

PARTS MANUAL

CHALLENGER

**H40.00XM-H48.00XM-16CH,
H50.00XM-H52.00XM-16CH
(E117)**

CUSTOMER EDITION

HYSTER

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4	ELECTRICAL SYSTEM
5	TRANSMISSION
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7	STEERING SYSTEM
8	BRAKE SYSTEM
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10	MAST WITH EMPTY CONTAINER HANDLER
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This Parts Manual is divided into 14 major sections which are listed above. Quick reference to these sections can be made by placing the right thumb on the tab of the desired section, bending the book back and thumbing the pages to the corresponding tab.

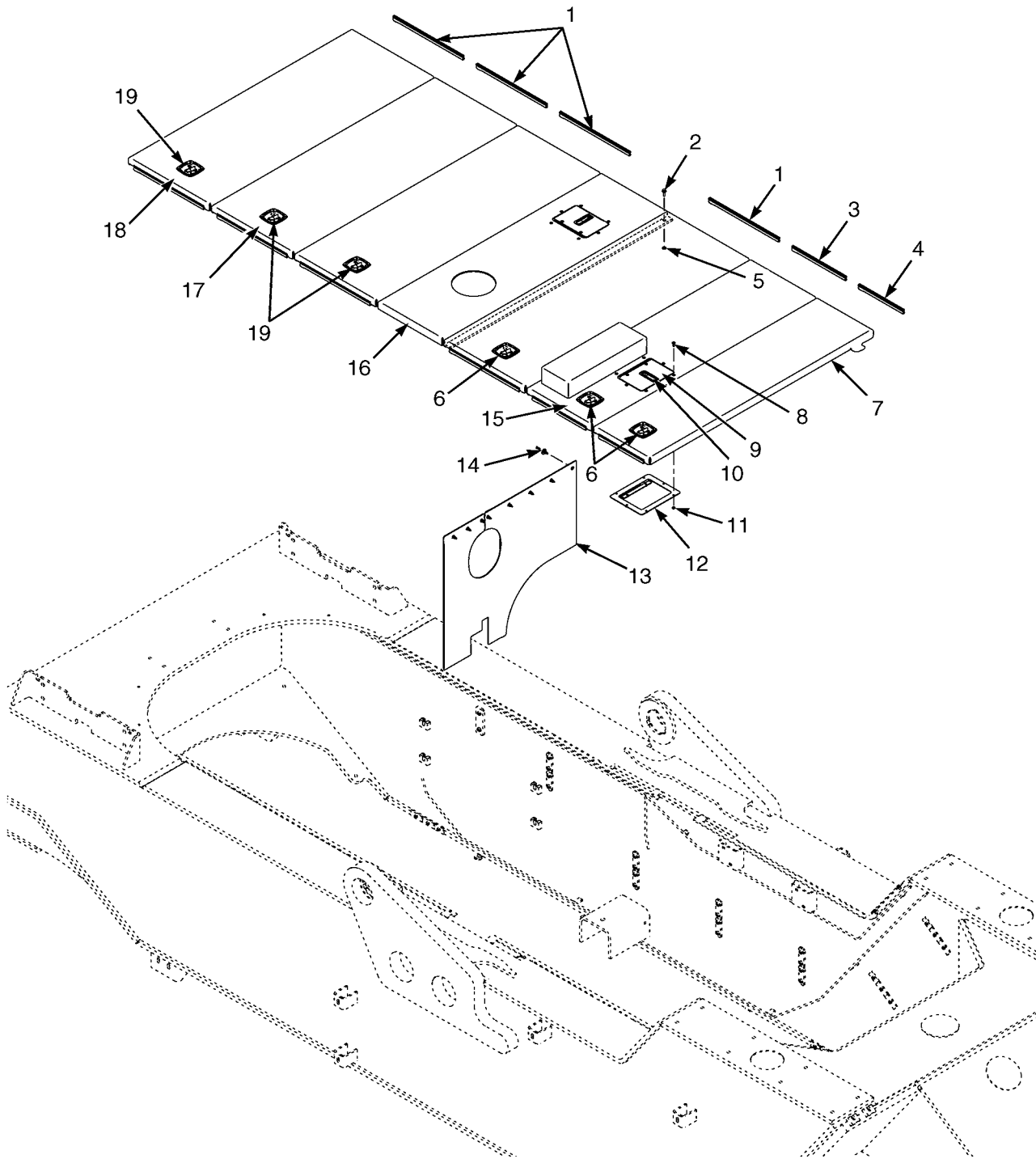
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FRAME

SECTION 1
FRAME

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COVERS (Figure 1-1)

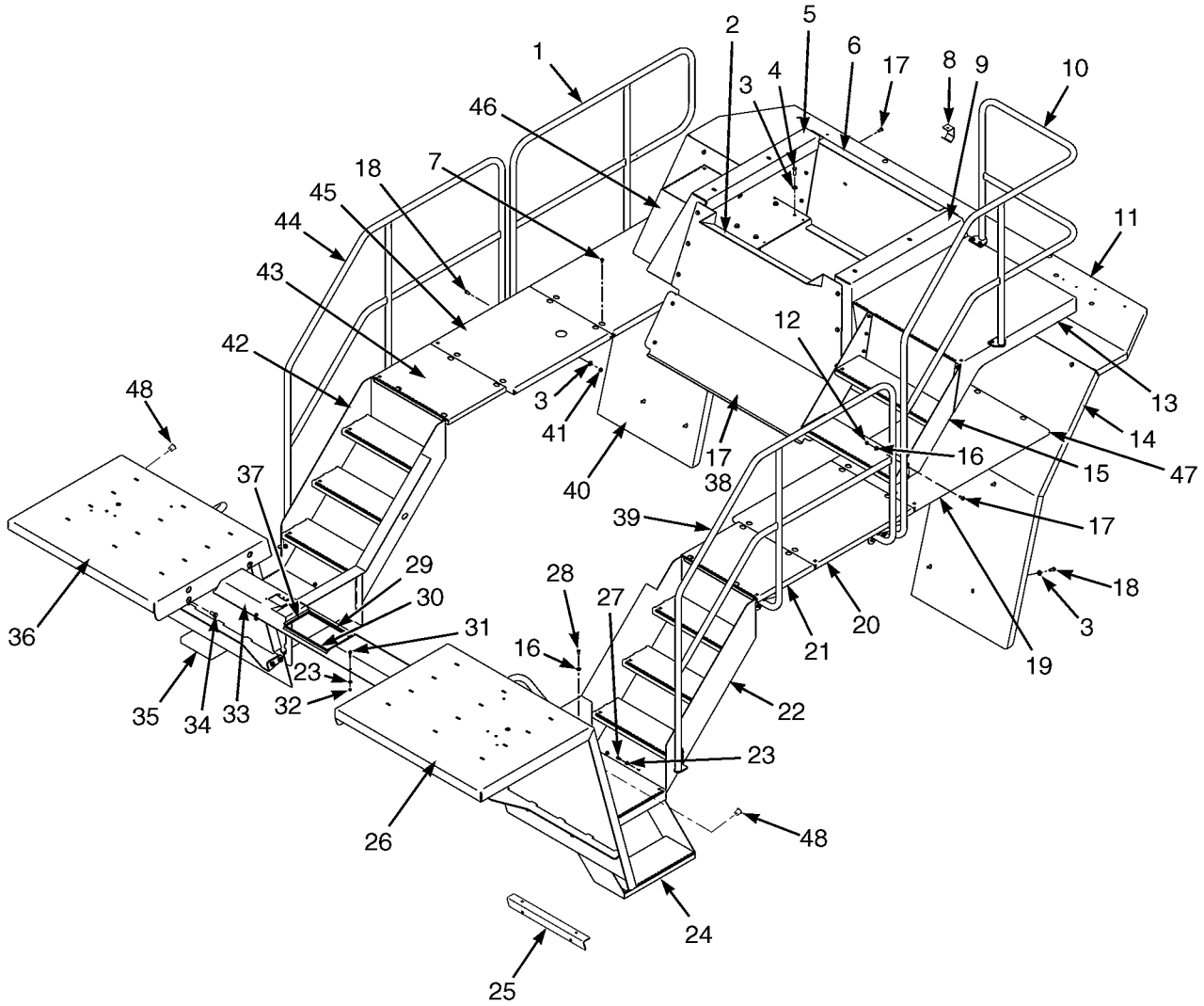


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COVERS

ITEM	PART NO.	DESCRIPTION	QTY
1	1553193	Trim Seal.....	8
2	132861	Capscrew.....	4
3	1553194	Trim Seal.....	2
4	1553195	Trim Seal.....	2
5	320158	Washer	4
6	1553504	Latch (Locking)	3
7	1552308	Cover (Rear)	1
8	296216	Capscrew.....	16
9	1539435	Plate	2
10	1530513	Latch.....	2
11	302399	Nut	16
12	1539438	Bracket.....	2
13	1560453	Screen (Turbo Protection).....	1
14	1484308	Rivet.....	8
15	1552305	Cover (Engine).....	1
16	1574132	Cover (Pre-Cleaner)	1
17	1552303	Cover (Intermediate).....	3
18	1552500	Cover (Front).....	1
19	1553505	Latch (Non-Locking)	3
	1608885	Dust Cover (Under Engine) (Not Illusrated).....	3
	320158	Washer (Not Illusrated).....	12
	176640	Capscrew (Not Illusrated)	12

FLOORPLATES, STEPS, AND RAILS (Figure 1-2)



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FLOORPLATES, STEPS, AND RAILS

ITEM	PART NO.	DESCRIPTION	QTY
1	1518664	Railing (RH) (Rear)	1
2	1548749	Plate (Front)	1
3	320162	Washer	72
4	292531	Capscrew	16
5	1579869	Support (RH) (Cab)	1
6	1518652	Plate (Rear)	1
7	136681	Capscrew	24
8	1545536	Bracket (Rear Cover)	2
9	1537156	Support (LH) (Cab)	1
10	1518634	Railing (LH) (Rear)	1
11	1545533	Cover (Counterweight)	1
12	302401	Locknut	22
13	1518619	Platform	1
14	1518660	Fender (LH) (Rear)	1
14	a 1566268	Fender (LH) (Rear)	1
15	1518614	Step (LH) (Upper Platform)	1
16	320160	Washer	56
17	136985	Capscrew	34
18	246001	Capscrew	34
19	1536247	Cover (LH Rear)	2
20	1536246	Cover (LH Intermediate)	1
21	1553925	Plate (LH)	1
22	1543047	Step (LH)	1
23	320158	Washer	58
24	1546609	Platform (LH)	1
25	1546615	Bracket (Front)	2
26	1558232	Fender (LH) (Front)	1
27	176640	Capscrew	20
28	296172	Capscrew	4
29	1532378	Trim	1
30	1532236	Trim	1
31	1528482	Capscrew	4
32	302400	Locknut	10
33	1532235	Cover (Manifold)	1
34	292562	Capscrew	8
35	1546608	Platform (RH)	1
36	1558231	Fender (RH) (Front)	1
37	1532379	Trim	2
38	1552309	Plate	1
39	1525375	Railing (LH) (Front)	1
40	1518659	Fender (RH) (Rear)	1
40	a 1566269	Fender (RH) (Rear)	1
41	302402	Locknut	22
42	1543048	Step (RH)	1
43	1525369	Plate (RH)	1
44	1518663	Railing (RH) (Front)	1
45	1547417	Cover (RH Intermediate)	1
46	1518607	Step (RH) (Upper Platform)	1

