



Illustrated Parts Manual

Models

D-SERIES

1100830-005

August 2001, 2001

ANSI

JLG®
An Oshkosh Truck Corporation Company

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Rev. 002

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Cummins 4BT3.9

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USING THIS BOOK

644B-37 S/N 101-586	
644B-42 S/N 101-156	
844C-42 S/N 101-468	
1044C-42 S/N 101-113	
1044C-54 S/N 101-124	
6K-37 S/N 101-274	
6K-42 S/N 101-115	
8K-42 S/N 101-196	
10K-42 S/N 101-106	
10K-54 S/N 101	
MISSION OIL COOLER ASSEMBLY 1.53.1	

644B
6K
844C
8K
1044C
10K
▼

Figure 1

This parts book covers all models, but some pages may only be specific to a few of them. To help you identify the page you're looking for, model numbers are always listed in the lower, far right corner of each parts list page (Figure 1, A).

Specific model and serial number information (B) is located on the lower, right side of each parts list page, above the page title (C).

How to Find What You're Looking For

To start, you must have the model and serial numbers, but you don't need the whole serial number—just the last digits will do. If it's related to the engine, you may need the engine model also.

A "Section Quick Reference" can be found at the beginning of the book as well as a complete table of contents, and each section has its own table of contents. Find the section, then the subject and page concerning the part you're after. Go to the page and see if it lists your machine's model and serial number. If not, it can probably be found on the pages immediately following that one.

For example:

You need a throttle part for an **844C-42**, serial number **302**, with a Cummins **6B5.9** engine.

Section 2, "Power Plant", contains information about engine installations. In the table of contents, you find a listing under "Cummins 6B5.9" for "Throttle Group Assembly" on page 2.40.1.

844C-42 S/N 101-291	
1044C-42 S/N 101-106	
1044C-54 S/N 101-104	
8K-42 S/N 101-171	
GROUP ASSEMBLY (Cummins 6B5.9) 2.40.1	

644B
6K
844C
8K
1044C
10K
▼

Figure 2

After going to that page, you'll see your model listed on the right-hand side in bold text (Figure 2, D). This means that the model is covered on this page, but the machine serial number (302) is not shown in the specific information (E). (Grayed model numbers (F) means that those models are not covered by that page.) The black arrow (G) tells you that more serial numbers and/or different models can be found on the next page.

844C-42 S/N 292-	
1044C-42 S/N 107-	
1044C-54 S/N 105-	
8K-42 S/N 172-	
10K-42 S/N 101-	
10K-54 S/N 101-	
GROUP ASSEMBLY (Cummins 6B5.9) 2.40.1.1	

644B
6K
844C
8K
1044C
10K
▼

Figure 3

The next page (2.40.1.1) shows that it contains the information for your machine model and serial number (*Figure 3, H & I*). The gray arrow (*J*) means that's the last page for that particular subject.

Page Numbers

Understanding how the page numbers are structured will help you navigate through the book.

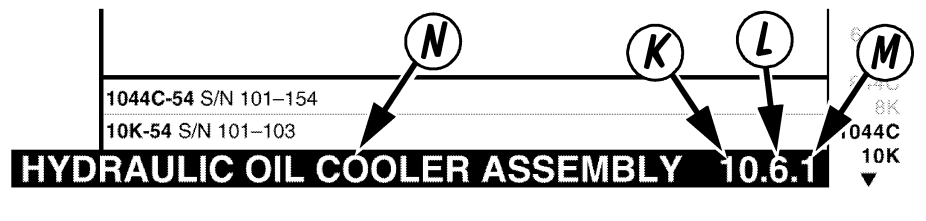


Figure 4

Figure 4 shows a typical page number.

- First number (*K*): Always matches the section number.
- Second number (*L*): Represents the subject title (*N*) in that section only.
- Third number (*M*): Shows page order for the machine models under that particular subject (*N*).

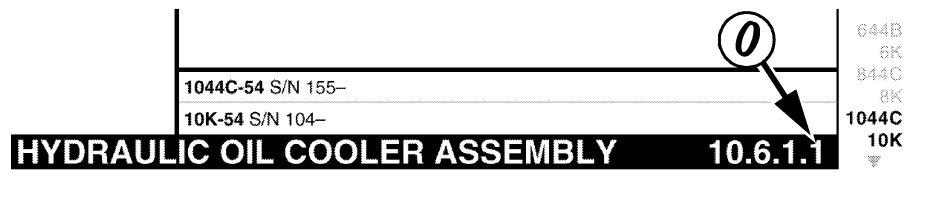


Figure 5

Figure 5 shows a page number with additional serial numbers not covered by the previous page (Figure 4).

- Fourth number (*O*): First, second, third, etc., page of additional serial numbers for the specified models.

General Information

The revision appears in the right hand margin of each page. The quantity shown in the "QTY" column is the number of parts used on that assembly. Where parts are referenced "REF" the part shown is included in another assembly or part of another item. For certain parts such as shims, spacers, etc. "A/R" indicates that the quantity to be used is as required.

Abbreviations

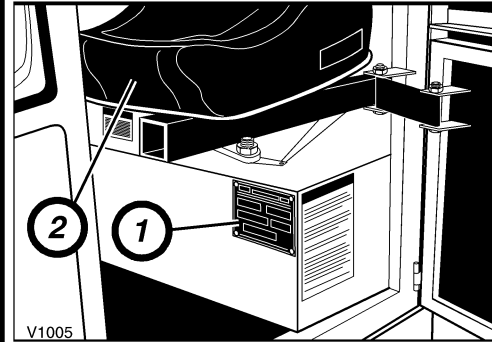
The following abbreviations are commonly used in this manual:

A/R	As Required	N/A	Not Applicable
Amp	Ampere	N.L.A.	No Longer Available
Ass'y	Assembly	N.P.T.	National Pipe Thread
AUX	Auxiliary	N.S.S.	Not Sold Separately
BCI	Battery Council International	O.D.	Outside Diameter
C.....	(Metric) Class	Osc.	Oscillation
CCA ...	Cold Cranking Performance Rating	oz.	Ounce(s)
Cyl.	Cylinder	Pcs.	Pieces
D.P.D.T.	Dual Pole, Dual Throw	P/N	Part Number
D.P.S.T.	Dual Pole, Single Throw	P.S.I.	Pounds Per Square Inch
Dia.	Diameter	Pt.	Point
Diff.	Differential	Rd.	Round
GA	Gauge	REF	Reference
GR	Grade	Req.	Required
Hd.	Head	R.H.	Right Hand
Hx.	Hex	S.P.D.T.	Single Pole, Dual Throw
Hyd.	Hydraulic	S.P.S.T.	Single Pole, Single Throw
I.D.	Inside Diameter	S/N	Serial Number
in.	Inches	SAE ..	Society of Automotive Engineers
Incl.	Includes	STD.	Standard
JIC	Joint Industry Council	Temp.	Temperature
Lg.	Long	Trans.	Transmission
L.H.	Left Hand	w/	With
mm	Millimeter	w/o	Without

ORDERING PARTS

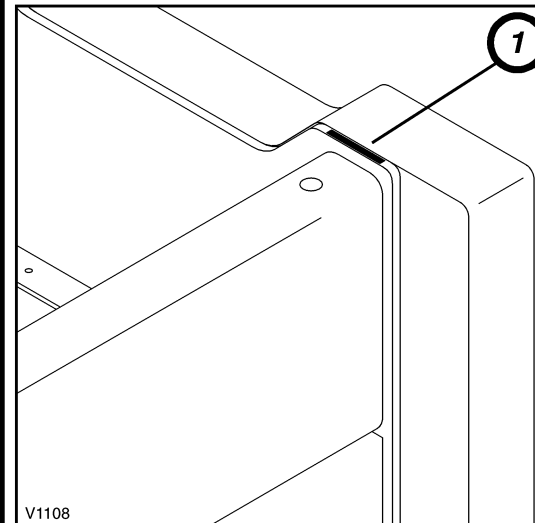
See inside back cover

SERIAL NUMBER LOCATIONS



The machine serial number plate (1) is mounted in the cab, below seat (2).

Machine Serial Number Plate

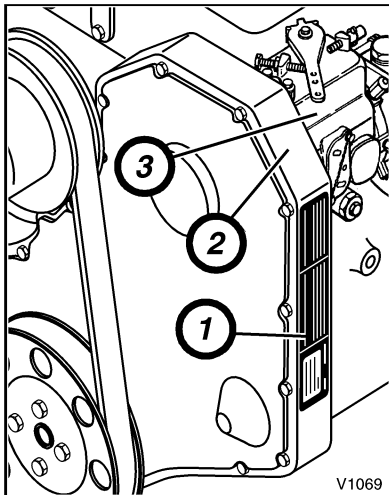


The machine serial number (1) is also stamped into the frame on the top left, rear corner of the machine.

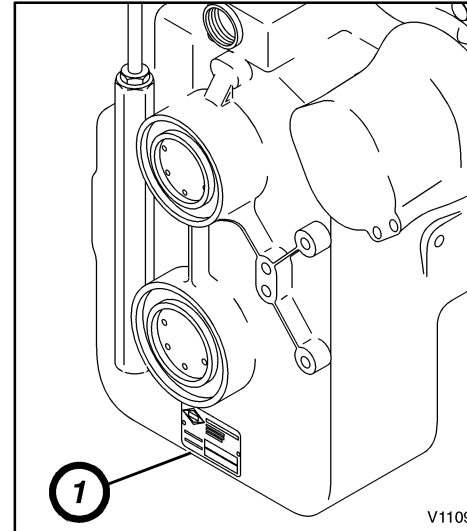
Stamped Machine Serial Number

SERIAL NUMBER CODES

XX X X X X - 101					
YEAR	MODEL	ENGINE	TRANS.	AXLES	SN
90	V-644B-37	12-DEERE 4039D	N-ZF 3WG 100	15-SPICER 7036-171	STARTING WITH SN 101
91	W-844C-42	13-CUMMINS 4B3.9	P-ZF 4WG 100	16-SPICER 7036-183	
92	X-6K-37	14-CUMMINS 4BT3.9	W-CLARK T12366	17-SPICER 7036-190	
93	Y-8K-42	16-DEERE 4039T		18-SPICER 7036-182	
94	Z-644B-42	17-CUMMINS 6B5.9		19-SPICER 8036-100	
95	AA-1044C-42	18-DEERE 6068D		20-SPICER 8036-101	
96	AB-1044C-54	19-DEERE 4045T (100 hp)		21-SPICER 7036-202	
97	AD-10K-42	20-DEERE 4045T (115 hp)		22-SPICER 7036-209	
98	AE-10K-54	21-CUMMINS 4BT3.9 (EPA)		24-SIGE/ SPICER 420S	
99	AG-6K-42	23-DEERE 4045D			
00	AL-644D-34	24-CUMMINS 4B3.9 (EPA)			
		25-CUMMINS 4BT3.9 (85 hp)			

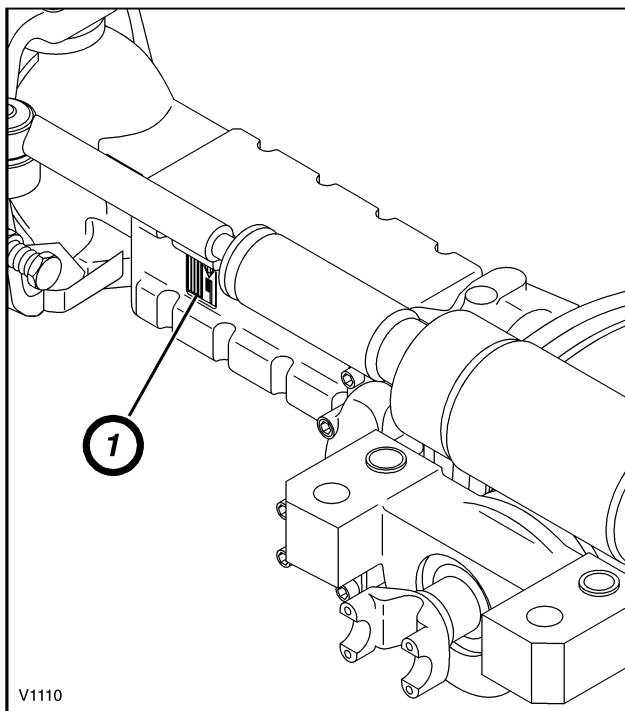
**Engine Serial Number — Cummins**

The engine serial number plate **(1)** is located on the right side of the engine, on gear housing **(2)** near the injection fuel pump **(3)**.



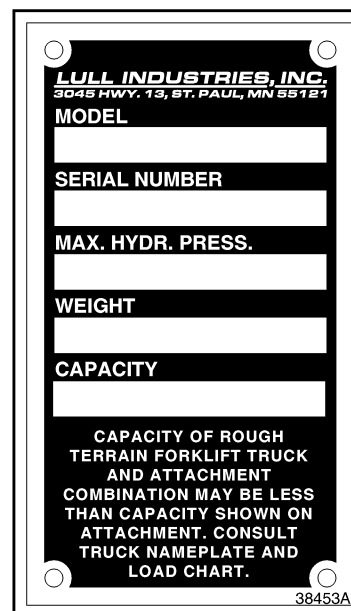
The transmission serial number plate **(1)** is located in the center, lower rear side of the transmission housing.

Transmission Serial Number



Axle Serial Number

The front axle serial number plate **(1)** is located on the left, rear side of the axle housing. The rear axle serial number plate is located on the right, front side of the axle housing.



The location of this plate varies with attachment.

Attachment Serial Number Plate

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Transmission Output Drive Shaft Assembly	1.2.1
Intermediate Drive Shaft Assembly	1.3.1
Front & Rear Drive Shaft Assembly	1.4.1

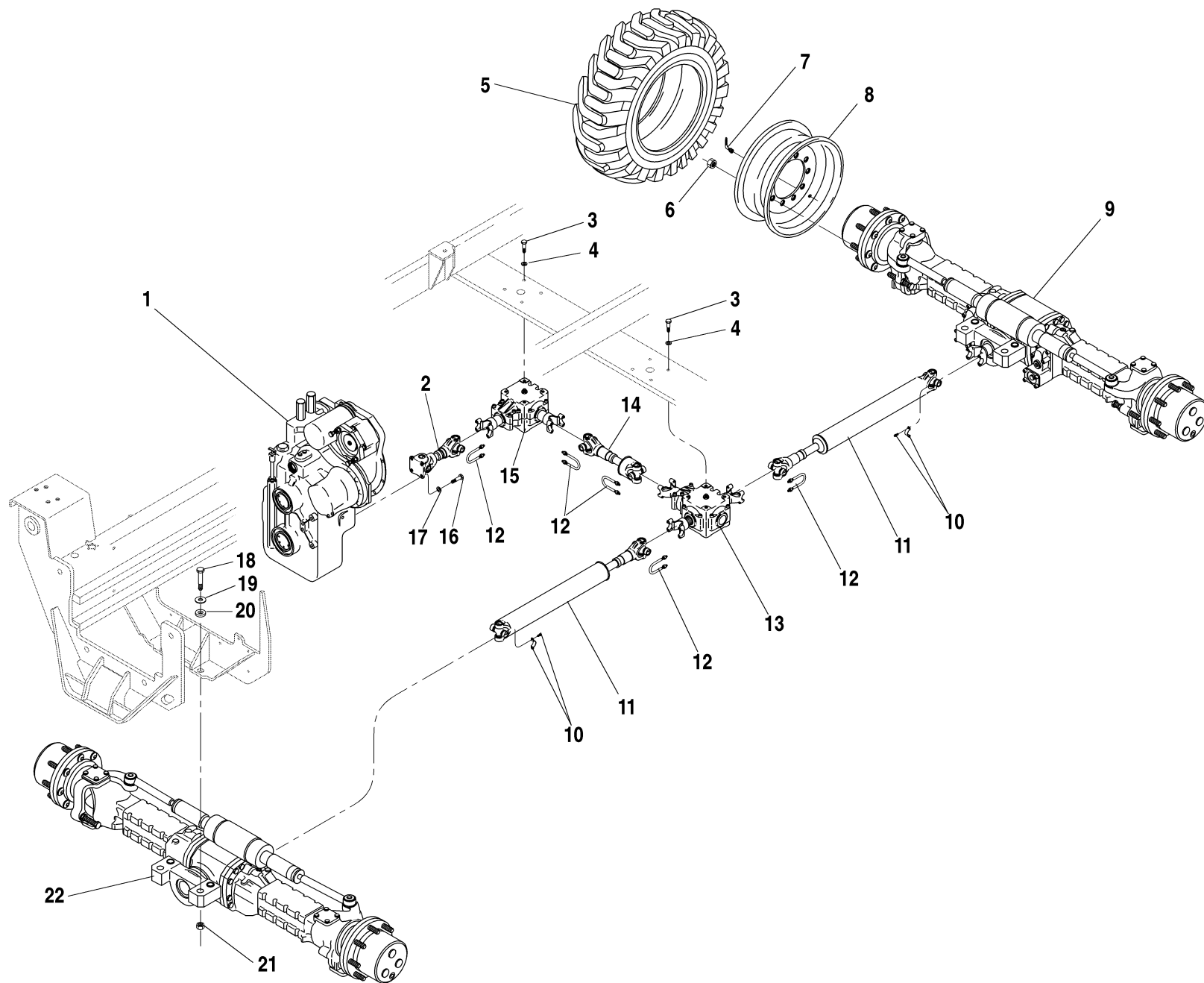
Axles (420S)

Axle Housing Assembly Right Front & Left Rear.	1.5.1
Axle Housing Assembly Left Front & Right Rear.	1.6.1
Center Gear Box Assembly	1.7.1
Differential Carrier Assembly - Front Axle (Limited Slip)	1.8.1
Differential Carrier Assembly - Rear Axle (Standard)	1.9.1
Brake Box Assembly - Front Axle	1.10.1
Brake Box Assembly - Rear Axle	1.11.1
Wheel End, Steer Axle Shafts & Knuckle Assembly	1.12.1
Steer Cylinder Assembly	1.13.1

Transmission T-12000

Converter Housing Assembly	1.15.1
Transmission Case & Plate Assembly	1.16.1
Torque Converter Assembly	1.17.1
Pump Drive Group.	1.18.1
Charging Pump & Filter Assembly	1.19.1
Reverse Idler Group	1.20.1
Forward & Reverse Shaft Group.	1.21.1
3rd Gear & Output Shaft Group.	1.22.1
1st & 2nd Gear Shaft Group	1.23.1
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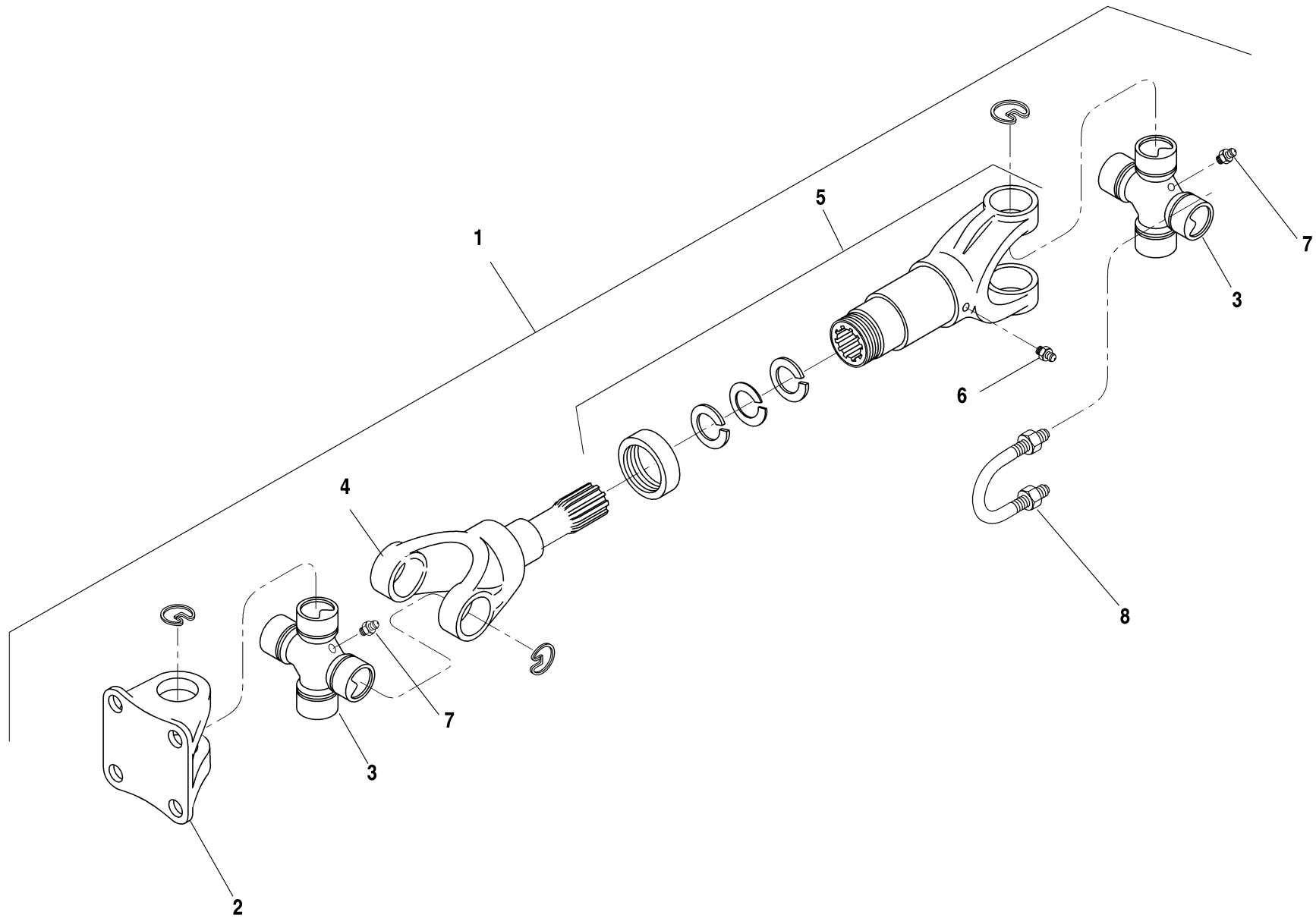
Electric Control Group	1.25.1
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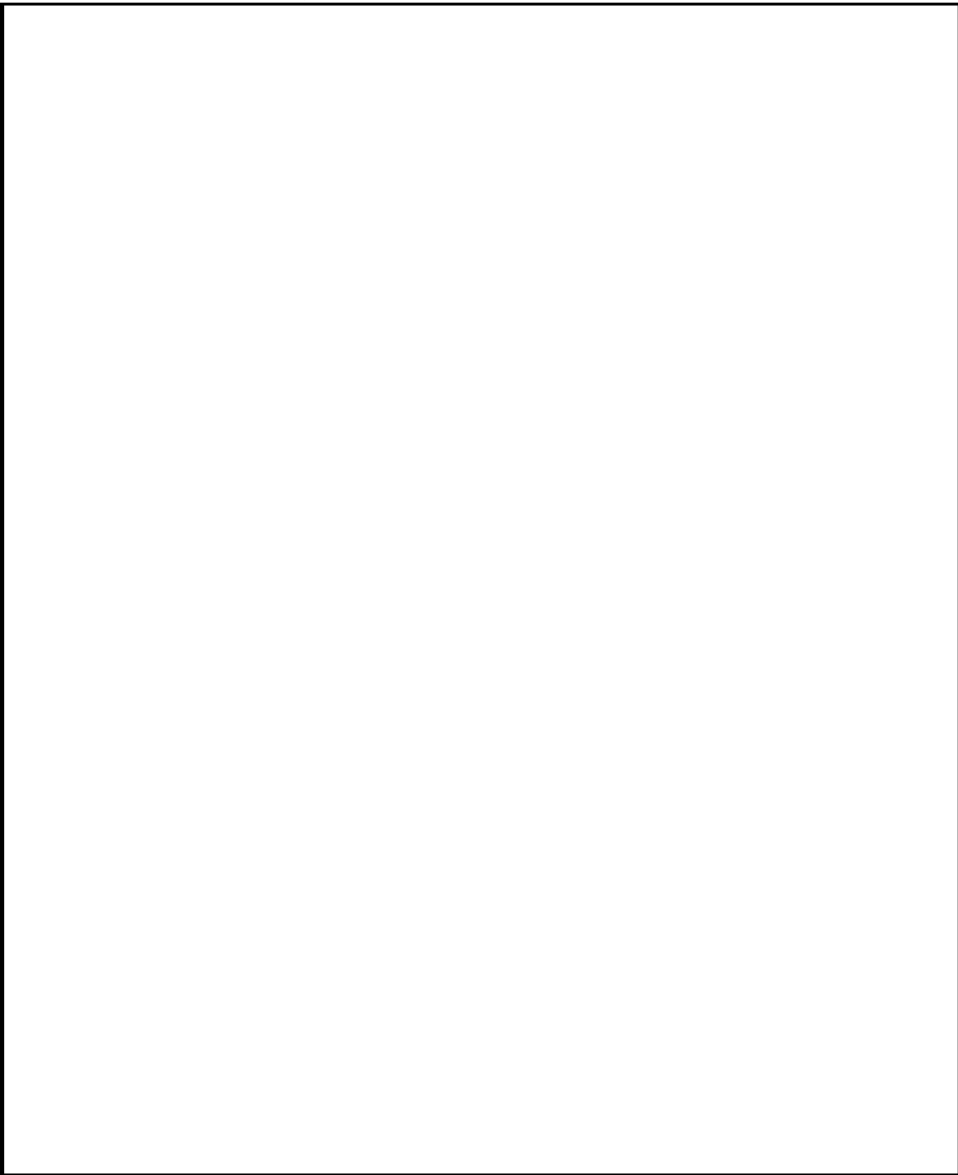
ITEM	PART NO.	QTY.	DESCRIPTION
1	1100224	1	Transmission (See Pages 1.15.1–1.25.1 for Breakdown)
2	67273B	1	Drive Shaft, Transmission Output (See Page 1.2.1 for Breakdown)
3	P00433		Capscrew, Hx., 1/2"-13 × 2" GR 8
4	P01312		Lockwasher, 1/2"
5	P19043	-	Tire, 13.00 × 24 12 Ply, Steel Belt
6	68024X		Lug Nut
7	P13673	4	Valve Stem
8	65448B	4	Wheel Rim, (9 × 24)
9	65261A	1	Axle, Rear (See Pages 1.5.1–1.13.1 for Breakdown)
10	37442X	2	Strap Kit
11	67275B	2	Drive Shaft Gearbox to Axles (See Page 1.4.1 for Breakdown)
12	P12530	10	U-Bolt
13	1101374	1	Gearbox, Tee (See Page 1.28.1 for Breakdown)
14	68960B	1	Drive Shaft, Intermediate (See Page 1.3.1 for Breakdown)
15	1101373		Gearbox, 90° (See Page 1.27.1 for Breakdown)
16	❶1100392	4	Capscrew, Socket Hd., 7/16"-20 × 15/16"
17	❷8307006	4	Lockwasher, 7/16"
18	P00785	8	Capscrew, Hx., 3/4"-16 × 4"
19	P01257	8	Washer, Flat, 3/4" Dia.
20	65611A	8	Washer, Axel Mounting Bolt
21	P01232		Nut, Hx., 3/4"-16
22	65260A	1	Axle, Front (See Pages 1.5.1–1.13.1 for Breakdown)

ITEM	PART NO.	QTY.	DESCRIPTION
NOTES: ❶ For S/N 108 – 656, use 1100419, Capscrew, Socket Hd., M12-1.75 × 30mm CI 10.9 . ❷ For S/N 108 – 656, use P04609, Lockwasher, M12, .			
644D-34 S/N 108–			

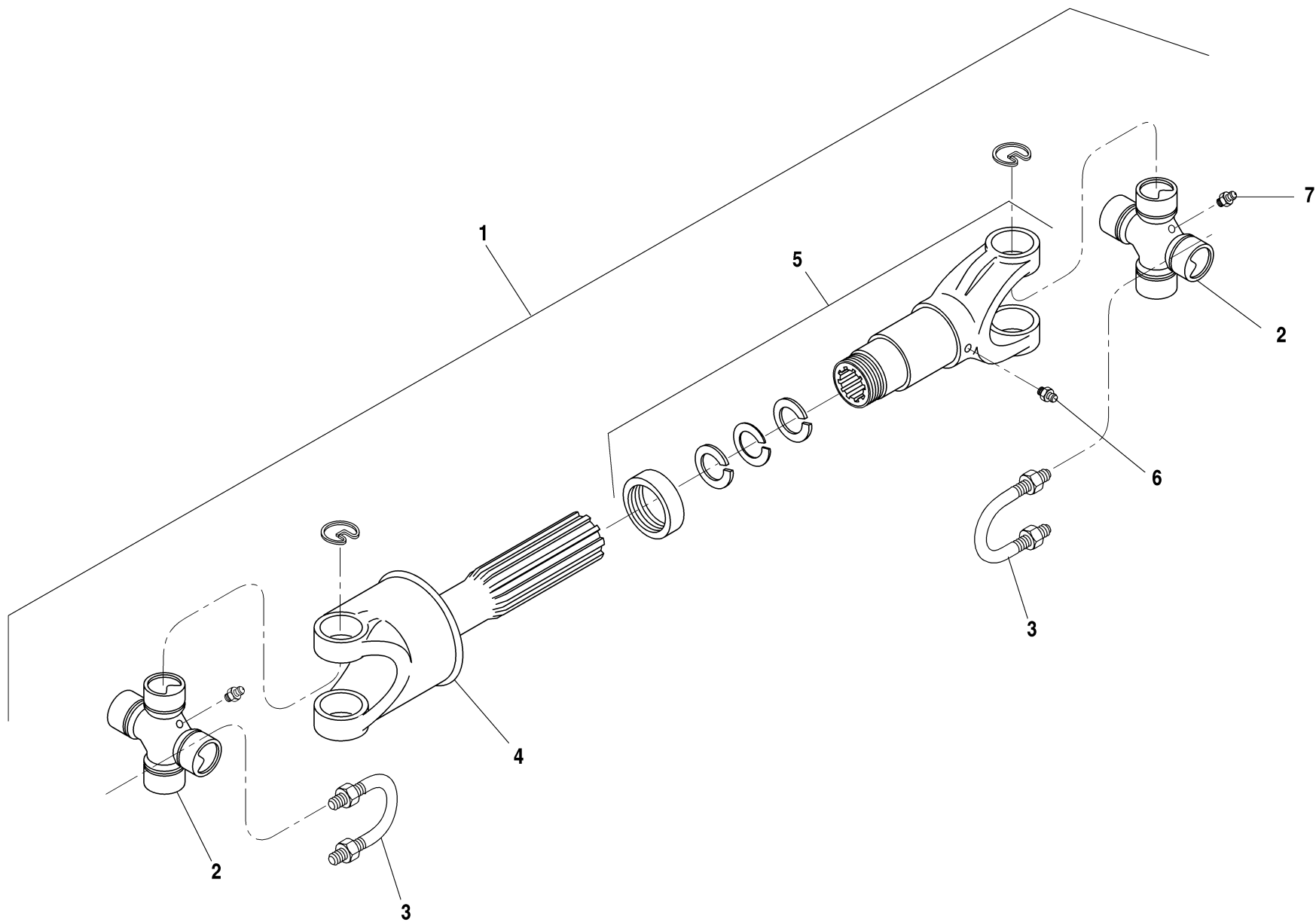
Rev. 004



ITEM	PART NO.	QTY.	DESCRIPTION
1	67273B	-	Drive Shaft (Includes items 2-7)
2	P11695	1	Flange, Yoke
3	P11694	2	U-Joint Assembly (Includes Snap Rings)
4	68348X	1	Yoke, Shaft
5	P12994	1	Yoke, Slip
6	P15272	1	Grease Zerk
7	P16611	2	Grease Zerk
8	P12530	2	U-Bolt



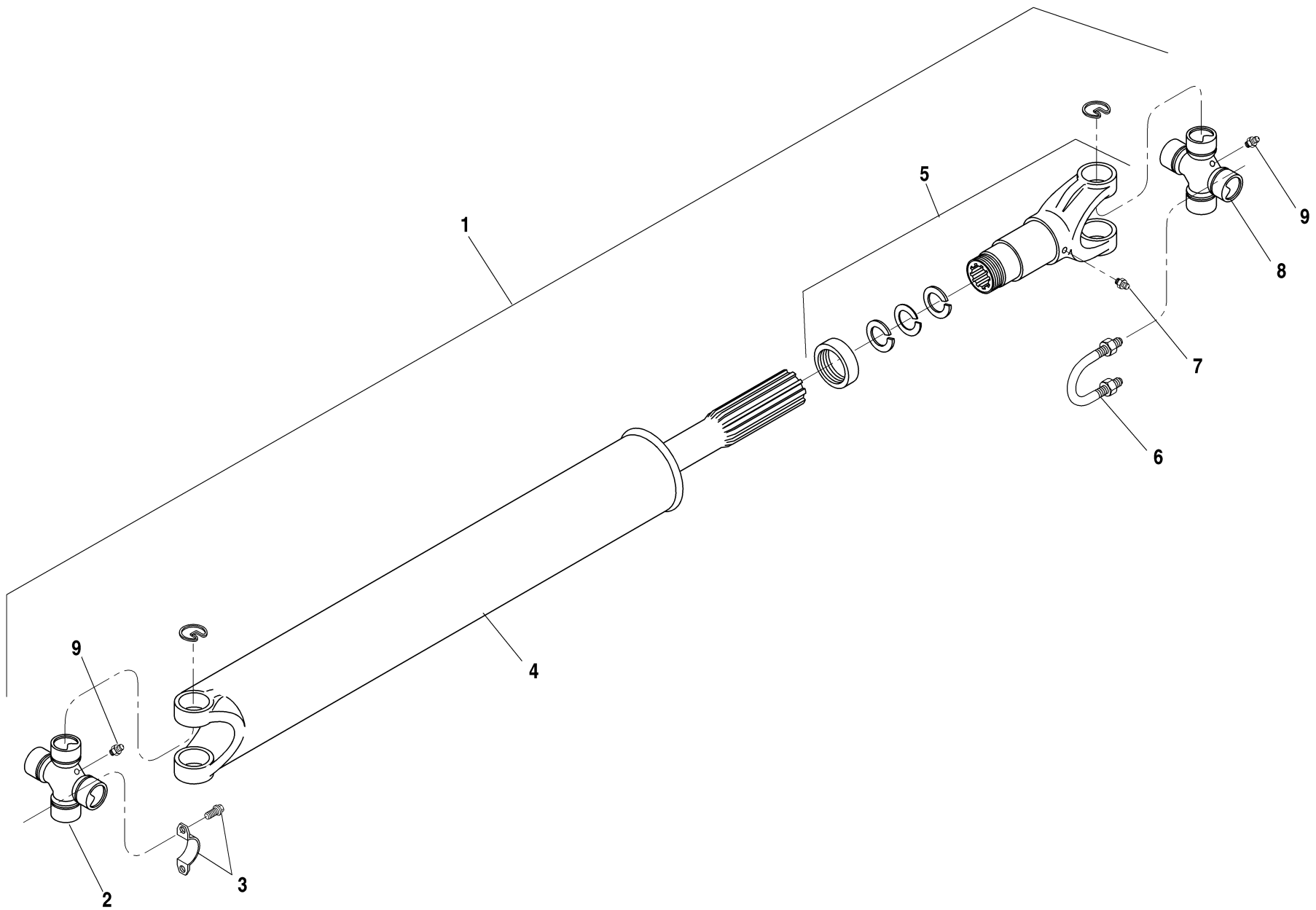
644D-34 S/N 108-

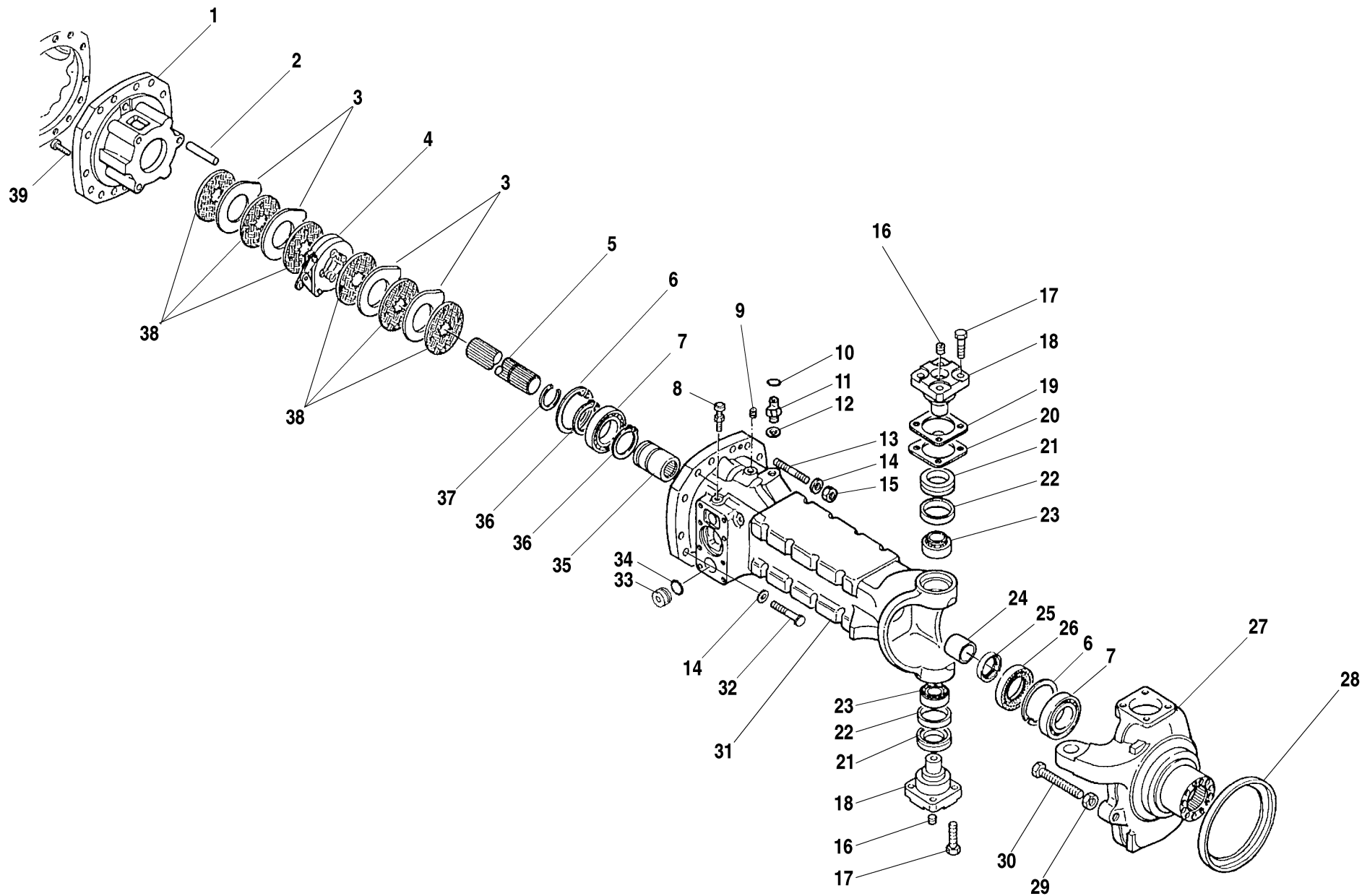


ITEM	PART NO.	QTY.	DESCRIPTION
1	68960B	1	Drive Shaft Intermediate
2	P11694	2	U-Joint Assembly (Includes Snap Rings & Item 7)
3	P12530	4	U-Bolt Kit
4	N.S.S.	-	Yoke Assembly
5	N.S.S.	1	Yoke, Slip
6	P15272	1	Grease Zerk
7	P16611	2	Grease Zerk

