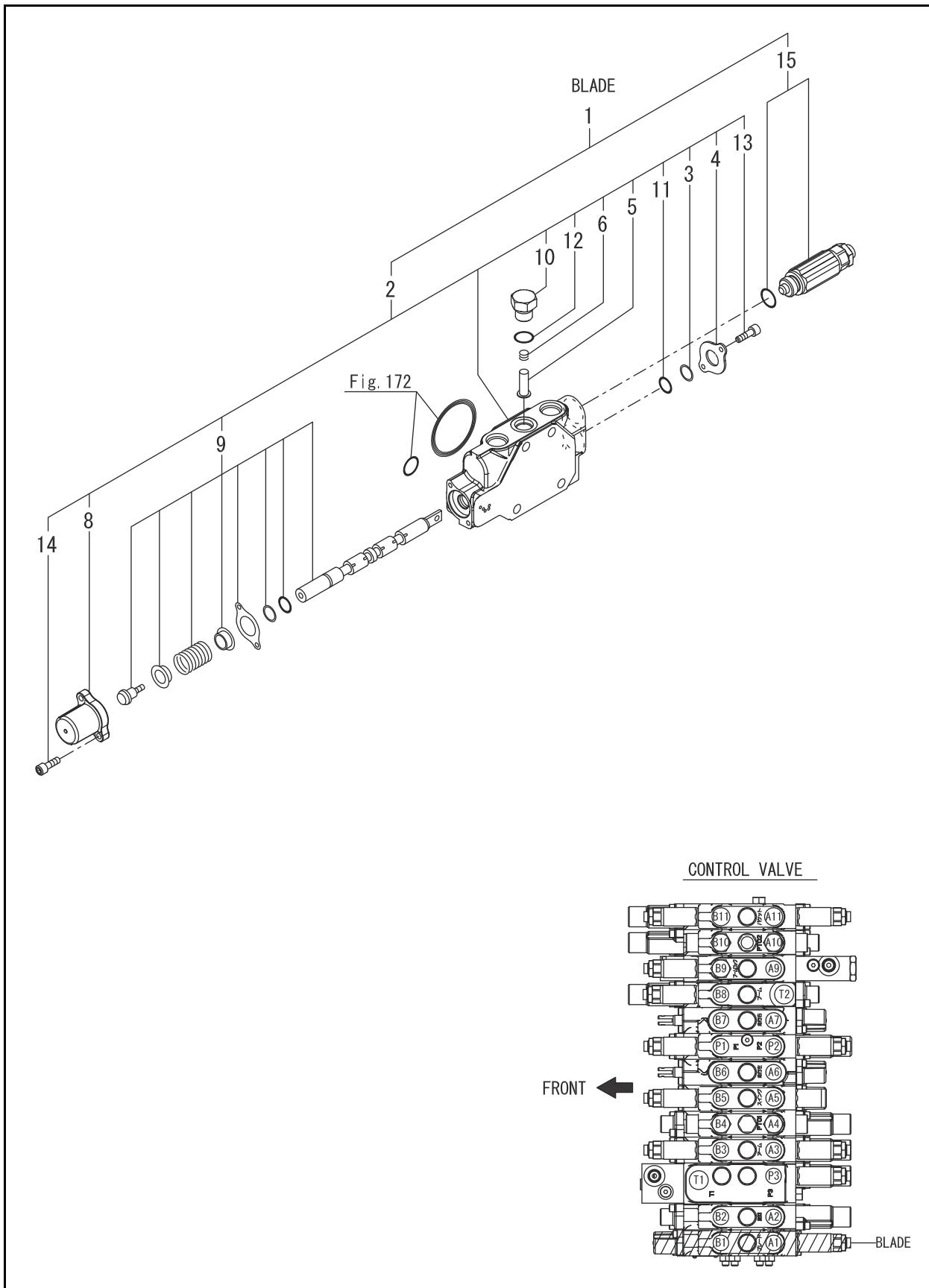
Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 177 - (127F) CONTROL VALVE (7/8)

Ref.