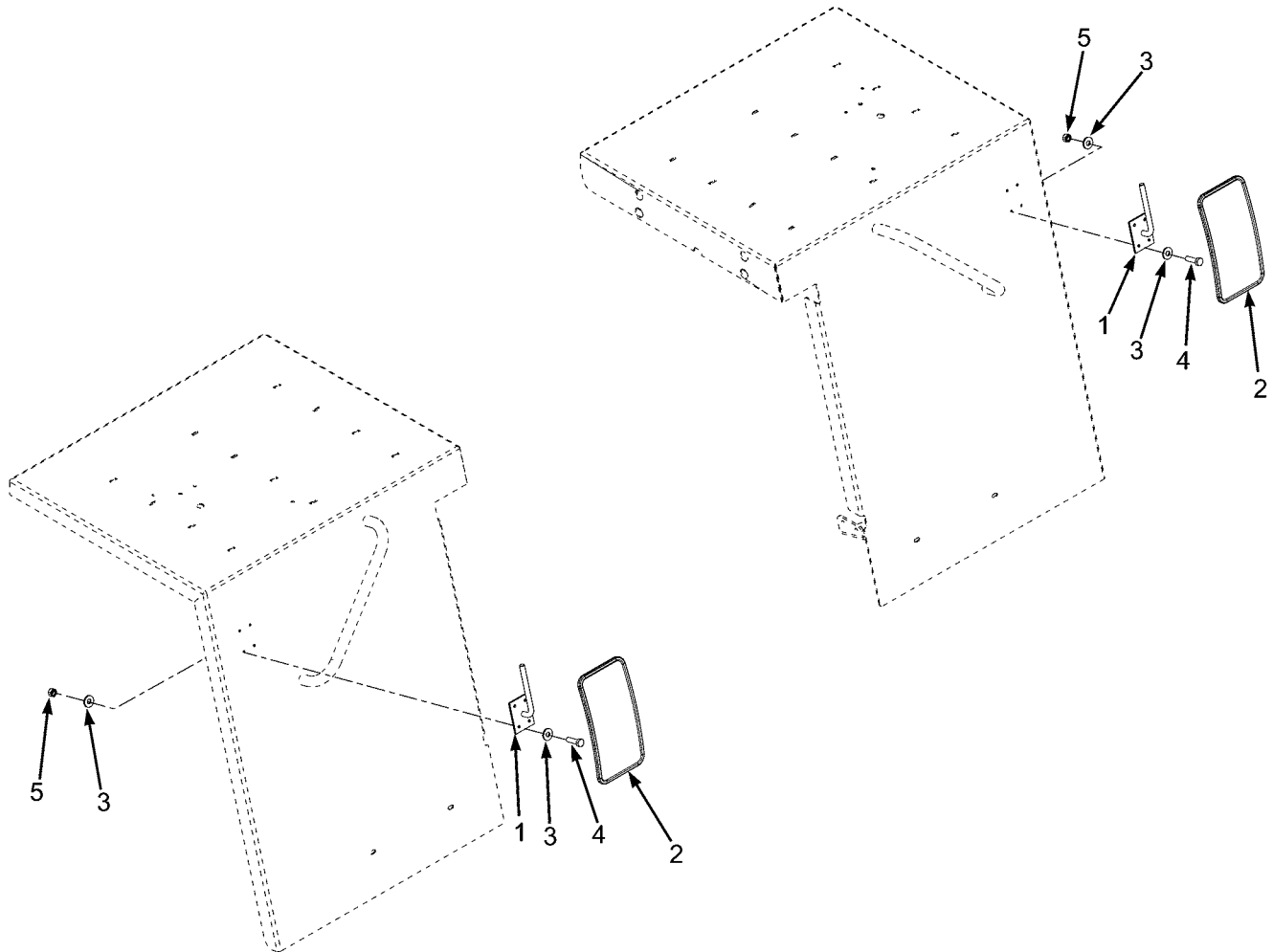
FLOORPLATES, STEPS, AND RAILS

ITEM	PART NO.	DESCRIPTION	QTY
47	1570559	Cover (Plate).....	1
48	1494868	Plug (Without Mirrors).....	8

FOOTNOTES:

- a Fabricated Type

MIRRORS (Figure 1-3) FRONT FENDER

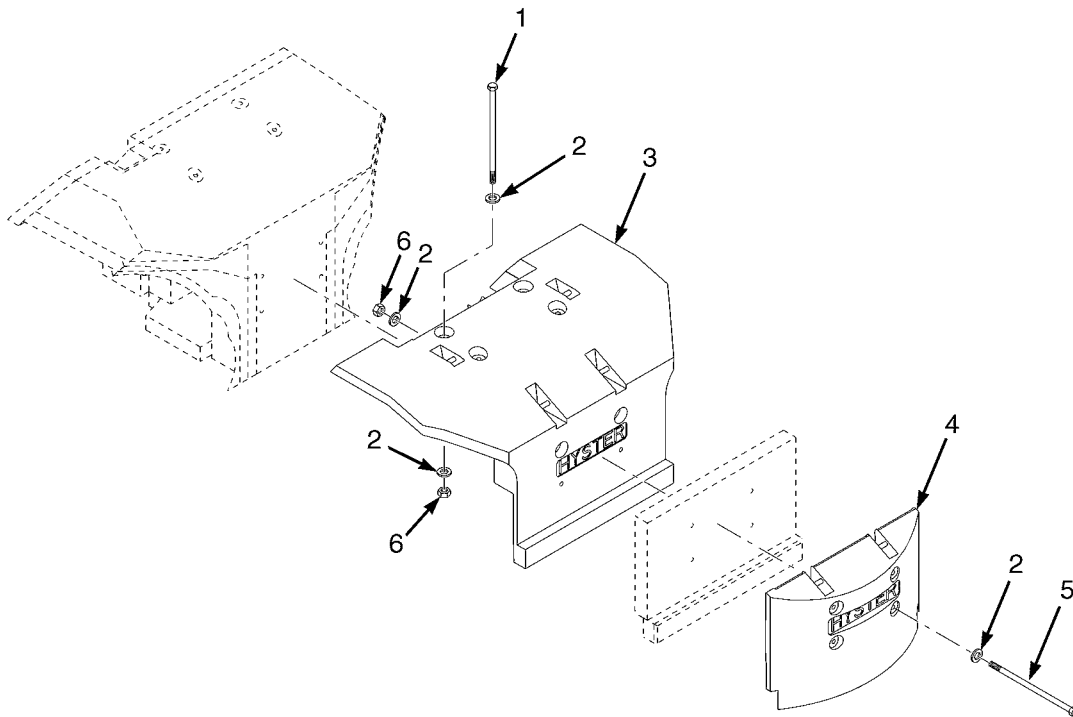


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**MIRRORS
FRONT FENDER**

ITEM	PART NO.	DESCRIPTION	QTY
1	1598029	Bracket.....	2
2	886835	Mirror	2
3	320158	Washer	16
4	176640	Capscrew.....	8
5	302400	Locknut	8

COUNTERWEIGHT (Figure 1-4)

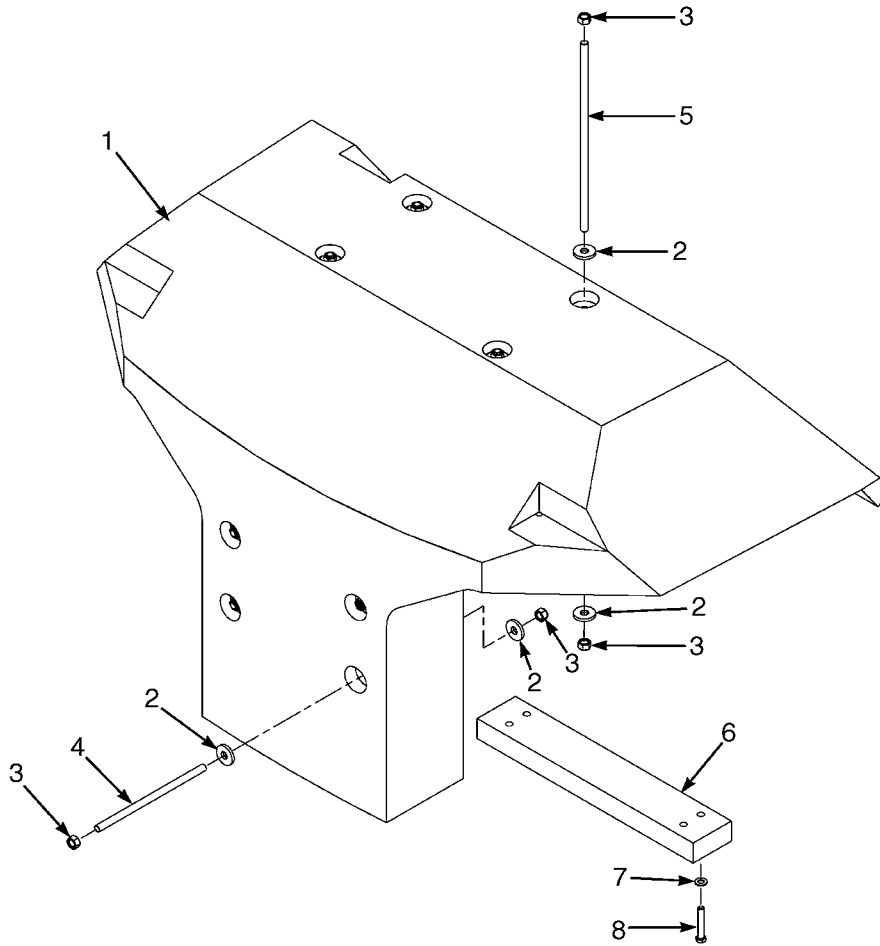


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- KEY:**
A: H40.00XM-16CH
B: H50.00XM-16CH
C: H52.00XM-16CH