Rev. 000

644D-34 S/N 108-

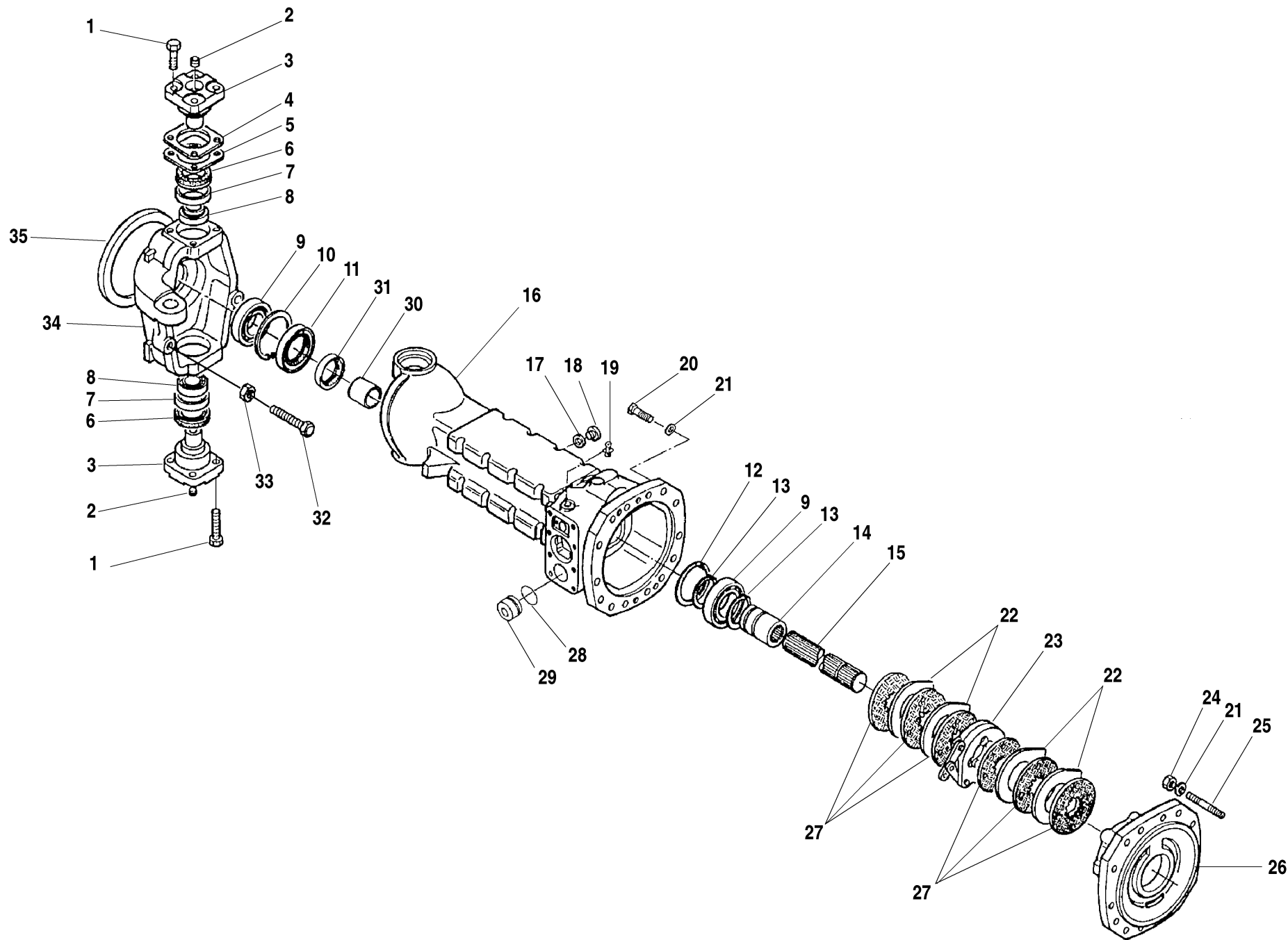




ITEM	PART NO.	QTY.	DESCRIPTION
1	67928X	1	Flange
2	67936X	3	Pin
3	67926X	10	Counter, Brake
4	67924X	1	Ball Brake
5	67953X	1	Half Shaft Brake
6	67949X	2	Snap Ring
7	67948X	2	Bearing
8	67906X	1	Bleed Valve
9	67907X	1	Dowel
10	67909X	1	O-Ring
11	67903X	1	Breather
12	67902X	1	Gasket
13	67943X	3	Stud
14	67944X	14	Thrust Washer
15	67945X	11	Nut
16	67938X	2	Dowel
17	67937X	8	Bolt
18	67936X	2	Pin
19	67935X	2	Shim
20	67934X	2	Shim
21	67933X	2	Oil Seal
22	67932X	2	Ring
23	67931X	2	Bearing
24	67904X	1	Bushing, Axle Housing
25	1100334	1	Seal, Axle Housing
26	67947X	1	Oil Seal
27	67917X	1	Steering Knuckle Right Front / Left Rear (Includes Item 28)
28	67919X	1	Cover
29	67923X	2	Nut
30	67922X	2	Capscrew
31	67901X	1	Axle Housing Right Front / Left Rear
32	67937X	11	Capscrew
33	❶67938X	1	Plug
34	❶67909X	1	O-Ring
35	67951X	1	Sleeve, Brake
36	67906X	3	Snap Ring

ITEM	PART NO.	QTY.	DESCRIPTION
37	67952X	1	Snap Ring
38	67925X	6	Disc, Brake
39	67942X	2	Screw
NOTES:			
❶ Not Used on Rear Axle.			
644D-34 S/N 108--			

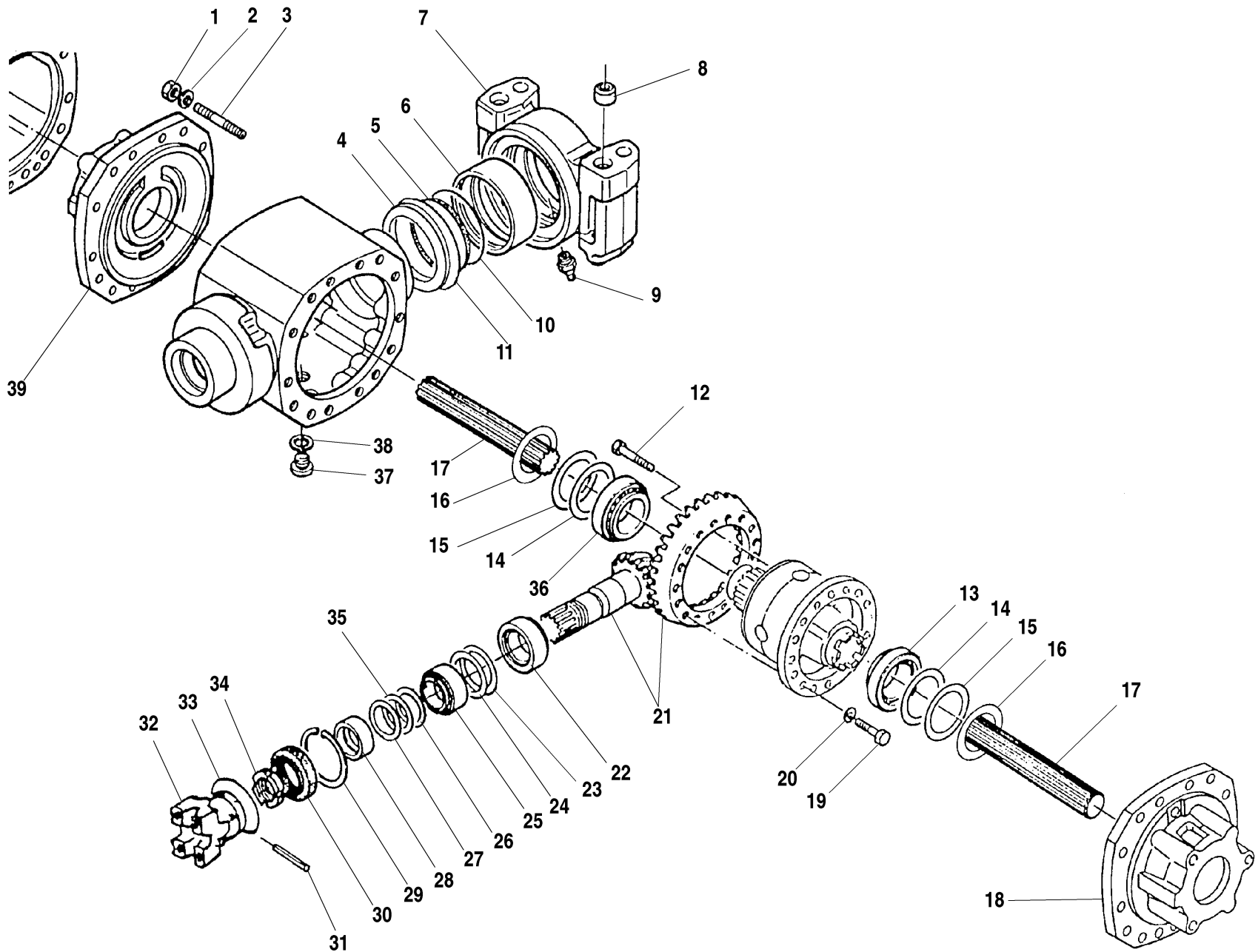
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ITEM	PART NO.	QTY.	DESCRIPTION
1	②67937X	8	Bolt, M14x40, GR10.9
2	67938X	2	Dowel
3	67936X	2	Pin
4	67935X	2	Shim
5	67934X	2	Shim
6	67933X	2	Oil Seal
7	67932X	4	Ring
8	67931X	2	Bearing
9	67948X	2	Bearing
10	67949X	2	Snap Ring
11	67947X	1	Oil Seal
12	67906X	3	Snap Ring
13	67950X	2	SnapRing
14	67951X	1	Sleeve, Brake
15	67953X	1	Half Shaft Brake
16	67911X	1	Axle Housing (Left Front / Right Rear)
17	67902X	1	Gasket
18	67915X	1	Oil Plug
19	67903X	1	Breather
20	67946X	11	Capscrew
21	67944X	14	Thrust Washer
22	67926X	10	Counter, Brake
23	67924X	1	Ball Brake
24	67945X	3	Nut
25	67943X	3	Stud
26	67928X	1	Flange
27	67925X	6	Disc, Brake
28	①67909X	1	O-Ring
29	①67938X	1	Plug
30	67904X	1	Bushing, Axle Housing
31	1100334	1	Seal, Axle Housing
32	67922X	2	Capscrew, M16
33	67923X	2	Nut
34	67920X	1	Steering Knuckle (Left Front / Right Rear) (Includes Item 35)
35	67919X	1	Cover

ITEM	PART NO.	QTY.	DESCRIPTION
NOTES: ❶ Not Used on Rear Axle. ❷ For Machines with fenders use 10704281 on the fender mount.			
644D-34 S/N 108–			

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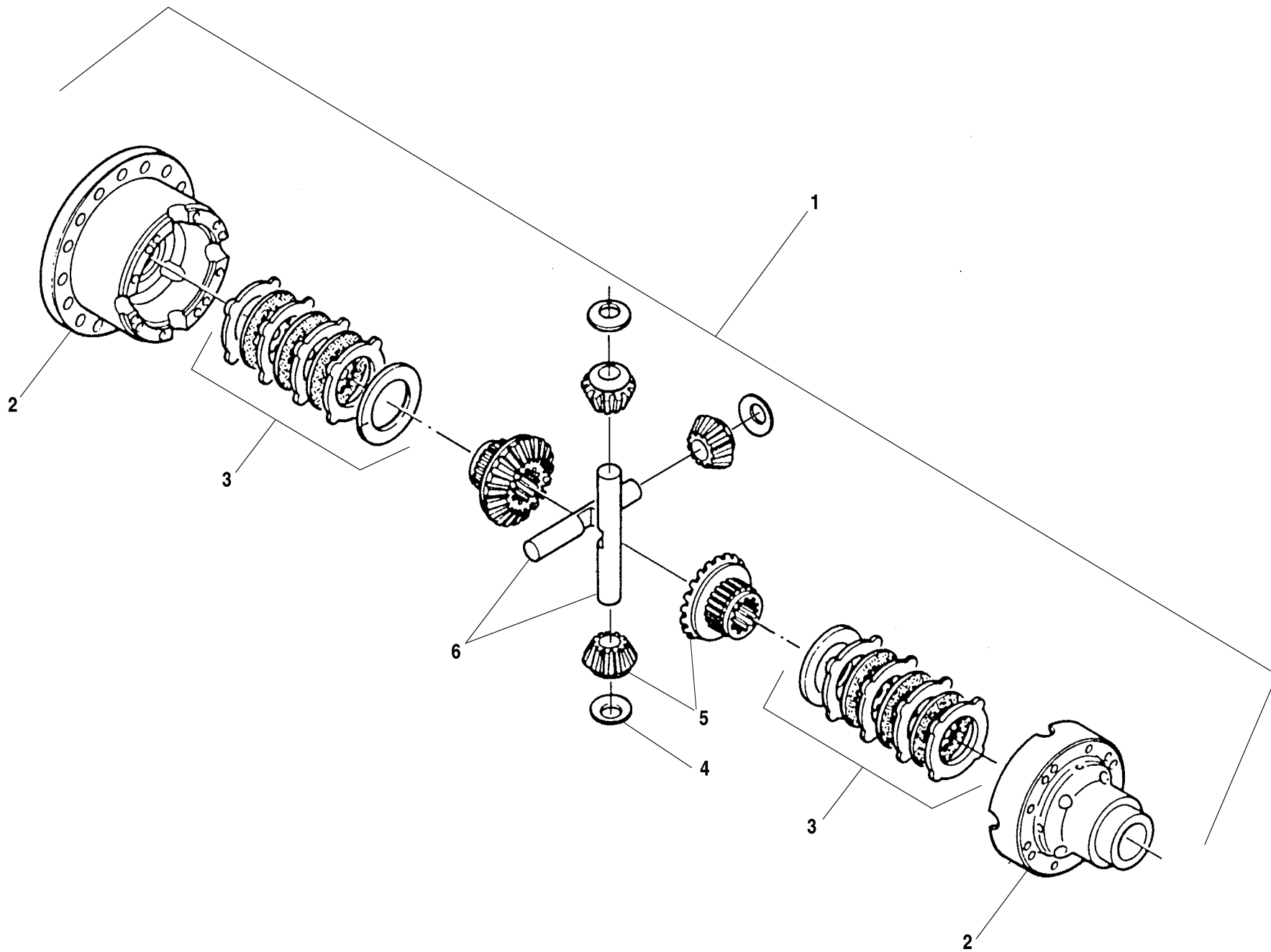


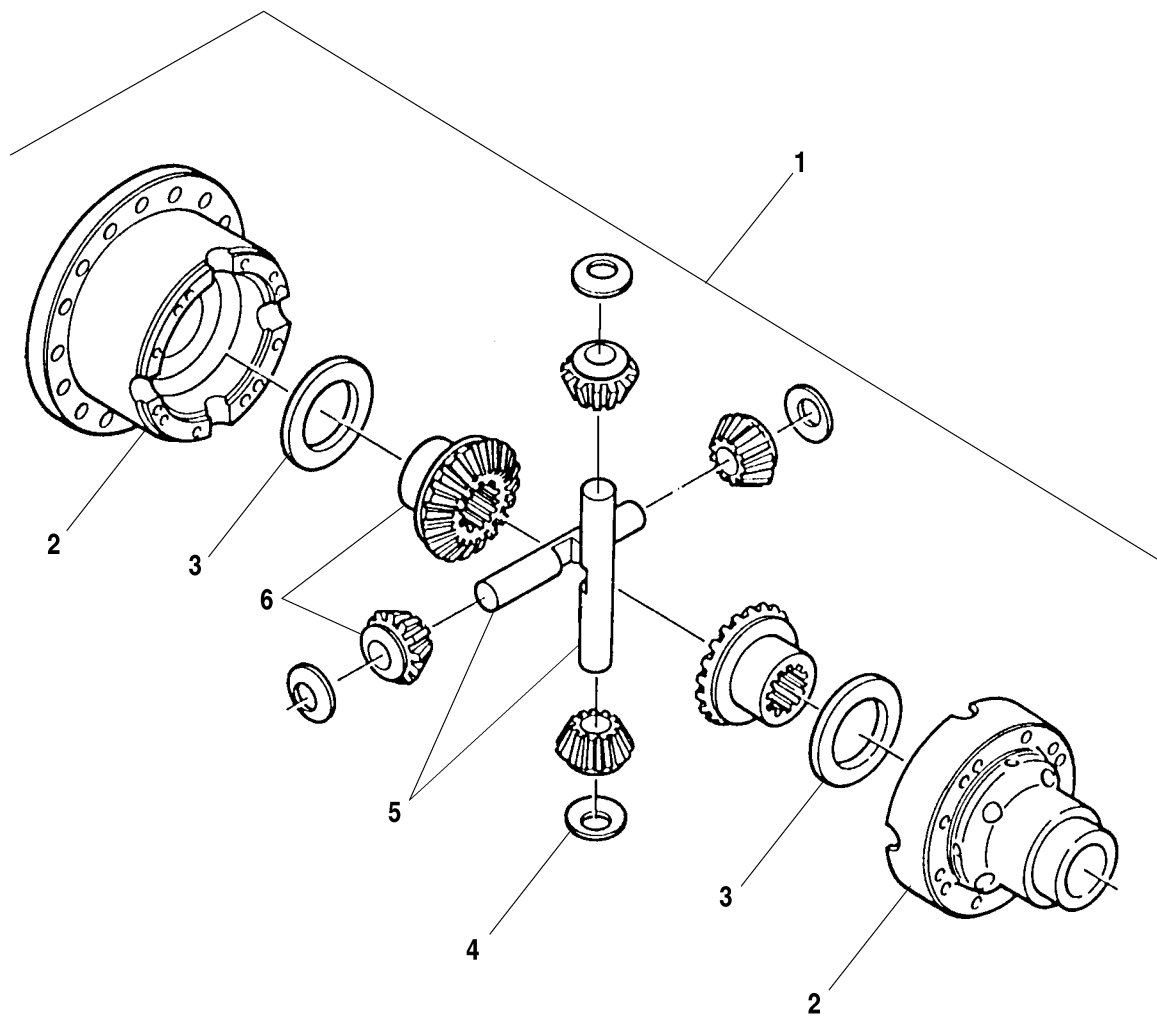
ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	67945X	6	Nut	38	67906X	1	Gasket
2	67944X	28	Thrust Washer	39	67940X	1	Flange
3	67943X	6	Stud				
4	67916X	2	Spacer				
5	67965X	2	V-Ring				
6	67957X	2	Bushing				
7	67955X	2	Support				
8	67956X	4	Bushing				
9	67958X	1	Grease Zerk				
10	67959X	2	O-Ring				
11	67960X	2	Spacer				
12	67980X	24	Capscrew				
13	67970X	1	Bearing				
14	67969X	4	Shim				
15	67968X	4	Shim				
16	67967X	4	Shim				
17	67953X	2	Half Shaft, Brake				
18	67939X	1	Flange				
19	67979X	16	Capscrew				
20	67978X	16	Thrustwasher				
21	68079X	1	Bevel Drive				
22	67971X	1	Bearing				
23	67972X	2	Shim				
24	67973X	2	Shim				
25	67974X	1	Bearing				
26	67975X	4	Shim				
27	67977X	4	Shim				
28	67964X	1	Spacer				
29	67963X	1	Snap Ring				
30	67962X	1	Oil Seal				
31	67930X	1	Pin				
32	67928X	1	Flange				
33	67929X	1	Cover				
34	67961X	1	Ring Nut				
35	67976X	4	Shim				
36	67966X	1	Bearing				
37	67915X	1	Oil Plug				
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CENTER GEARBOX ASSEMBLY (420S)1.7.1

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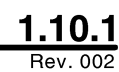




ITEM	PART NO.	QTY.	DESCRIPTION
1	68075X	-	Differential Case Complete
2	68076X	1	Case, Differential
3	68078X	2	Washer
4	67985X	4	Thrust Washer
5	67986X	2	Pin
6	68077X	1	Set, Differential Gear

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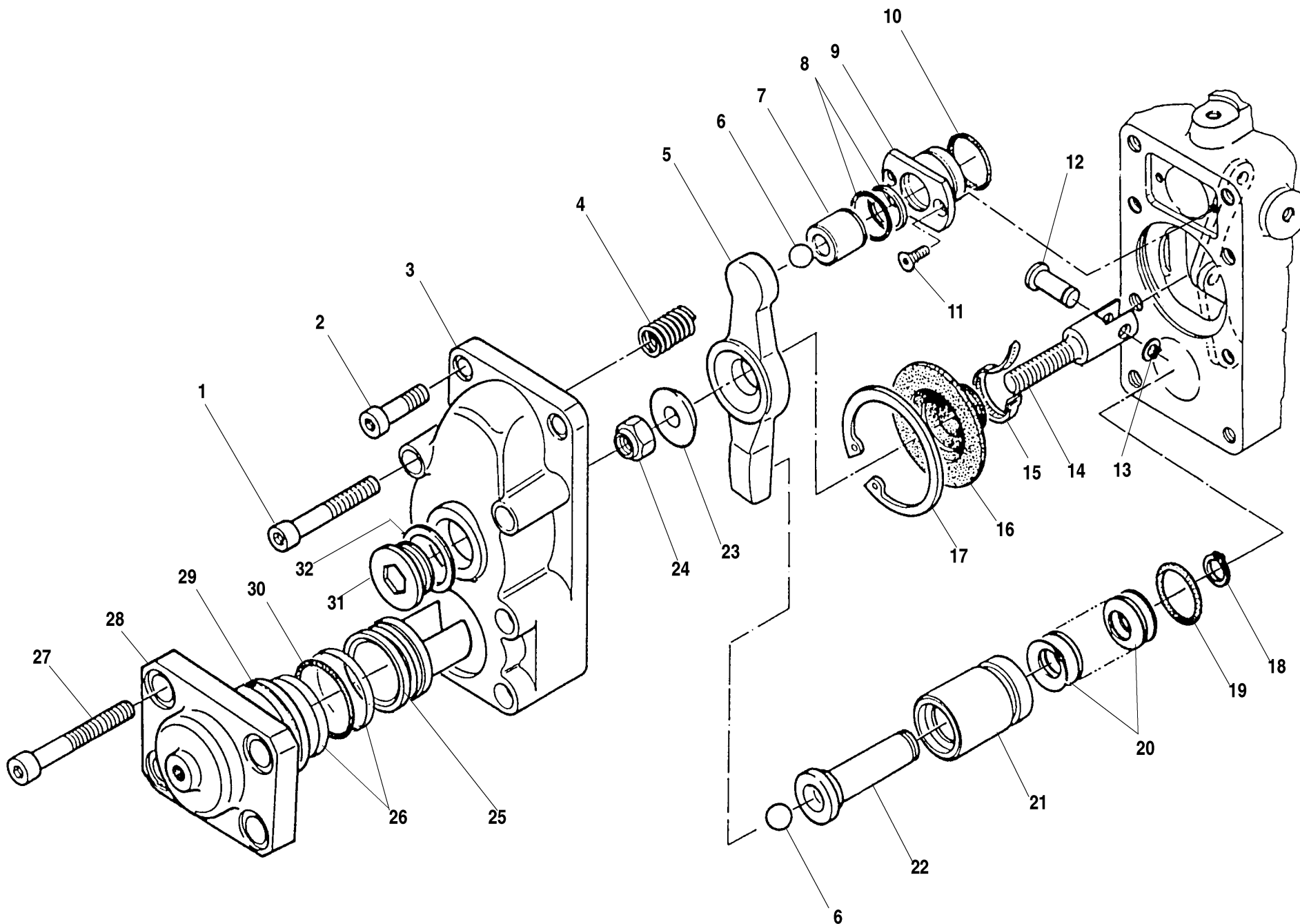


ITEM	PART NO.	QTY.	DESCRIPTION
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Rev. 002

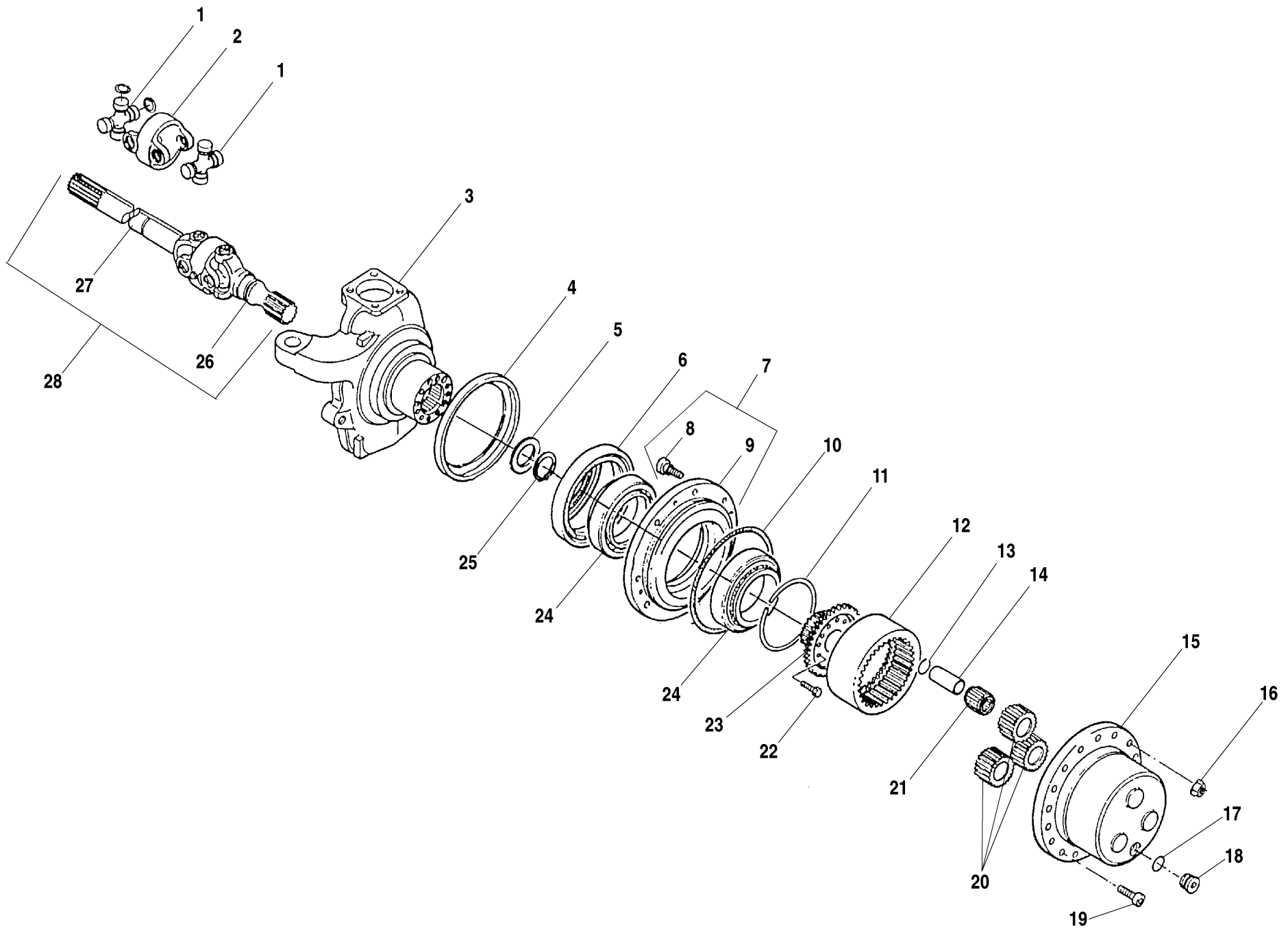
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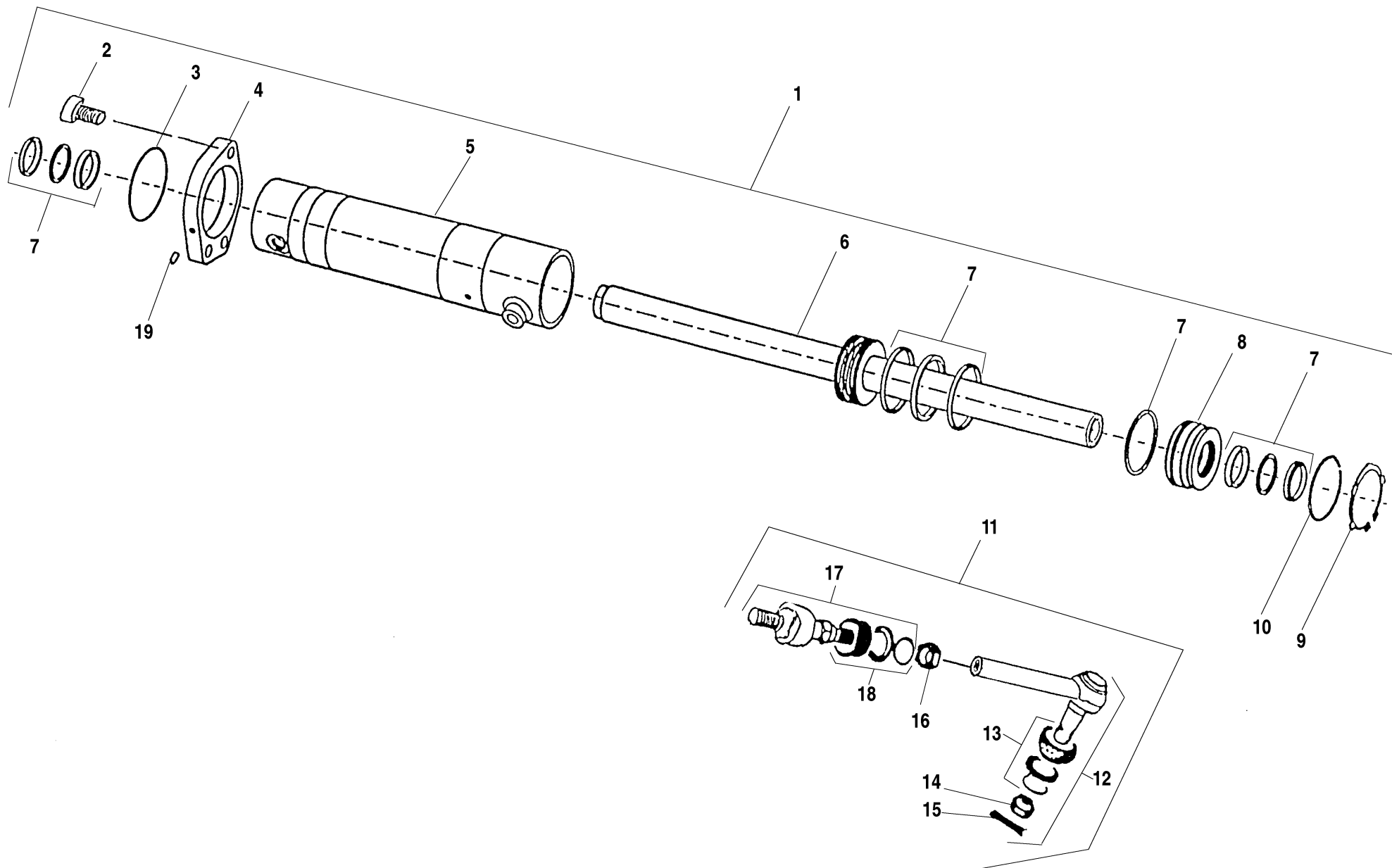
ITEM	PART NO.	QTY.	DESCRIPTION	
1	67980X	4	Screw	
2	67987X	4	Screw	
3	68069X	1	Box, Brake, Rear Axle	
4	67994X	1	Spring	
5	68070X	1	Lever, Brake	
6	68000X	2	Ball	
7	67999X	1	Piston, Brake	
8	67998X	1	Seal, Oil	
9	67997X	1	Bushing, Brake	
10	67996X	1	O-Ring	
11	68001X	2	Screw	
12	68009X	1	Pin	
13	68011X	1	Snap Ring	
14	68010X	1	Fork	
15	68008X	1	Clamp	
16	68007X	1	Seal Ring	
17	68006X	1	Snap Ring	
18	68068X	1	Snap Ring	
19	67909X	1	O-Ring	
20	68071X	16	Spring	
21	68067X	1	Bushing, Brake	
22	68065X	1	Pin	
23	67993X	1	Ball Washer	
24	67992X	1	Nut	
25	68062X	1	Piston, Brake	
26	68061X	2	Ring	
27	68050X	4	Screw	
28	68058X	1	Flange	
29	68060X	1	O-Ring	
30	68063X	1	O-Ring	
31	67988X	1	Oil Plug	
32	67989X	1	Gasket	
				644D-34 S/N 108-

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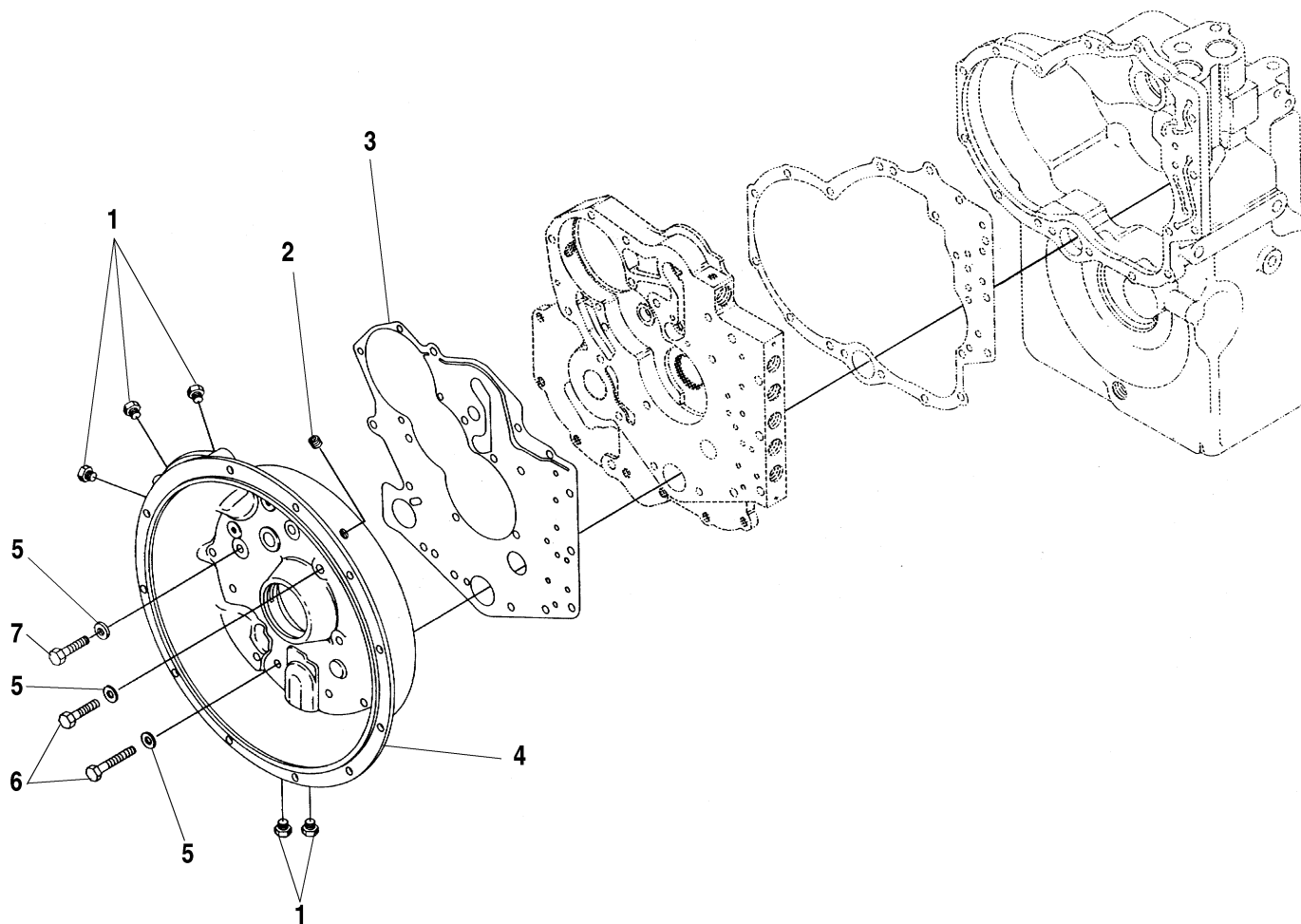