No.	Part No.	Description	Qty.
1	50287705	SECTION ASSY/SWING	1
2	50283052	CHECK VALVE	1
3	50283053	SPRING, CHECK VALVE	1
5	50287719	SPOOL ASSY/SWING	1
6	50283055	PACKING S 22	2
7	50283056	COVER B1, PILOT	1
8	50283057	COVER A1, PILOT	1
9	50283058	SWP HEX.BOLT 5X20	4
10	50283065	STAY, CHECK VALVE	1
11	50282470	O-RING 1B P-11.0	1
13	50287644	SECTION ASSY/CONFLUX	1
14	50287645	SPOOL ASSY/CONFLUX	1
16	50283055	PACKING S 22	1
17	50287611	BLOCK/PILOT	1
18	50283057	COVER A1, PILOT	1
19	50287613	PLUG/THROTTLE	1
20	50283058	SWP HEX.BOLT 5X20	2
21	50283677	PLUG (SAE1/4)	1
22	50283059	CHECK VALVE	2
23	50283060	SPRING, CHECK VALVE	2
24	50283066	STAY, CHECK VALVE	2
25	50283068	PLUG,PF1/8	2
26	50283266	FILTER	1
27	50283719	O-RING AS568-904	1
28	50283756	O-RING AS 1B17	1
29	50283759	PLUG NPT1/16	1
30	50286604	O-RING	2
31	50282468	O-RING 1B P-8.0	2
32	50282470	O-RING 1B P-11.0	2
33	50287806	BOLT 5X50	3
34	50287796	RELIEF ASSY	1

Z45 GEN:2 - COMPACT EXCAVATOR

FIG. 178 - (127G) CONTROL VALVE (8/8)

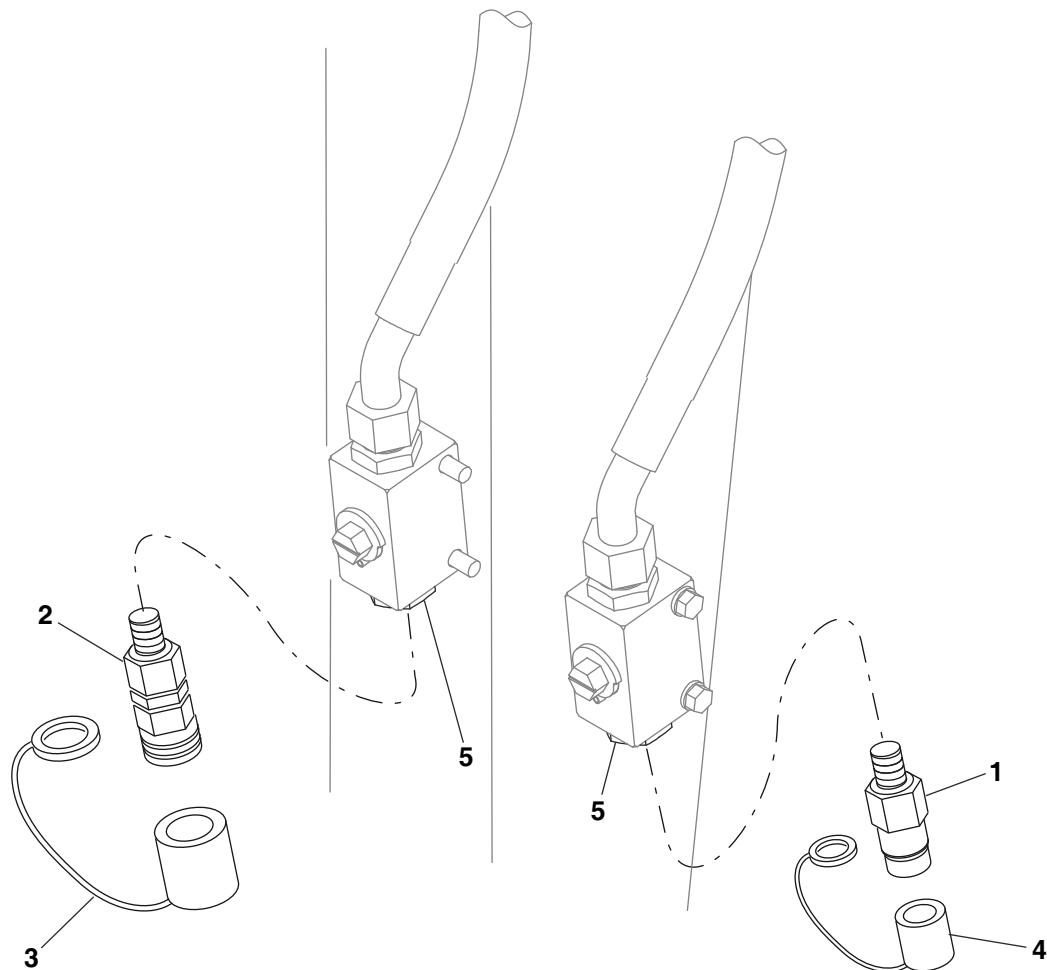


Z45 GEN:2 - COMPACT EXCAVATOR
FIG. 178 - (127G) CONTROL VALVE (8/8)

Ref.