ITEM	PART NO.	DESCRIPTION	QTY		
			A	B	C
1	885190	Tie Rod	4	4	4
2	885189	Washer	12	16	16
3	889034	Counterweight	1	1	1
4	885149	Counterweight .....	..	1	..
4	1542507	Counterweight .....	..	..	1
5	885191	Tie Rod	2	..	..
5	885194	Tie Rod	4	4
6	302407	Locknut	6	8	8

COUNTERWEIGHT (Figure 1-5) FABRICATED

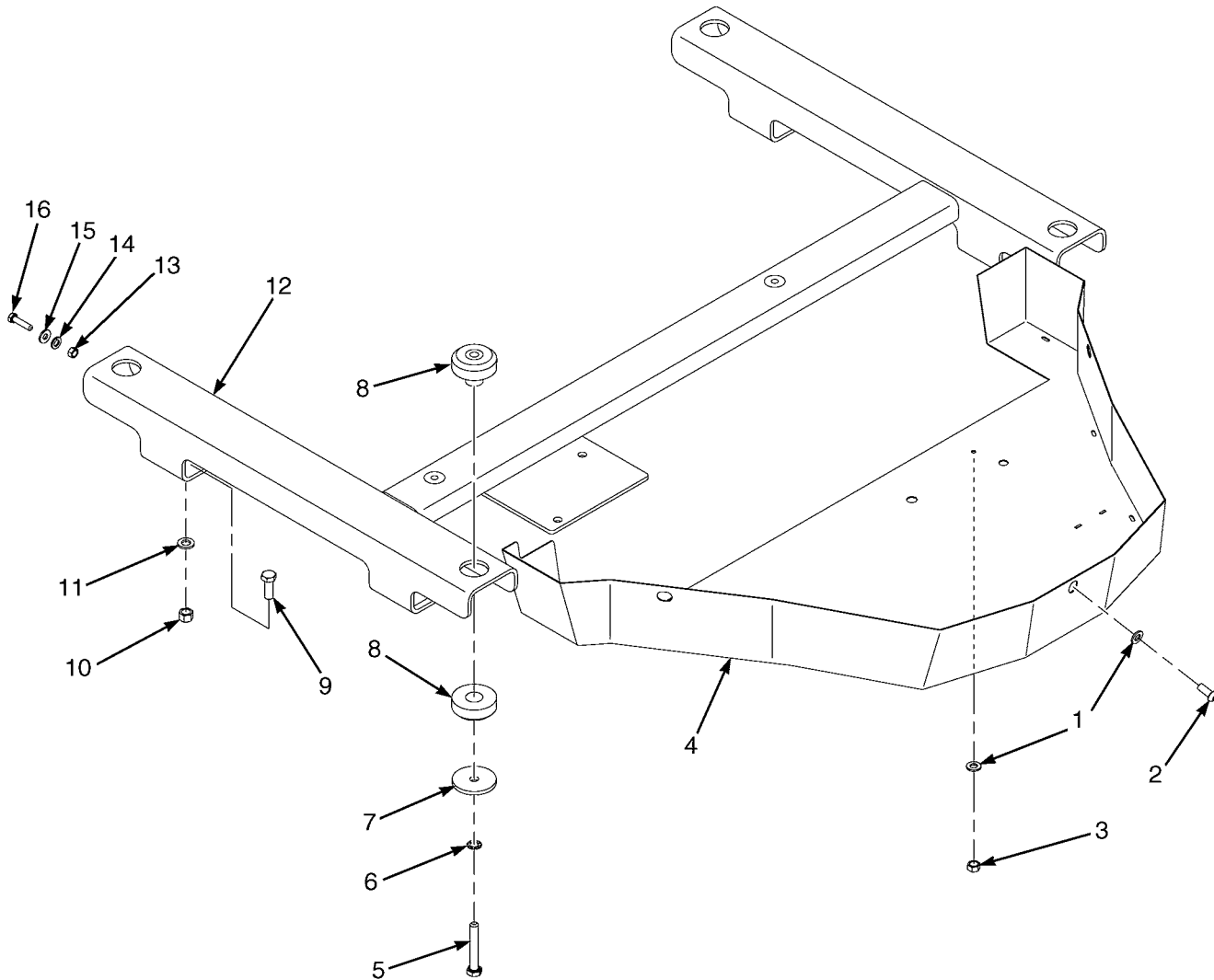


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**COUNTERWEIGHT
FABRICATED****KEY:****A: H40.00XM-16CH****B: H44.00XM-16CH****C: H48.00XM-16CH****D: H50,00XM-16CH**

ITEM	PART NO.	DESCRIPTION	QTY			
			A	B	C	D
1	1564340	Counterweight .....	..	1	1	..
1	1571608	Counterweight	1	..	..	..
1	1588372	Counterweight .....	..	..	..	1
2	885189	Washer	16	16	16	16
3	292661	Nut	8	8	8	8
4	1566260	Tie Rod	4	4	4	4
5	1566262	Tie Rod	4	4	4	4
6	1564348	Slab .....	..	..	1	1
7	320174	Washer	4	4
8	292614	Capscrew.....	4	4
8	292617	Capscrew.....	4

CAB MOUNT (Figure 1-6)

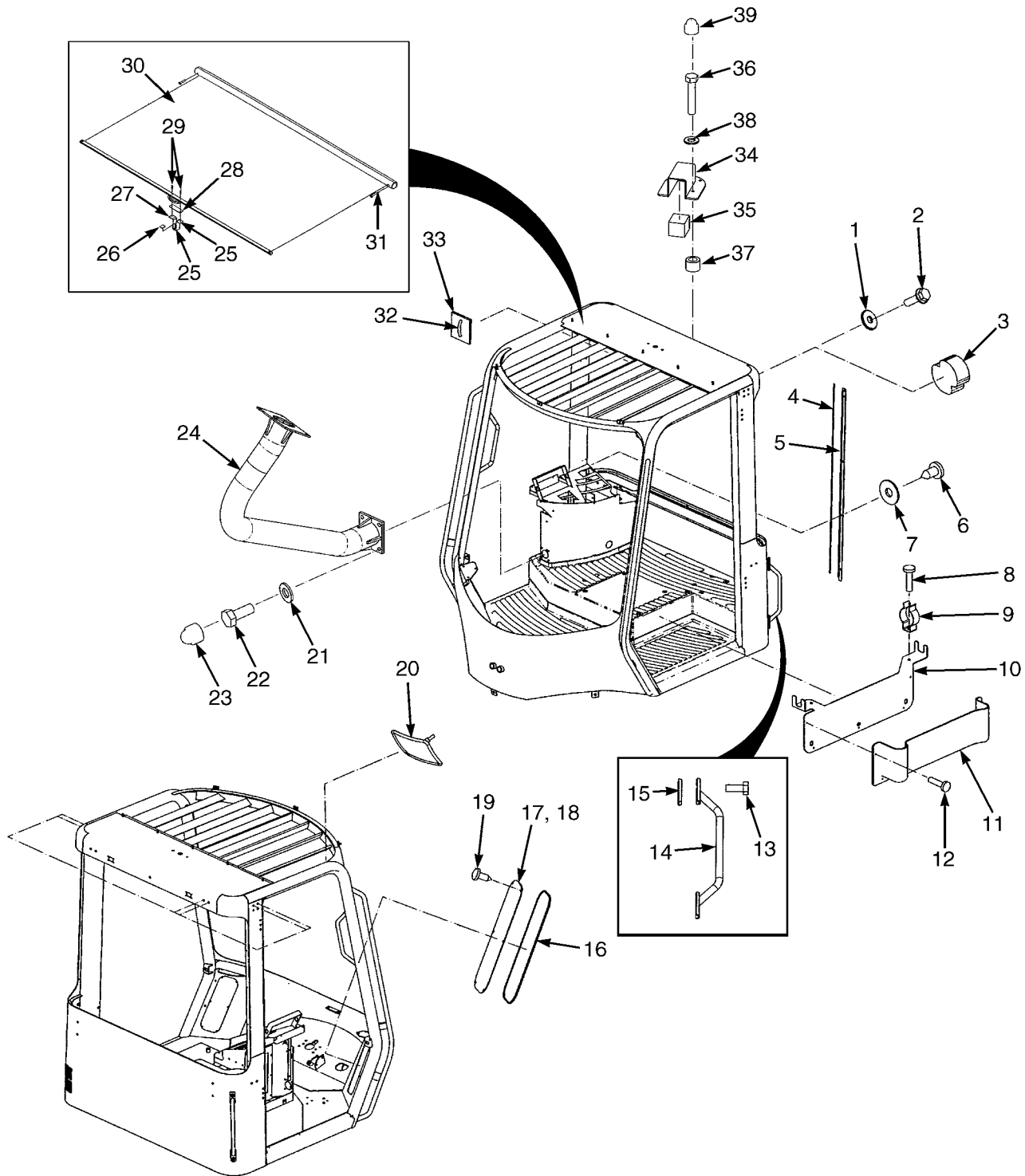


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CAB MOUNT

ITEM	PART NO.	DESCRIPTION	QTY
1	320159	Washer	4
2	296173	Capscrew	3
3	136692	Nut	1
4	1527224	Cover Assembly	1
5	292535	Capscrew	4
6	296382	Washer	4
7	300939	Washer	4
8	1486540	Mount	4
9	292528	Capscrew	4
10	216877	Nut	4
11	320162	Washer	4
12	1527225	Subframe	1
13	302401	Locknut	1
14	320160	Washer	1
15	296408	Lockwasher	1
16	1510117	Capscrew	1

CAB ATTACHING PARTS (Figure 1-7)