ITEM	PART NO.	QTY.	DESCRIPTION	
1	68031X	2	U-Joint	
2	68032X	1	Coupling, Yoke	
3	67918X	1	Steering Knuckle, Right Front / Left Rear	
	67921X	1	Steering Knuckle, Left Front / Right Rear	
4	67919X	1	Cover	
5	68028X	1	Thrust Washer	
6	68072X	1	Box Ring	
7	68012X	-	Wheel Hub Complete (Includes Items 9 & 10)	
8	68014X	8	Stud,Wheel	
9	68013X	1	Hub, Wheel	
10	68016X	1	O-Ring	
11	68017X	1	Ring	
12	68020X	1	Ring Gear	
13	68021X	3	Snap Ring	
14	68022X	3	Pin, Planet	
15	68026X	1	Flange	
16	68024X	8	Lug Nut	
17	67902X	1	Gasket	
18	67915X	1	Oil Plug	
19	68027X	2	Screw	
20	68025X	1	Set, Planet Gear	
21	68023X	3	Cage, Roller Bearing	
22	68019X	12	Screw	
23	68018X	1	Sun Gear	
24	68015X	2	Bearing	
25	67950X	1	Snap Ring	
26	1100333	1	Half Shaft	
27	68033X	1	Differential Half Shaft	
28	68029X	1	Shaft Assemble (Includes Items 1-2, 26 & 27)	
				644D-34 S/N 108-

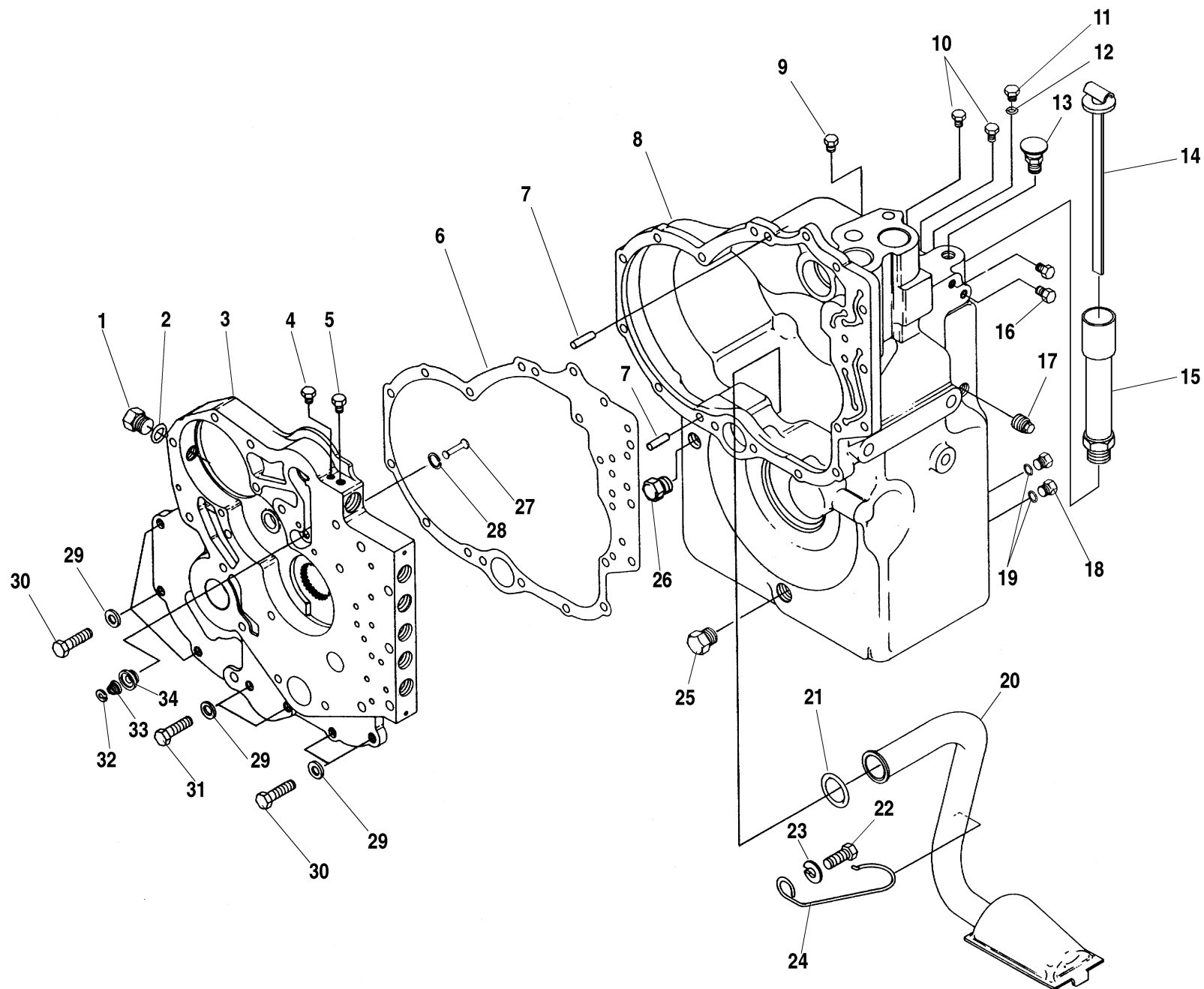
Rev. 002



ITEM	PART NO.	QTY.	DESCRIPTION		Rev. 000
1	68040X	-	Steer Cylinder (Includes Items 2-10)		
2	68050X	3	Screw, Cylinder		
3	68048X	1	Snap Ring		
4	68047X	1	Flange		
5	68046X	1	Barrel, Steer Cylinder		
6	68045X	1	Rod, Steer Cylinder		
7	68041X	1	Seal Kit		
8	68044X	1	Piston		
9	68042X	1	Snap Ring RB		
10	68043X	1	Snap Ring RW		
11	68051X	1	Steering Arm Assembly (Includes Items 12-18)		
12	68052X	1	Steering Arm (Includes Items 13-15)		
13	68073X	1	Kit, Ring & Guard		
14	68056X	1	Nut		
15	68055X	1	Split Pin		
16	68054X	1	Nut		
17	68053X	1	Axial Joint (Includes Item 18)		
18	68074X	1	Kit, Ring & Guard		
19	68049X	1	Pin, Elastic		
				644D-34 S/N 108-	
STEER CYLINDER ASSEMBLY (420S) 1.13.1					644D ▼

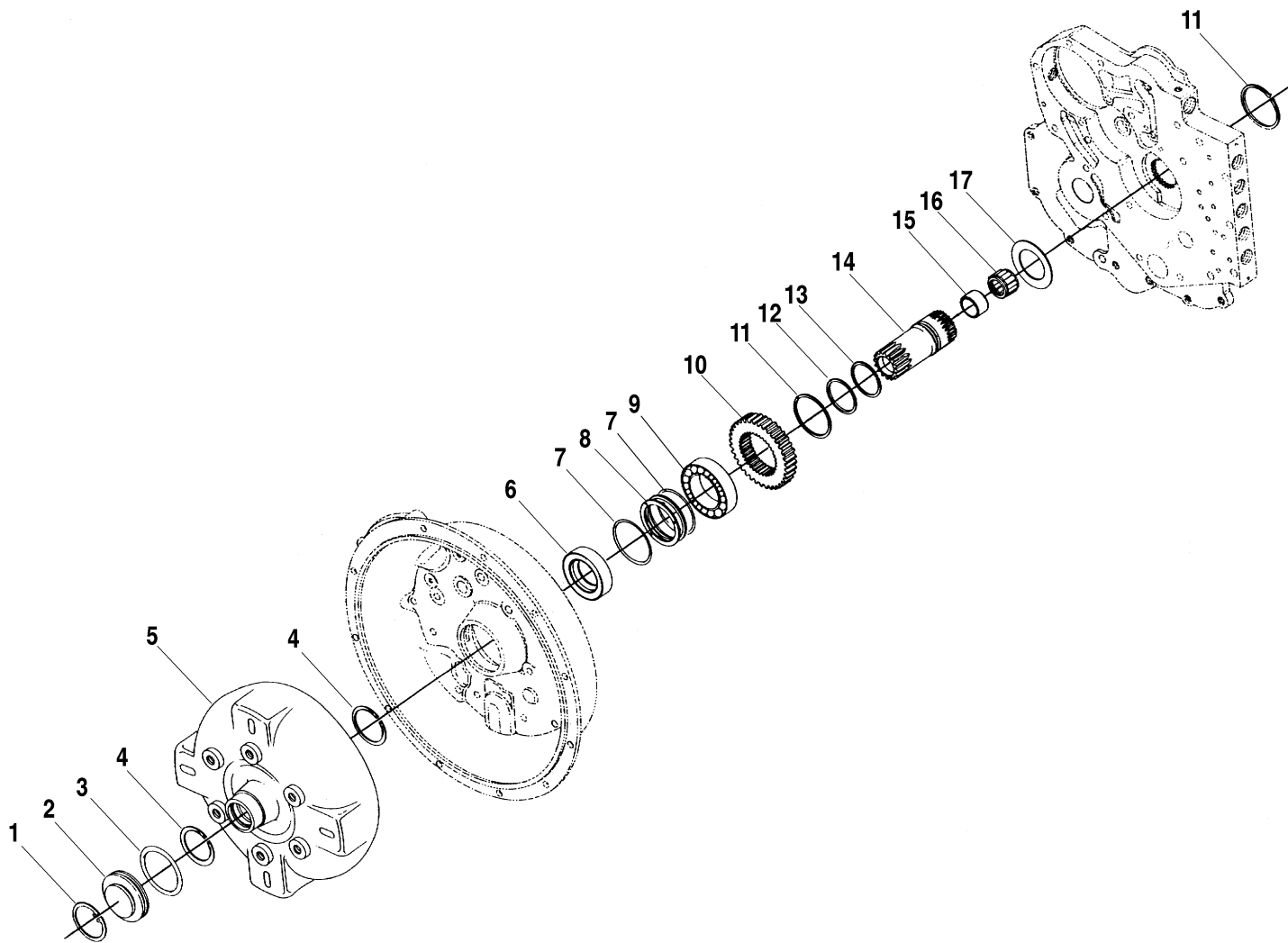


ITEM	PART NO.	QTY.	DESCRIPTION
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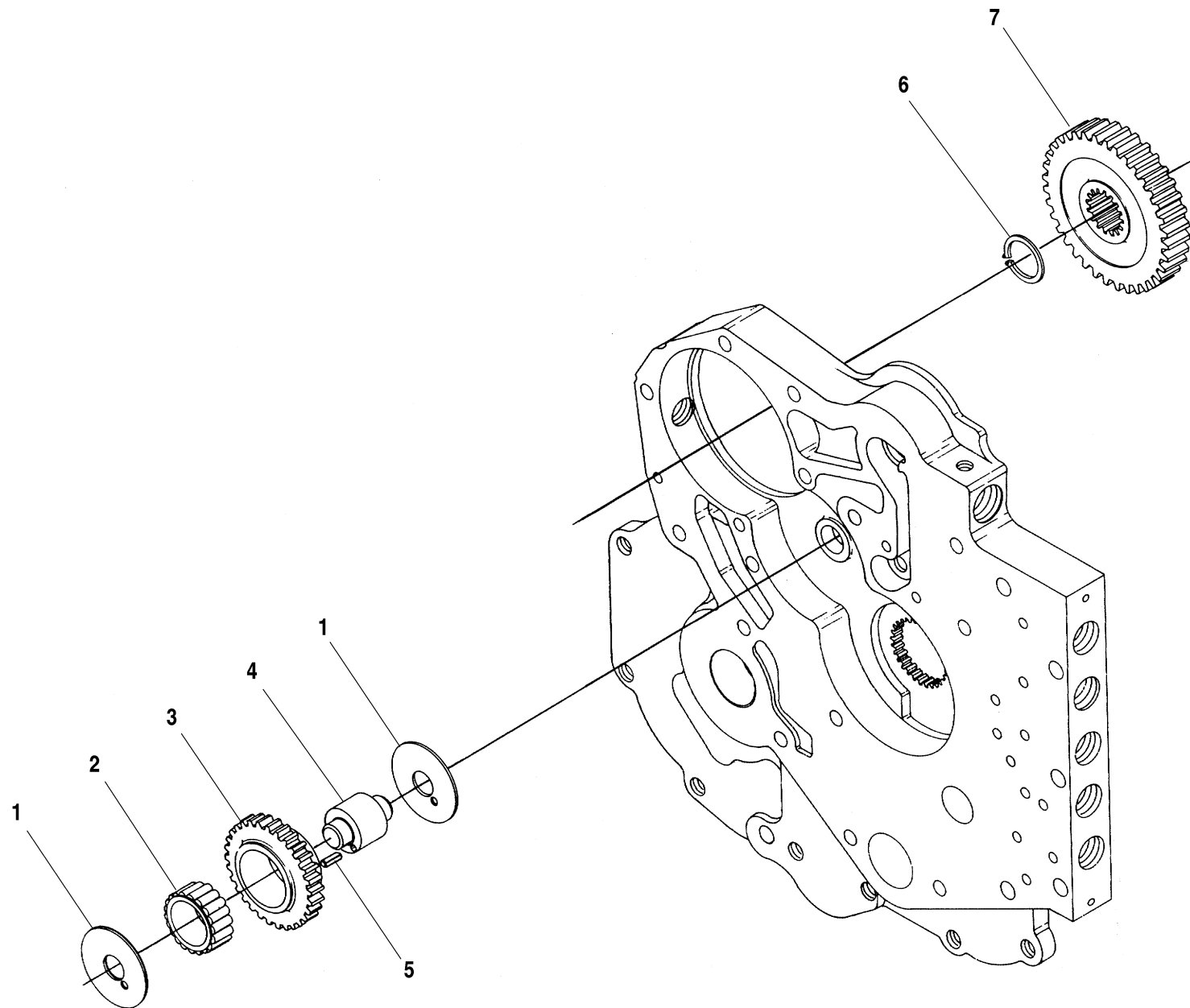


ITEM	PART NO.	QTY.	DESCRIPTION	
1	68209X	1	Plug, Sensor Port	
2	68210X	1	O-Ring	
3	68211X	1	Plate, Spacer	
4	P20808	1	Plug, Inlet Pressure Port	
5	68212X	1	Plug, Outlet	
6	68213X	1	Gasket, Spacer Plate to Transmission	
7	68214X	2	Dowel Pin	
8	68215X	1	Case, Transmission	
9	68216X	1	Plug, Filler	
10	P20808	1	Plug, Pipe	
11	68208X	1	Plug, Speed Sensor Port	
12	68210X	1	O-Ring	
13	68217X	1	Air Breather	
14	1100332	1	Dipstick, Transmission	
15	8034964	1	Tube, Dipstick	
16	68200X	2	Plug	
17	68218X	1	Plug, Sensor Port	
18	68220X	2	Plug, Oil Level	
19	68219X	2	O-Ring	
20	68221X	1	Oil Supply Tube	
21	37074X	1	Seal, Oil Supply Tube	
22	68222X	1	Capscrew	
23	68223X	1	Washer	
24	68224X	1	Retaining Clip	
25	P20614	1	Plug, Magnetic Drain	
26	68225X	1	Plug, Drain	
27	68226X	1	Valve, Poppet	
28	68227X	1	Snap Ring	
29	68205X	9	Lockwasher	
30	68344X	7	Capscrew	
31	68228X	2	Capscrew	
32	68345X	1	Washer, Poppet	
33	P23310	1	Spring, Safety Valve	
34	68229X	1	Seat, Safety Valve	
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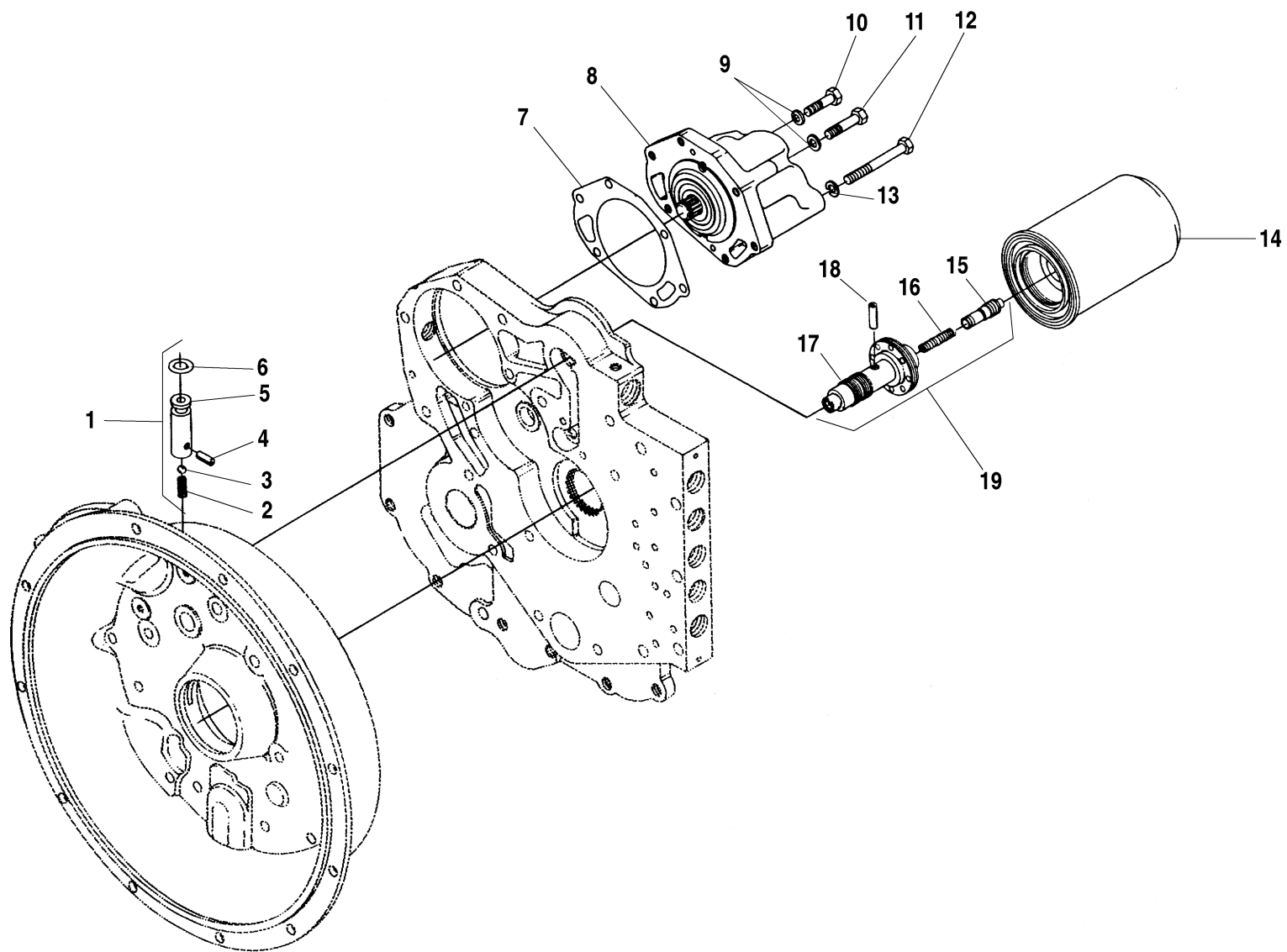
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ITEM	PART NO.	QTY.	DESCRIPTION
1	68243X	2	Thrust Washer, Pump Drive Idler
2	68244X	1	Bearing, Idler Gear
3	68245X	1	Gear, Pump Drive Idler (31T)
4	37073X	1	Pump Drive Idler Shaft (Includes Item 5)
5	68248X	1	Roll Pin
6	68246X	1	Snap Ring
7	68247X	1	Gear, Pump Drive (34T)

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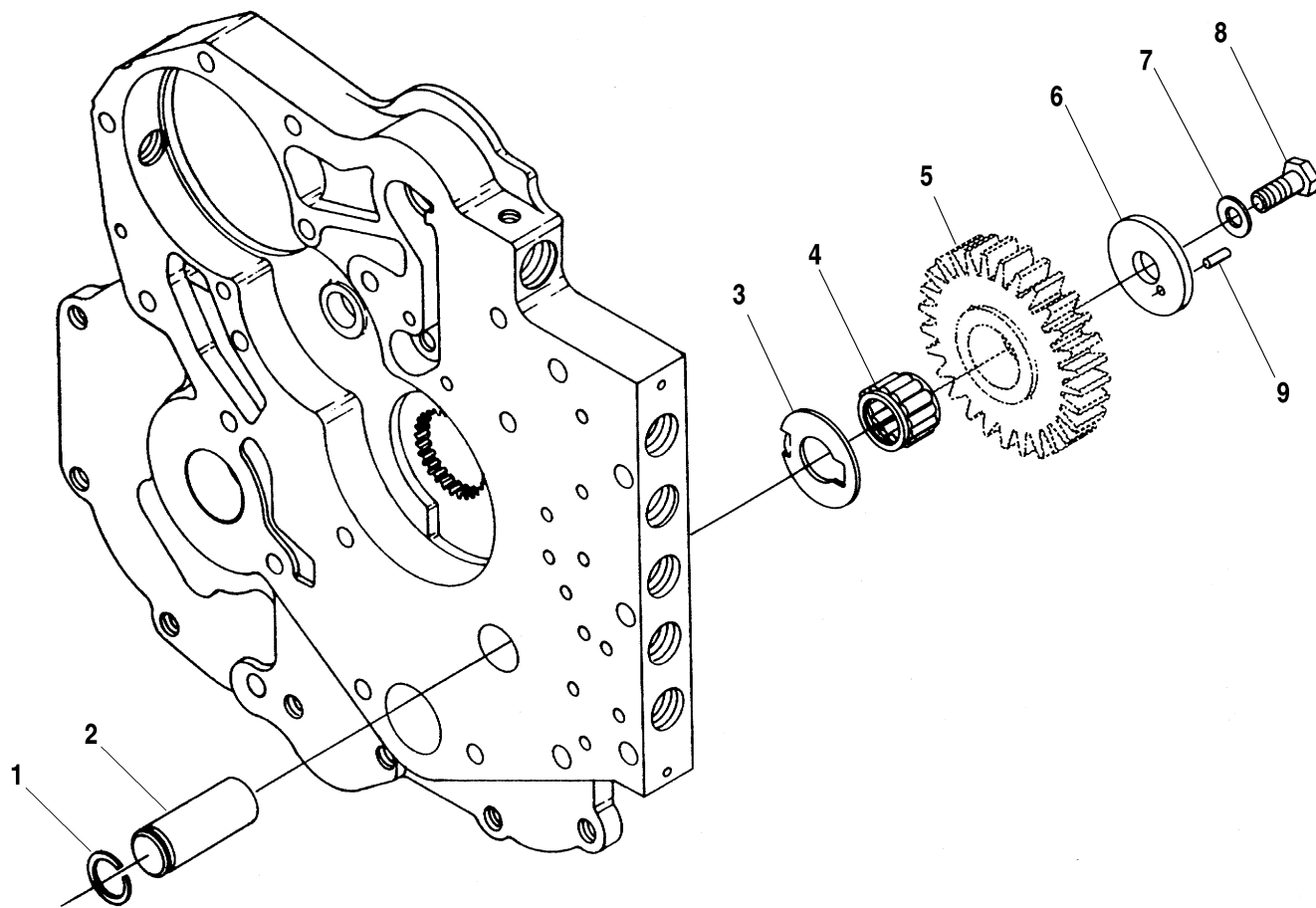
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ITEM	PART NO.	QTY.	DESCRIPTION
1	68250X	1	Check Valve Assembly (Includes Items 2-6)
2	68253X	1	Spring
3	68252X	1	Ball
4	68251X	1	Pin
5	N.S.S.	-	Housing, Check Valve
6	68249X	1	O-Ring
7	68254X	1	Gasket, Charging Pump
8	68255X	1	Pump, Charging
9	68346X	5	Lockwasher
10	68256X	1	Capscrew
11	68257X	4	Capscrew
12	68258X	1	Capscrew
13	68205X	1	Lockwasher
14	68259X	1	Filter
15	68260X	1	Piston
16	68261X	1	Spring
17	68263X	1	Sleeve
18	68262X	1	Pin
19	68264X	1	Regulator Valve Assembly (Includes Items 15-18)

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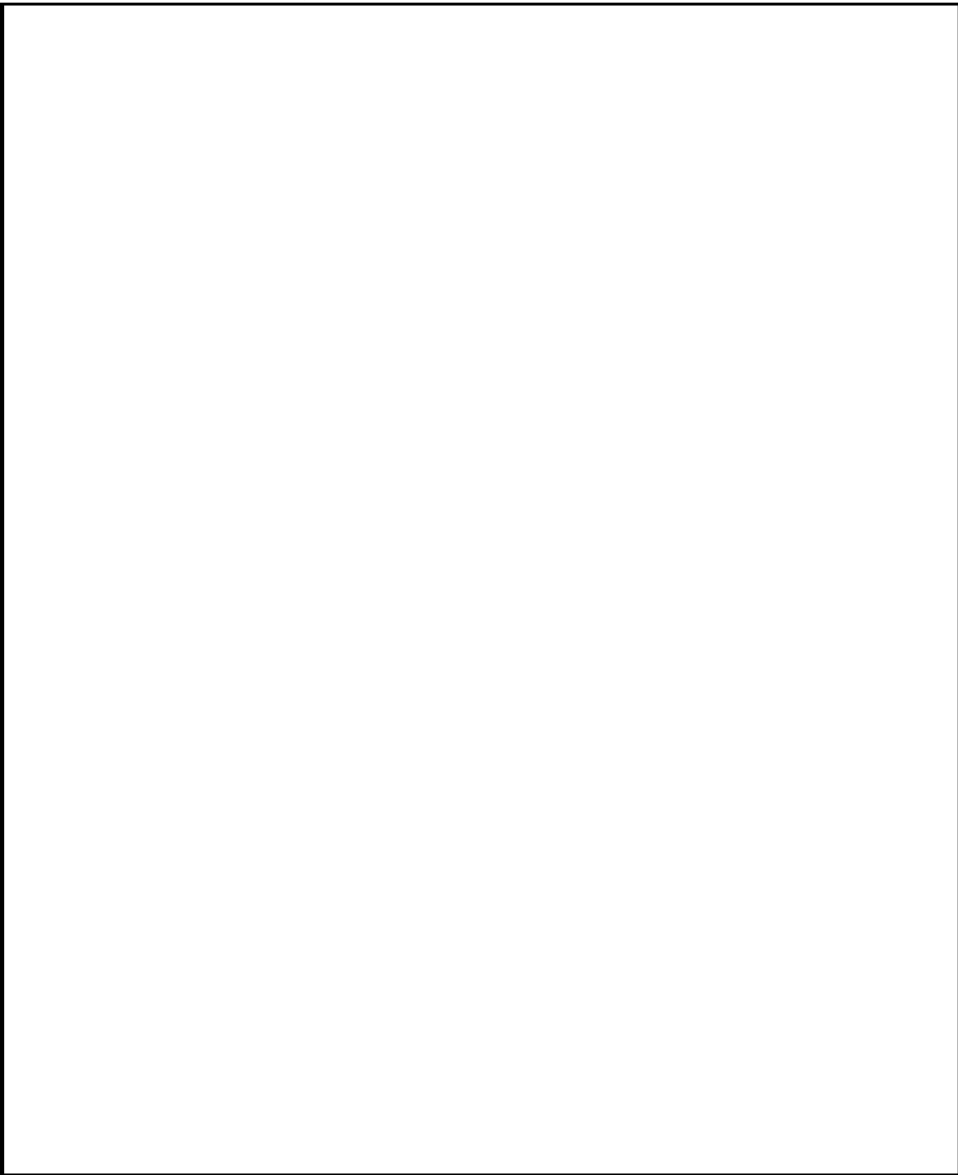


ITEM	PART NO.	QTY.	DESCRIPTION	
1	68265X	1	Snap Ring	
2	68266X	1	Shaft, Idler & Pilot	
3	68267X	1	Thrust Washer	
4	68268X	1	Bearing, Reverse Idler Gear	
5	68333X	1	Gear, Reverse Idler	
6	68269X	1	End Plate	
7	68270X	1	Washer	
8	68271X	1	Capscrew	
9	68272X	1	Roll Pin	
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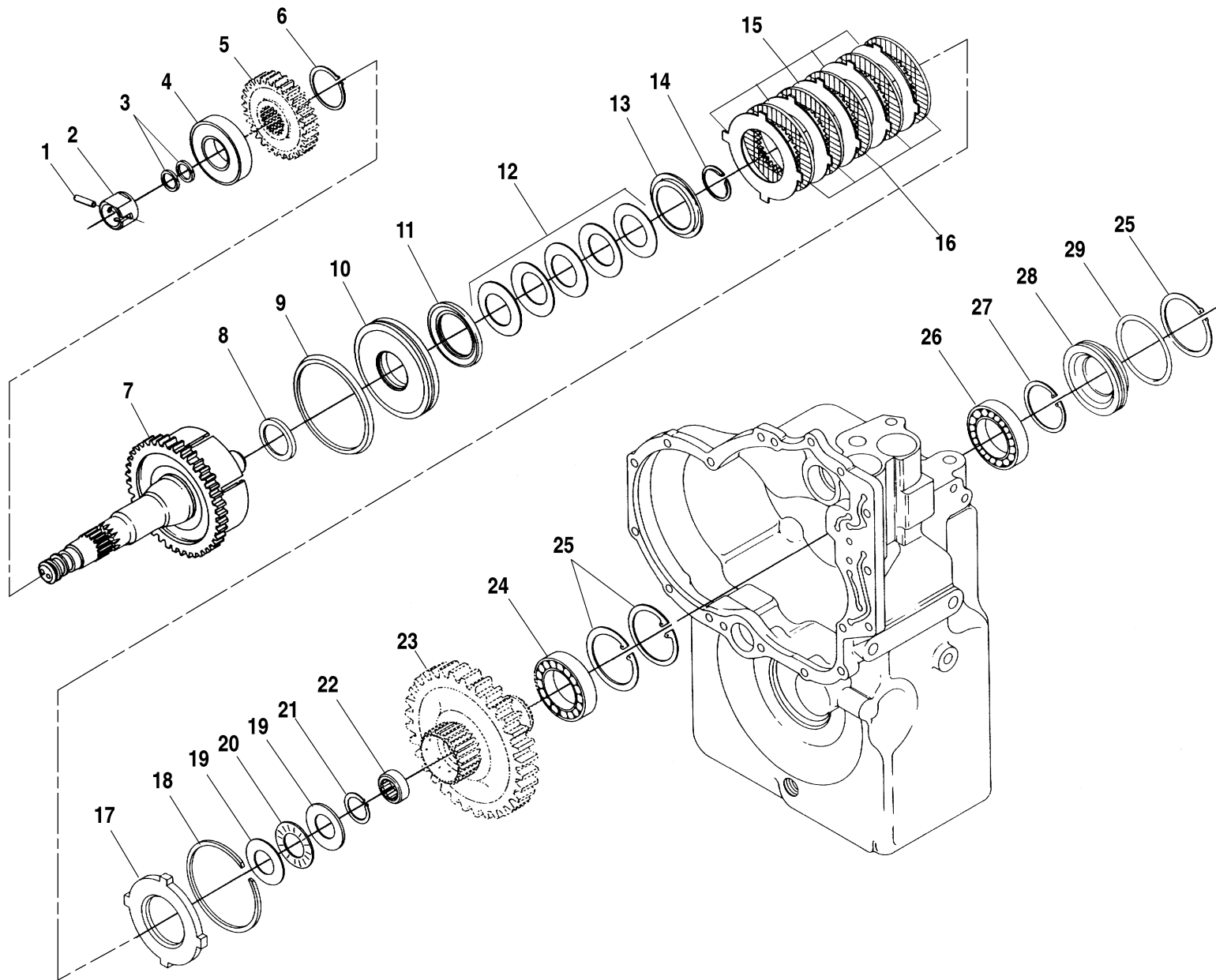
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ITEM	PART NO.	QTY.	DESCRIPTION
1	37066X	8	Thrust Washer
2	37065X	4	Thrust Washer Bearing
3	68334X	2	Reverse Clutch Gear Bearing
4	68335X	1	Reverse Clutch Bearing Spacer
5	68336X	1	Reverse Clutch Gear Bearing Assembly
6	68273X	2	Snap Ring
7	37067X	1	End Plate
8	37064X	12	Inner Disc
9	68274X	1	Snap Ring
10	68275X	2	Retainer, Snap Ring
11	68276X	1	Disc Washer Spring Set (Includes 5 Washers)
12	68277X	2	Wear Plate, Clutch Piston
13	68278X	2	Clutch Piston Assembly (Includes Items 13 & 14)
14	37063X	12	Outer Disc
15	68274X	1	Snap Ring
16	37062X	2	Outer Seal, Clutch Piston
17	37061X	2	Inner Seal, Clutch Piston
18	68279X	1	Turbine Shaft Drum & Plug Assembly
19	68337X	1	Forward Gear & Clutch Assembly
20	68334X	2	Bearing
21	68335X	1	Bearing Spacer
22	68280X	1	Bearing, Turbine Shaft
23	37060X	3	Piston Ring
24	68281X	1	Sleeve, Oil Distribution
25	68282X	1	Retaining Screw