No.	Part No.	Description	Qty.
1	50287658	VALVE ASSY/BLADE	1
2	50287661	SECTION ASSY/BLADE	1
3	50283050	DUST WIPER	1
4	50283051	BRACKET, OIL SEAL	1
5	50283052	CHECK VALVE	1
6	50283053	SPRING, CHECK VALVE	1
8	50283054	CAP,SPRING	1
9	50287701	SPOOL ASSY/BLADE	1
10	50283065	STAY, CHECK VALVE	1
11	425-34776	O-RING 1A P-12.0	1
12	50282470	O-RING 1B P-11.0	1
13	197813	BOLT M5X10	2
14	50284129	BOLT 5X18	2
15	50283732	VALVE/RELIEF	1

**Z45 GEN:2 - COMPACT EXCAVATOR
HYDRAULIC QUICK-CONNECT COUPLERS**



**Z45 GEN:2 - COMPACT EXCAVATOR
HYDRAULIC QUICK-CONNECT COUPLERS**

Ref. No.	Part No.	Description	Qty.
1	See NOTE**	COUPLER/MALE	1
2	See NOTE**	COUPLER/FEMALE	1
3	271084	COVER/DUST FEMALE 08	1
4	271083	COVER/DUST MALE 08	1
5	See NOTE**	ADAPTER	2

NOTE: See Page 278 for related components.

** Call Service for availability.

**Z45 GEN:2 - COMPACT EXCAVATOR
NOTES**

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50289150	183	3	50289192	225	30	50289226	233	8
50289151	185	1	50289192	227	10	50289227	231	5
50289153	185	4	50289192	229	10	50289228	229	8
50289154	185	5	50289193	225	31	50289229	229	9
50289155	185	6	50289193	227	11	50289230	231	1
50289156	185	7	50289193	229	11	50289231	231	10
50289157	255	34	50289194	231	14	50289232	231	12
50289158	187	1	50289195	225	9	50289233	231	13
50289160	187	4	50289196	225	10	50289234	231	16
50289162	187	17	50289197	233	6	50289235	231	3
50289163	181	16	50289198	227	15	50289236	231	4
50289164	191	4	50289199	227	19	50289237	233	12
50289165	191	6	50289200	227	20	50289237	233	14
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50289168	219	1	50289203	227	23	50289240	233	9
50289169	225	1	50289204	227	24	50289241	233	4
50289170	225	2	50289205	227	26	50289242	233	5
50289171	227	1	50289206	227	27	50289243	221	6
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50289400	103	14	50289434	225	27	425-34776	315	26
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TORQUE SPECIFICATIONS

Note: Use these torque values when tightening hardware (excluding: locknuts and self-tapping, thread forming and sheet metal screws) unless specified otherwise.

Hydraulic fittings with various seals (light application). All torque values are in lb.-ft. (Nm) unless marked otherwise.

Thread	Straight pipe fitting with thread and screwed plug (GE)			Non-return valve with elastic seal	Identification aid outside Ø
	Sealing washer	Elastic seal	O-ring		
M10X1.0	7 (9)	13 (18)	11 (15)	13 (18)	0.4 in. (10 mm)
M12X1.5	15 (20)	18 (25)	18 (25)	18 (25)	0.5 in. (12 mm)
M14X1.5	26 (35)	33 (45)	26 (35)	26 (35)	0.6 in. (14 mm)
M16X1.5	33 (45)	41 (55)	30 (40)	37 (50)	0.6 in. (16 mm)
M18X1.5	41 (55)	52 (70)	33 (45)	52 (70)	0.7 in. (18 mm)
M22X1.5	48 (65)	92 (125)	44 (60)	92 (125)	0.9 in. (22 mm)
M27X2.0	66 (90)	133 (180)	74 (100)	107 (145)	1.0 in. (27 mm)
M33X2.0	111 (150)	229 (310)	118 (160)	155 (210)	1.3 in. (33 mm)
M42X2.0	177 (240)	332 (450)	155 (210)	266 (360)	1.7 in. (42 mm)
M48X2.0	214 (290)	398 (540)	192 (260)	398 (540)	1.9 in. (48 mm)
G1/8A	7 (9)	13 (18)	11 (15)	13 (18)	0.4 in. (9.73 mm)
G1/4A	26 (35)	26 (35)	22 (30)	26 (35)	0.5 in. (13.16 mm)
G3/8A	33 (45)	52 (70)	33 (45)	37 (50)	0.7 in. (16.66 mm)
G1/2A	48 (65)	66 (90)	41 (55)	48 (65)	0.8 in. (20.96 mm)
G3/4A	66 (90)	133 (180)	74 (100)	103 (140)	1.0 in. (26.44 mm)
G1A	111 (150)	229 (310)	118 (160)	140 (190)	1.3 in. (33.25 mm)
G1 1/4A	177 (240)	332 (450)	155 (210)	266 (360)	1.7 in. (41.91 mm)
G1 1/2A	214 (290)	398 (540)	192 (260)	398 (540)	1.9 in. (47.80 mm)