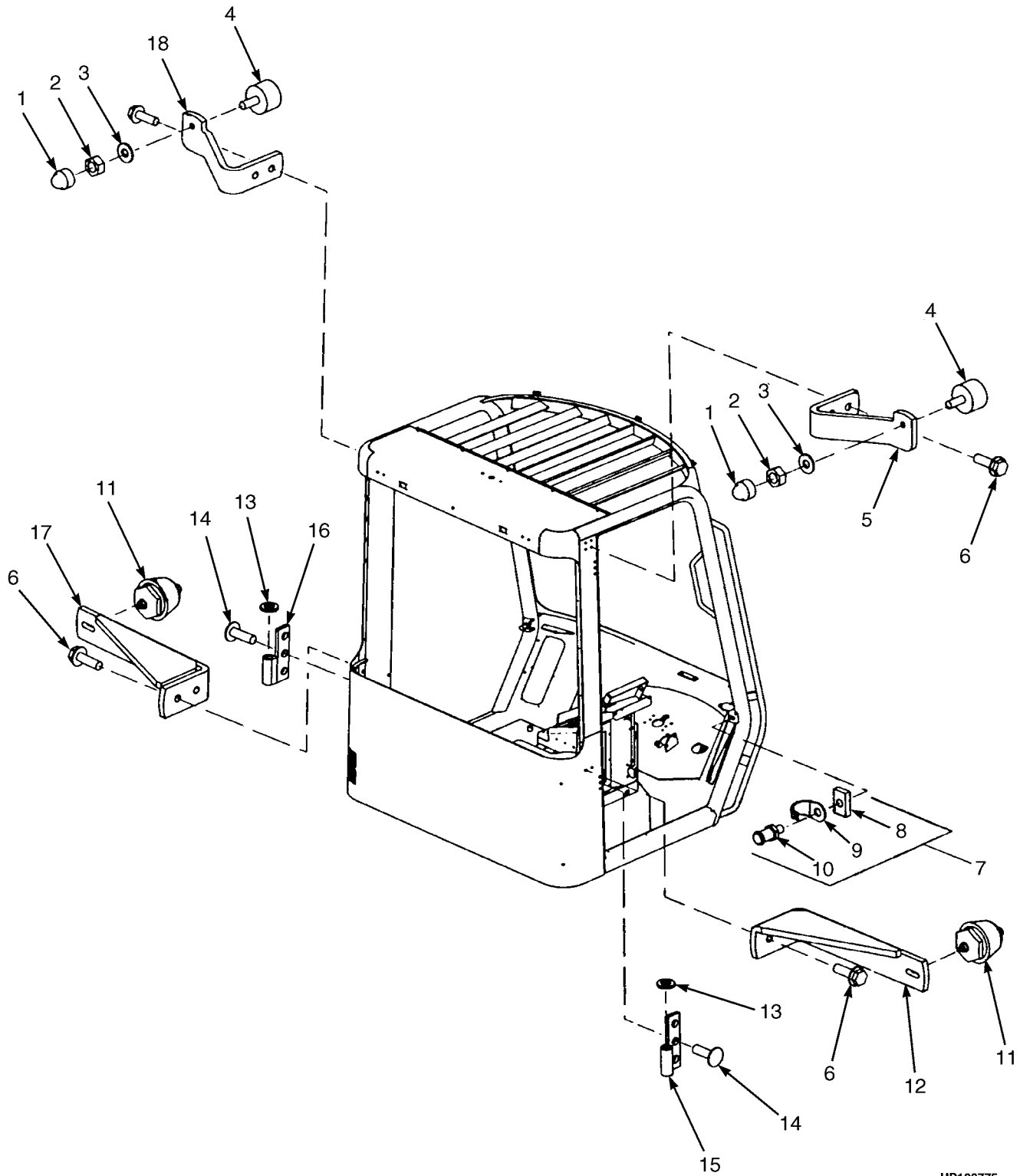


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CAB ATTACHING PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	1504942	Washer	8
2	1566044	Bolt	8
3	1558037	Seal	2
4	1492167	Cover	1
5	1492166	Cover	1
6	1468306	Screw.....	5
7	1492140	Washer	5
8	1498357	Screw.....	2
9	1498356	Clip	2
10	1498355	Bracket.....	1
11	1492133	Cup and Clip Board Holder.....	1
12	1498354	Rivet.....	5
13	1566041	Screw.....	4
14	1498334	Handle (Rear)	2
14	136681	Capscrew	4
14	320158	Washer	4
14	1476584	Cap.....	4
15	1498335	Pad	4
16	1498362	Seal	AR
17	1492197	Plate (LH)	1
18	1492198	Plate (RH).....	1
19	1498363	Screw.....	12
20	1493278	Mirror (Interior).....	2
21	296419	Washer	4
22	136749	Capscrew.....	4
23	1476584	Cap	4
24	1571812	Handle	1
25	1493322	Adhesive	AR
26	1506748	Pad (Rubber)	1
27	1506750	Clamp	1
28	1506749	Pad (Rubber)	1
29	1498357	Screw.....	2
30	1506751	Sunshade (Top)	1
30	1570557	Sunshade (Rear)	1
31	1468318	Screw.....	2
32	1393499	Clamp	1
33	1558036	Clip	1
34	1571804	Bracket.....	1
35	1571803	Foam.....	AR
36	1571802	Screw.....	4
37	1571841	Spacer	4
38	320156	Washer	8
39	1493397	Cover	4

DOOR ATTACHING PARTS (Figure 1-8)

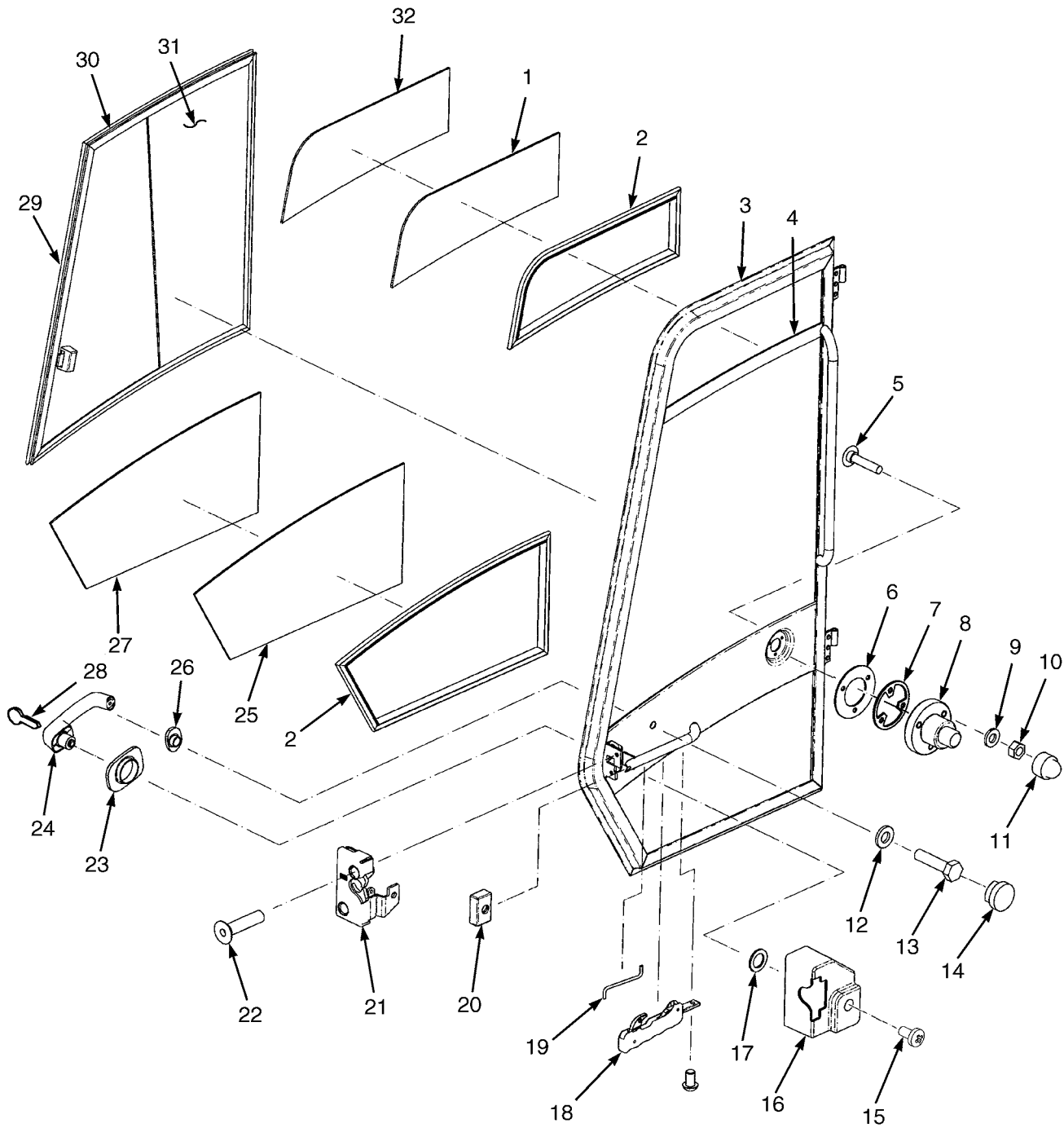


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DOOR ATTACHING PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	1476584	Cap	2
2	316835	Nut	2
3	1571029	Washer	2
4	1493316	Bumper	2
5	1571616	Bracket (RH)	1
6	1566044	Bolt	8
7	1493318	Bolt Assembly (Striker)	2
8	1504953	Block.....	1
9	1504954	Guard (Striker Bolt)	1
10	1504955	Bolt (Striker)	1
11	1493313	Bumper	2
12	1571618	Bracket (RH)	1
13	1468312	Washer	4
14	1493308	Bolt	12
15	1393474	Hinge (RH).....	2
16	1393473	Hinge (LH)	2
17	1571619	Bracket (LH).....	1
18	1571617	Bracket (LH).....	1