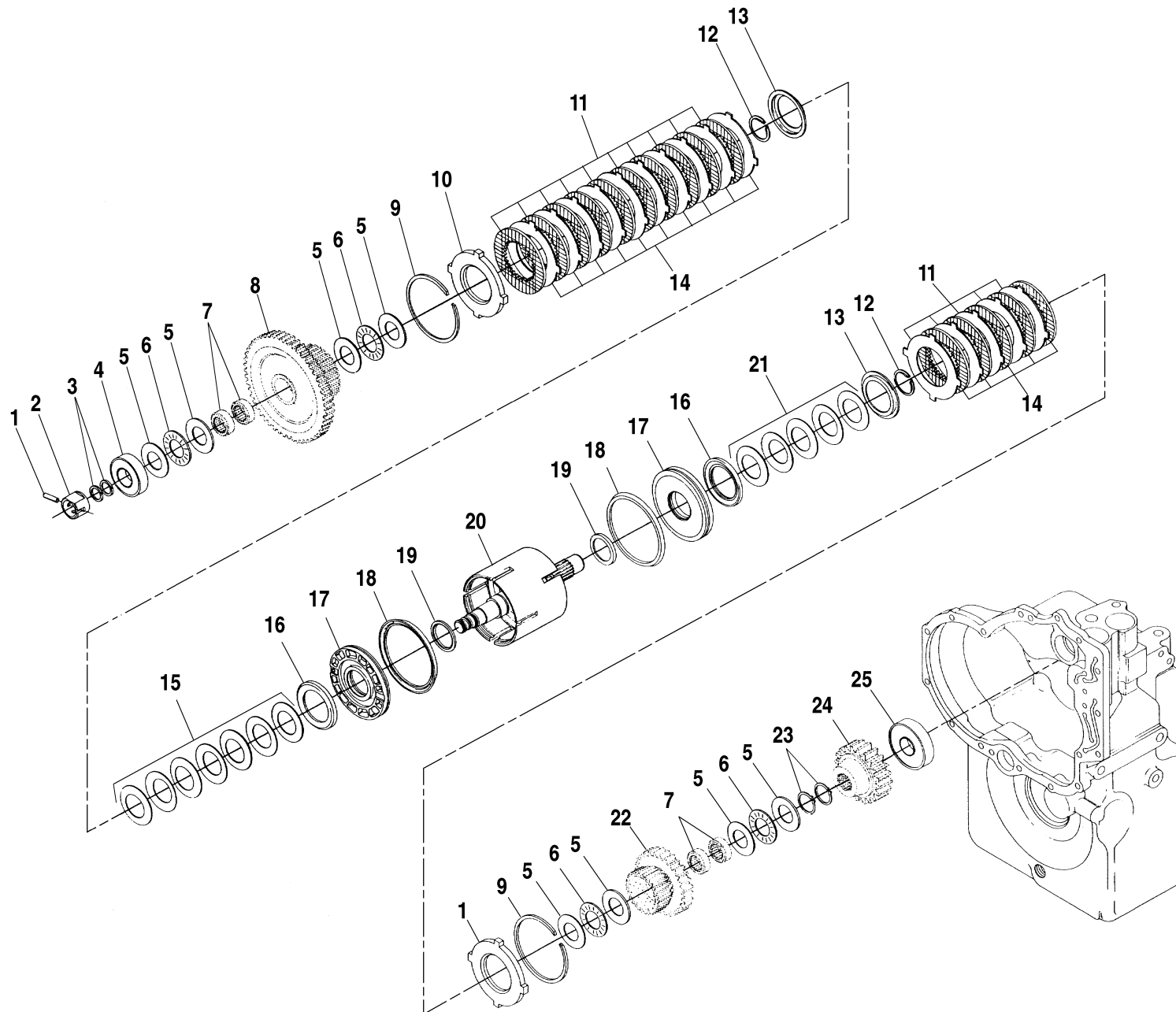


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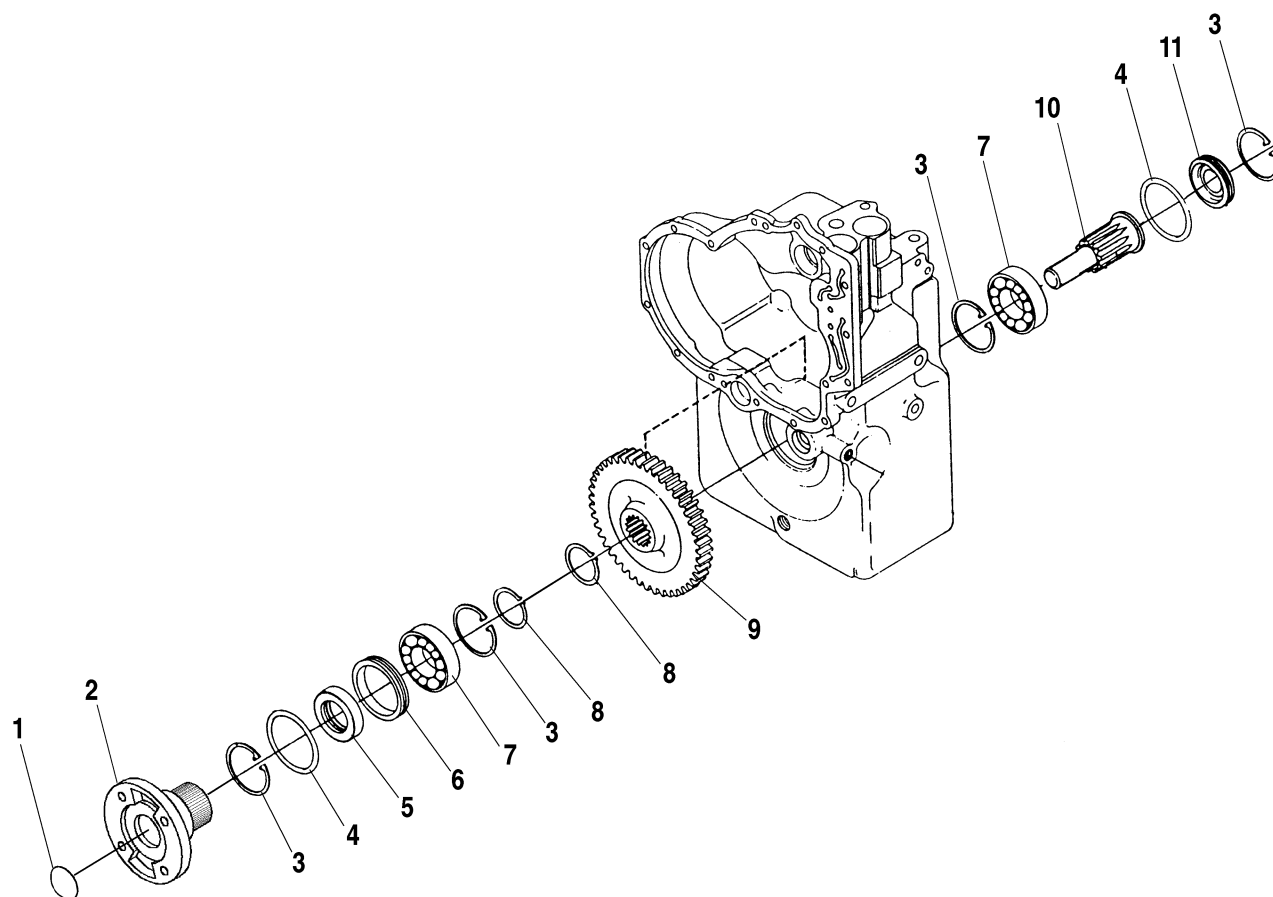
ITEM	PART NO.	QTY.	DESCRIPTION	
1	68283X	1	Sleeve locating Screw	
2	68284X	1	Sleeve, Oil Distribution	
3	37060X	2	Piston Ring	
4	68285X	1	Bearing & Seal Assembly	
5	68338X	1	Gear, Drive	
6	68286X	1	Snap Ring	
7	68287X	1	3rd Gear Shaft, Drum & Plug Assembly	
8	37061X	1	Seal, Inner Clutch Piston	
9	37062X	1	Seal, Outer Clutch Piston	
10	68288X	1	Clutch Piston & Ball Seat Assembly	
		1	(Includes Items 8 & 9)	
11	68277X	1	Clutch Piston Wear Plate	
12	68276X	1	Disc Spring Assembly (Includes 5 Springs)	
13	68275X	1	Snap Ring Retainer	
14	68274X	1	Snap Ring	
15	37063X	5	Outer Disc- 3rd Clutch	
16	37064X	5	Inner Disc- 3rd Clutch	
17	37067X	1	End Plate	
18	68273X	1	Snap Ring, End Plate	
19	37066X	2	Thrust Washer	
20	37065X	1	Thrust Washer Bearing	
21	68289X	1	Snap Ring, Thrust Washer Retaining	
22	68290X	1	Bearing	
23	68339X	1	3rd Gear & Shaft	
24	68291X	1	Bearing, Rear	
25	68302X	5	Snap Ring, Rear Bearing Retaining	
26	P23509	1	Bearing, Output Shaft	
27	68292X	1	Snap Ring, Output Shaft Bearing Retaining	
28	68293X	1	Plug, Capped End	
29	68294X	1	Oil Seal Sleeve O-Ring	
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ITEM	PART NO.	QTY.	DESCRIPTION
1	68283X	1	Screw, Sleeve Locating
2	68295X	1	Oil Distribution Sleeve
3	37060X	2	Piston Ring
4	68285X	1	Bearing & Seal Assembly
5	37066X	8	Thrust Washer, Clutch Gear
6	37065X	4	Thrust Washer Bearing, Clutch Gear
7	68337X	2	Bearing Assembly
8	68340X	1	1st Clutch & Gear Assembly
9	68273X	2	Snap Ring, End Plate
10	37067X	2	End Plate
11	37064X	15	Inner Disc
12	68274X	2	Snap Ring, Retaining
13	68275X	2	Retainer, Snap Ring
14	37063X	15	Outer Disc
15	68296X	2	Clutch Disc Spring Set (Includes 7 Springs)
16	68252X	2	Wear Plate, Clutch Piston
17	68297X	2	Clutch Piston & Seal Assembly (Includes Items 17 & 18)
18	37062X	2	Outer Seal, Clutch Piston
19	37061X	2	Inner Seal, Clutch Piston
20	68298X	1	1st & 2nd Gear Shaft, Drum & Plug Assembly
21	68276X	1	2nd Gear Clutch Disc Spring Set (Includes 5 Springs)
22	68341X	1	2nd Clutch & n Gear Assembly
23	68286X	2	Snap Ring
24	68342X	1	3rd Clutch Driven Gear
25	68299X	1	Bearing, Rear

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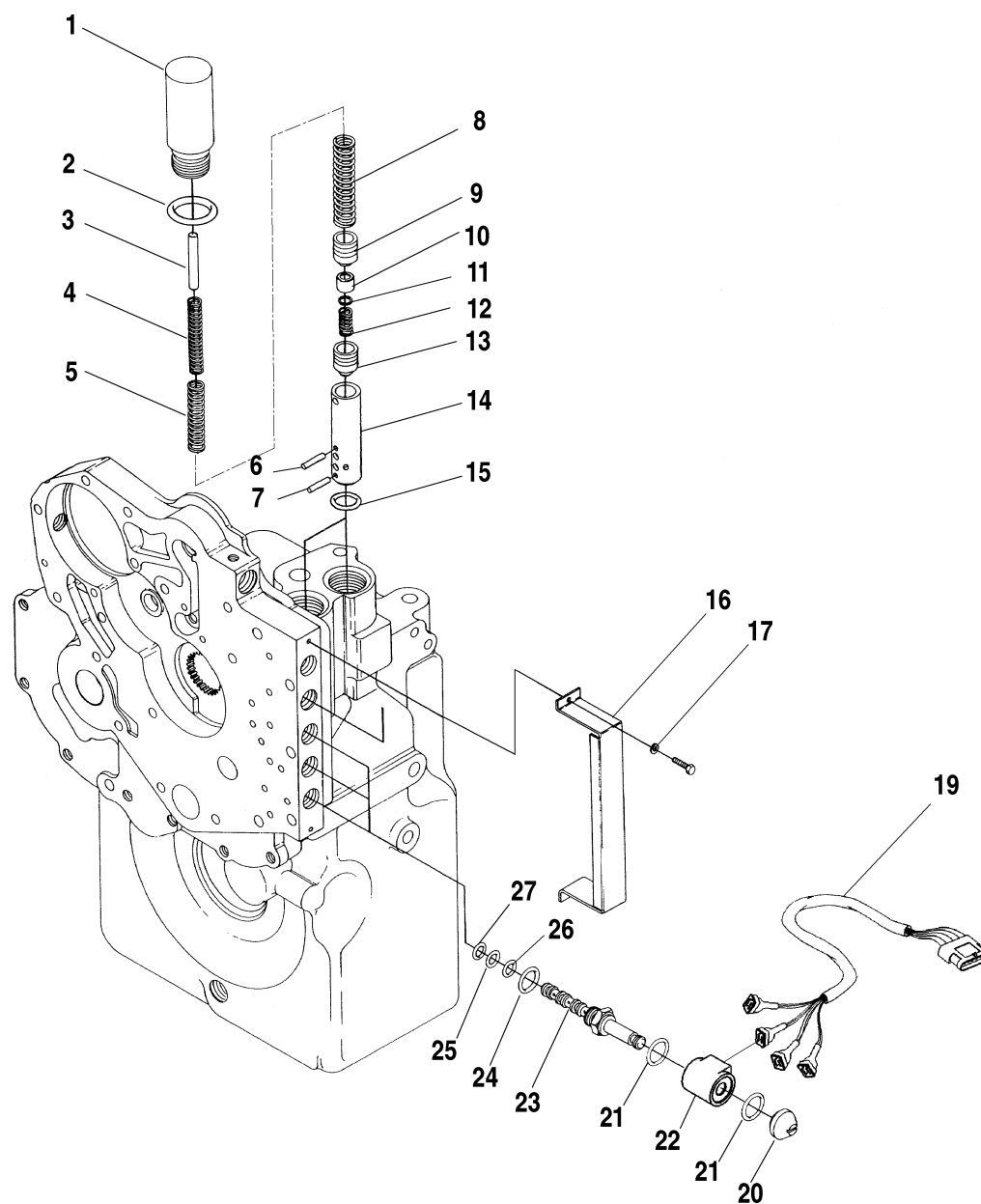
ITEM	PART NO.	QTY.	DESCRIPTION
1	68300X	1	Plug, Flange
2	❶1100322	1	Output Flange, 7/16"-20 Threads
	N.L.A.	1	Output Flange, 12MM Threads
3	68302X	2	Snap Ring, Output Shaft Bearing
4	68294X	2	Oil Seal Sleeve O-Ring
5	P20723	1	Oil Seal, Output Shaft
6	68303X	1	Oil Seal, Sleeve
7	P23509	2	Bearing, Output Shaft
8	68292X	2	Snap Ring
9	1100317	1	Gear, Output Shaft
10	1100318	1	Output Shaft & Brake Flange
11	1100319	1	Output Shaft Bore Plug
12	❷8310469	4	Capscrew, Socket Hd., 7/16"-20 x 1 1/4"
13	❷8307006	4	Lockwasher, 7/16"

NOTES:

- ❶ If replacing a metric threaded output flange new drive shaft mounting bolts and washers are required. See itmes 12 & 13.
- ❷ Not illustrated

N.S.S. = Not Sold Separately

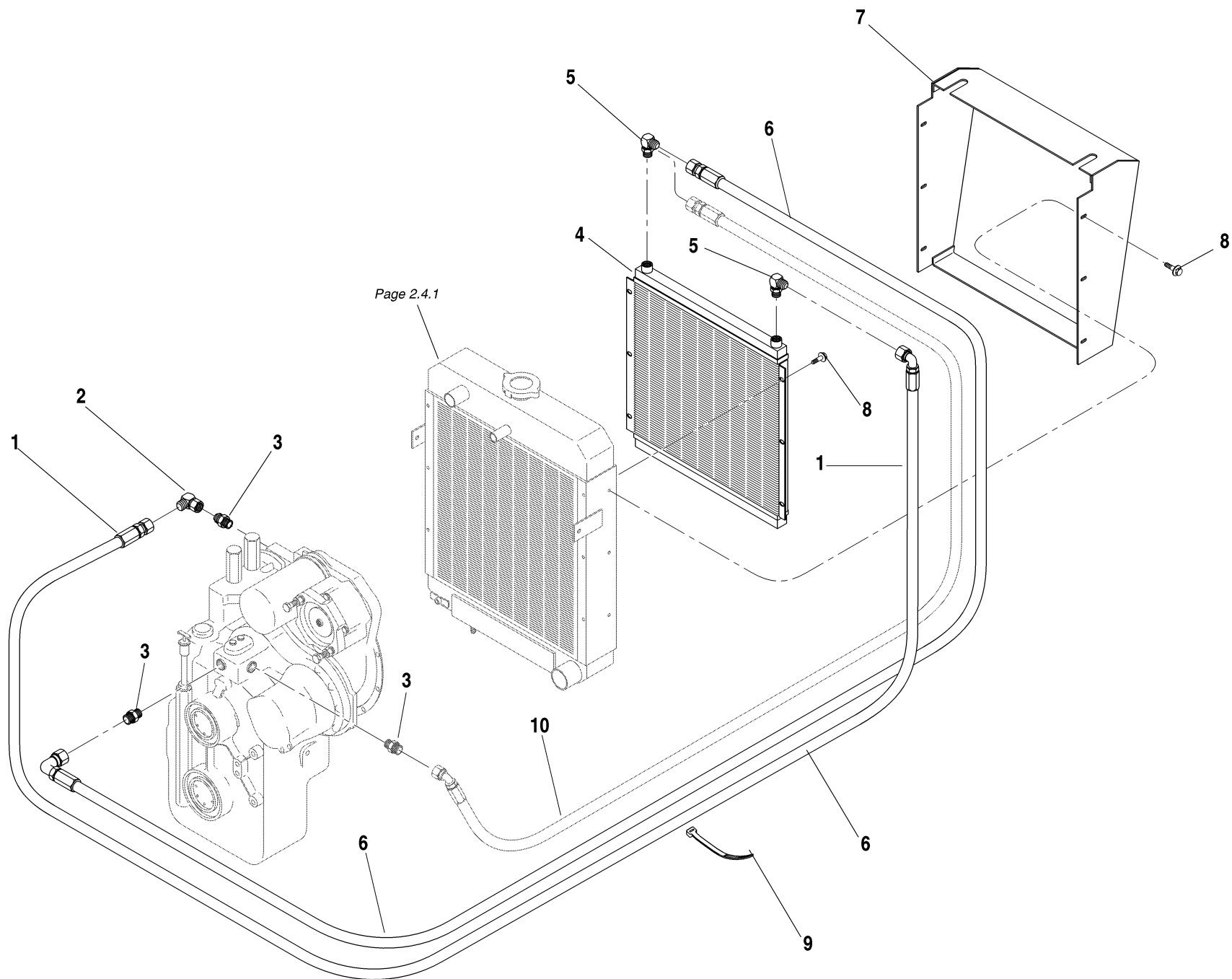
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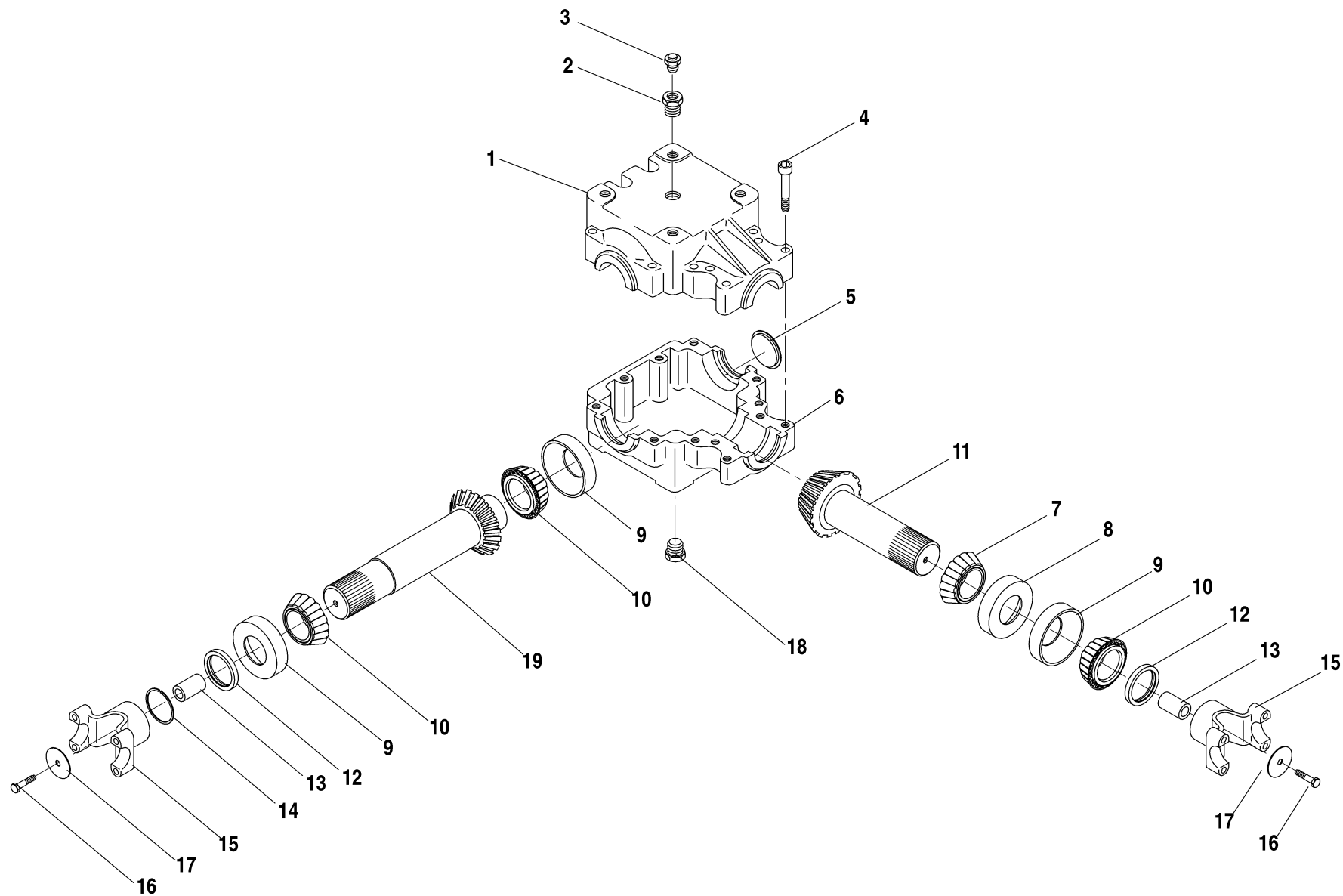


ITEM	PART NO.	QTY.	DESCRIPTION
REF	68331X	1	Modulator Valve Assembly (Includes Items 1-14)
1	68306X	1	Housing, Modulator Valve
2	68307X	1	O-Ring
3	68308X	1	Stop Pin
4	68309X	1	Spring, Inner
5	68310X	1	Spring, Middle
6	68311X	1	Pin, Upper
7	68312X	1	Pin, Lower
8	68320X	1	Spring, Outer
9	68319X	1	Accumulator Spool
10	68318X	1	Spring Retainer
11	68317X	1	Spacer, Spring
12	68316X	1	Spring
13	68315X	1	Regularator Spool
14	68314X	1	Sleeve, Modulation Housing
15	68313X	1	O-Ring
16	68323X	1	Cover, Protective
17	68321X	2	Lockwasher
18	68322X	2	Capscrew
19	68396X	1	Wiring Harness
20	68324X	1	Retaining Nut
21	68325X	1	O-Ring
22	68326X	1	Solenoid Coil
23	68332X	4	Valve Cartridge, 4 Way
24	68330X	1	O-Ring
25	68329X	1	O-Ring
26	68328X	1	O-Ring
27	68327X	1	O-Ring

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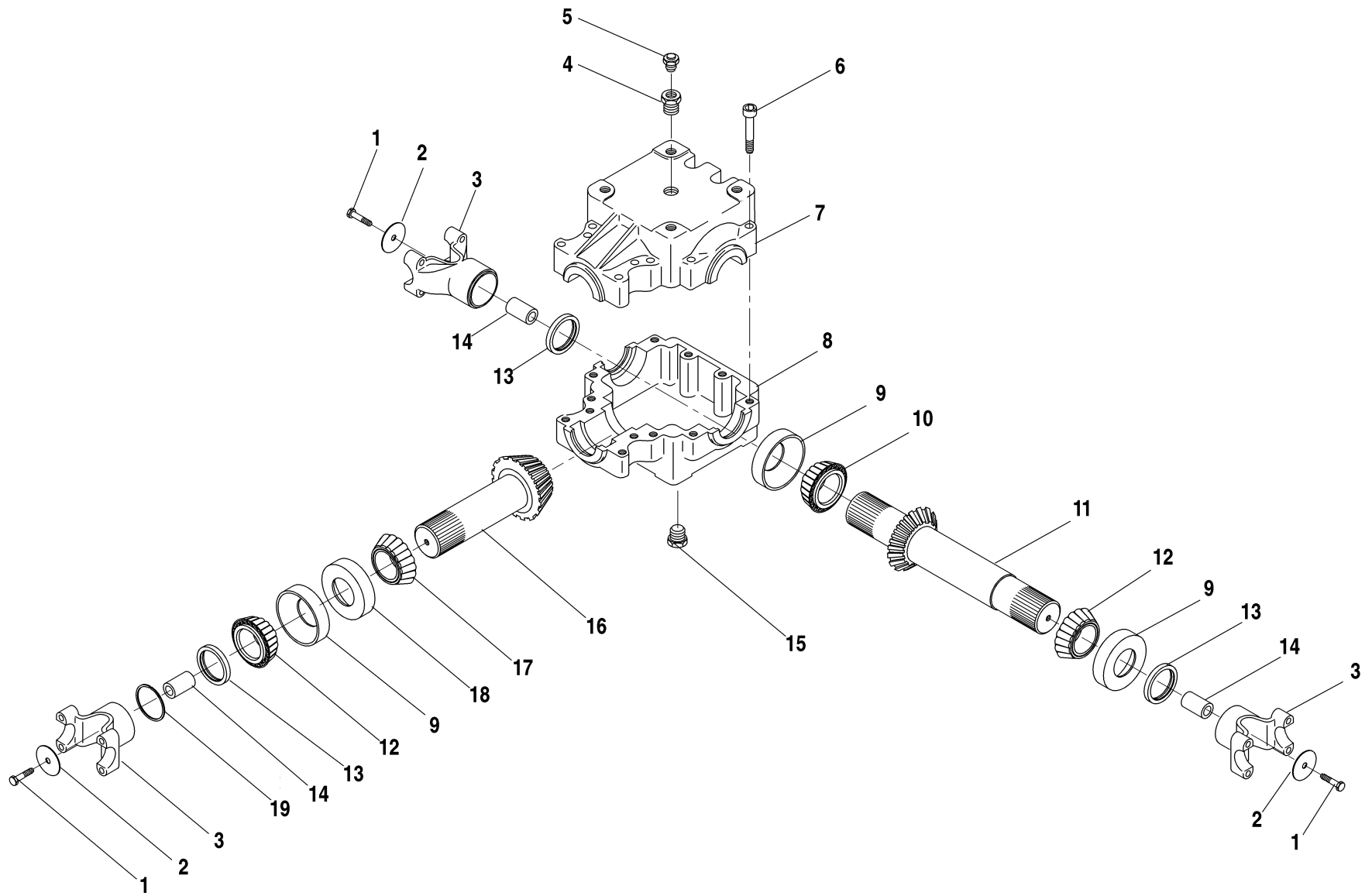
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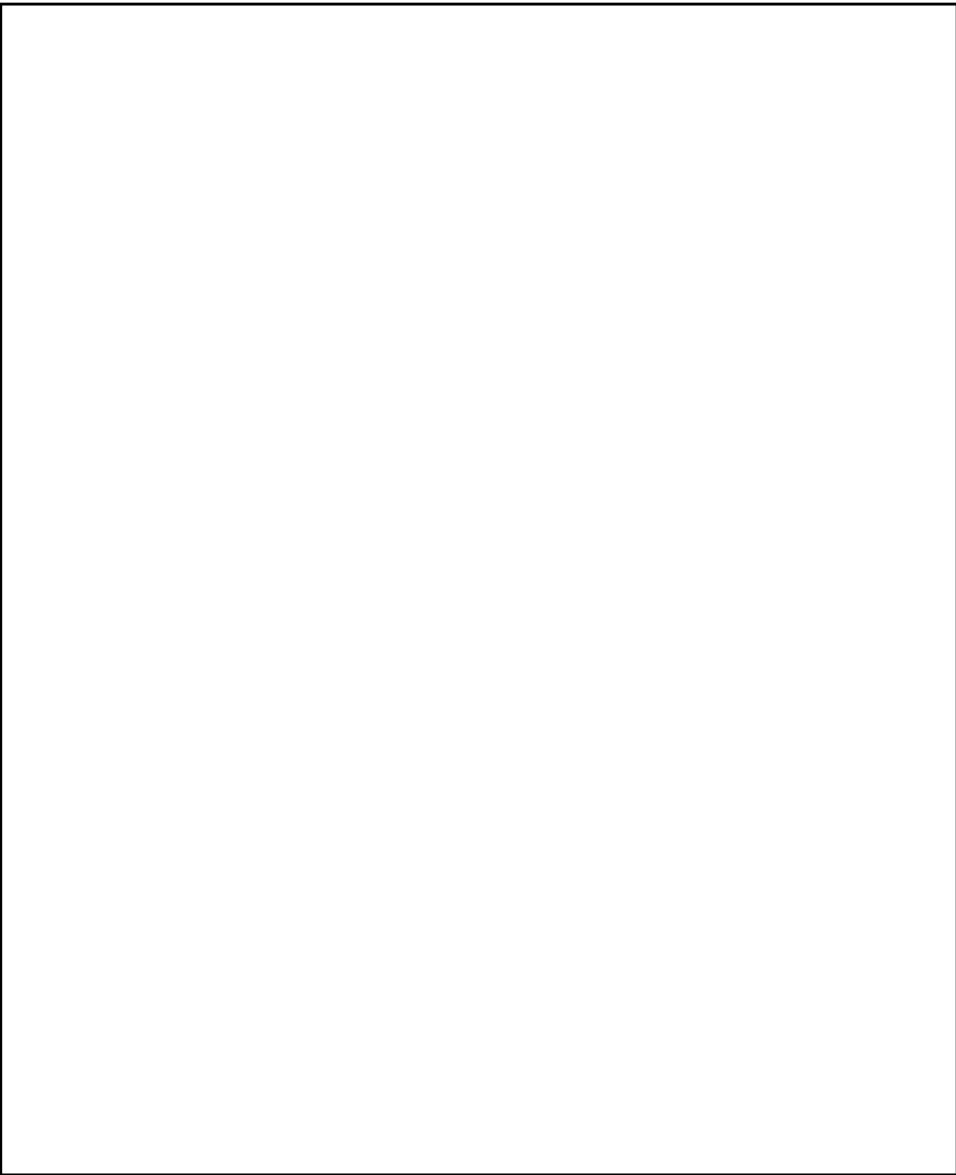


ITEM	PART NO.	QTY.	DESCRIPTION	
1	1100301	1	Casting, Machined Upper	
2	68392X	1	Bushing, 1/2 NPT to 1/8 NPT	
3	1100310	1	Plug, Vent 5 P.S.I.	
4	68390X	12	Bolt, 3/8-16 x 2 1/4" SHCS	
5	1100315	1	Plug, End	
6	1100300	1	Casting, Machined Lower	
7	1100304	1	Bearing, Cup	
8	1100305	1	Bearing, Cone	
9	1100306	3	Bearing, Cup	
10	1100307	3	Bearing, Cone	
11	1101375	1	Pinion, Shaft/Gear, Assembly	
12	1100308	2	Seal	
13	1100311	2	Spacer	
14	1100309	1	Ring, Retaining 1 3/4"	
15	68393X	2	Yoke End	
16	68394X	2	SHCS 3/8"-16 x 1 1/4"	
17	68395X	2	Washer, .300 x 1.750 Gearbox	
18	68389X	1	Plug 1/2 NPT SKHD Hex	
19	1101376	1	Pinion\Gear Sub Assembly	
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ITEM	PART NO.	QTY.	DESCRIPTION
1	68394X	3	SHCS 3/8"-16 × 1 1/4"
2	68395X	3	Washer, .300 × 1.750 Gearbox
3	68393X	3	Yoke End
4	68392X	1	Bushing, 1/2 NPT to 1/8 NPT
5	1100310	1	Plug, Vent 5 P.S.I.
6	68390X	12	Bolt, 3/8-16 × 2 1/4" SHCS
7	1100300	1	Casting, Machined Upper
8	1100301	1	Casting, Machined Lower
9	1100306	3	Bearing, Cup
10	1100312	1	Bearing, Cone
11	1101377	1	Cross/Gear Sub Assembly
12	1100307	2	Bearing, Cup
13	1100308	3	Seal
14	1100311	3	Spacer
15	68389X	1	Plug 1/2 NPT SKHD Hex
16	1101375	1	Pinion/Gear Sub Assembly
17	1100304	1	Bearing, Cone
18	1100305	1	Bearing, Cup
19	1100309	1	Ring, Retaining, 1 3/4"



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Section 2 — Power Plant

Cummins 4BT3.9

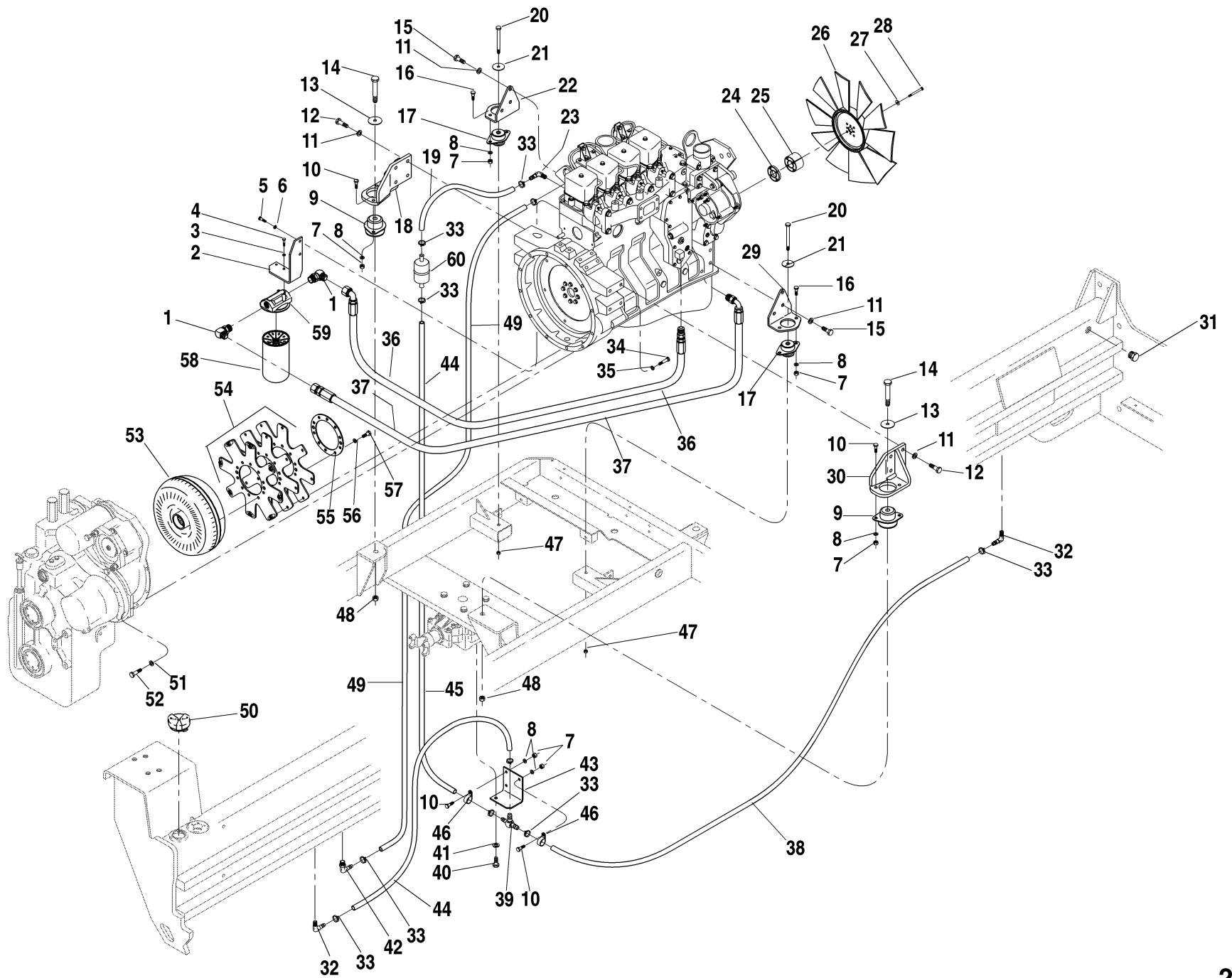
Engine Mounting & Fuel Lines 2.1.1

Exhaust Assembly 2.2.1

Air Cleaner Assembly 2.3.1

Radiator Group Assembly2.4.1

Throttle Group Assembly. 2.5.1



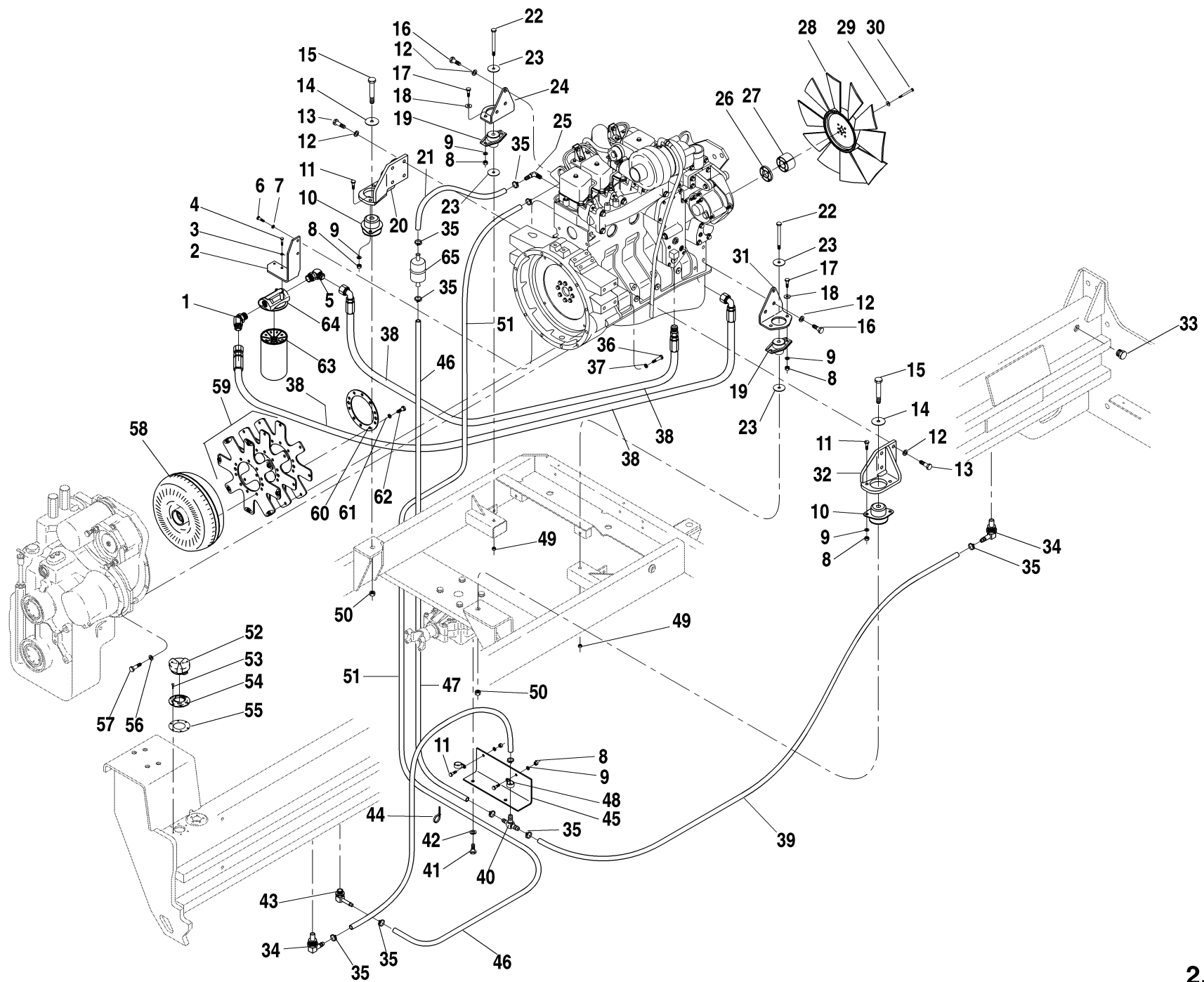
ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	P17802	2	Adapter 90°	38	67130A-98	1	Hose, Fuel 3/8" × 98"
2	67707B	1	Mount, Oil Filter	39	37652X	1	Tee, Union Hose
3	P01308	2	Lockwasher, 1/4"	40	P00400	1	Capscrew, Hx., 1/2"-13 × 3/4"
4	P00005	2	Capscrew, Hx., 1/4"-20 × 1"	41	P01312	1	Lockwasher, 1/2"
5	P04103	2	Capscrew, Hx., M8-1.25 × 20mm CI 8.8	42	67534X	1	Adapter, Barbed
6	P04607	2	Lockwasher, M8	43	67720A	1	Bracket Fuel Line
7	P01508	8	Nut, Hx., 3/8"-16	44	67130A-62	1	Hose, Fuel 3/8" × 62"
8	P01310	8	Lockwasher, 3/8"	45	67130A-23	1	Hose, Fuel 3/8" × 23"
9	67192X	2	Engine Mount, Rubber, Rear	46	37368X	2	Clamp
10	P00204	4	Capscrew, Hx., 3/8"-16 × 1"	47	P01659	2	Lock Nut, Hx., 7/16"-14 (Nylon Insert)
11	P04609	14	Lockwasher, M12	48	P01662	2	Lock Nut, Hx., 5/8"-11 (Nylon Insert)
12	P04203	6	Capscrew, Hx., M12-1.75 × 30mm	49	67129A-83	1	Hose, Fuel Return 5/16" × 83"
13	P00641	2	Capscrew, Hx., 5/8"-11 × 4" GR 8	50	67714A	1	Cap, Fuel Tank
14	67514X	2	Washer, Rebound 5/8"	51	P04608	11	Lockwasher, M10
15	P04205	8	Capscrew, Hx., M12-1.75 × 40mm	52	P04154	11	Capscrew, Hx., M10-1.5 × 30mm
16	P00205	4	Capscrew, Hx., 3/8"-16 × 1 1/4"	53	68233X	1	Torque Converter
17	67193X	2	Engine Mount, Rubber, Front	54	37075X	1	Kit, Drive Plate
18	67188X	1	Engine Mount, Cummins, Left Rear	55	68092X	1	Drive Plate Backing Ring
19	67130A-3	1	Hose, Fuel 3/8" × 3"	56	P20538	6	Lockwasher
20	P00342	2	Capscrew, Hx., 7/16"-14 × 4 1/2" GR 8	57	68091X	6	Capscrew
21	67513X	2	Washer, Rebound 7/16"	58	P31295	1	Filter, Oil
22	67190X	1	Engine Mount, Cummins, Left Front	59	67510X	1	Head, Lube Oil Filter
23	P28874	1	Adapter, 90° 3/8" Barb	60	66109X	1	Filter, Fuel
24	68094X	1	Spacer, Fan 1/4"				
25	68093X	1	Spacer, Fan 1 1/2"				
26	66113X	1	Fan, 18" Suction				
27	P04630	4	Flatwasher, M8				
28	P04113	4	Capscrew, Hx., M8-1.25 × 70mm CL 8.8				
29	67191X	1	Engine Mount, Cummins, Right Front				
30	67189X	1	Engine Mount, Cummins, Right Rear				
31	10715446	1	Plug, Adapter, SAE 1"				
32	67718A	2	Adapter, 90°				
33	P14047	8	Clamp, Hose, 3/8"				
34	P00284	8	Capscrew, Hx., 3/8"-24 × 1 3/4" GR 8				
35	P01252	8	Flatwasher, 3/8"				
36	66748X	1	Hose Hyd, 3/4" × 31"				
37	66749X	1	Hose Hyd, 3/4" × 38"				