Hydraulic fittings with various seals (heavy application). All torque values are in lb.-ft. (Nm) unless marked otherwise.

Thread	Straight pipe fitting with thread and screwed plug (GE)			Non-return valve with elastic seal	Identification aid outside Ø
	Sealing washer	Elastic seal	O-ring		
M12X1.5	15 (20)	26 (35)	26 (35)	26 (35)	0.5 in. (12 mm)
M14X1.5	26 (35)	41 (55)	33 (45)	33 (45)	0.6 in. (14 mm)
M16X1.5	33 (45)	52 (70)	41 (55)	41 (55)	0.6 in. (16 mm)
M18X1.5	41 (55)	66 (90)	52 (70)	52 (70)	0.7 in. (18 mm)
M20X1.5	41 (55)	92 (125)	59 (80)	74 (100)	0.8 in. (20 mm)
M22X1.5	48 (65)	100 (135)	74 (100)	92 (125)	0.9 in. (22 mm)
M27X2.0	66 (90)	133 (180)	125 (170)	100 (135)	1.0 in. (27 mm)
M33X2.0	111 (150)	229 (310)	229 (310)	155 (210)	1.3 in. (33 mm)
M42X2.0	177 (240)	332 (450)	243 (330)	266 (360)	1.7 in. (42 mm)
M48X2.0	214 (290)	398 (540)	310 (420)	398 (540)	1.9 in. (48 mm)
G1/8A	26 (35)	41 (55)	33 (45)	33 (45)	0.5 in. (13.16 mm)
G1/4A	33 (45)	59 (80)	44 (60)	44 (60)	0.7 in. (16.66 mm)
G3/8A	48 (65)	85 (115)	55 (75)	74 (100)	0.8 in. (20.96 mm)
G1/2A	66 (90)	133 (180)	125 (170)	107 (145)	1.0 in. (26.44 mm)
G3/4A	111 (150)	229 (310)	229 (310)	192 (260)	1.3 in. (33.25 mm)
G1A	177 (240)	332 (450)	243 (330)	266 (360)	1.7 in. (41.91 mm)
G1 1/4A	214 (290)	398 (540)	310 (420)	398 (540)	1.9 in. (47.80 mm)

English coarse and fine pitch threads. All torque values are in lb.-ft. (Nm) unless marked otherwise.

Values marked with an asterisk (*) are in lb-in., values marked () are in Kg-Cm**