STEEL DOOR (Figure 1-9) RIGHT HAND

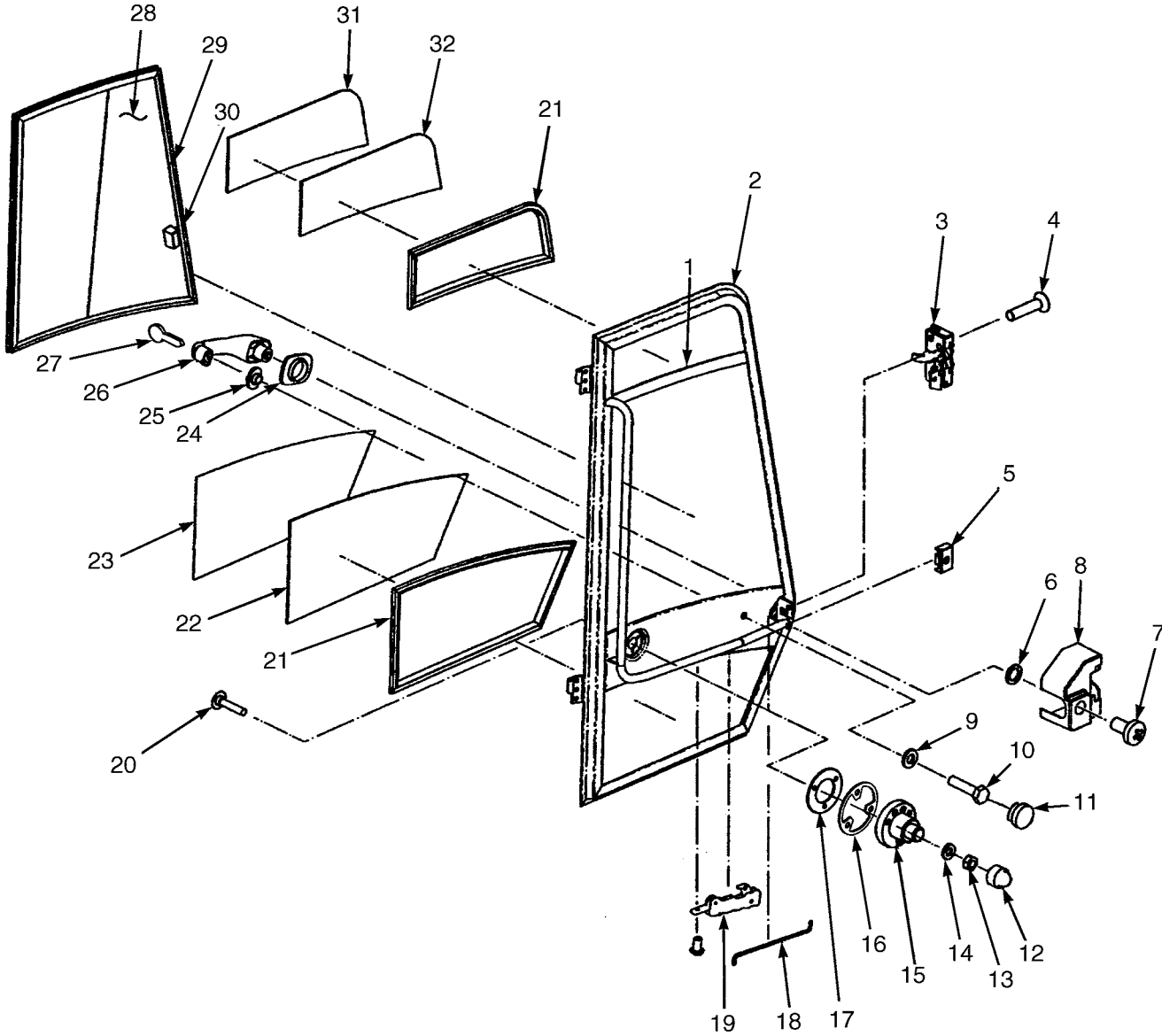


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**STEEL DOOR
RIGHT HAND**

ITEM	PART NO.	DESCRIPTION	QTY
	1553404	Door Assembly (RH).....	1
1	1558297	Window (Upper)	1
2	1558299	Seal	4
3	1515337	Seal	5
4	1558292	Frame	1
5	1558307	Screw	3
6	1495454	Seal	1
7	1495456	Washer	1
8	1559691	Hold-Open	1
9	1506738	Washer	3
10	316834	Nut.....	3
11	1493397	Cover.....	3
12	1468321	Washer	1
13	287816	Capscrew	1
14	1558300	Cap.....	1
15	1493308	Bolt	1
16	1495435	Cover.....	1
17	1558303	Washer	1
18	1558305	Remote Control (Door Handle).....	1
19	1558306	Rod (Connector).....	1
20	1558302	Plate (Door Handle).....	1
21	1558301	Latch Assembly	1
22	296229	Capscrew	2
23	1495372	Seal	1
24	1495371	Handle (Push Button).....	1
25	1558295	Window (Lower)	1
26	1495431	Seal	1
27	1558296	Frame (Window) (Lower).....	1
28	1593629	Key	1
29	1595802	Glue Kit (Sliding Window).....	AR
30	1558294	Seal	1
31	1558293	Window (Main)	1
31	1542548	Shim (Rubber).....	1
31	1483226	Latch (Sliding Window)	1
32	1558298	Frame (Window) (Upper).....	1

STEEL DOOR (Figure 1-10) LEFT HAND

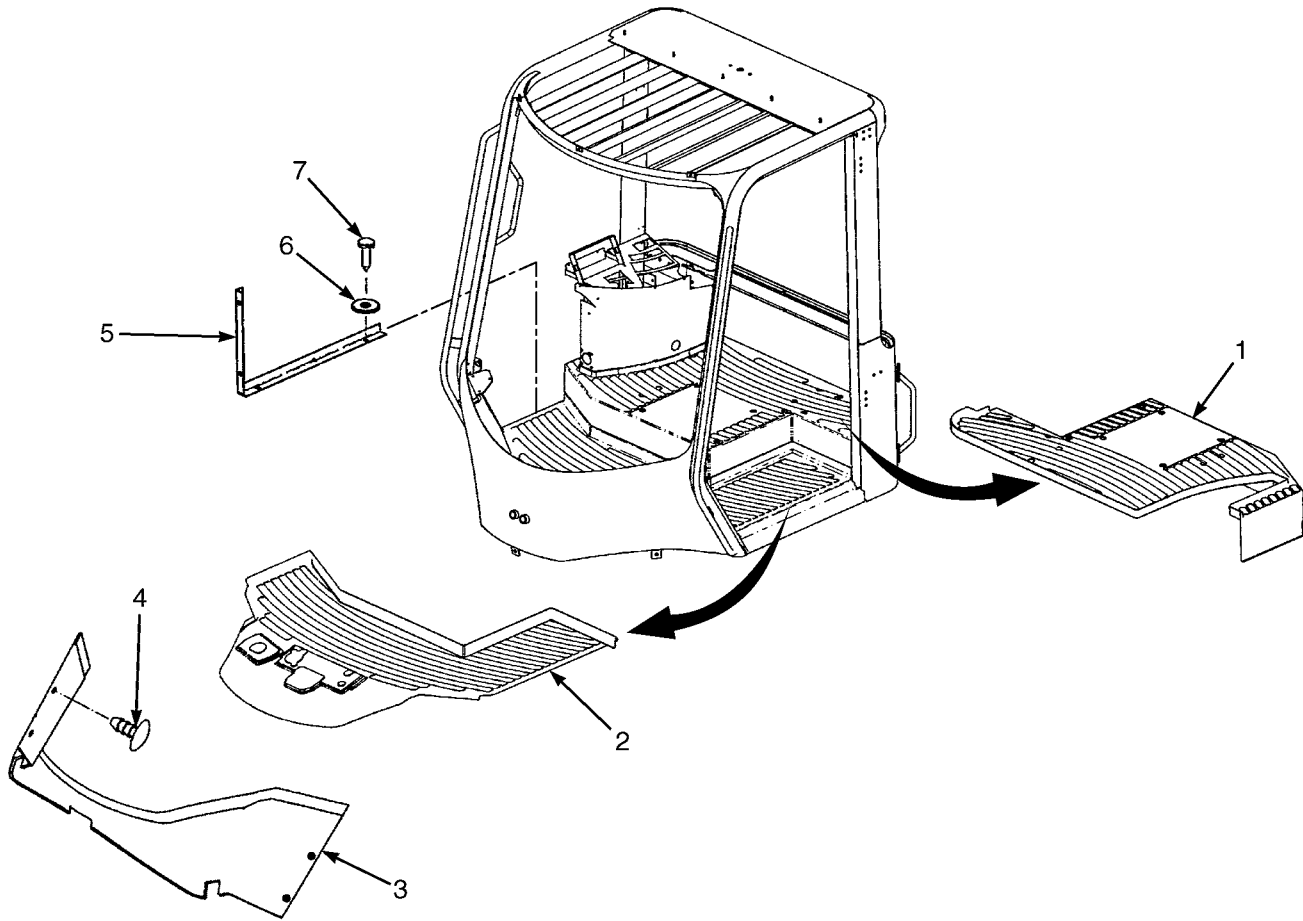


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**STEEL DOOR
LEFT HAND**

ITEM	PART NO.	DESCRIPTION	QTY
	1553405	Door Assembly (LH)	1
1	1558440	Frame	1
2	1515337	Seal	5
3	1558446	Latch Assembly	1
4	296229	Capscrew	2
5	1558302	Plate	1
6	1558303	Washer	1
7	1493308	Bolt	1
8	1495438	Cover	1
9	1468321	Washer	1
10	287816	Capscrew	1
11	1558300	Cap	1
12	1493397	Cover	3
13	316834	Nut	3
14	1506738	Washer	3
15	1559691	Hold-Open	1
16	1495456	Washer	1
17	1495454	Seal	1
18	1558447	Rod (Connector)	1
19	1558305	Remote Control	1
20	1558307	Screw	3
21	1558299	Seal	4
22	1558442	Window (Door) (Lower)	1
23	1558443	Frame (Window) (Lower)	1
24	1495372	Seal	1
25	1495431	Seal	1
26	1495371	Handle (Push Button)	1
27	1593629	Key	1
28	1558441	Window (Main)	1
28	1542548	Shim (Rubber)	1
28	1483226	Latch (Sliding Window)	1
29	1558294	Seal	AR
30	1595802	Glue Kit (Sliding Window)	AR
31	1558445	Frame (Window) (Upper)	1
32	1558444	Window (Door) (Upper)	1

CAB FLOORMATS (Figure 1-11)

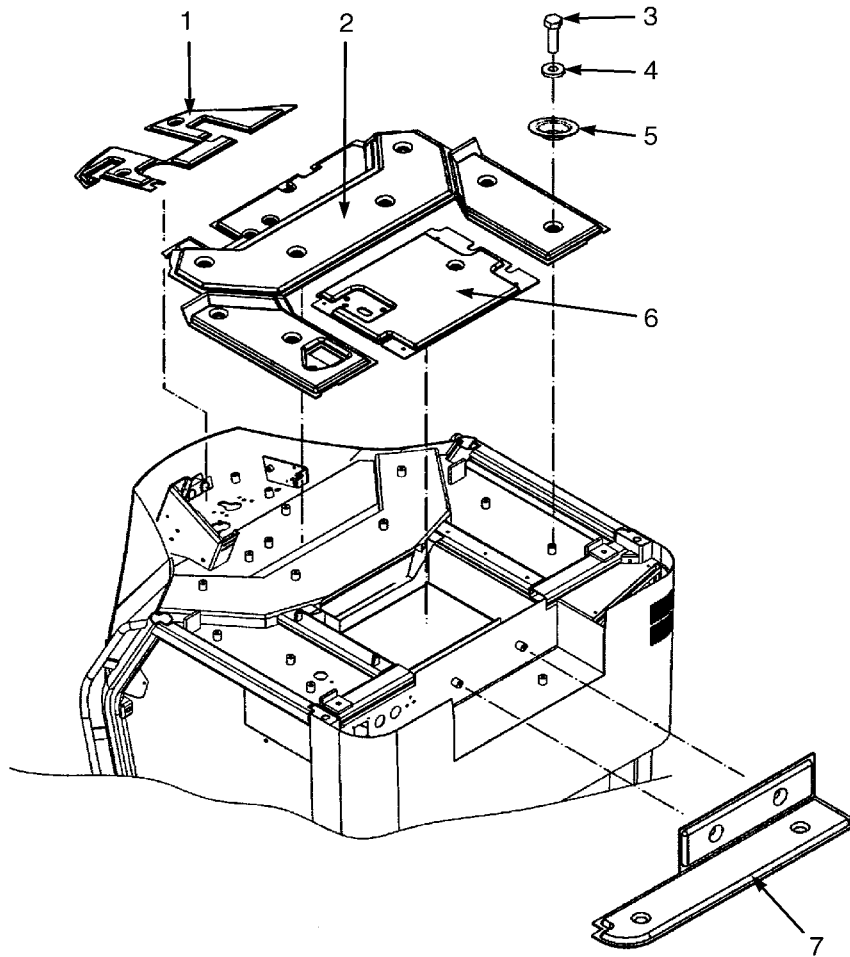


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CAB FLOORMATS

ITEM	PART NO.	DESCRIPTION	QTY
1	1493282	Floormat (Seat).....	1
2	1493281	Floormat (Main)	1
3	1493283	Floormat (Cowl)	1
4	1498364	Buckler.....	4
5	1498365	Strip	1
6	1492140	Washer	37
7	1468318	Screw.....	14