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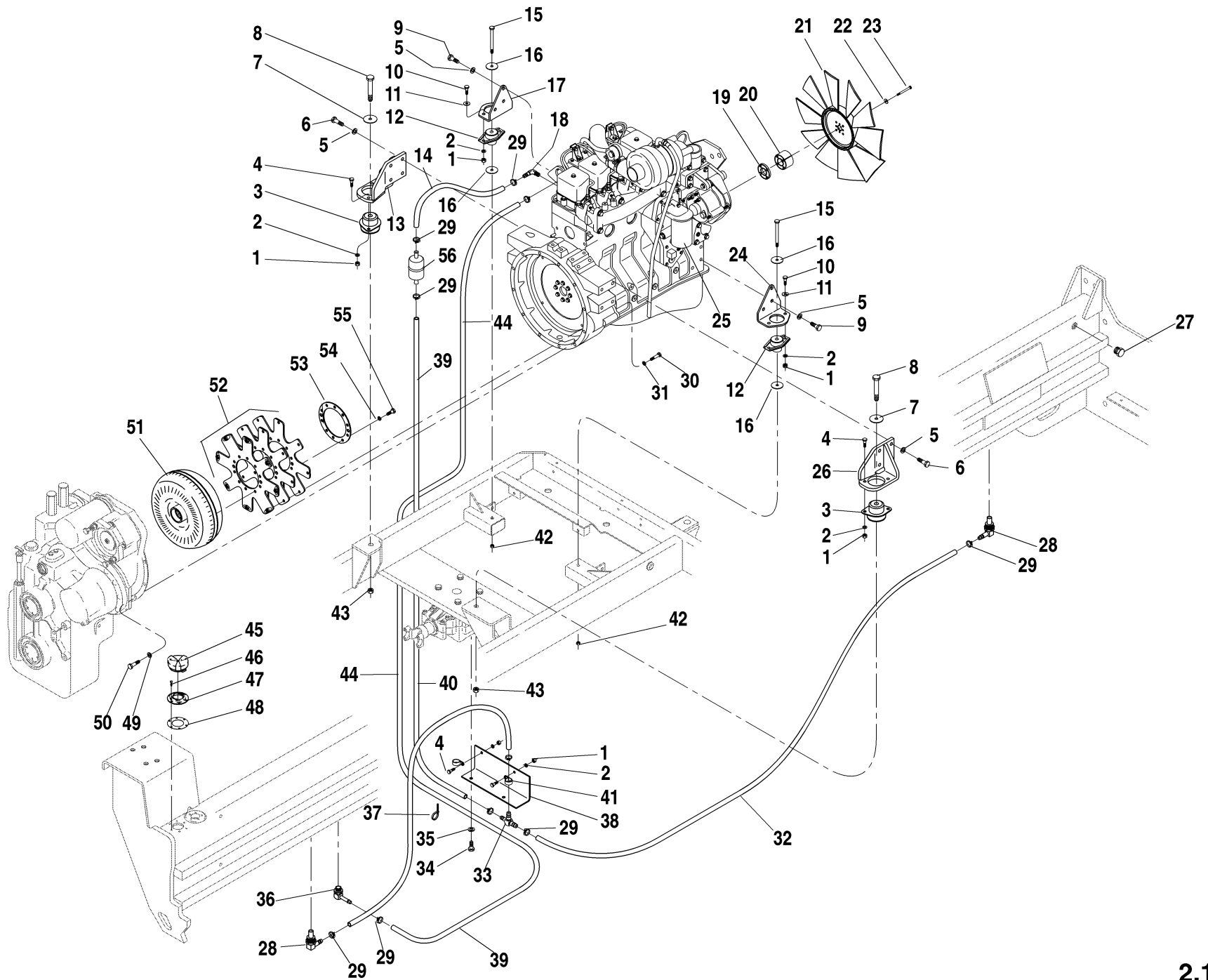
ENGINE MOUNTING & FUEL LINES (Cummins 4BT3.9) 2.1.1

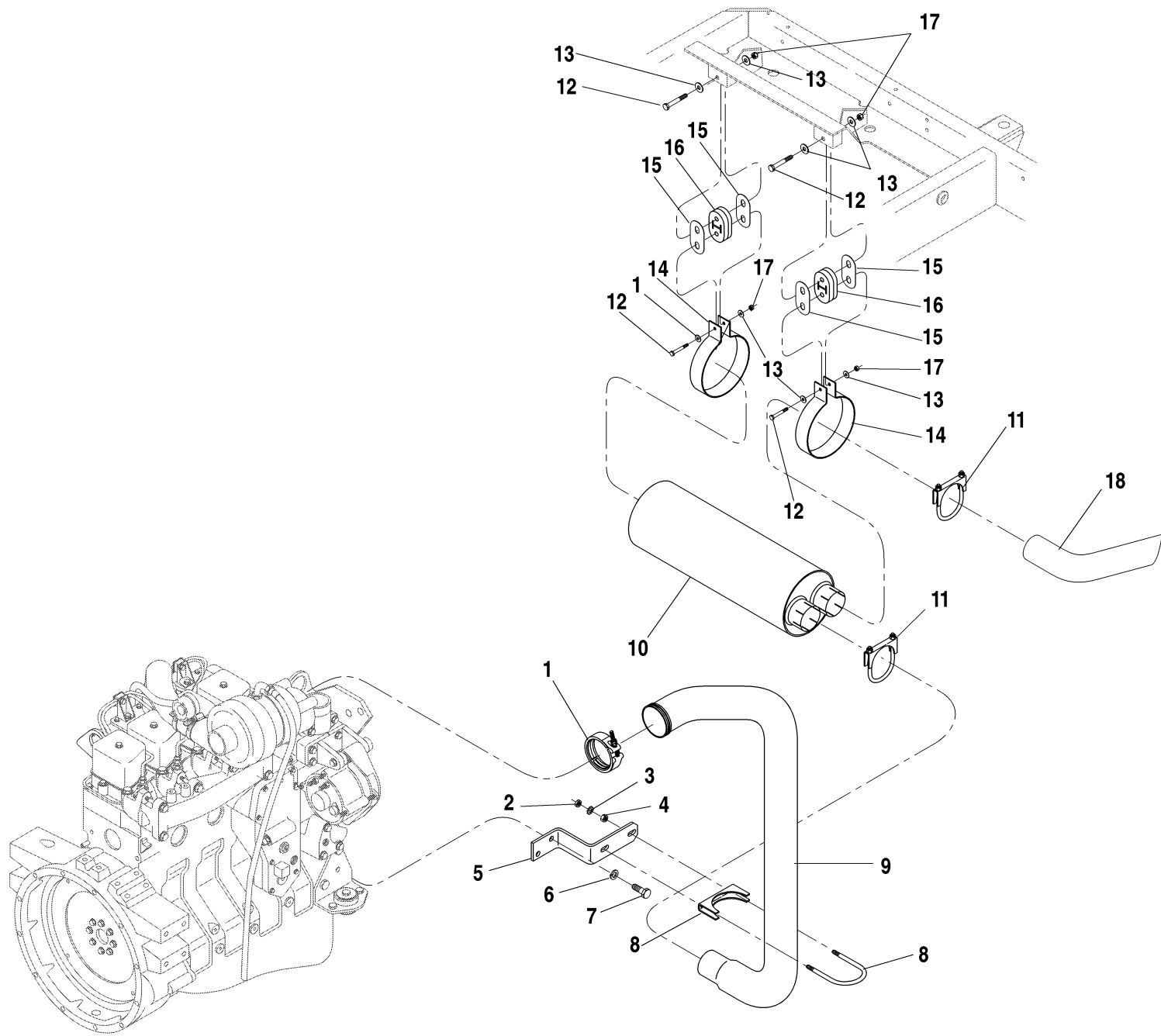
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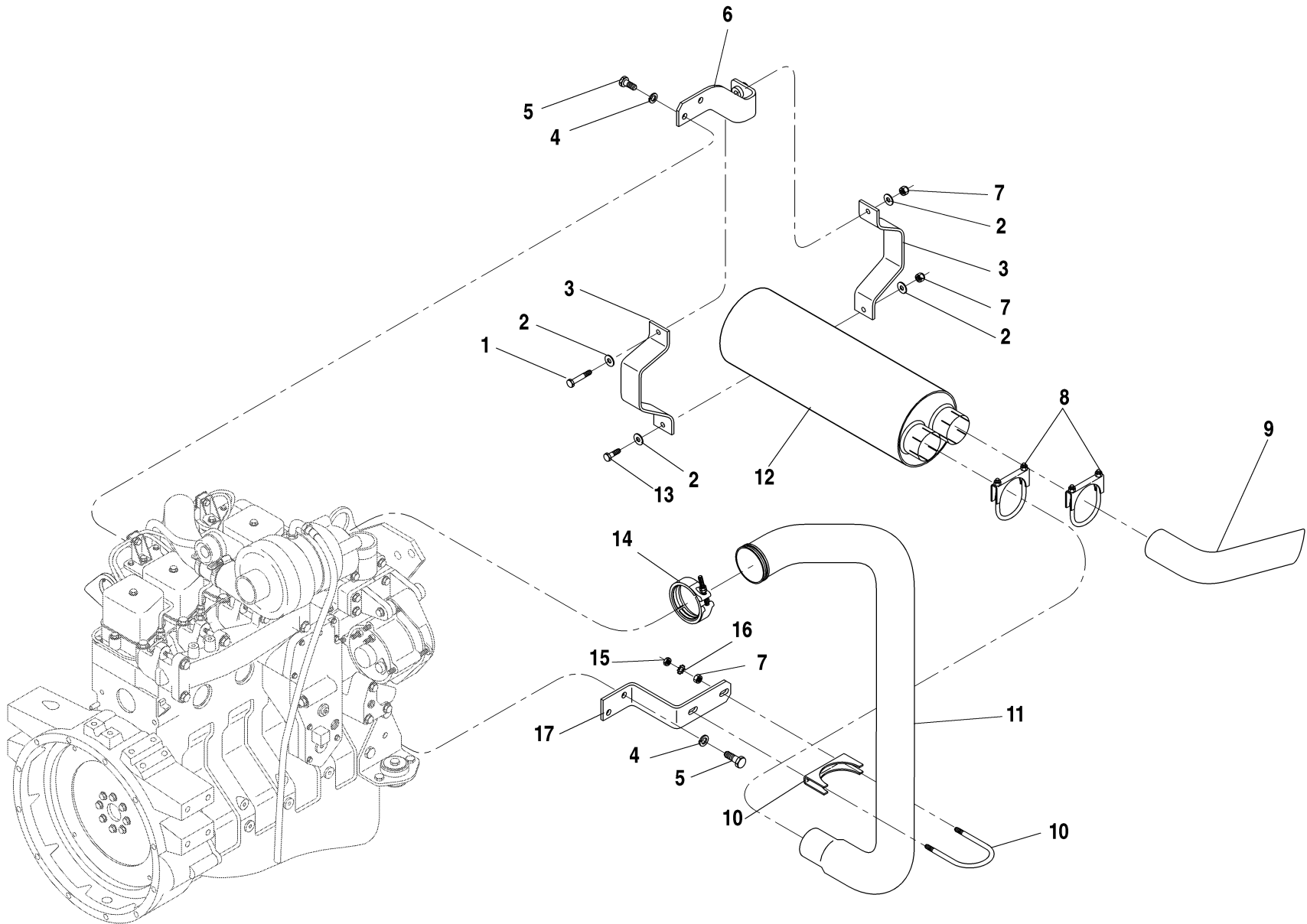
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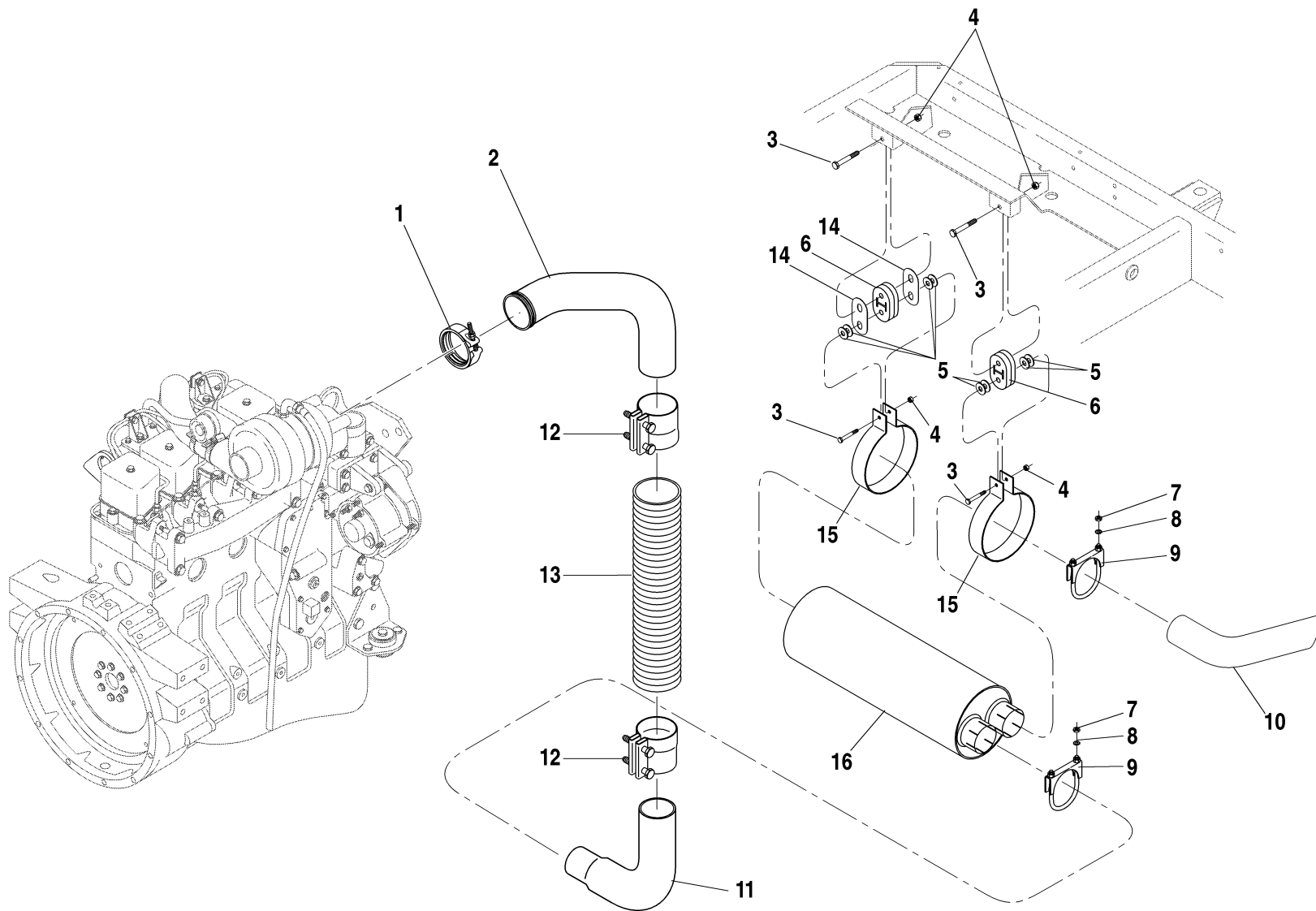
ITEM	PART NO.	QTY.	DESCRIPTION	
1	P32986	1	Clamp, Exhaust, Turbo	
2	P01359	2	Starwasher, External, 3/8"	
3	P01558	2	Nut, Jam 3/8"-16	
4	P01508	2	Nut, Hx., 3/8"-16	
5	67420B	1	Support, Exhaust Pipe	
6	P04609	2	Lockwasher, M12	
7	P04205	2	Capscrew, Hx., M12-1.75 × 40mm	
8	P17169	1	Clamp, Exhaust 3" ID	
9	67279B	1	Pipe, Exhaust, Engine to Muffler	
10	37799X	1	Muffler	
11	P12169	2	Clamp, Exhaust 2 1/2" ID	
12	P00158	4	Capscrew, Hx., 5/16"-24 × 2.0 Gr 5	
13	P01434	8	Flatwasher, 5/16"	
14	65486B	2	Hanger, Muffler, 6.63" Dia	
15	39922A	4	Link, Exhaust Hanger	
16	P32982	2	Hanger, Rubber Exhaust	
17	P01680	4	Lock nut, 5/16"-24	
18	67795A	1	Tailpipe, 2 1/2"	
				644D-34 S/N 108–203

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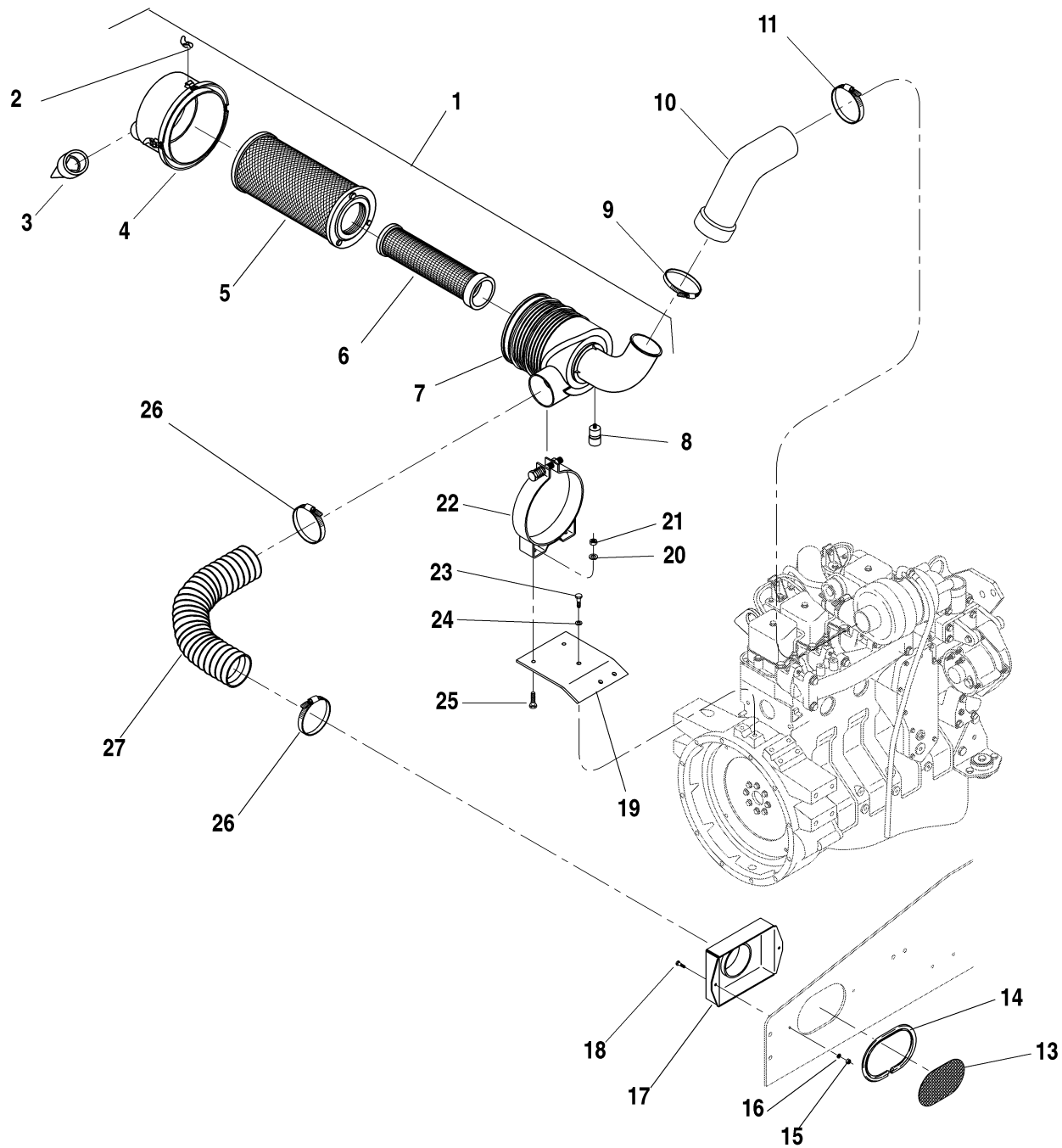
ITEM	PART NO.	QTY.	DESCRIPTION	
1	P00209	1	Capscrew, Hx., 3/8"-16x 2 1/4"	
2	P01404	4	Flatwasher, 3/8"	
3	1100010	2	Hanger, Muffler	
4	P04609	2	Lockwasher, M12	
5	P04207	2	Capscrew, Hx., M12-1.75 x 50mm 8.8	
6	68749B	1	Bracket, Muffler Hanger	
7	P01508	4	Nut, Hx., 3/8"-16	
8	P12169	2	Clamp, Exhaust 2 1/2" ID	
9	67795A	1	Tailpipe, 2 1/2"	
10	P17169	1	Clamp, Exhaust 3" ID	
11	67279B	1	Pipe, Exhaust, Engine to Muffler	
12	37799X	1	Muffler	
13	P00205	1	Capscrew, Hx., 3/8"-16x 1 1/4"	
14	P32986	1	Clamp, Exhaust, Turbo	
15	P01558	2	Nut, Jam 3/8"-16	
16	P01359	2	Starwasher, External, 3/8"	
17	67420B	1	Support, Exhaust Pipe	
				644D-34 S/N 204-680

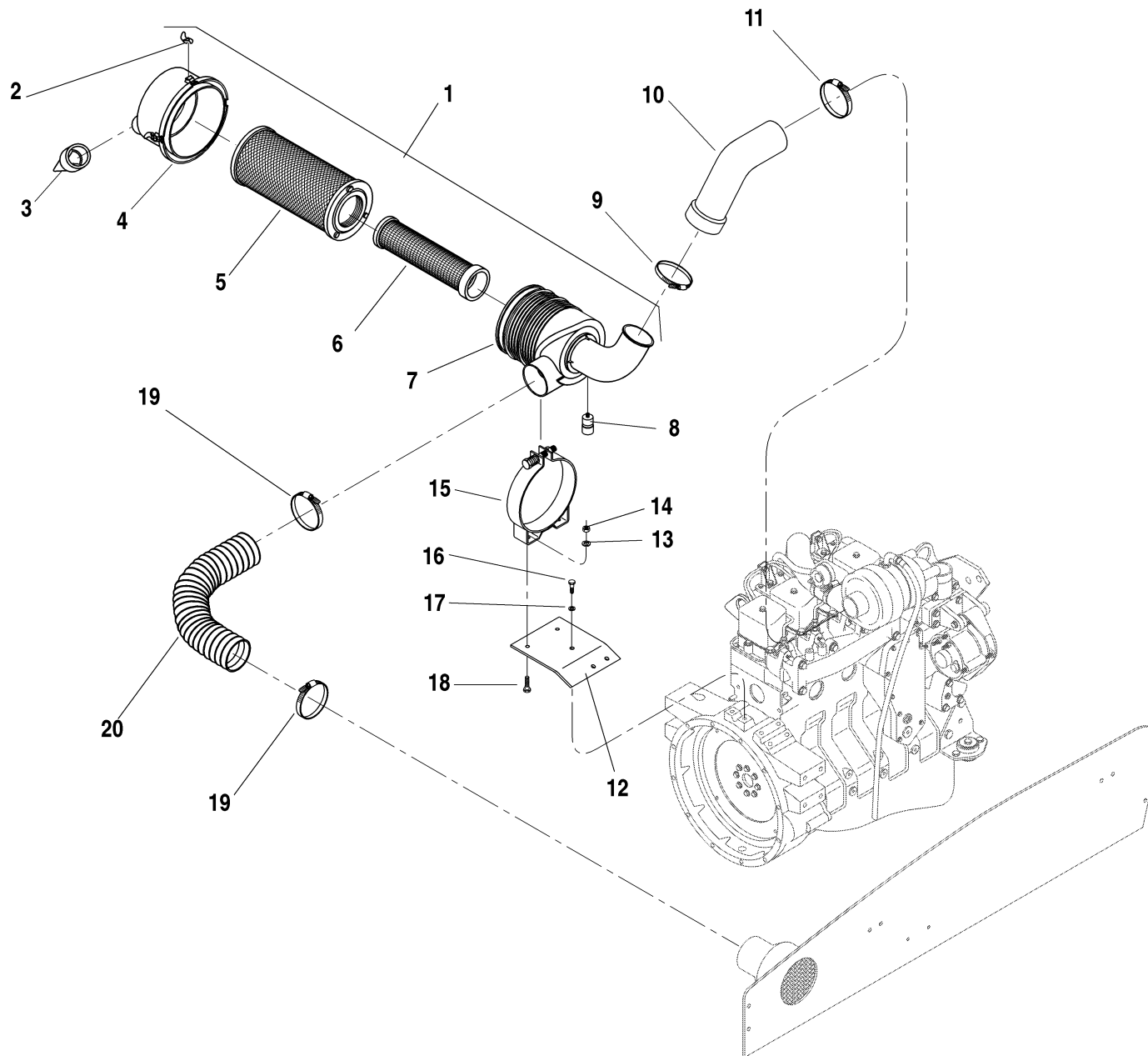
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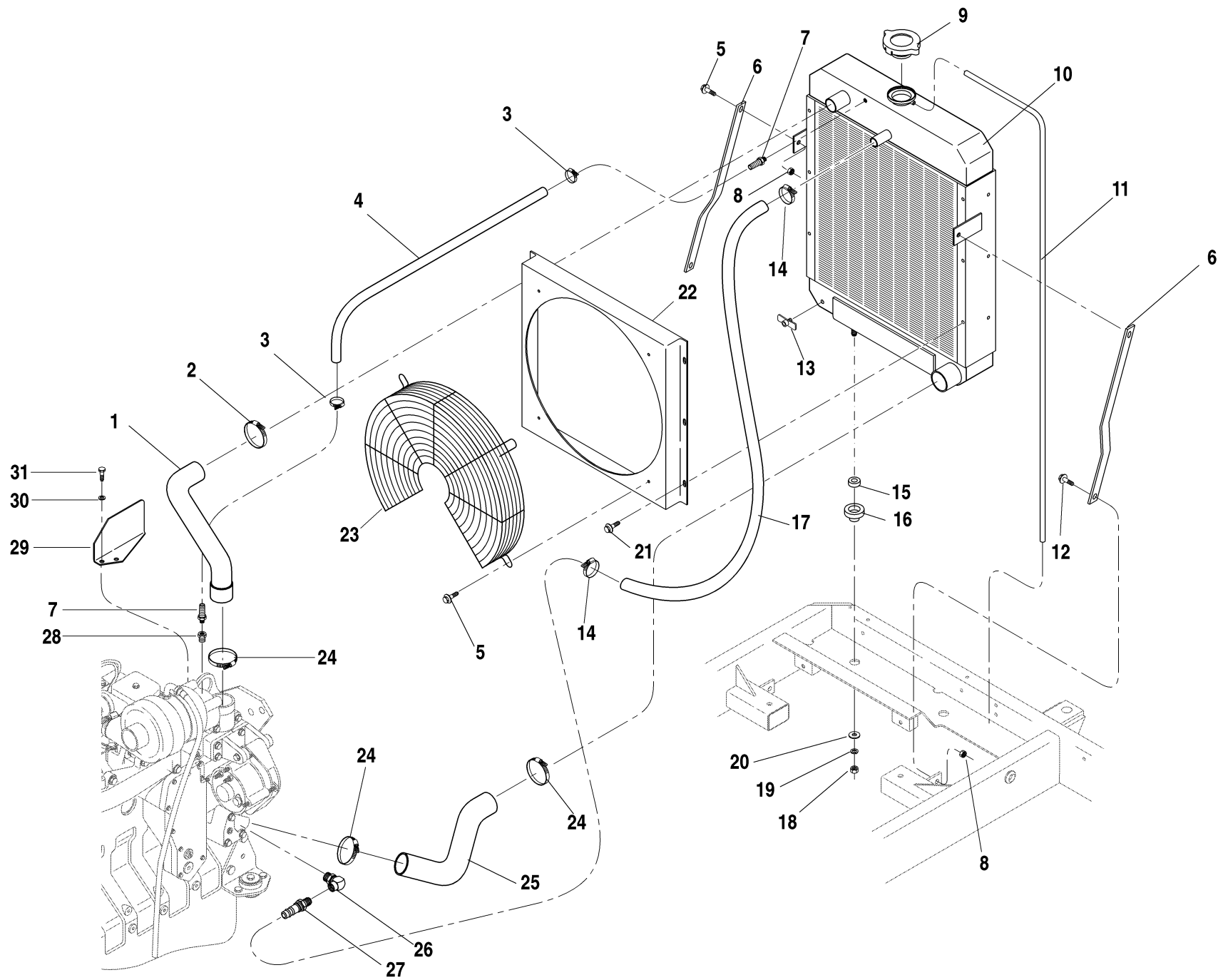
ITEM	PART NO.	QTY.	DESCRIPTION	
1	10732986	1	Clamp, Exhaust, Turbo	
2	1100196	1	Pipe, Exhaust, Upper	
3	10700158	4	Capscrew, Hx., 5/16"-24x 2"	
4	10701680	4	Locknut, Hx., 5/16"-24	
5	10701434	8	Flatwasher, 5/16"	
6	10732982	2	Hanger, Rubber Exhaust	
7	10701558	2	Nut, Jam 3/8"-16	
8	10701359	2	Starwasher, External, 3/8"	
9	1100119	2	Clamp, Exhaust	
10	10167795	1	Tailpipe, 2 1/2"	
11	1100197	1	Pipe, Exhaust, Lower	
12	10733144	2	Clamp, Seal	
13	1100124	1	Exhaust Pipe, Flexible	
14	10139922	2	Link, Exhaust Hanger	
15	10265486	2	Hanger, Muffler	
16	10837799	1	Muffler	
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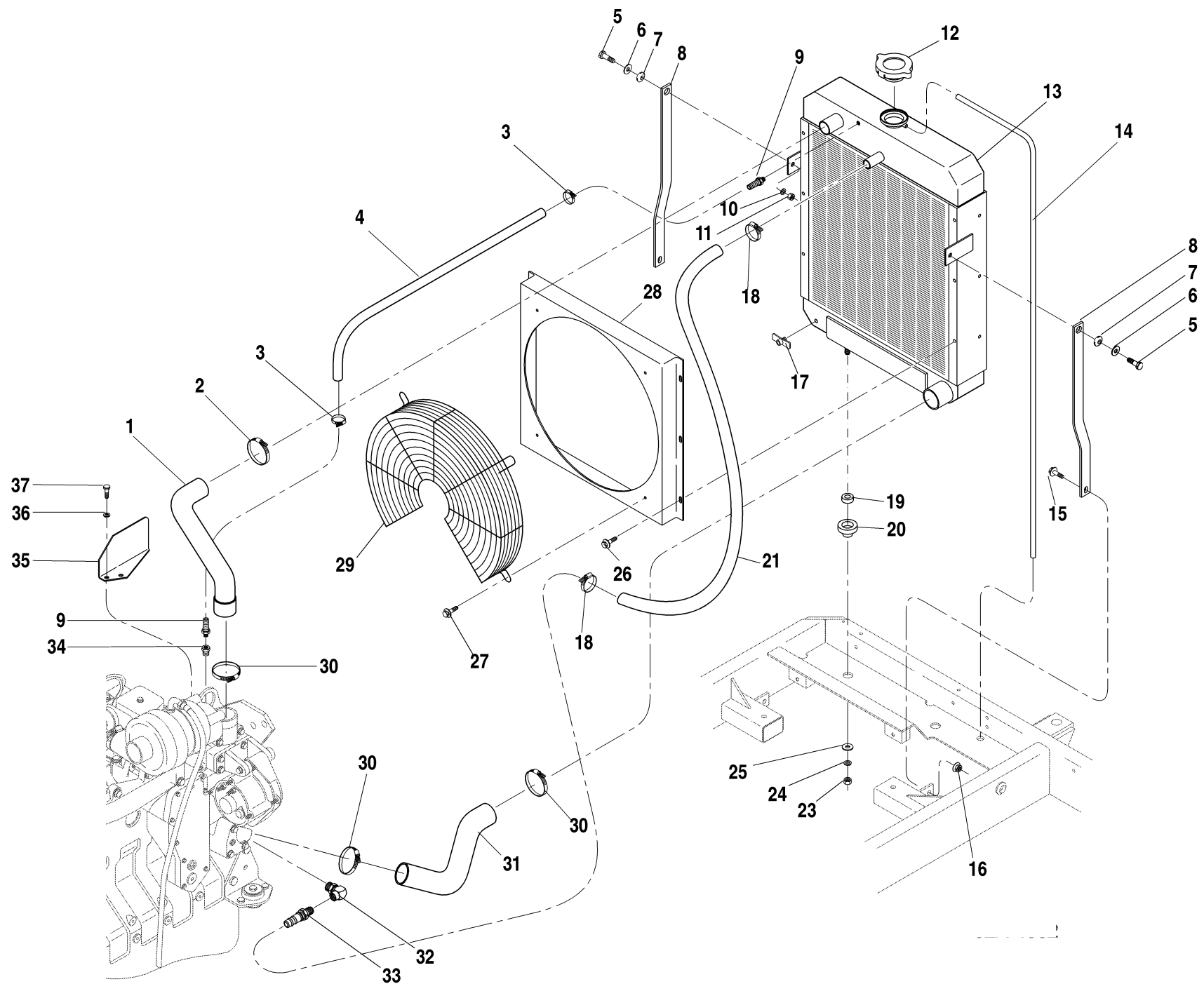


ITEM	PART NO.	QTY.	DESCRIPTION		Rev. 000
1	67503D	1	Air Cleaner (Includes Items 2-7)		
2	P33184	3	Latch		
3	P33183	1	Vacuator Valve		
4	P33182	1	Cover (Includes Item 2)		
5	P33180	1	Filter Element, Primary		
6	P33181	1	Filter Element, Secondary		
7	N.S.S.	-	Body		
8	67537X	1	Switch, Vacuum		
9	67198X	1	Clamp, T-Bolt		
10	67186B	1	Tube, Air Intake		
11	67197X	1	Clamp, T-Bolt		
12	67185B	1	Bracket, Air Cleaner Mounting		
13	P01309	2	Lockwasher, 5/16"		
14	P01507	2	Nut, Hx, 5/16"-18		
15	P33142	1	Band, Mounting		
16	P00204	3	Capscrew, Hx., 3/8"-16 × 1"		
17	P01310	3	Lockwasher, 3/8"		
18	P00104	2	Capscrew, Hx., 5/16"-18 × 1"		
19	P11124	2	Hose Clamp		
20	10167195	1	Hose, Air Cleaner		
				644D-34 S/N 277-	
AIR CLEANER ASSEMBLY (Cummins 4BT3.9) 2.3.1.1					644D ▼



ITEM	PART NO.	QTY.	DESCRIPTION	
1	67488B	1	Hose, Radiator - Upper	
2	P14043	1	Hose Clamp, 1" x 2"	
3	P14047	2	Hose Clamp, 3/8"	
4	67127A-12	1	Hose, 3/16 x 12"	
5	P05322	6	Capscrew, Flg Hd., 3/8"-16 x 3/4"	
6	67419A	2	Support, Upper Radiator	
7	67530X	2	Adapter, 1/8MP-3/8" Barb	
8	P01658	4	Locknut, Hx, 3/8"-16	
9	68090X	1	Cap, Radiator 10 P.S.I.	
10	67233C	1	Radiator	
11	36504X	1	Hose, Over Flow 5/16" x 44"	
12	P05343	2	Capscrew, Flg Hd., 3/8"-16 x 7/8"	
13	P16675	1	Petcock, Drain	
14	P10178	2	Clamp, Hose, 1"	
15	P24305	2	Bushing	
16	P24306	2	Grommet, Rubber 3/8" ID	
17	67672A	1	Hose, 1" I.D. x 30"	
18	P01510	2	Nut, Hx, 1/2"-13	
19	P01312	2	Lockwasher, 1/2"	
20	P01406	2	Flatwasher, 1/2"	
21	P05320	6	Capscrew, Flg Hd., 5/16"-18 x 1/2"	
22	67297B	1	Shroud, Fan	
23	10238470	1	Guard, Fan	
24	P10601	3	Hose Clamp, 1 3/4" x 2 3/4"	
25	67489B	1	Hose, Radiator - Lower	
26	67515X	1	Adapter, 8MP-12FP90	
27	67517X	1	Adapter. 12MP-16 Hose	
28	67529X	1	Bushing, Reducer, 1/2MP-1/8MP	
29	67421A	1	Heat Shield	
30	P04608	2	Lockwsaher, M10	
31	P04152	2	Capscrew, Hx., M10-1.5 x 20mm	
				644D-34 S/N 108-856