Thread - Pitch	Grade 2		Grade 5		Grade 8	
	Dry	Lubed	Dry	Lubed	Dry	Lubed
8-32	19* (21**)	14* (16**)	30* (34**)	22* (25**)	41* (47**)	31* (35**)
8-36	20* (23**)	15* (17**)	31* (35**)	23* (26**)	43* (49**)	32* (36**)
10-24	27* (31**)	21* (24**)	43* (49**)	32* (36**)	60* (69**)	45* (51**)
10-32	31* (35**)	23* (26**)	49* (56**)	36* (41**)	68* (78**)	51* (58**)
1/4-20	66* (76**)	50* (57**)	9 (12)	75* (86**)	12 (16)	9 (12)
1/4-28	76* (87**)	56* (64**)	10 (14)	86* (99**)	14 (19)	10 (14)
5/16-18	11 (1.5)	9 (12)	17 (23)	13 (18)	25 (34)	18 (24)
5/16-24	12 (16)	9 (12)	19 (26)	14 (19)	25 (34)	20 (27)
3/8-16	20 (27)	15 (20)	30 (41)	23 (31)	45 (61)	35 (47)
3/8-24	23 (31)	17 (23)	35 (47)	25 (34)	50 (68)	35 (47)
7/16-14	32 (43)	24 (33)	50 (68)	35 (47)	70 (95)	55 (75)
7/16-20	36 (49)	27 (37)	55 (75)	40 (54)	80 (108)	60 (81)
1/2-13	35 (47)	35 (47)	75 (102)	55 (75)	110 (149)	80 (108)
1/2-20	40 (54)	40 (54)	90 (122)	65 (88)	120 (163)	90 (122)
9/16-12	55 (75)	55 (75)	110 (149)	80 (108)	150 (203)	110 (149)
9/16-18	60 (81)	60 (81)	120 (163)	90 (122)	170 (230)	130 (176)
5/8-11	75 (102)	75 (102)	150 (203)	110 (149)	220 (298)	170 (230)
5/8-18	85 (115)	85 (115)	180 (244)	130 (176)	240 (325)	180 (244)
3/4-10	130 (176)	130 (176)	260 (353)	200 (271)	380 (515)	280 (380)
3/4-16	150 (203)	150 (203)	300 (407)	220 (298)	420 (569)	320 (434)
7/8-9	125 (169)	125 (169)	430 (583)	320 (434)	600 (813)	460 (624)
7/8-14	140 (190)	140 (190)	470 (637)	360 (488)	660 (895)	500 (678)
1-8	190 (258)	190 (258)	640 (868)	480 (651)	900 (1220)	680 (922)
1-14	210 (285)	210 (285)	710 (963)	530 (719)	1000 (1356)	740 (1003)

With coarse-pitch thread. All torque values are in lb.-ft. (Nm) unless marked otherwise.					
Thread	Threads according to DIN 912, DIN 931, DIN 933, etc.			Threads according to DIN 7984	
	8.8	10.9	12.9	8.8	10.9
M5	4.1 (5.5)	6 (8)	7 (10)	4 (5)	5 (7)
M6	7 (10)	10 (14)	13 (17)	6.3 (8.5)	9 (12)
M8	18 (25)	26 (35)	31 (42)	15 (20)	22 (30)
M10	33 (45)	48 (65)	59 (80)	30 (40)	44 (59)
M12	64 (87)	81 (110)	108 (147)	51 (69)	74 (100)
M14	100 (135)	133 (180)	170 (230)	81 (110)	118 (160)
M16	155 (210)	203 (275)	258 (350)	125 (170)	184 (250)
M18	207 (280)	302 (410)	354 (480)	181 (245)	254 (345)
M20	302 (410)	420 (570)	509 (690)	251 (340)	361 (490)
M22	406 (550)	575 (780)	686 (930)	339 (460)	487 (660)
M24	524 (710)	738 (1000)	878 (1190)	435 (590)	620 (840)
M27	767 (1040)	1092 (1480)	1305 (1770)	642 (870)	922 (1250)
M30	1047 (1420)	1482 (2010)	1770 (2400)	885 (1200)	1254 (1700)

With fine-pitch thread. All torque values are in lb.-ft. (Nm) unless marked otherwise.					
Thread	Threads according to DIN 912, DIN 931, DIN 933, etc.			Threads according to DIN 7984	
	8.8	10.9	12.9	8.8	10.9
M8X1.0	18 (25)	27 (37)	32 (43)	16 (22)	24 (32)
M10X1.0	37 (50)	55 (75)	65 (88)	32 (43)	48 (65)
M10X1.25	36 (49)	52 (71)	61 (83)	31 (42)	46 (62)
M12X1.25	64 (87)	96 (130)	111 (150)	55 (75)	81 (110)
M12X1.5	61 (83)	92 (125)	107 (145)	53 (72)	77 (105)
M14X1.5	100 (135)	148 (200)	173 (235)	89 (120)	129 (175)
M16X1.5	155 (210)	229 (310)	266 (360)	133 (180)	195 (265)
M18X1.5	232 (315)	332 (450)	391 (530)	199 (270)	284 (385)
M20X1.5	325 (440)	465 (630)	538 (730)	277 (375)	391 (530)
M22X1.5	435 (590)	620 (840)	723 (980)	369 (500)	524 (710)
M24X2.0	546 (740)	789 (1070)	922 (1250)	465 (630)	664 (900)
M27X2.0	811 (1100)	1143 (1550)	1328 (1800)	679 (920)	959 (1300)
M30X2.0	1106 (1500)	1586 (2150)	1844 (2500)	959 (1300)	1364 (1850)



Manitou Americas, Inc. P.O. Box 179, West Bend, WI 53095-0179 U.S.A.
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