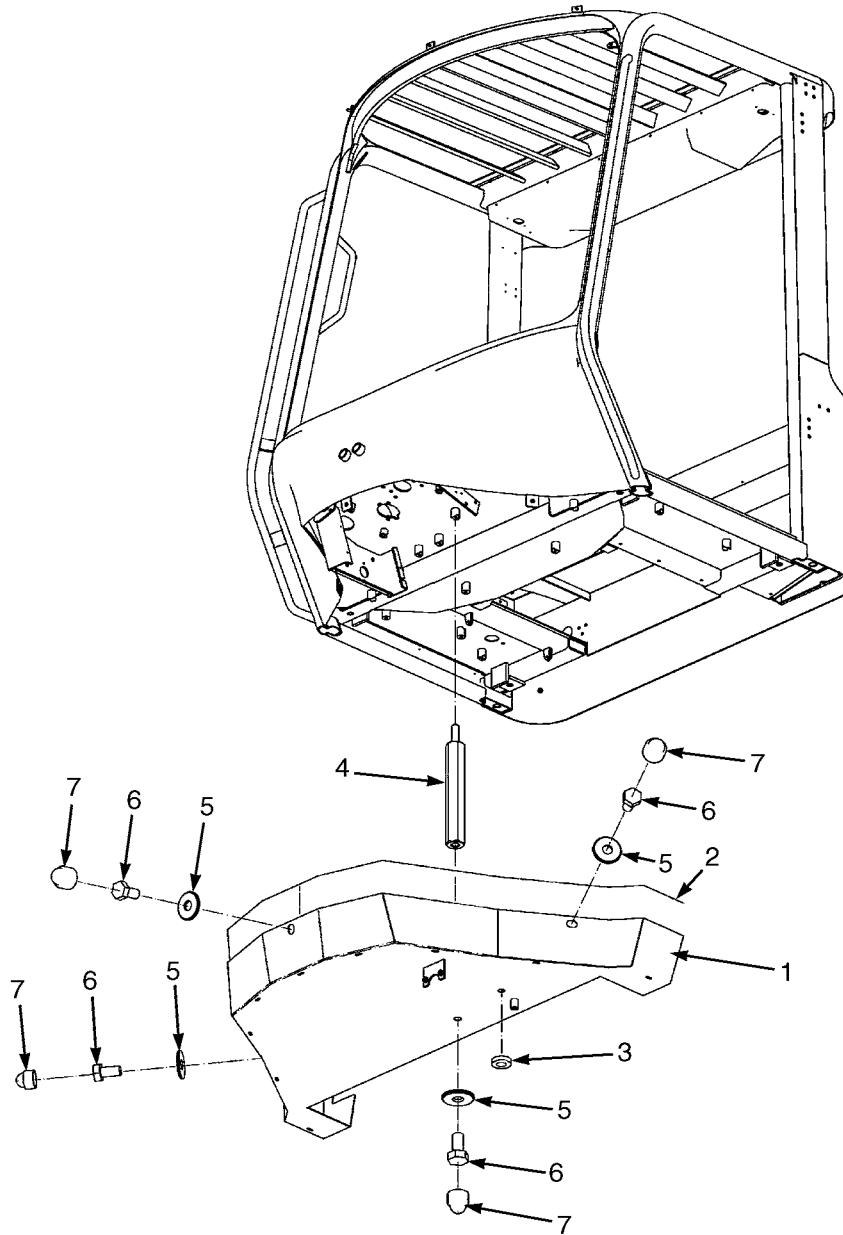
CAB SOUND REDUCTION (Figure 1-12)



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ITEM	PART NO.	DESCRIPTION	QTY
1	1567942	Insulation (Front).....	1
2	1498370	Insulation (Main).....	1
3	292514	Capscrew.....	20
4	320160	Washer.....	20
5	1498373	Plate (Fixing).....	20
6	1498372	Insulation (Heater).....	1
7	1498371	Insulation (Rear).....	1

UNDERFLOOR COVER MOUNT (Figure 1-13)

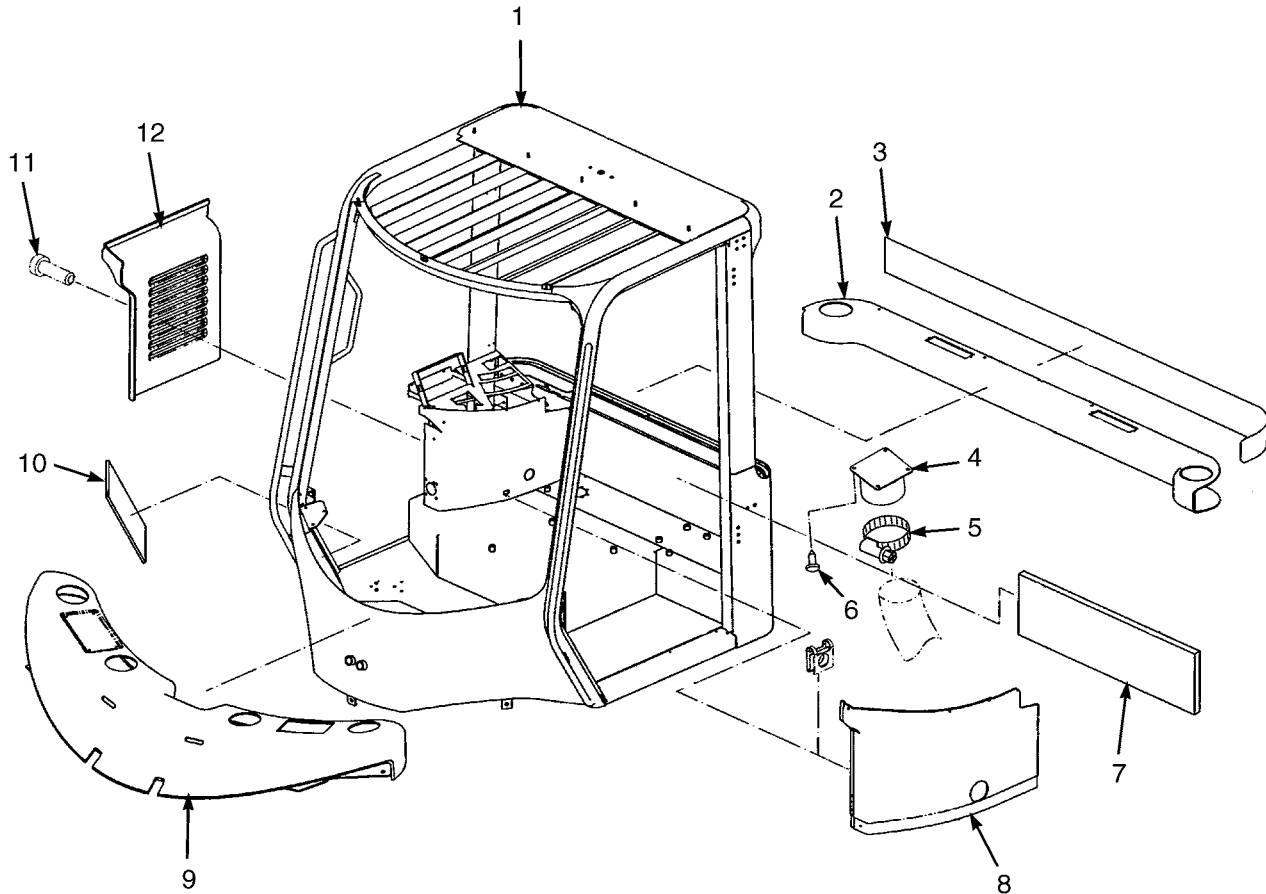


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UNDERFLOOR COVER MOUNT

ITEM	PART NO.	DESCRIPTION	QTY
1	1527224	Cover Assembly.....	1
1	1571772	Cover.....	1
2	1498336	Edge Protector	1
3	1534479	Grommet	1
4	1571771	Stud.....	1
5	1498338	Washer	4
6	1571632	Screw	4
7	1493312	Cap.....	4

CAB PANELS (Figure 1-14)