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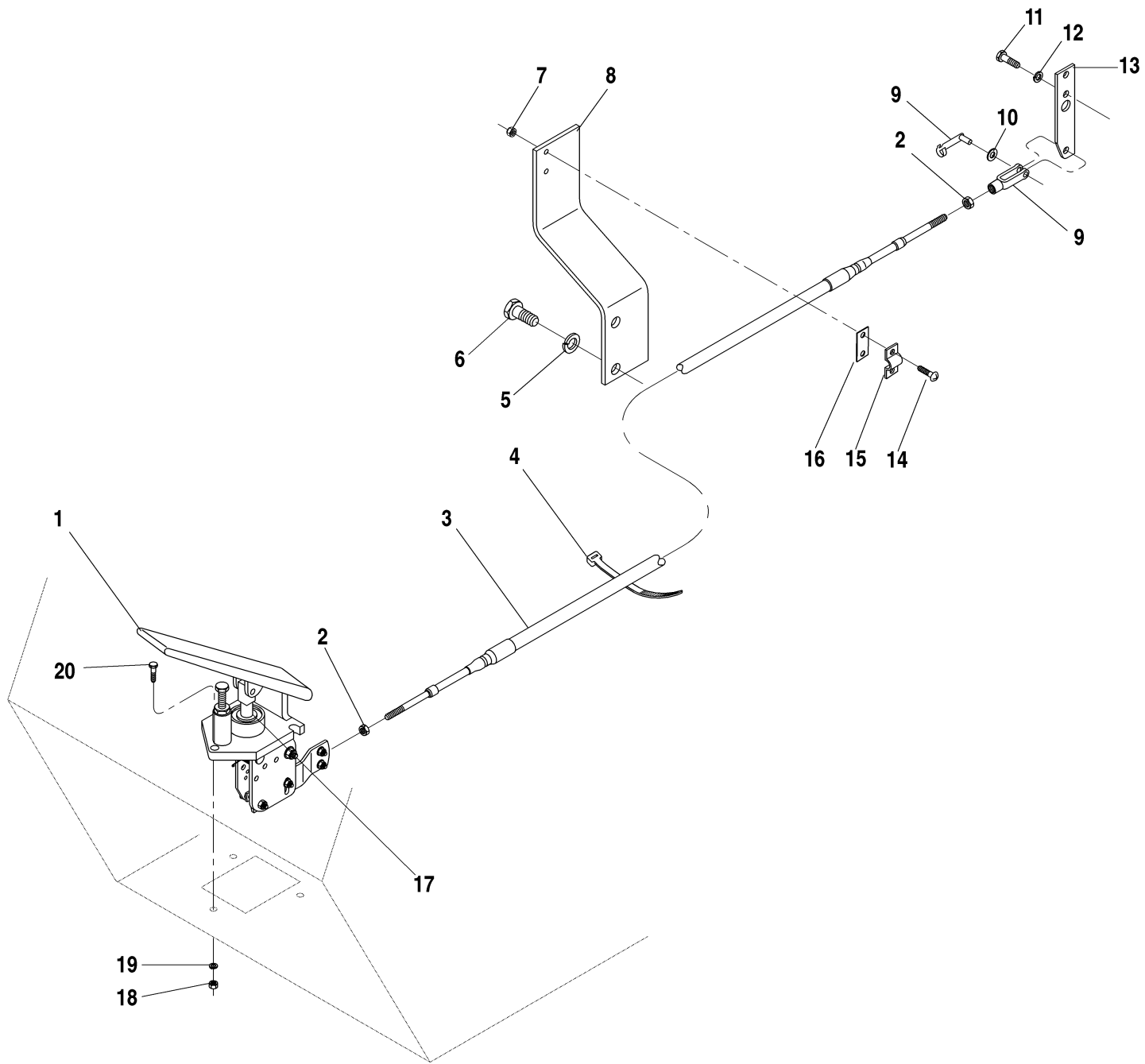


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Section 3 — Frame and Operator’s Compartment

Main Frame Assembly 3.1.1

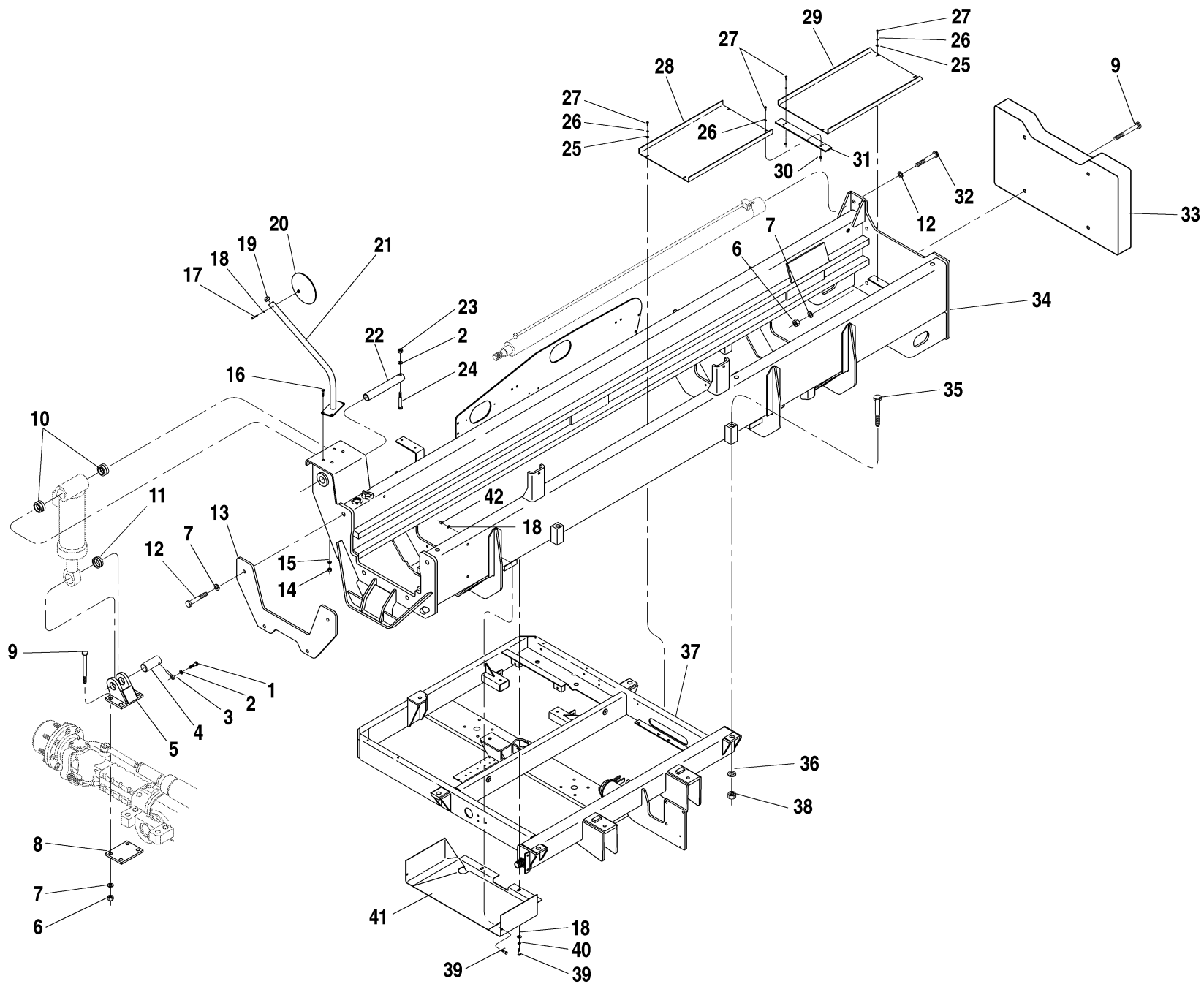
Engine Cowel Assembly 3.2.1

Operator’s Compartment Assembly 3.3.1

Instrument Panel Assembly 3.4.1

Steer Column Assembly 3.5.1

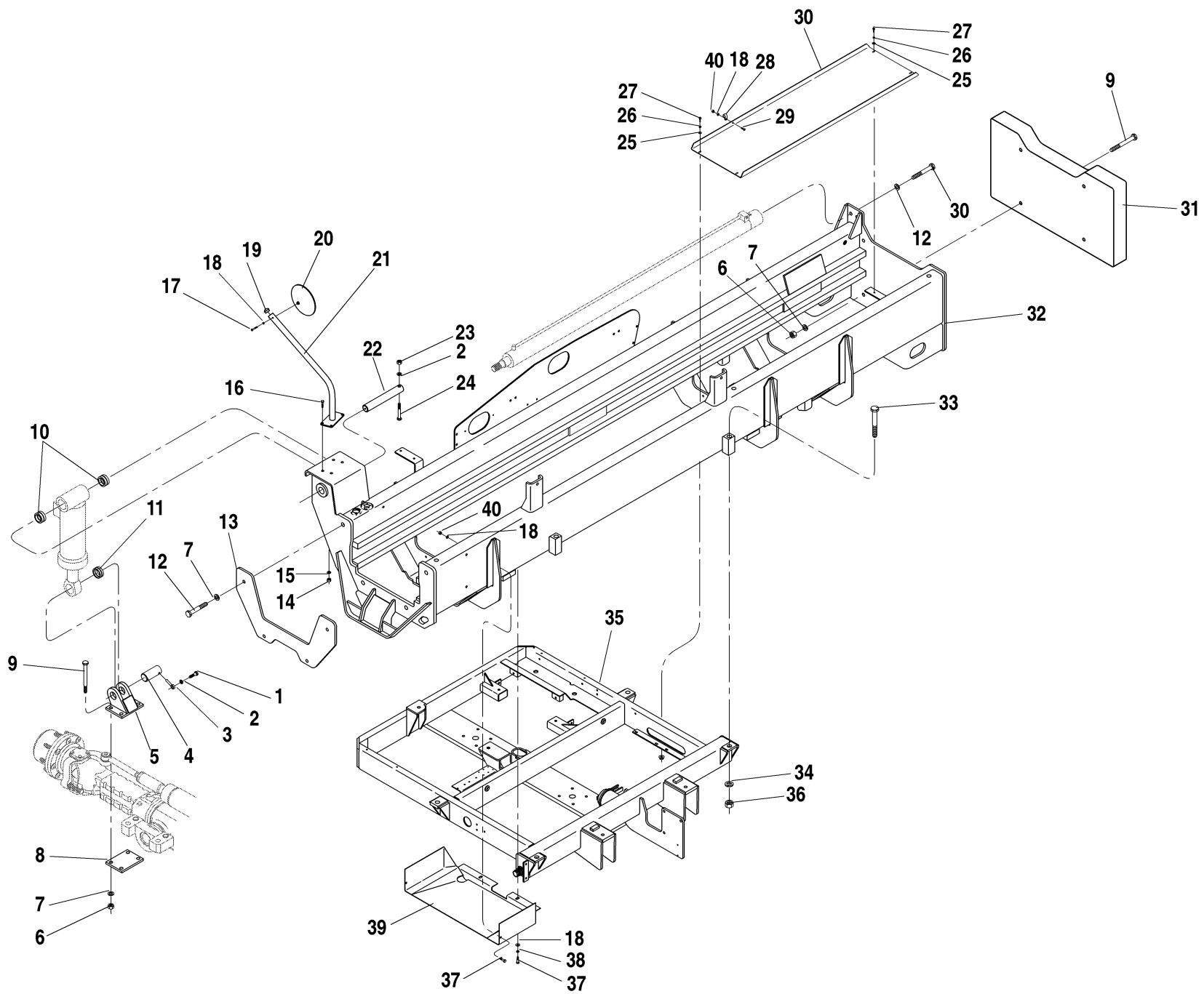
Fender Assembly 3.6.1



ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	P00403	1	Capscrew, Hx., 1/2"-13 × 1 1/4"	38	P01209	4	Nut, Hx 1"-8 GRD 8
2	P01312	2	Lockwasher, 1/2"	39	P00104	4	Capscrew, Hx., 5/16"-18 × 1"
3	34178A	1	Lock Pin	40	P01403	2	Flatwasher, 5/16"
4	65601A	1	Pin, Frame Tilt Cylinder - Lower	41	67694C	1	Guard, Filter
5	65558B	1	Mount, Frame Tilt Cylinder	42	P01507	2	Nut Hx., 5/16"-18
6	P01315	14	Nut, Hx., 3/4"-10 GR C				
7	P01315	12	Lockwasher, 3/4"				
8	65561A	1	Plate, Frame Tilt Support Ear Hose Guard, Cab				
9	P00742	8	Capscrew, Hx., 3/4"-10 × 7 1/2" GR 8				
10	16228A	2	Bushing, Cylinder				
11	21665A	1	Bushing, Cylinder				
12	P00706	4	Capscrew, Hx., 3/4"-10 × 3"				
13	65462B	1	Plate, Front, Upper Frame Assembly				
14	P01508	4	Nut, Hx., 3/8"-16				
15	P01310	4	Lockwasher, 3/8"				
16	P00205	4	Capscrew, Hx., 3/8"-16 × 1 /14"				
17	P00107	1	Capscrew, Hx., 5/16"-16 × 1 3/4"				
18	P01309	4	Lockwasher, 5/16"				
19	69129X	1	Plug, End Cap				
20	P32579	1	Mirror, Convex				
21	67705B	1	Bracket, Mirror				
22	24732A	1	Pin, Frame Tilt Cylinder - Upper				
23	P01510	1	Nut, Hx., 1/2"-13				
24	P00414	1	Capscrew, Hx., 1/2"-13 × 4"				
25	P01402	8	Flatwasher, 1/4"				
26	P01308	8	Lockwasher, 1/4"				
27	P03196	8	Capscrew, Button Hd. Socket, 1/4"-20 × 3/4"				
28	65570A	1	Hose Tray, Front				
29	65800A	1	Hose Tray, Rear				
30	P01506	4	Nut, Hx., 1/4"-20				
31	65801A	1	Mount, Hose Tray				
32	P00753	2	Capscrew, Hx., 3/4"-16 × 2 1/2"				
33	67703B	1	Counterweight				
34	65422D	1	Frame, Upper				
35	P00941	4	Capscrew, Hx., 1"-8 × 7"				
36	P01259	4	Flatwasher, 1" SAE				
37	66478D	1	Frame, Lower				

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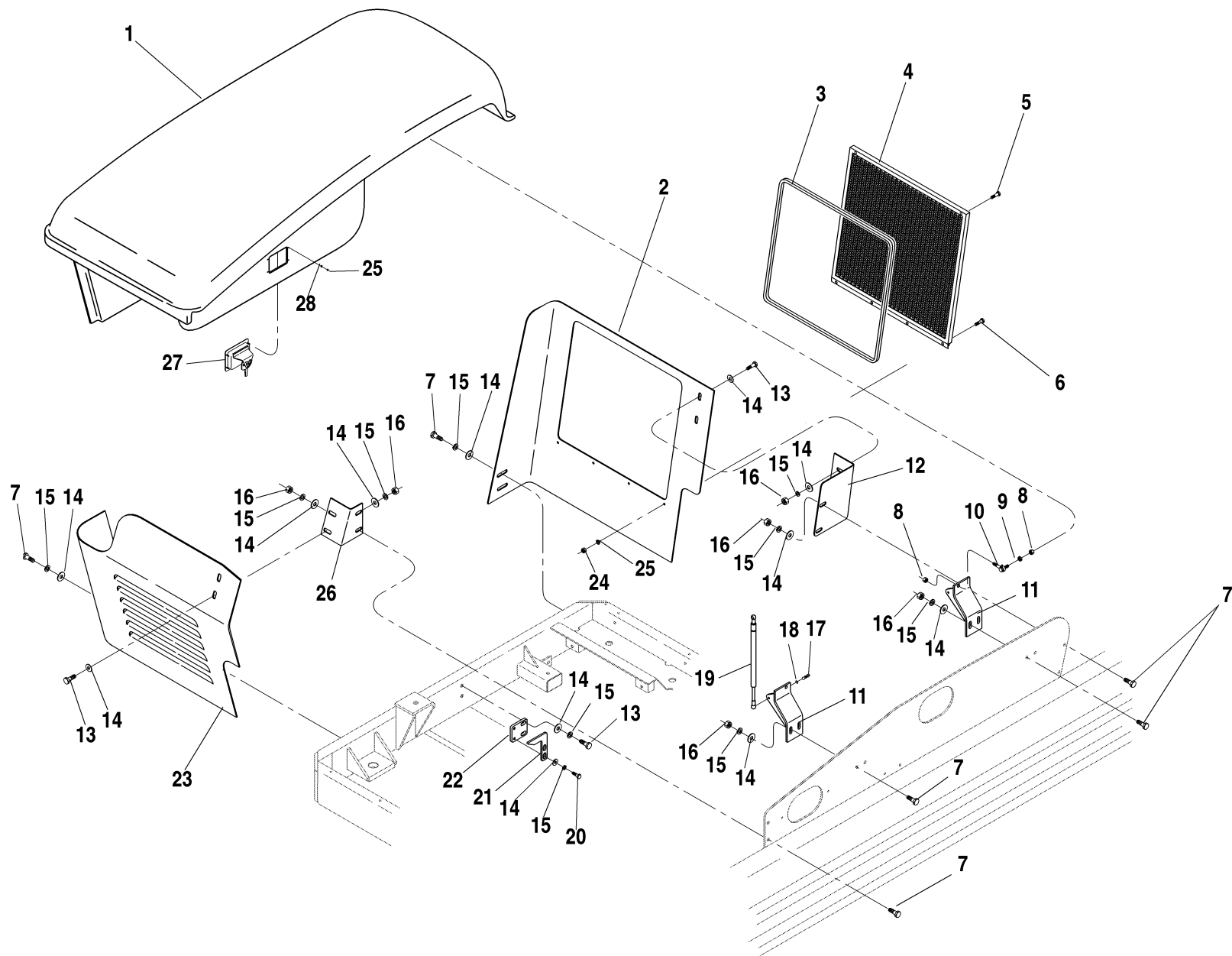
ITEM	PART NO.	QTY.	DESCRIPTION
1	P00403	1	Capscrew, Hx., 1/2"-13 x 1 1/4"
2	P01312	2	Lockwasher, 1/2"
3	34178A	1	Lock Pin
4	65601A	1	Pin, Frame Tilt Cylinder - Lower
5	65558B	1	Mount, Frame Tilt Cylinder
6	P01315	14	Nut, Hx., 3/4"-10 GR C
7	P01315	12	Lockwasher, 3/4"
8	65561A	1	Plate, Frame Tilt Support Ear Hose Guard, Cab
9	P00742	8	Capscrew, Hx., 3/4"-10 x 7 1/2" GR 8
10	16228A	2	Bushing, Cylinder
11	21665A	1	Bushing, Cylinder
12	P00706	4	Capscrew, Hx., 3/4"-10 x 3"
13	65462B	1	Plate, Front, Upper Frame Assembly
14	P01508	4	Nut, Hx., 3/8"-16
15	P01310	4	Lockwasher, 3/8"
16	P00205	4	Capscrew, Hx., 3/8"-16 x 1 /14"
17	P00107	1	Capscrew, Hx., 5/16"-18 x 1 3/4"
18	P01309	4	Lockwasher, 5/16"
19	69129X	1	Plug, End Cap
20	P32579	1	Mirror, Convex
21	67705B	1	Bracket, Mirror
22	24732A	1	Pin, Frame Tilt Cylinder - Upper
23	P01510	1	Nut, Hx., 1/2"-13
24	P00414	1	Capscrew, Hx., 1/2"-13 x 4"
25	P01402	4	Flatwasher, 1/4"
26	P01308	4	Lockwasher, 1/4"
27	P03196	4	Capscrew, Button Hd. Socket, 1/4"-20 x 3/4"
28	37368X	1	Hose Clamp, Double
29	P27829	1	MS, Truss Hd., Phillips, 5/16"x3/4"
30	P00753	2	Capscrew, Hx., 3/4"-16 x 2 1/2"
31	67703B	1	Counterweight
32	65422D	1	Frame, Upper
33	P00941	4	Capscrew, Hx., 1"-8 x 7"
34	P01259	4	Flatwasher, 1" SAE
35	66478D	1	Frame, Lower
36	P01209	4	Nut, Hx 1"-8 GRD 8
37	P00104	4	Capscrew, Hx., 5/16"-18 x 1"

ITEM	PART NO.	QTY.	DESCRIPTION
38	P01403	2	Flatwasher, 5/16"
39	67694C	1	Guard, Filter
40	P01507	2	Nut Hx., 5/16"-18
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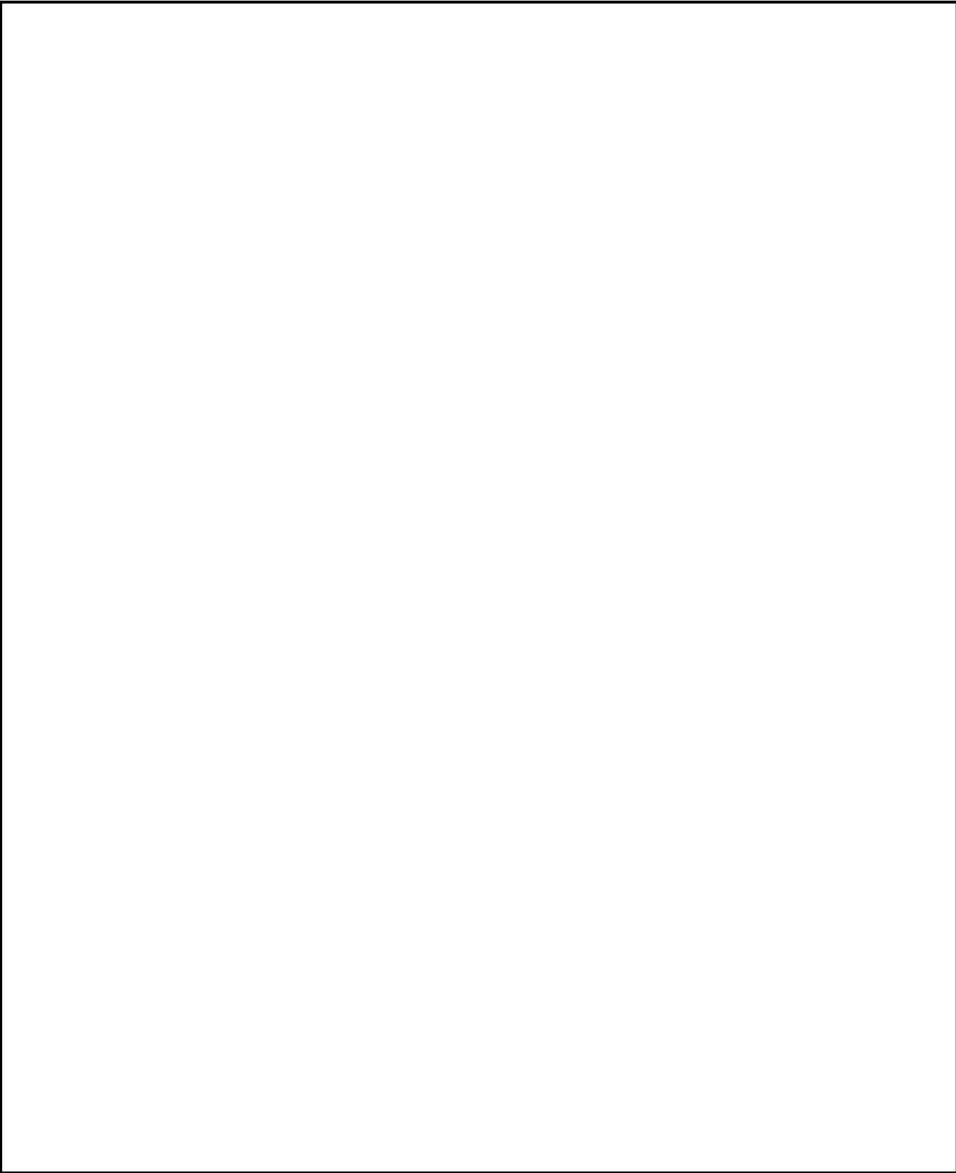
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MAIN FRAME ASSEMBLY 3.1.1.1

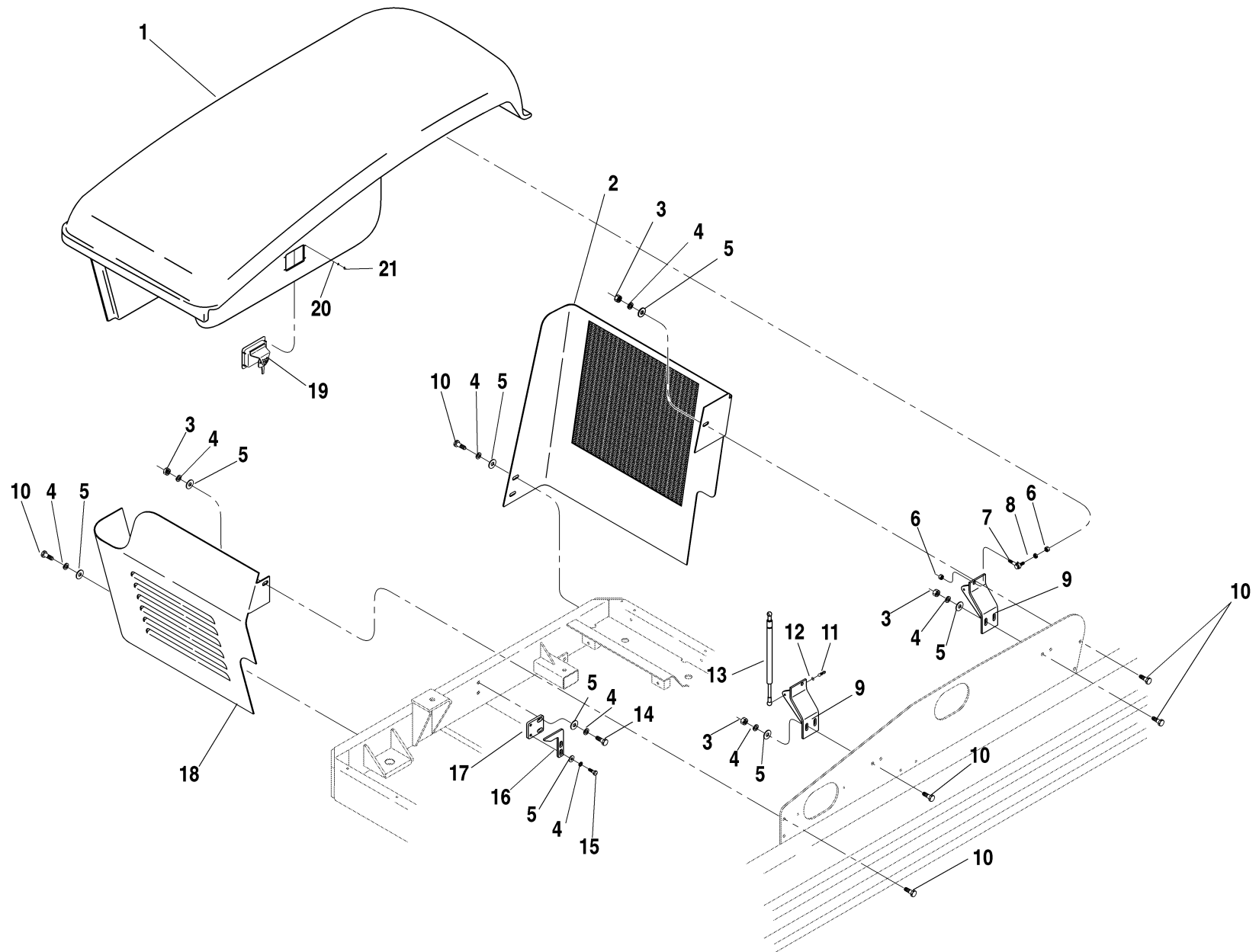
644D



ITEM	PART NO.	QTY.	DESCRIPTION
1	67144D	1	Hood, Fiberglass
2	67148D	1	Engine Compartment Rear Panel
3	67184X	1	Door Seal
4	67376C	1	Rear Grille
5	P00007	2	Capscrew, Hx., 1/4"-20 × 1 1/2"
6	P00001	5	Capscrew, Hx., 1/4"-20 × 1/2"
7	P00205	12	Capscrew, Hx., 3/8-16 × 1 1/4"
8	P01681	4	LockNut, Hx., 3/8"-16 (Nylock)
9	P01584	2	JamNut, Hx., 3/8"-16
10	67547X	2	Rodend
11	67731B	2	Mounting Bracket, Hinge
12	67857B	1	Mounting Bracket, Rear Panel
13	P00204	4	Capscrew, Hx., 3/8-16 × 1"
14	P01404	24	Flatwasher, 3/8"
15	P01310	20	Lockwasher, 3/8"
16	P01508	12	Nut, Hx., 3/8"-16
17	66148X	4	Stud, Ball
18	66149X	4	Clip Retaining
19	67554X	2	Gas Spring
20	P00202	2	Capscrew, Hx., 3/8-16 × 3/4"
21	67863B	1	Catch, Latch
22	67890A	1	Mount, Latch Catch
23	67364D	1	Cover, Front Engine
24	P01528	4	Nut, Hx., #10-24
25	P01306	4	Lockwasher, #10
26	67856B	1	Mounting Bracket, Front Louver
27	67556X	1	Latch
28	P01355	4	Starwasher, #10



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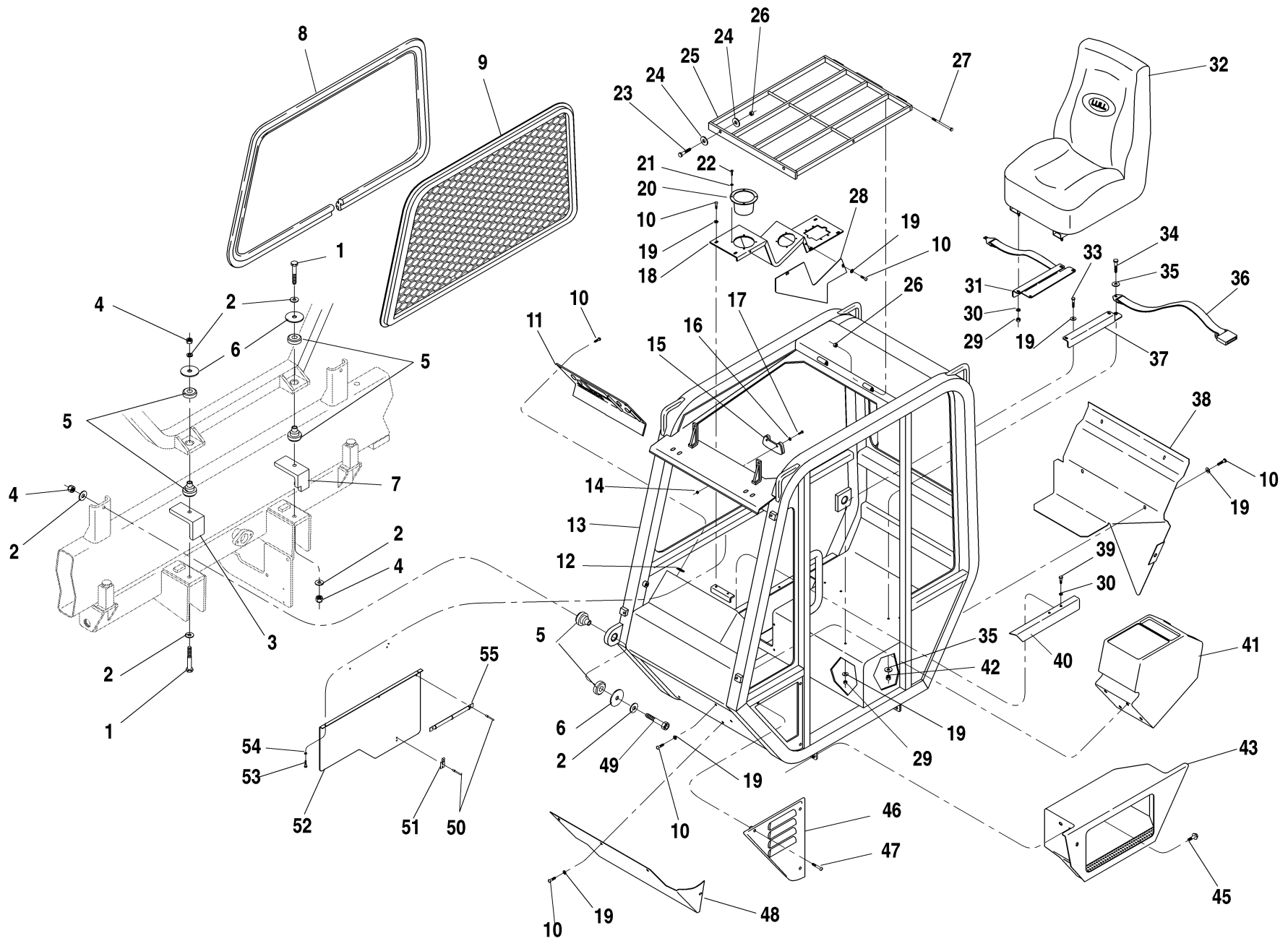


ITEM	PART NO.	QTY.	DESCRIPTION
1	67144D	1	Hood, Fiberglass
2	1100009	1	Engine Compartment Rear Panel
3	P01508	12	Nut, Hx., 3/8"-16
4	P01310	12	Lockwasher, 3/8"
5	P01404	12	Flatwasher, 3/8"
6	P01681	4	LockNut, Hx., 3/8"-16 (Nylock)
7	67547X	2	Rodend
8	P01584	2	JamNut, Hx., 3/8"-16
9	67731B	2	❶ Mounting Bracket, Hinge
10	P00205	8	Capscrew, Hx., 3/8-16 × 1 1/4"
11	66148X	4	Stud, Ball
12	66149X	4	Clip Retaining
13	67554X	2	Gas Spring
14	P00202	2	Capscrew, Hx., 3/8-16 × 3/4"
15	P00204	2	Capscrew, Hx., 3/8-16 × 1"
16	67863B	1	Catch, Latch
17	67890A	1	Mount, Latch Catch
18	10469132	1	Cover, Front Engine
19	67556X	1	Latch
20	P01355	4	Stawasher, #10
21	P01528	4	Nut, Hx., #10-24

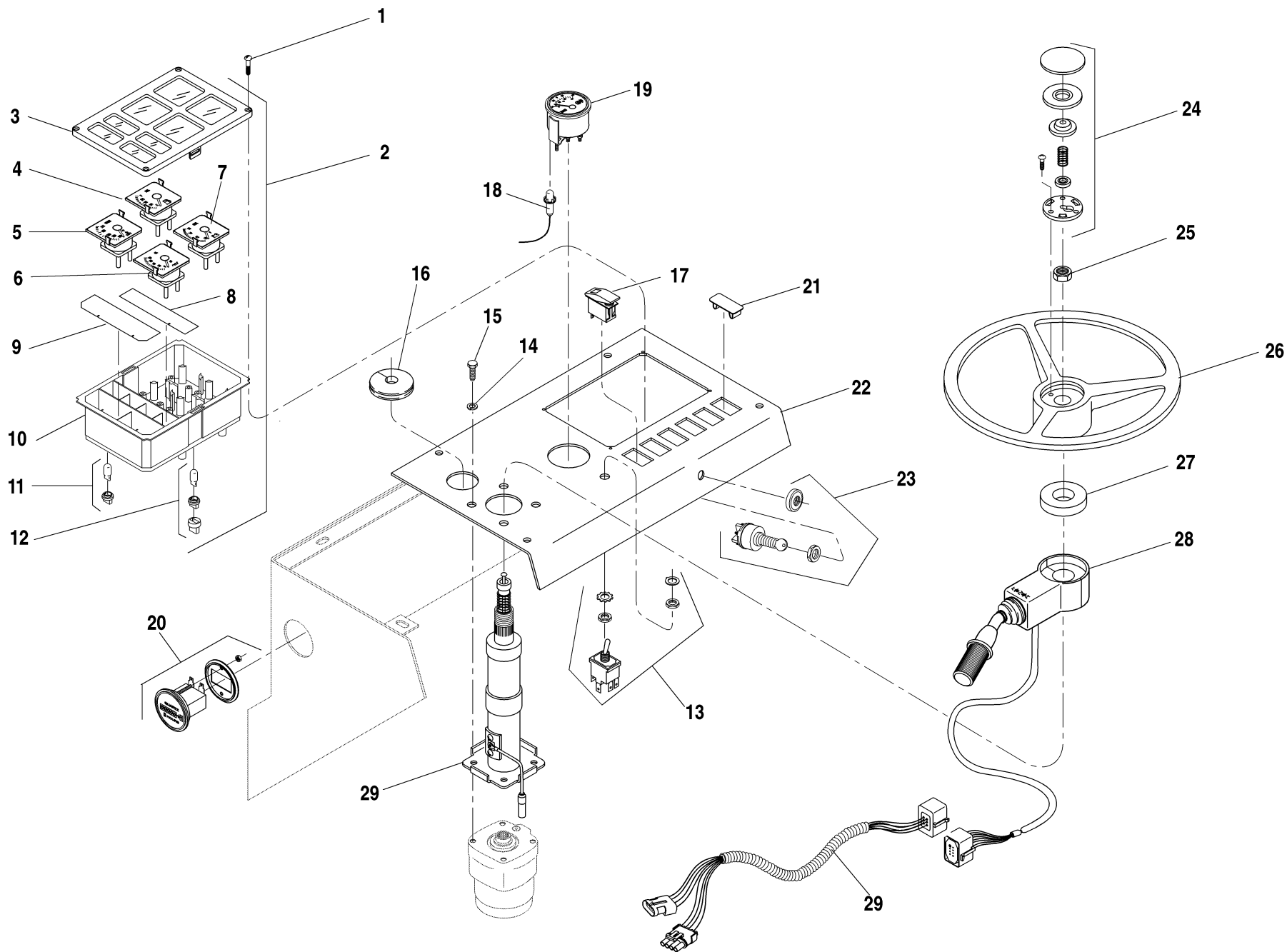
NOTES:

❶ On machine S/N 703 and after the hinge mounting brackets are welded on.