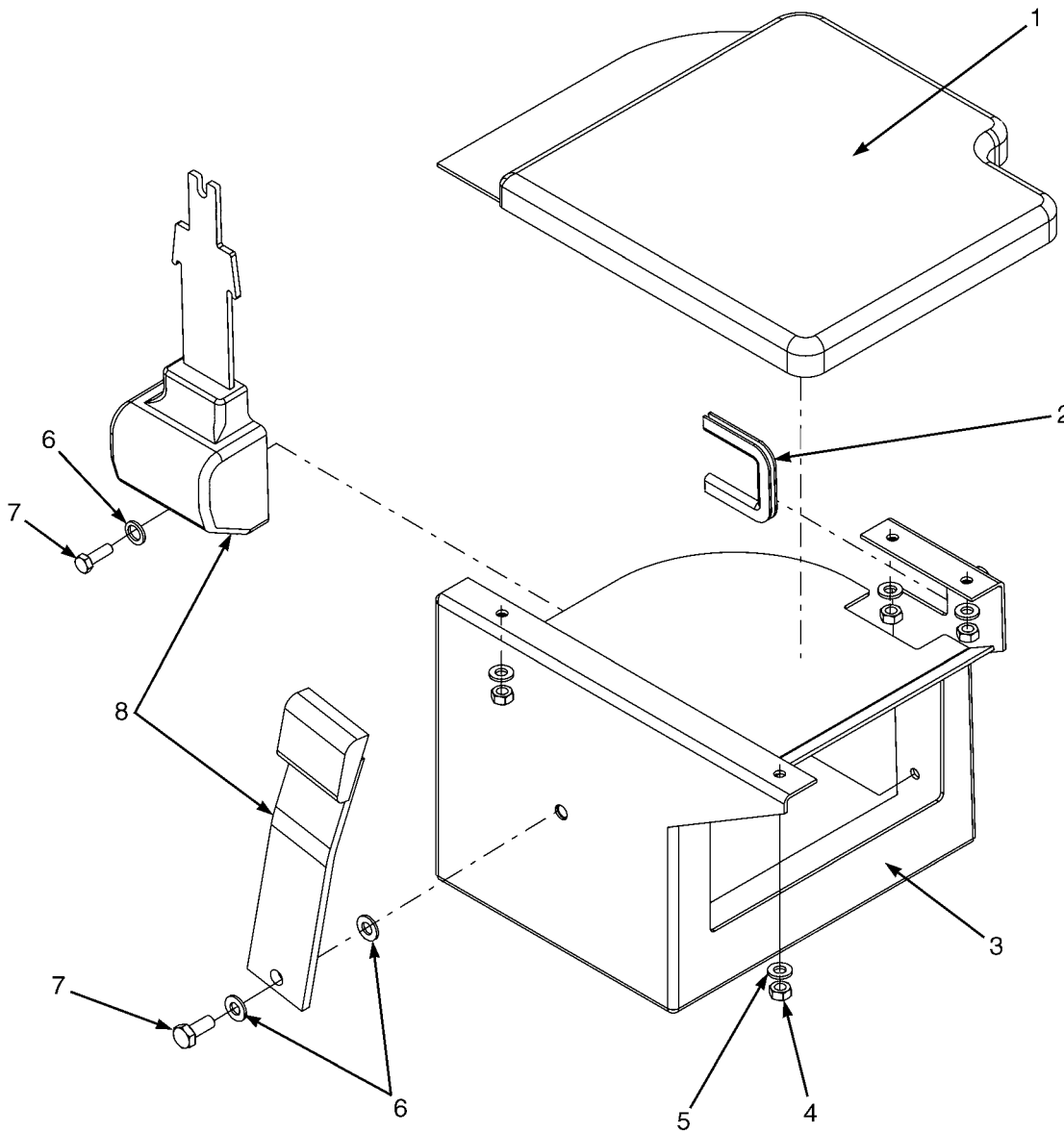
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CAB PANELS

ITEM	PART NO.	DESCRIPTION	QTY
1	b	Cab Weldment	1
2	1492175	Duct Assembly (Rear).....	1
2	1491495	Duct (Front Cover).....	1
2	1468319	Screw	8
2	1492139	Nut.....	20
2	1492140	Washer	8
2	1492169	Louver	2
2	1598398	Nozzle	2
2	1468320	Screw	12
2	1492171	Bolt	12
2	1492174	Adapter.....	1
3	1493370	Foam.....	1
4	1492174	Adapter	2
5	1493393	Clamp	2
6	1468319	Screw.....	4
7	1492173	Foam (Rear)	1
8	1491029	Console (RH Internal).....	1
9	1492200	Dash and Air Duct Assembly	1
9	1492196	Ashtray	1
9	1468319	Screw	24
9	1492139	Nut.....	16
9	1598398	Nozzle	6
9	1492195	Dash and Cap	1
9	1468321	Washer	6
9	292501	Capscrew	6
9	1493397	Cover.....	6
9	1493372	Foam (LH)	1
9	1493373	Foam (RH).....	1
9	1492197	Plate (LH)	1
9	1492198	Plate (RH).....	1
9	1498362	Seal	AR
9	1498363	Screw	12
9	1492199	Louver (Fixed)	1
10	1493372	Foam (LH).....	1
10	1493373	Foam (RH)	1
11	1558042	Screw.....	4
12	1491028	Console (RH External).....	1
13	a 1393499	Clamp	4
14	a 1506825	Strap Clamp.....	2

FOOTNOTES:**a** Not Illustrated**b** Not Serviced Separately

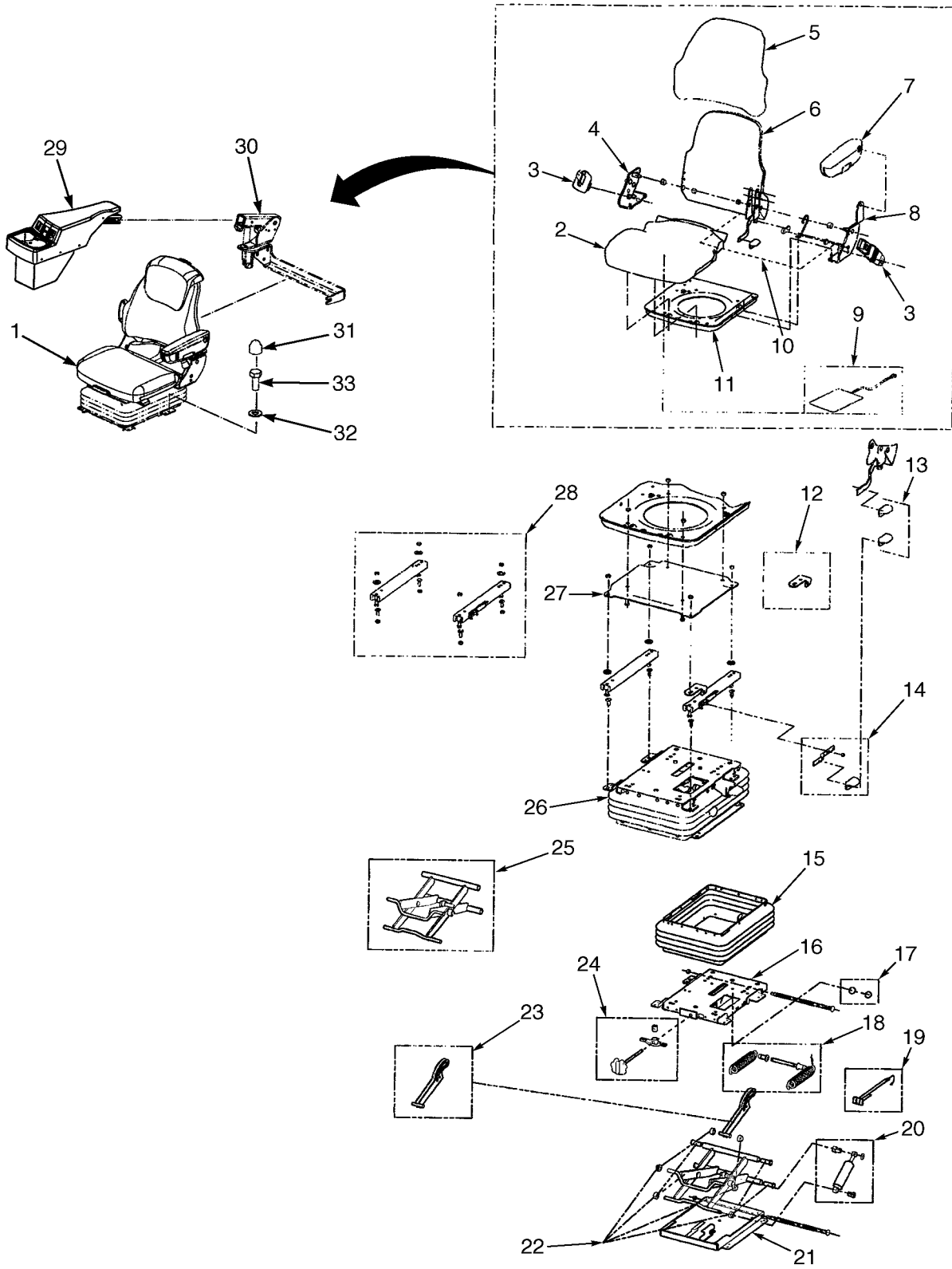
TRAINING SEAT (Figure 1-15)



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ITEM	PART NO.	DESCRIPTION	QTY
	1497822	Seat Assembly.....	1
1	1499936	Cover (Top).....	1
2	1498336	Edge Protector	AR
3	1506677	Seat (Bottom)	1
4	136687	Nut.....	4
5	320156	Washer	4
6	1498338	Washer	3
7	293628	Capscrew	2
8	1461081	Seat Belt Kit.....	1