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ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	P01929	2	Capscrew, Hx., 5/8"-18 x 5 1/2" GR8	37	①P25464	-	Seat Belt - 3" Wide
2	P01256	9	Flatwasher, Hardened., 5/8"	38	65862B	1	Seat Mount, Left
3	68850A	1	Stop Block, Angle	39	65907C	1	Cover, Rear
4	P06083	4	Lock Nut, Hx., 5/8"-18(Nylock)	40	P03209	2	Capscrew, Button Hd. Socket, 5/16"-18 x 1/2"
5	P33152	4	Rubber Mount, Two Piece	41	67747B	1	Guard, Cable and Hose
6	36262A	4	Snubbing Washer	42	38246B	1	Storage Box
7	68851A	1	Stop Block, Angle	43	P05003	2	Locknut, Hx., 7/16"-14
8	N12354	1	Rubber Locking Channel	44	65894B	1	Step, Operator's
9	39390C	1	Screen Slide	45	P00202	4	Capscrew, Hx., 3/8"-16 x 3/4"
10	P27829	24	Screw, Phillips Truss Hd., 5/16"-18 x 3/4"	46	P01310	4	Lockwasher, 3/8"
11	65545B	1	Instrument Panel	47	36849B	1	Cover, Side
12	P20459	4	Speed Nut	48	37113X	3	Screw, Phillips Truss Hd., 5/16"-18 x 1 1/2"
13	67266E	1	Operator's Compartment	49	36958B	1	Cover, Front
14	P01653	2	Locknut, Hx., #8-32	50	P00642	2	Capscrew, Hx., 5/8"-11 x 4 1/2" GR8
15	P28470	1	Level Indicator	51	P32958	4	Pop-Rivet, Aluminum, 1/8" Dia. x.337" Long
16	P01327	2	Flatwasher, #8 SAE	52	37364X	1	Holder, Flip Card
17	P02034	2	Screw, Slotted Rd. Hd., #8-32 x 1/2"	53	②36542B	1	Mounting Plate, Decal
18	66290C	1	Control Panel	54	②P00001	2	Capscrew, Hx., 1/4"-20 x 1/2"
19	P01403	20	Flatwasher, 5/16"	55	②P01308	2	Lockwasher, 1/4"
20	38316A	1	Cup Holder		38718A	1	3-Ring Hanger, Flip Card
21	P01357	4	Starwasher, 1/4" External	NOTES: ① Required in California. ② Used with Optional Enclosed Cab Only.			
22	P03196	4	Capscrew, Button Hd, Socket,. 1/4"-20 x 3/4"				
23	P00234	2	Capscrew, Hx., 3/8"-16 x 1 3/4" GR 8				
24	P01404	4	Flatwasher, 3/8"				
25	36887C	1	Overhead Guard	644D-34 S/N 108-			
26	P01658	4	Locknut, Hx., 3/8"-16				
27	P00245	2	Capscrew, Hx., 3/8"-16 x 5" GR 8				
28	36436B	1	Side Cover, Control Panel				
29	P01507	6	Nut, Hx., 5/16"-18				
30	P01309	6	Lockwasher, 5/16"				
31	65863B	1	Sea Mount, Right				
32	36478C	1	Seat, Operator's				
	38383C	-	Suspension Seat, Operator's (Optional)				
33	P00102	4	Capscrew, Hx., 5/16"-18 x 3/4"				
34	P00102	2	Capscrew, Hx., 7/16"-14 x 1 1/4"				
35	P01405	4	Flatwasher, 7/16"				
36	39367B	1	Seat Belt - 2" Wide				



ITEM	PART NO.	QTY.	DESCRIPTION
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1	P02057	4	Screw, Slotted Rd. Hd., #10-24 x 3/4"
2	36830B	1	Cluster Gauge (Includes Items 3–12)
3	37330X	1	Bezel
4	37331X	1	Gauge, Fuel
5	37332X	1	Gauge, Water Temperature
6	37333X	1	Gauge, Oil Pressure
7	37334X	1	Gauge, Voltmeter
8	38222B	1	Lens, Diff Lock, "Park Brake" and "Brake"
9	38221B	1	Lens, "Rear Osc Lock"
10	N.S.S.	1	Body, Cluster Gauge
11	37328X	6	Light Socket (with G.E. #194 Lamp)
12	37329X	2	Light Socket (with G.E. #168 Lamp)
13	67524X	1	Switch, Parking Switch
14	P01310	4	Lockwasher, 3/8"
15	P00205	4	Capscrew, Hx., 3/8"-16 x 1 1/4"
16	P32575	1	Grommet
17	38094A	1	Switch, Rocker (Transmission Declutch)
18	38462A	1	Light Source
19	36805X	1	Gauge, Transmission Oil Temp
20	36804X	1	Gauge, Hourmeter
21	36512X	5	Plug, Hole
22	65545B	1	Instrument Panel
23	P11092	1	Switch, Ignition
REF	P32926	-	Key
24	P18141	1	Horn Button
25	P13009	1	Nut, Steering
26	P28704	1	Steering Wheel
27	34667A	1	Mounting Pad, Rubber
28	10267224	1	Shift Control, Electric
29	P33122	1	Steering Column
30	①68410B	1	Harness, Jumper, Shifter

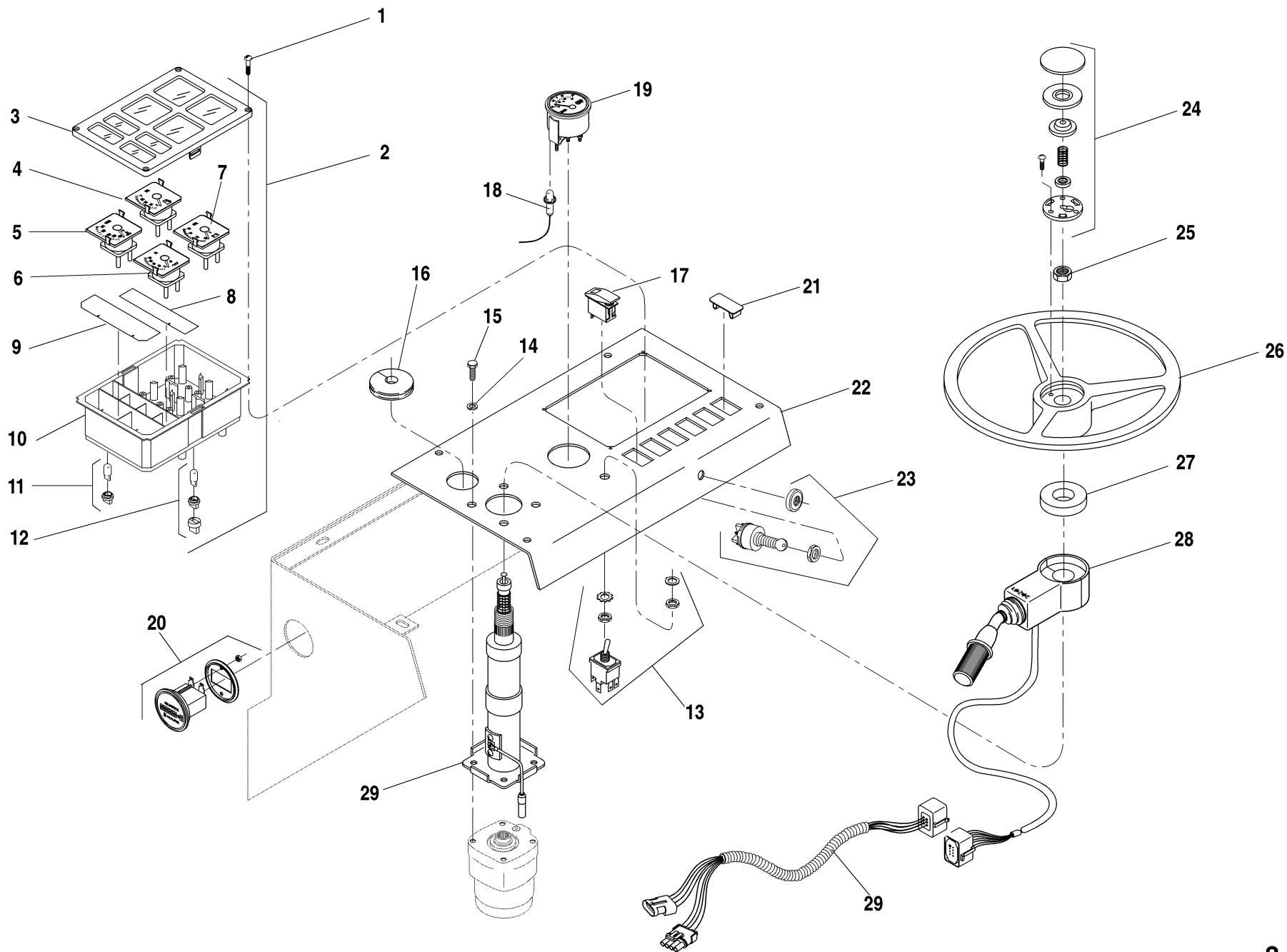
N.S.S. = Not Sold Separately

NOTES:

- ① Used S/N 108–612. Not Required when ordering a new Shift Control (item 28).

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ITEM	PART NO.	QTY.	DESCRIPTION
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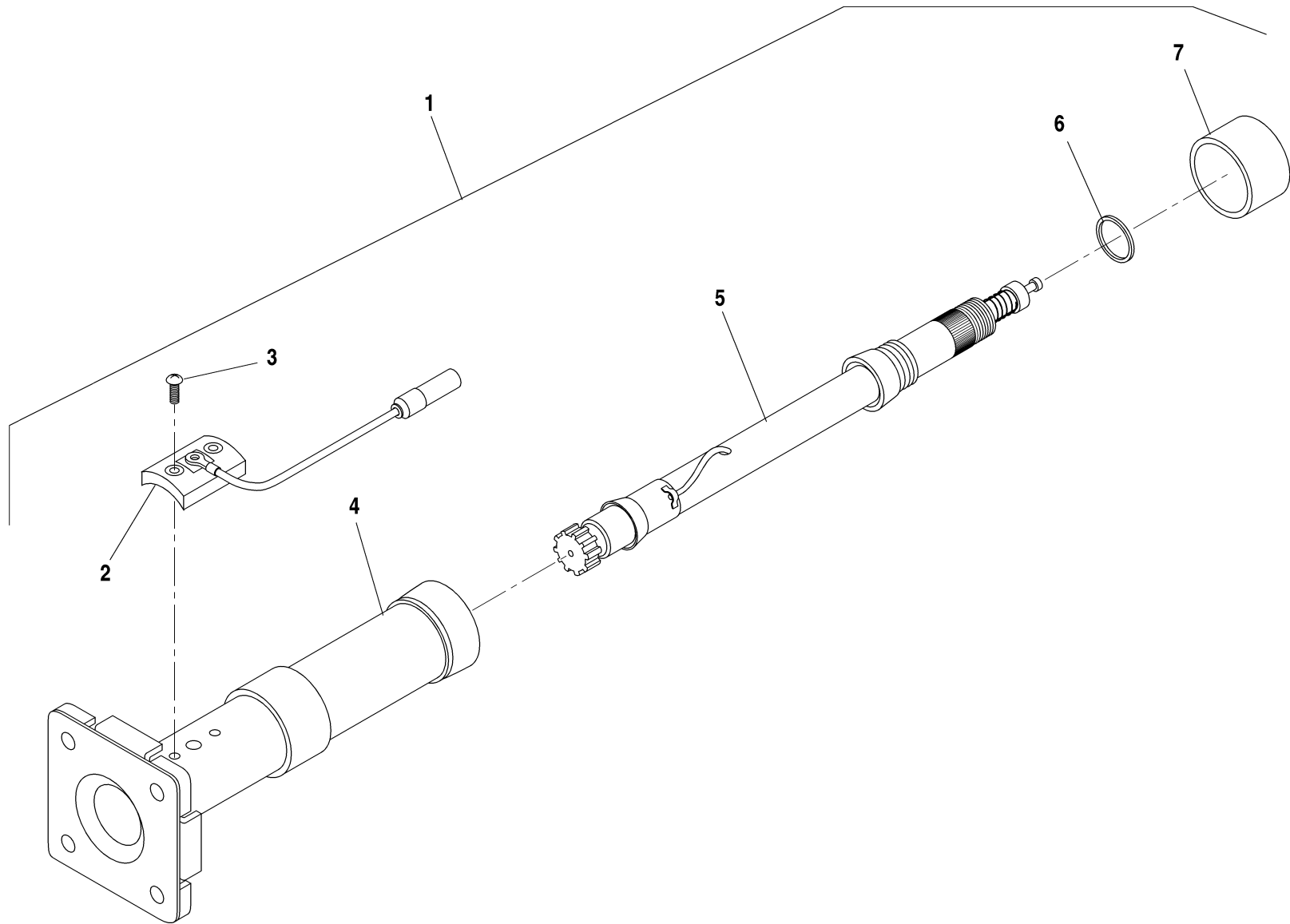
1	P02057	4	Screw, Slotted Rd. Hd., #10-24 x 3/4"
2	36830B	1	Cluster Gauge (Includes Items 3–12)
3	37330X	1	Bezel
4	37331X	1	Gauge, Fuel
5	37332X	1	Gauge, Water Temperature
6	37333X	1	Gauge, Oil Pressure
7	37334X	1	Gauge, Voltmeter
8	38222B	1	Lens, Diff Lock, "Park Brake" and "Brake"
9	38221B	1	Lens, "Rear Osc Lock"
10	N.S.S.	1	Body, Cluster Gauge
11	37328X	6	Light Socket (with G.E. #194 Lamp)
12	37329X	2	Light Socket (with G.E. #168 Lamp)
13	67524X	1	Switch, Parking Switch
14	P01310	4	Lockwasher, 3/8"
15	P00205	4	Capscrew, Hx., 3/8"-16 x 1 1/4"
16	P32575	1	Grommet
17	38094A	1	Switch, Rocker (Transmission Declutch)
18	38462A	1	Light Source
19	36805X	1	Gauge, Transmission Oil Temp
20	36804X	1	Gauge, Hourmeter
21	36512X	5	Plug, Hole
22	65545B	1	Instrument Panel
23	1101202	1	Switch, Ignition (includes 2ea keys)
REF	1101203	-	Key
24	P18141	1	Horn Button
25	P13009	1	Nut, Steering
26	P28704	1	Steering Wheel
27	34667A	1	Mounting Pad, Rubber
28	10267224	1	Shift Control, Electric
29	P33122	1	Steering Column
30	❶68410B	1	Harness, Jumper, Shifter

N.S.S. = Not Sold Separately

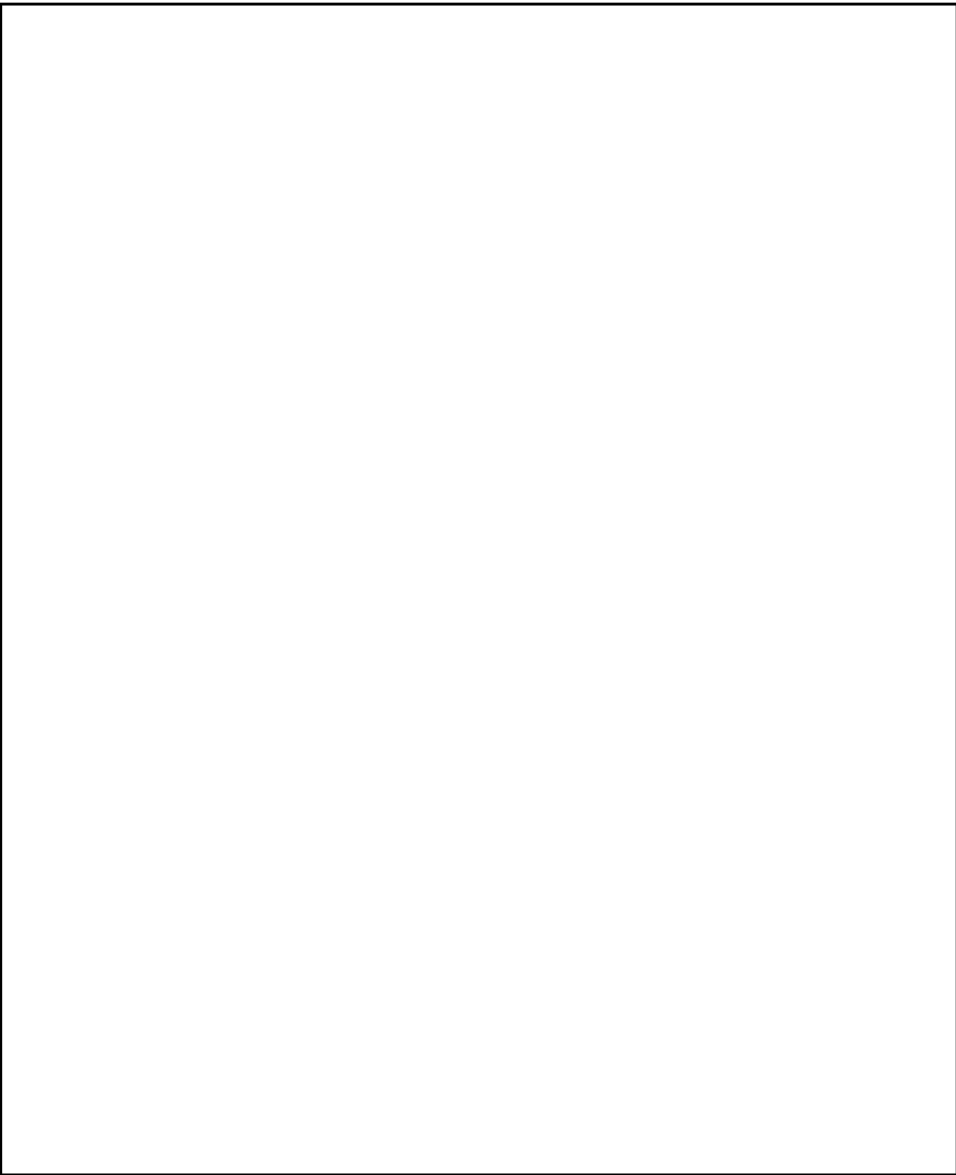
NOTES:

- ❶ Used S/N 108–612. Not Required when ordering a new Shift Control (item 28).

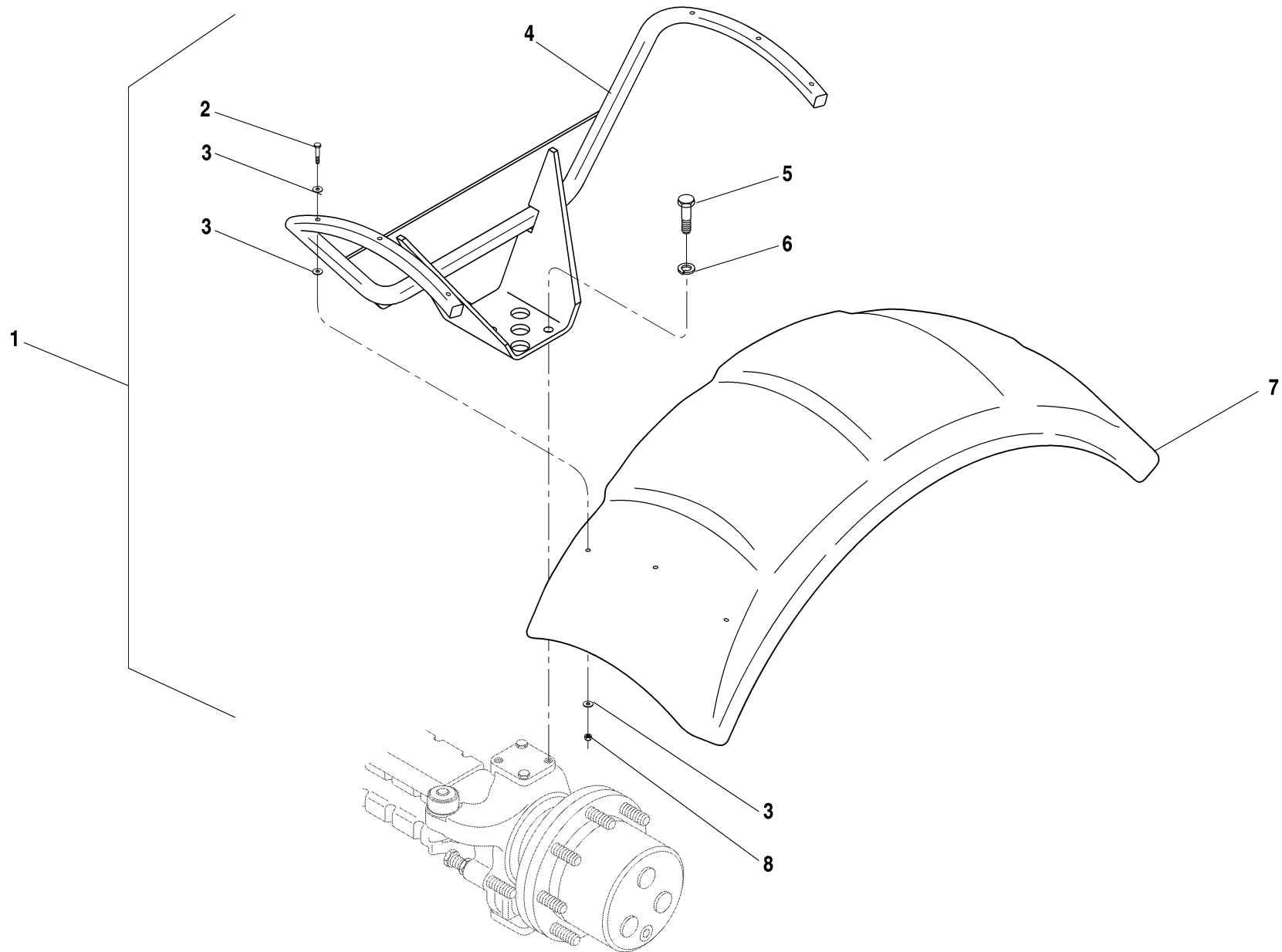
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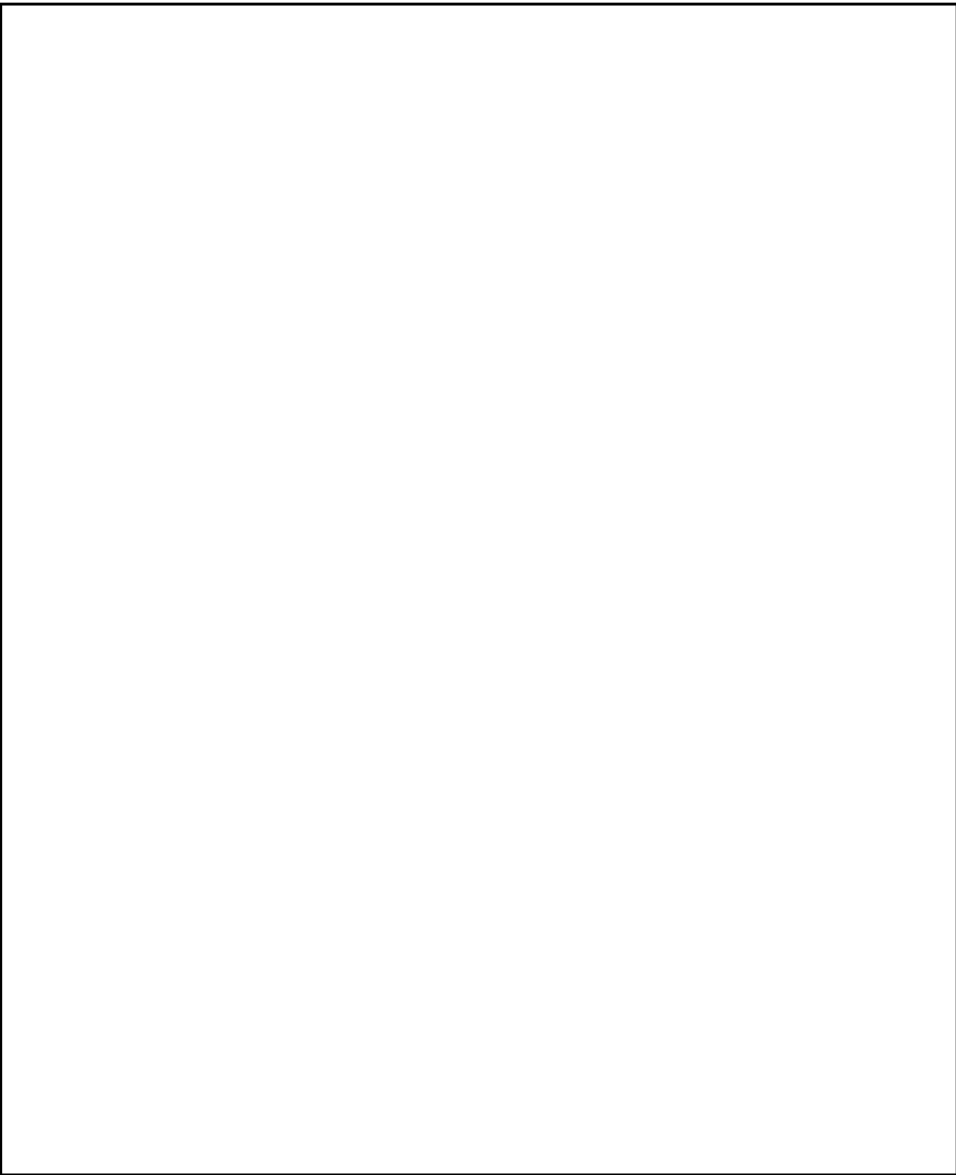
ITEM	PART NO.	QTY.	DESCRIPTION
1	P33122	1	Steer Column Assembly
2	P18740	1	Brush Assembly (Includes Item 3)
3	N.S.S.	2	Screw
4	N.S.S.	1	Tube Assembly
5	N.S.S.	1	Shaft Assembly
6	N.S.S.	1	Retainer, Shaft
7	P18738	1	Cap, Tube
			N.S.S. = Not Sold Separately



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ITEM	PART NO.	QTY.	DESCRIPTION
1	1100706	-	Fender Assembly (includes items 2-8)
2	10700008	6	Capscrew, Hx., 1/4"-20 X1 3/4"
3	8307109	18	Flatwasher, 1/4"
4	1100475	1	Support, Fender
5	10704281	2	Capscrew, Hx., M14-2.0 X 50mm GR 10.9
6	8310173	2	Flatwasher, 14mm
7	1100705	1	Fender, 16" Wide X 46" Long
8	10705000	6	Nut, Toplock., 1/4" 20



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Section 4 — Boom and Transfer Carriage

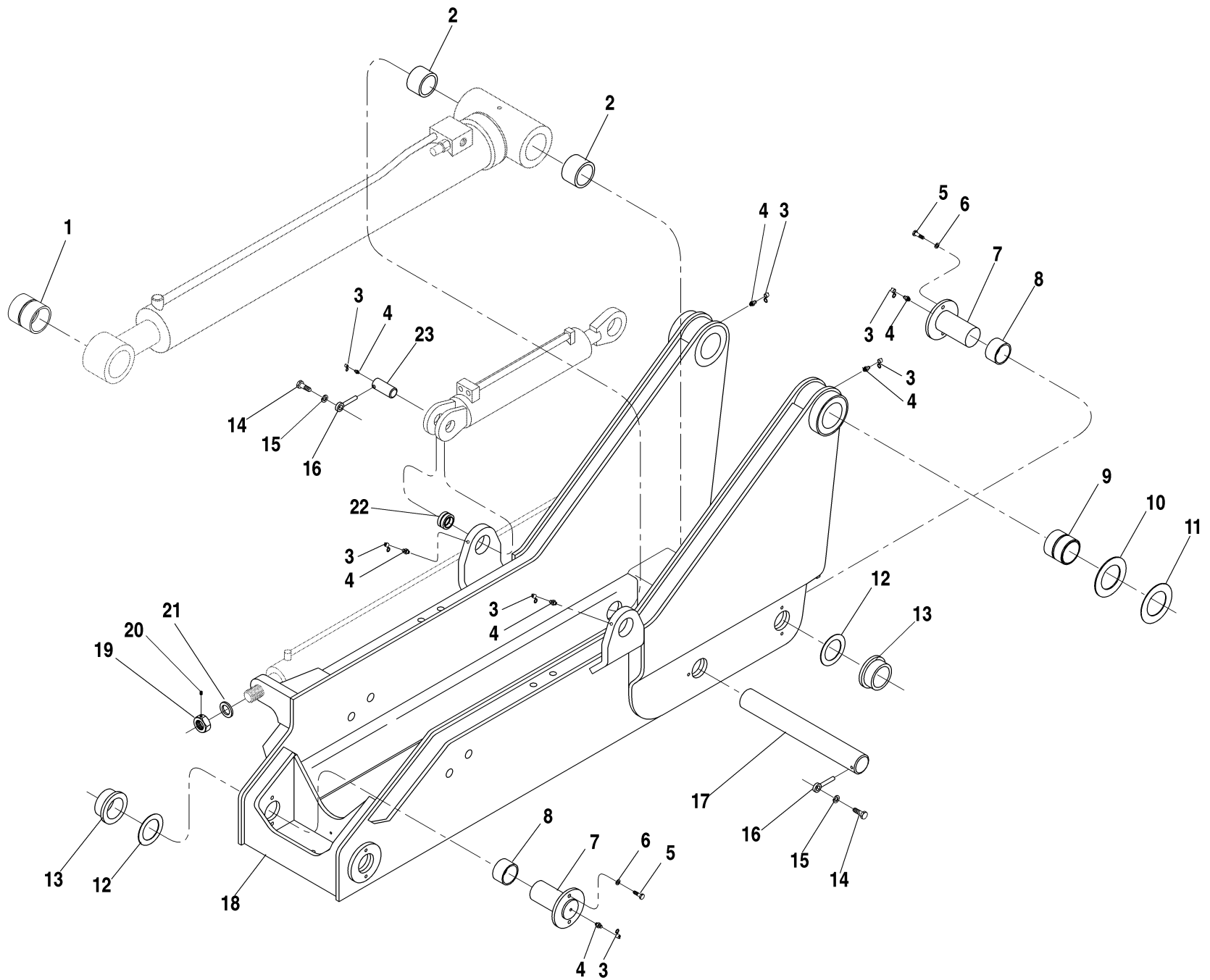
Transfer Carriage Assembly/Boom Cradle Assembly4.1.1

Outer Boom Assembly, 3-Section4.2.1

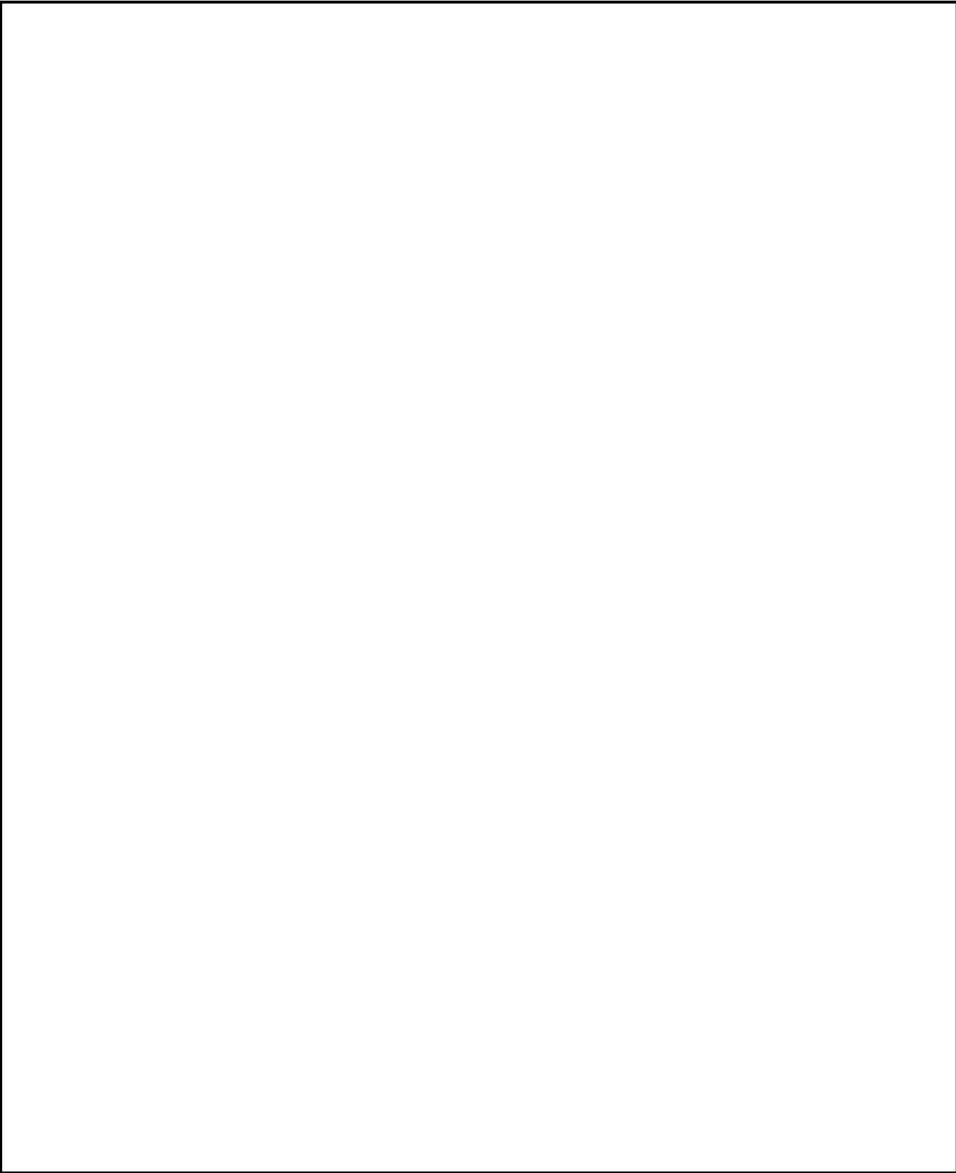
Middle Boom Assembly, 3-Section4.3.1

Inner Boom Assembly, 3-Section4.4.1

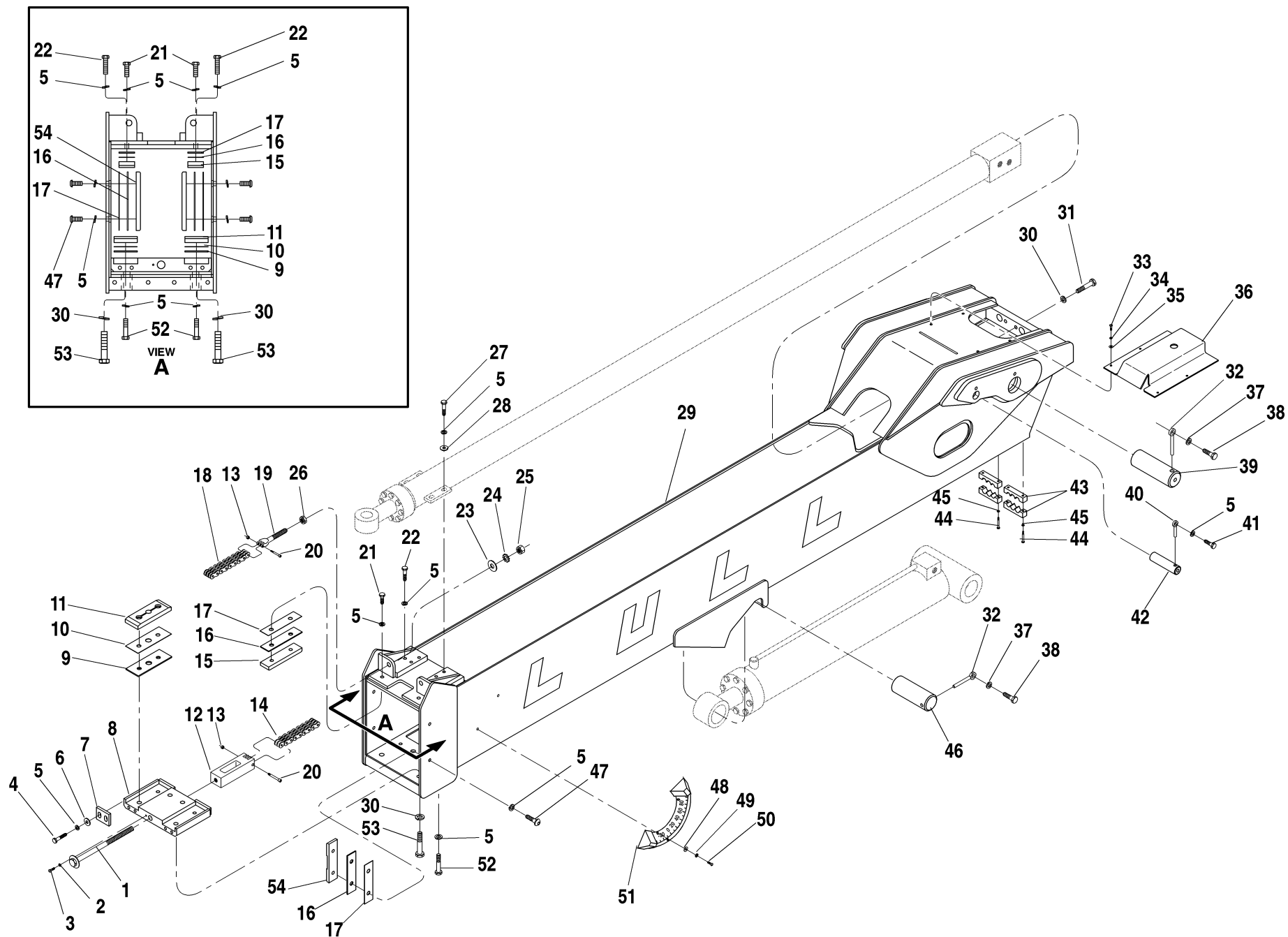
Quick Attach Group Assembly4.7.1



ITEM	PART NO.	QTY.	DESCRIPTION
1	15959A	1	Bushing, Hoist Cylinder, Lower
2	65692A	2	Bushing, Hoist Cylinder, Upper
3	P32689	7	Cover, Grease Fitting
4	P15367	1	Grease Fitting 45°
5	P00204	4	Capscrew, Hx., 3/8"-16 × 1"
6	P01310	4	Lockwasher, 3/8"
7	66596A	4	Roller Pin
8	24257A	4	Bushing, Roller Transfer Carriage
9	P27758	2	Bushing, Boom Pivot
10	P24746	A/R	Shim -.07"
11	P24747	A/R	Shim -.10"
12	17012A	4	Thrust Washer
13	15969B	4	Roller, Transfer
14	P00403	4	Capscrew, Hx., 1/2"-13 × 1 1/4"
15	P01312	4	Lockwasher 1/2"
16	34178A	4	Lock Pin
17	65610A	1	Pin, Hoist Cylinder, Transfer Carriage
18	65331D	1	Transfer Carriage
19	16369A	1	Nut, Transfer Cylinder
20	P02614	2	Setscrew, Socket Cup Pt., 3/8"-16 × 1/2"
21	15976A	1	Boss, Cylinder Rod
22	P13449	2	Bushing, Rear Carriage Tilt Cylinder Mount
23	36464A	2	Pin, Rear Carriage Tilt