SEAT ASSEMBLY (Figure 1-16) MECHANICAL

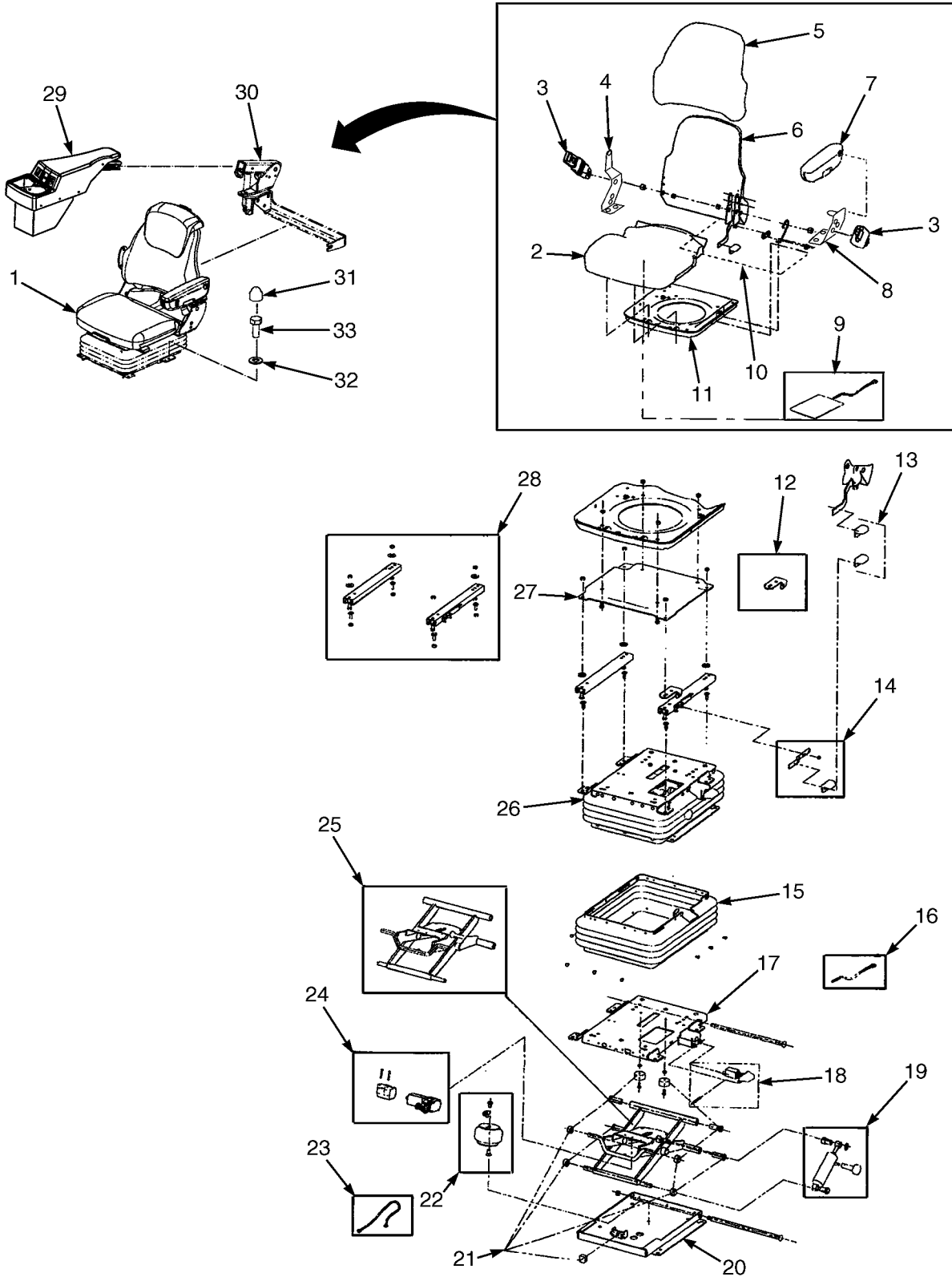


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**SEAT ASSEMBLY
MECHANICAL****KEY:****A: Fabric Cover****B: Vinyl Cover**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1488000	Seat Assembly.....	1	..
	1488002	Seat Assembly.....	..	1
1	1482798	Seat Top Assembly (With Armrest) .....	..	1
1	1482954	Seat Top Assembly (With Armrest)	1	..
2	1482972	Seat Cushion Assembly .....	..	1
2	1482973	Seat Cushion Assembly	1	..
3	.....	Seat Belt	1	1
4	1482974	Bracket Kit (RH)	1	1
5	1482957	Back Cushion Assembly .....	..	1
5	1482958	Back Cushion Assembly	1	..
6	1482959	Back Pan Kit.....	1	1
7	1482960	Armrest (LH)	1	1
8	1482969	Bracket Kit (LH).....	1	1
9	1482975	Service Kit.....	1	1
10	1482970	Recliner Kit.....	1	1
11	1482971	Seat Pan Kit	1	1
12	1482996	Bracket Kit.....	1	1
13	1482976	Knob Kit	1	1
14	1482978	Lever Kit (Slider)	1	1
15	1483001	Boot Kit (Suspension)	1	1
16	1483007	Housing Kit (Upper)	1	1
17	1483012	Bumper Kit	1	1
18	1483015	Spring Kit	1	1
19	1483020	Weight Adjuster Kit.....	1	1
20	1483024	Shock Absorber Kit	1	1
21	1483027	Housing Kit (Lower).....	1	1
22	1483030	Bearing Kit	1	1
23	1483032	Arm Assembly	1	1
24	1483034	Weight Adjust Knob.....	1	1
25	1483037	Service Kit (Suspension Scissors)	1	1
26	1482991	Service Kit (Suspension Assembly)(Mechanical)	1	1
27	1482993	Plate Kit (Adapter).....	1	1
28	1482998	Slider Kit.....	1	1
29	1571623	Armrest Assembly (☞ Figure 1-19)	1	1
30	1571627	Pivot Arm Assembly (☞ Figure 1-18)	1	1
31	1476584	Cap	4	4
32	1558035	Lockwasher.....	4	4
33	136681	Capscrew.....	4	4

SEAT ASSEMBLY (Figure 1-17) AIR

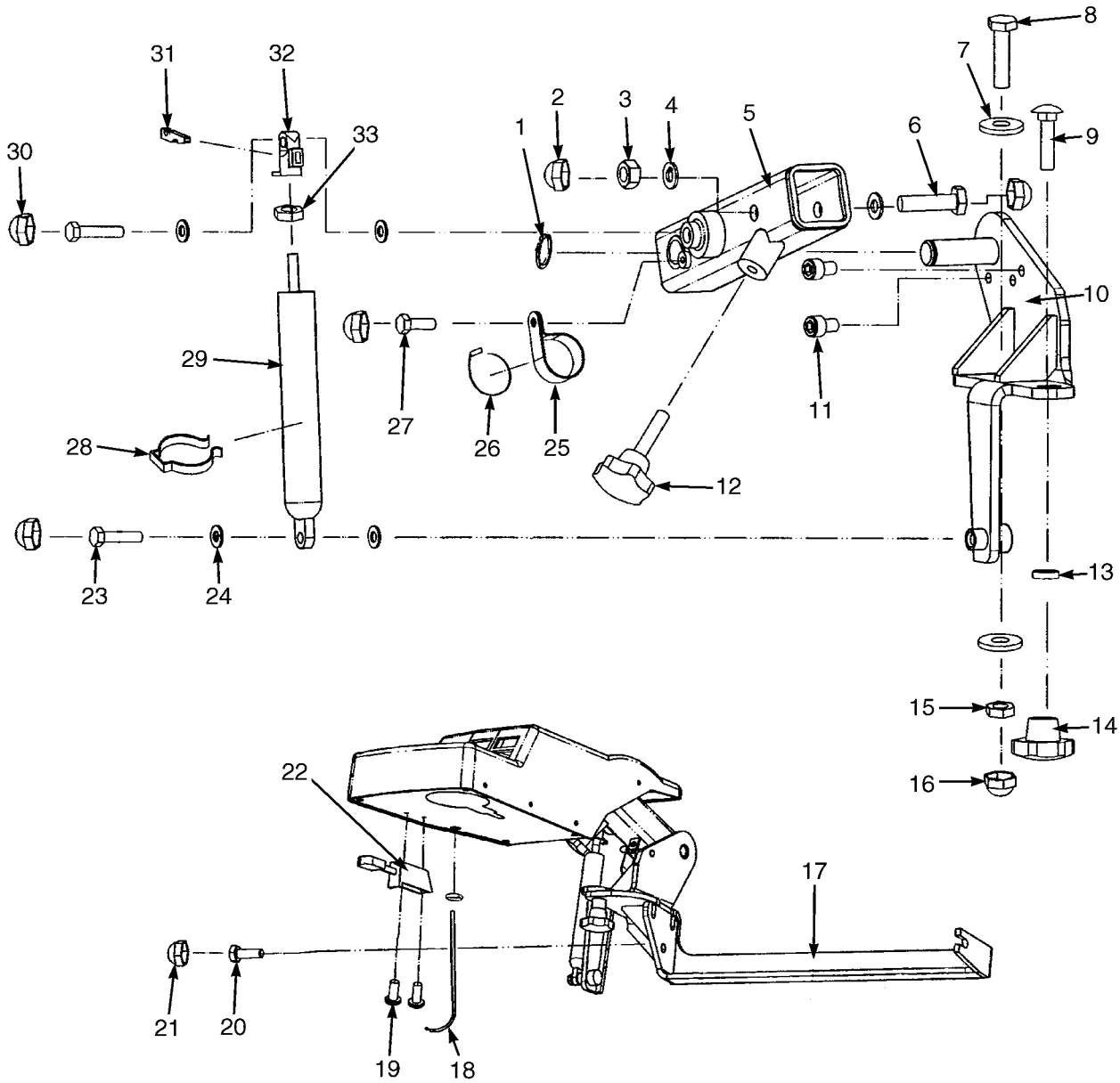


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**SEAT ASSEMBLY
AIR****KEY:****A: Vinyl Cover****B: Fabric Cover**

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
	1528715	Seat Assembly (Fabric) .....	..	1
	1528716	Seat Assembly (Vinyl).....	1	..
1	1482798	Seat Top Assembly (With Armrest) .....	..	1
1	1482954	Seat Top Assembly (With Armrest)	1	..
2	1482972	Seat Cushion Assembly .....	..	1
2	1482973	Seat Cushion Assembly	1	..
3	1374750	Seat Belt	1	1
4	1482969	Bracket Kit (LH).....	1	1
5	1482957	Back Cushion Assembly .....	..	1
5	1482958	Back Cushion Assembly	1	..
6	1482959	Back Pan Kit.....	1	1
7	1482960	Armrest (LH)	1	1
8	1482974	Bracket Kit (RH)	1	1
9	1482975	Service Kit.....	1	1
10	1482970	Recliner Kit.....	1	1
11	1482971	Seat Pan Kit	1	1
12	1482996	Bracket Kit.....	1	1
13	1482976	Knob Kit	1	1
14	1482978	Lever Kit (Slider)	1	1
15	1483005	Boot Kit (Suspension)	1	1
16	1483040	Wire Harness Kit.....	1	1
17	1483042	Housing Kit (Upper)	1	1
18	1483044	Control Valve (Air).....	1	1
19	1483049	Shock Absorber Kit	1	1
20	1483050	Housing Kit (Lower).....	1	1
21	1483052	Bearing Kit (Suspension)	1	1
22	1483056	Spring Kit (Air).....	1	1
23	1483061	Air Hose Kit	1	1
24	1528714	Compressor Kit (Kit).....	1	1
25	1483069	Frame Kit (Suspension)	1	1
26	1482982	Service Kit (Suspension Assembly)(Air)	1	1
27	1482993	Plate Kit (Adapter).....	1	1
28	1482998	Slider Kit.....	1	1
29	1571623	Armrest Assembly (☞ Figure 1-19)	1	1
30	1571627	Pivot Arm Assembly (☞ Figure 1-18)	1	1
31	1476584	Cap	4	4
32	1558035	Lockwasher.....	4	4
33	136681	Capscrew.....	4	4

PIVOT ARM ASSEMBLY (Figure 1-18)



HP120779

PIVOT ARM ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
	1571627	Pivot Arm Assembly.....	1
1	1498385	Retaining Ring.....	1
2	1493397	Cover (Capscew).....	2
3	316834	Nut.....	1
4	1476421	Washer.....	2
5	1534475	Tube.....	2
6	1506669	Screw.....	1
7	1571029	Washer.....	3
8	287837	Capscrew.....	1
9	1493499	Screw.....	1
10	1534474	Console Weldment.....	1
11	296010	Capscrew.....	2
12	1493494	Star Grip.....	1
13	1498338	Washer.....	2
14	1534476	Knob.....	1
15	1506827	Nut.....	1
16	1493474	Cover (Capscrew).....	1
17	1534481	Console Weldment.....	1
18	1530386	Cable.....	1
19	1498357	Screw.....	2
20	136985	Capscrew.....	3
21	1493312	Cap.....	3
22	1531747	Lever (Armrest Release).....	1
23	132861	Capscrew.....	2
24	320158	Washer.....	4
25	1493498	Clamp.....	1
26	1506825	Strap Clamp.....	2
27	287805	Capscrew.....	1
28	1498356	Clip.....	1
29	1530385	Gas Spring.....	1
30	1476584	Cap.....	3
31	1534477	Lever (Release).....	1
32	1534425	Rod End.....	1
33	1539034	Nut.....	1

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