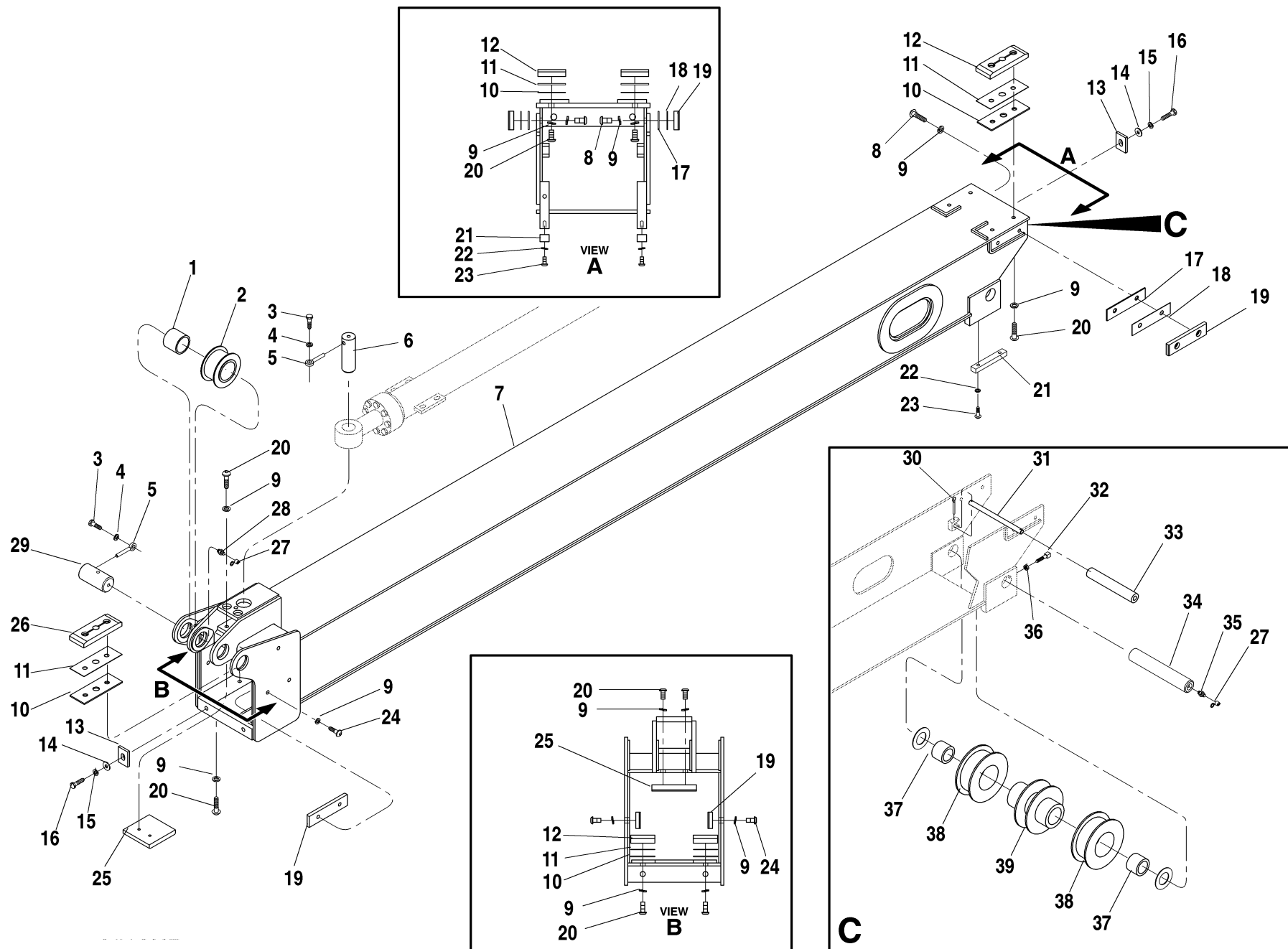


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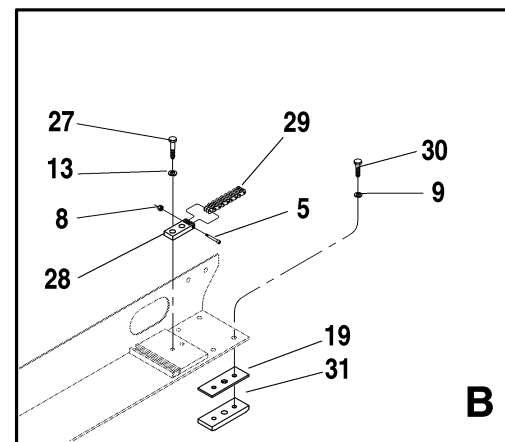
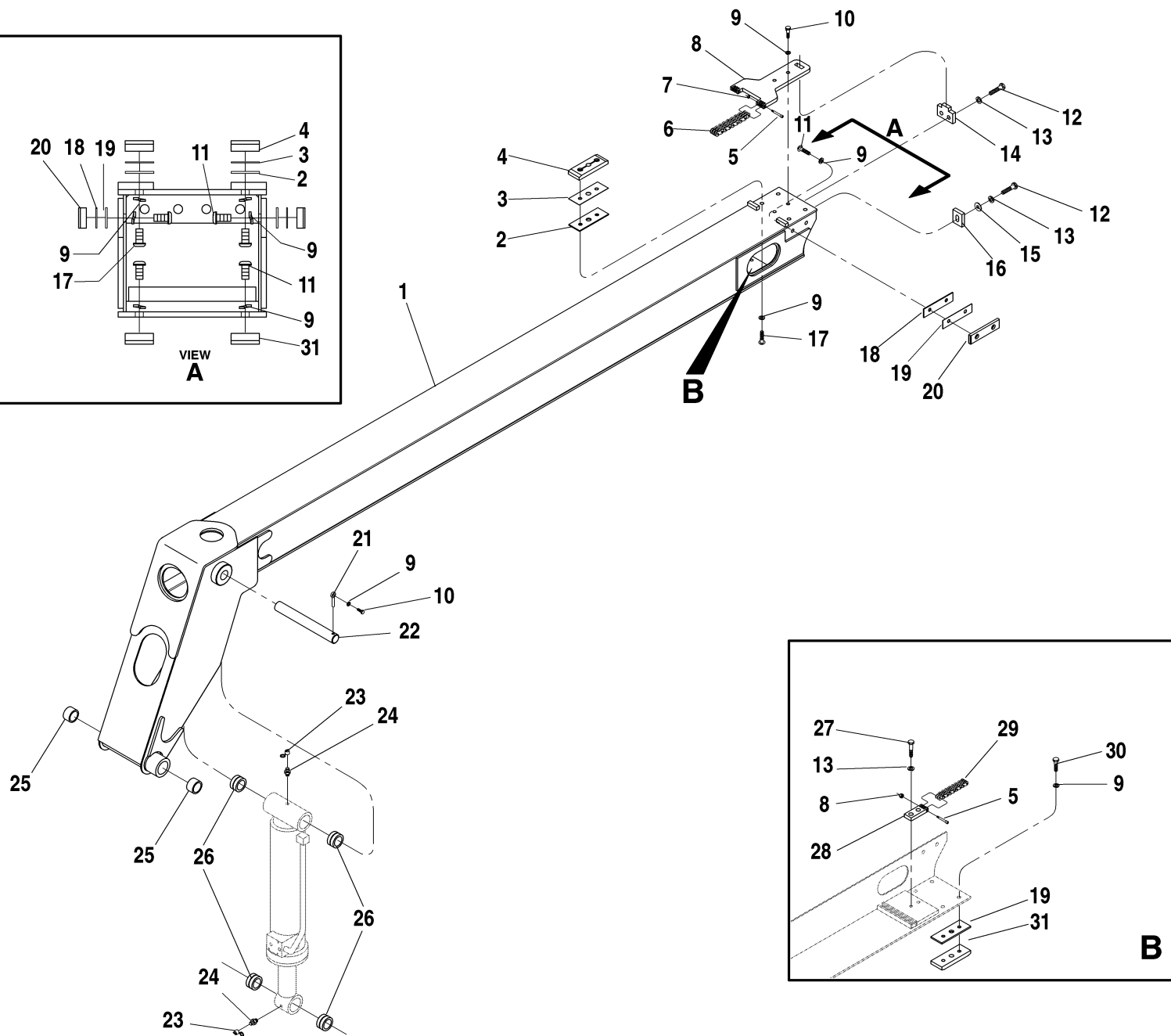
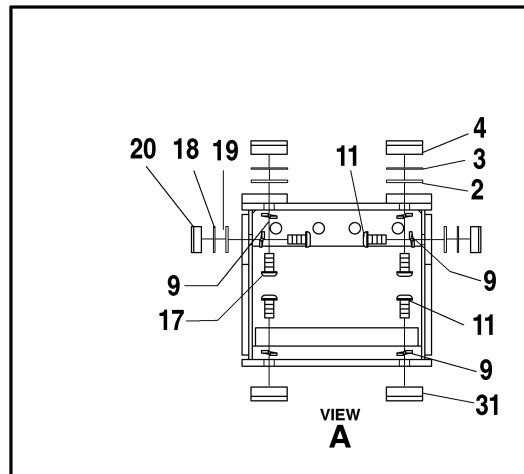
ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	38374A	1	Adjustment Rod, Chain	36	1100393	1	Cover, Cylinder
2	P01308	1	Lockwasher, 1/4"	37	P01314	3	Lockwasher, 5/8"
3	P03194	1	Capscrew, Hx., 1/4"-20 × 1/4"	38	P00632	3	Capscrew, Hx., 5/8"-11 × 1 3/4"
4	P00404	4	Capscrew, Hx., 1/2"-13 × 1 1/2"	39	65330A	2	Pin, Boom Pivot
5	②P01312	18	Lockwasher, 1/2"	40	34178A	2	Lock Pin
	②P01361	-	Starwasher, External 1/2"	41	P00403	2	Capscrew, Hx., 1/2"-13 × 1 1/4"
	②P01406	-	Flatwasher, 1/2"	42	36240A	2	Pin, Slave Cylinder
6	P01279	4	Flatwasher, 1/2" - Hardened	43	66909A	2	Hose Clamp
7	37100A	2	Pad Retainer, Aluminum	44	P00011	4	Capscrew, Hx., 1/4"-20 × 2 1/2"
8	65235B	1	Anchor Base	45	P01308	4	Lockwasher, 1/4"
9	38769A	A/R	Shim, 10 GA (.135" × 3" Wide)	46	65329A	1	Pin, Boom Hoist - Rod End
10	38770A	A/R	Shim, 16 GA (.135" × 3" Wide)	47	①P03236	-	Capscrew, Button Hd. Socket, 1/2"-20 × 3/4"
11	1100082	4	Slide Pad, Boom (1" × 3" Wide)		①P03237	-	Capscrew, Button Hd. Socket, 1/2"-20 × 1"
12	39013B	1	Adjustment Block, Chain		①P03242	12	Capscrew, Button Hd. Socket, 1/2"-20 × 1 1/4"
13	P05000	4	Locknut, Hx., 1/4"-20	48	P01327	2	Flatwasher, #8
14	65682A	1	Chain, Lower, 146 1/2"	49	P01354	2	Starwasher, #8 External
15	39024A	2	Slide Pad, Boom (3/4" × 2" Wide)	50	P02034	2	Screw, Slotted Rd. Hd., #8-32 × 1/2"
16	36328A	A/R	Shim, 10 GA (.135" × 2" Wide)	51	38252B	1	Inclinometer, Boom Angle
17	36329A	A/R	Shim, 16 GA (.135" × 2" Wide)	52	P00456	2	Capscrew, Hx., 1/2"-20 × 1 1/2"
18	65681A	2	Chain, Upper, 162"	53	P00733	4	Capscrew, Hx., 3/4"-10 × 3 1/2"
19	66345A	2	Anchor, Chain Adjustment	54	66399A	1	Slide Pad, Boom (9/16" × 2" Wide) Left Side
20	37456X	3	Shoulder Bolt, 5/16" Dia. × 2 1/2"		39604A	1	Slide Pad, Boom (7/16" × 2" Wide) Right Side
21	P00481	2	Capscrew, Hx., 1/2"-20 × 1 1/2"	NOTES: ① Capscrew length will vary with shimming requirements. ② Washers will vary with shimming requirements.			
22	P00485	2	Capscrew, Hx., 1/2"-20 × 2 1/2"				
23	P01257	2	Flatwasher, 3/4" SAE				
24	P01232	4	Nut, Hx., 3/4"-16 GR8				
25	P01364	2	Starwasher, 3/4" External	644D-34 S/N 108--			
26	P01586	2	Jam Nut, Hx., 3/4"-16"				
27	P00432	4	Capscrew, Hx., 1/2"-13 × 1 3/4"				
28	P01406	4	Flatwasher, 1/2"				
29	68976D	1	Weldment, Outer Boom				
30	P01315	2	Lockwasher, 3/4"				
31	P00733	2	Capscrew, Hx., 3/4"-10 × 3 1/2"				
32	32432A	3	Lock Pin				
33	10700003	4	Capscrew, Hx., 1/4"-20 × 3/4"				
34	10701308	4	Lockwasher, 1/4"				
35	10701402	4	Flatwasher, 1/4"				

OUTER BOOM ASSEMBLY (3 Section) 4.2.1



ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	65715A	2	Bushing	34	65266A	1	Pin, Chain Sheave & Hose Sleeve
2	65833B	2	Chain Sheave	35	P16611	2	Grease Fitting
3	P00403	2	Capscrew, Hx., 1/2"-13 x 1 1/4"	36	P01560	1	Jamnut, Hx., 1/2"-13
4	P01312	16	Lockwasher, 1/2"	37	65723A	2	Bushing
5	34178A	2	Lock Pin, 1/2" Dia.	38	65270B	2	Hose Sheave
6	65214A	1	Pin, Boom Extend Cylinder	39	66275B	1	Roller, Chain/Hose
7	65123D	1	Middle Boom	NOTES: ❶ Capscrew length will vary with shimming requirements. ❷ Washers will vary with shimming requirements.			
8	❶P03242	16	Capscrew, Button Hd. Socket, 1/2"-20 x 1 1/4"				
	❶P03236	-	Capscrew, Button Hd. Socket, 1/2"-20 x 3/4"				
	❶P03237	-	Capscrew, Button Hd. Socket, 1/2"-20 x 1"				
9	❷P01312	16	Lockwasher, 1/2"				
	❷P01361	-	Starwasher, External 1/2"				
	❷P01406	-	Flatwasher, 1/2"				
10	38769A	A/R	Shim, 10 GA				
11	38770A	A/R	Shim, 16 GA				
12	1100084	2	Slide Pad, Boom (3/4" x 3" Wide)				
13	39809A	2	Pad Retainer, Aluminum				
14	P01440	2	Flatwasher, 3/4" SAE				
15	P01315	2	Lockwasher, 3/4"				
16	P00726	2	Capscrew, Hx., 3/4"-10 x 1 3/4"				
17	36328A	A/R	Shim, 10 GA (.135" x 2" Wide)				
18	36329A	A/R	Shim, 16 GA (.060" x 2" Wide)				
19	39604A	4	Slide Pad, Boom (7/16" x 2" Wide)				
20	P00452	4	Capscrew, Hx., 1/2"-20 x 1" GR 8				
21	65626A	2	Slide Pad, Boom (3/4" x 1" Wide)				
22	P01359	4	Starwasher 3/8"				
23	P03225	4	Capscrew, Button Hd. Socket, 3/8"-16 x 3/4"				
24	P00452	8	Capscrew, Hx., 1/2"-20 x 1"				
25	65622A	1	Slide Pad, Boom				
26	1100082	2	Slide Pad, Boom (1" x 3" Wide)				
27	P32689	4	Cover, Grease Fitting				
28	P15277	3	Grease Fitting				
29	1100712	1	Pin, Front Chain Sheave				
30	10169065	1	Pin, Hitch				
31	65678A	1	Mounting Shaft, Hose Follower				
32	P02757	1	Setscrew, Square Hd., Cup Pt., 1/2"-13 x 1 3/4"				
33	65676A	1	Roller, Hose Follower				
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MIDDLE BOOM ASSEMBLY (3 Section) 4.3.1



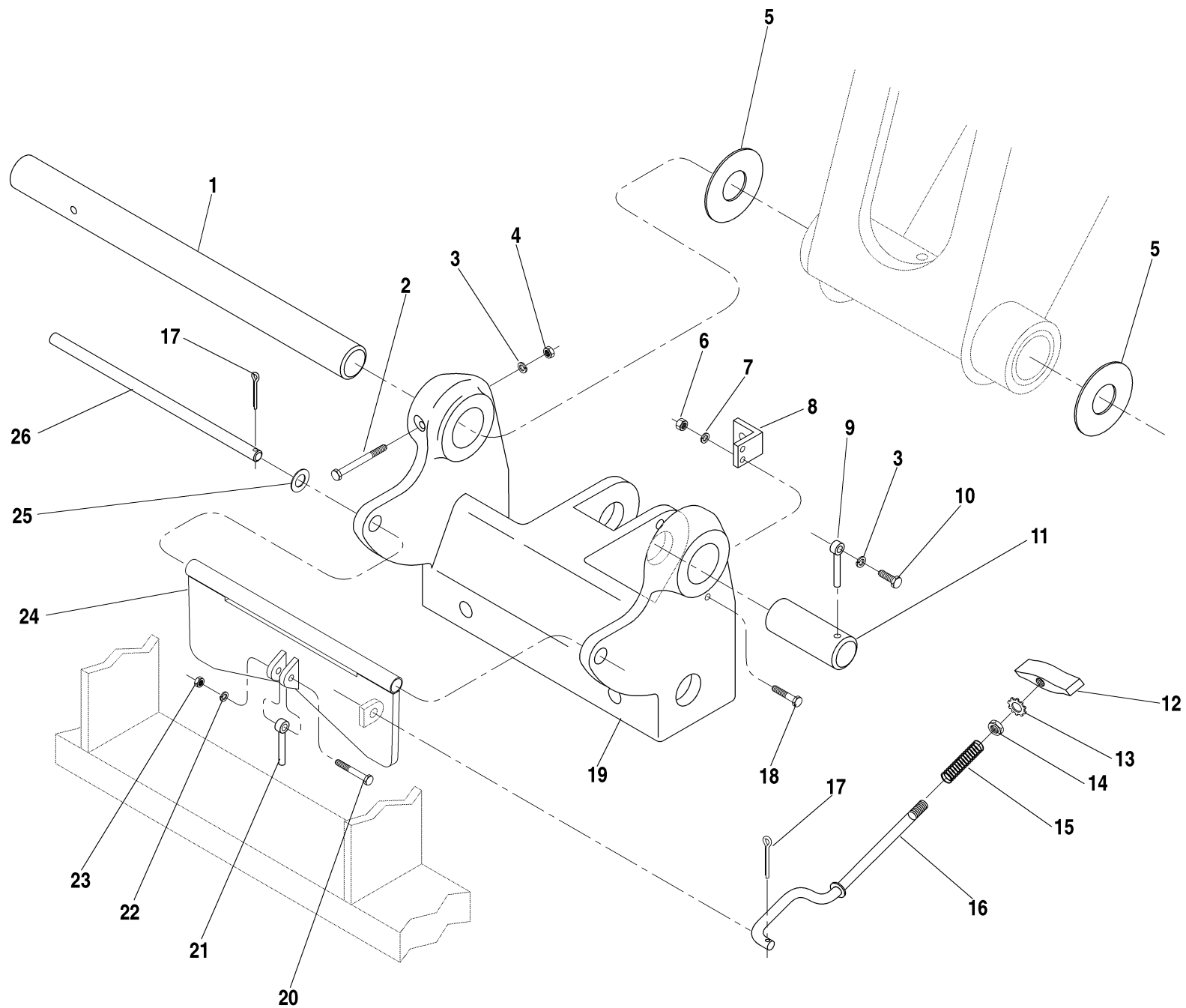
ITEM	PART NO.	QTY.	DESCRIPTION
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1	65124D	1	Inner Boom
2	38769A	A/R	Shim, 10 GA (.135" x 3" Wide)
3	38770A	A/R	Shim, 16 GA (.135" x 3" Wide)
4	1100082	2	Slide Pad, Boom (1" x 3" Wide)
5	P27310	2	Shoulder Bolt, 5/16" x 2"
6	65681A	2	Chain, Upper 162"
7	P05000	2	Lock Nut, Hx., 1/4"-20
8	65264B	1	Chain Anchor, Upper
9	①P01312	13	Lockwasher, 1/2"
	①P01361	-	Starwasher, External 1/2"
	①P01406	-	Flatwasher, 1/2"
10	P00403	3	Capscrew, Hx., 1/2"-13 x 1 1/4"
11	P00450	-	Capscrew, Hx., 1/2"-20 x 3/4"
12	P00726	2	Capscrew, Hx., 3/4"-10 x 3 1/2"
13	P01315	6	Lockwasher, 3/4"
14	65265A	1	Chain Anchor Shear Block
15	P01440	2	Flatwasher, 3/4" SAE
16	39809A	2	Pad Retainer, Aluminum
17	P00453	4	Capscrew, Hx., 1/2"-20 x 1 1/2"
18	36328A	A/R	Shim, 10 GA (.135" x 2" Wide)
19	36329A	A/R	Shim, 16 GA (.135" x 2" Wide)
20	39604A	2	Slide Pad, Boom (7/16"x 2" Wide)
21	34178A	1	Lock Pin
22	65624A	1	Pin, Front Carriage Tilt Cylinder, Base End
23	P32689	2	Cover, Grease Fitting
24	P15337	2	Grease Fitting
25	24257A	2	Bushing, Boom - Quick Attach Pivot
26	16228A	4	Bushing, Front Carriage Tilt Cylinder
27	P00726	2	Capscrew, Hx., 3/4"-10 x 1 3/4"
28	38724B	1	Chain Anchor
29	65682A	1	Chain, Lower 146 1/2"
30	P00452	4	Capscrew, Hx., 1/2"-20 x 1"
31	39024A	2	Slide Pad, Boom (1" x 3" Wide)

NOTES:

- ① Washers will vary with shimming requirements.

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ITEM	PART NO.	QTY.	DESCRIPTION	
1	36863A	1	Pin, Quick Attach Pivot	
2	P00420	1	Capscrew, Hx., 1/2"-13 × 7"	
3	P01312	2	Lockwasher, 1/2"	
4	P01510	1	Nut, Hx., 1/2"-13	
5	36013A	A/R	Shim -.036" (.91mm)	
	17012A	A/R	Shim -.075" (1.90mm)	
6	P01200	2	Nut, Hx., 1/4"-20	
7	P01308	2	Lockwasher, 1/4"	
8	38177A	1	Bracket, Rod Support	
9	34178A	1	Lock Pin	
10	P00403	1	Capscrew, Hx., 1/2"-13 × 1 1/4"	
11	65667A	1	Pin, Front Carriage Tilt - Rod End	
12	37103X	1	Handle, Release	
13	P01361	1	Starwasher, 1/2"	
14	P01560	1	Jam Nut, Hx., 1/2"-13	
15	66835X	1	Spring, Release	
16	67059A	1	Rod, Quick Attach Release	
17	P03865	3	Cotter Pin, 3/16" × 1 1/2"	
18	P00008	2	Capscrew, Hx., 1/4"-20 × 1 3/4"	
19	38176D	1	Quick Attach Casting	
20	P00209	1	Capscrew, Hx., 3/8"-16 × 2 1/4"	
21	32493A	1	Lock Pin	
22	P01310	1	Lockwasher, 3/8"	
23	P01508	1	Nut, Hx., 3/8"-16	
24	65671B	1	Lock Plate	
25	P01411	2	Flatwasher, 1"	
26	65668A	1	Pin, Lock Pivot Plate	
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Rear Carriage Tilt Hydraulic Circuit. 5.3.1

Rear Carriage Tilt Cylinder Assembly 5.4.1

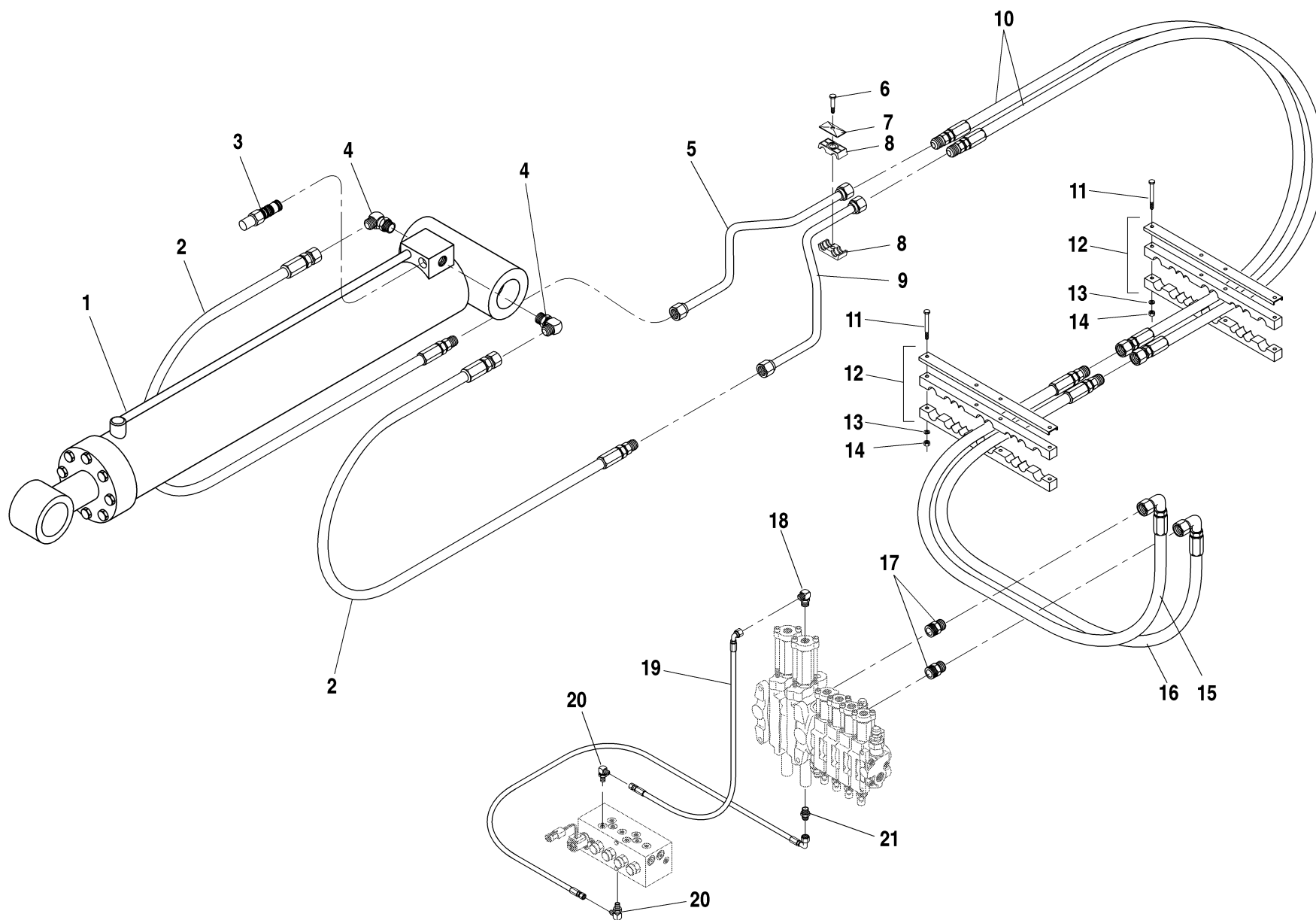
Transfer Hydraulic Circuit 5.5.1

Transfer Cylinder Assembly 5.6.1

Boom Hydraulic Circuit, 3-Section. 5.7.1

Boom Extension Cylinder Assembly, 3-Section 5.8.1

Front Carriage Tilt Cylinder Assembly. 5.11.1



ITEM	PART NO.	QTY.	DESCRIPTION
1	34847B	1	Cylinder, Hoist (See Page 5.2.1 for Breakdown)
2	37833X	2	Hyd. Hose, 3/4" × 48"
3	P27827	1	Cartridge, Counterbalance Valve
REF	P40491	-	Seal Kit for Item 3
4	P17802	2	90° Elbow, O-Ring
5	65468B	1	Hyd. Tube, 3/4" O.D.
6	P00107		Capscrew, Hx., 1/4"-20 × 3"
7	37734X	1	Cover, Clamp
8	37733X	1	Clamp, Tube, 5/8"
9	65467B	1	Hyd. Tube, 3/4" O.D.
10	37850X	2	Hyd. Hose, 3/4" × 71"
11	P00013	4	Capscrew, Hx., 1/4"-20 × 3"
12	85482B	1	Clamp, Multiple Hose
13	P01308	4	Lockwasher, 1/4"
14	P01506	4	Nut, Hx., 1/4"-20
15	66752X	1	Hyd. Hose, 3/4" × 44"
16	66741X	1	Hyd. Hose, 3/4" × 42"
17	P17805	2	Connector, O-Ring
18	P18935	1	90° Elbow
19	P30173	1	Hyd. Hose, 1/4" × 20"
20	P19248	1	90° Elbow
21	P18936	1	Connector

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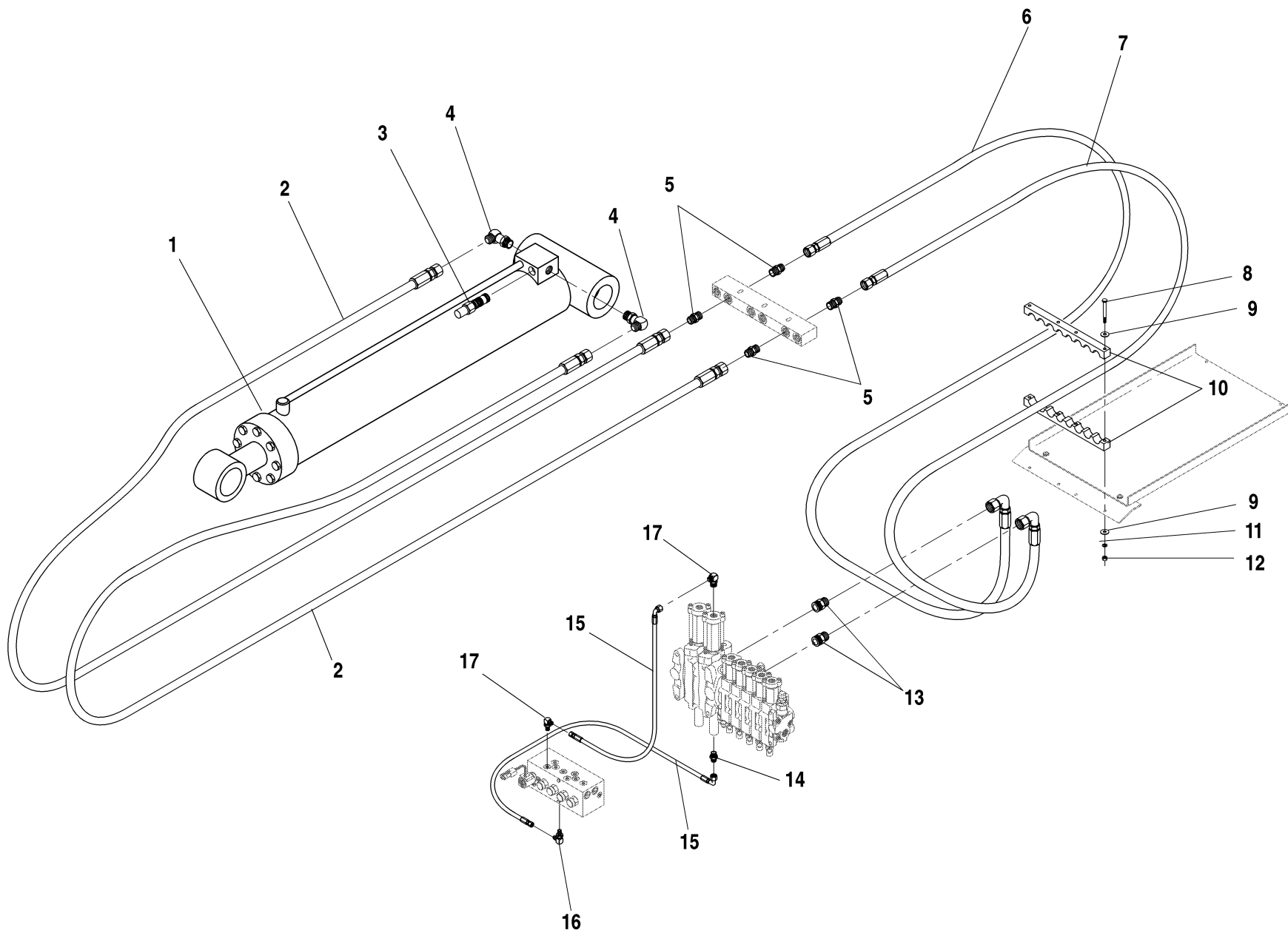
ITEM	PART NO.	QTY.	DESCRIPTION
1	34847B	-	Cylinder Assembly, Hoist
2	65692A	2	Bushing
3	P16611	2	Grease Fittings
4	68364X	1	Barrel Weldment
5	P40461	1	Nut, Crownlock
6	P19111	2	Bushing
7	68365X	1	Rod Weldment
8	68368X	12	Capscrew, Hx.,
9	*N.S.S.	1	Wiper
10	*N.S.S.	1	Seal
11	68367X	1	Head, Rod Bearing
12	*N.S.S.	1	Back-Up Ring
13	*N.S.S.	1	O-Ring
14	*N.S.S.	2	Wear Ring
15	*N.S.S.	1	O-Ring
16	*N.S.S.	2	Wear Ring
17	68366X	1	Piston
18	N.S.S.	2	Back-Up Ring
19	N.S.S.	1	Pistion Seal
REF	68369X	1	Seal Kit

NOTES:

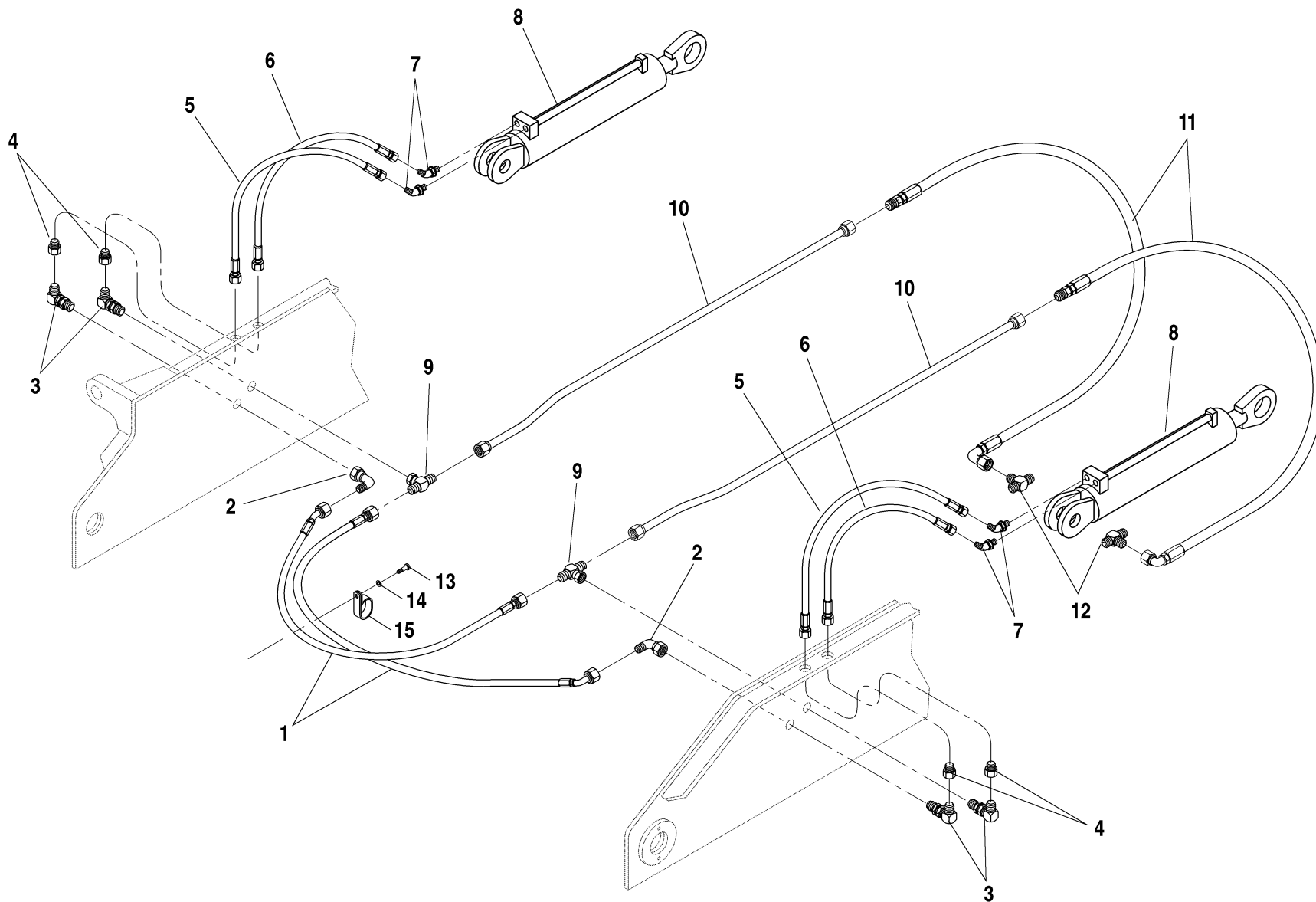
* Items Included in Seal Kit.

N.S.S. = Not Sold Separately

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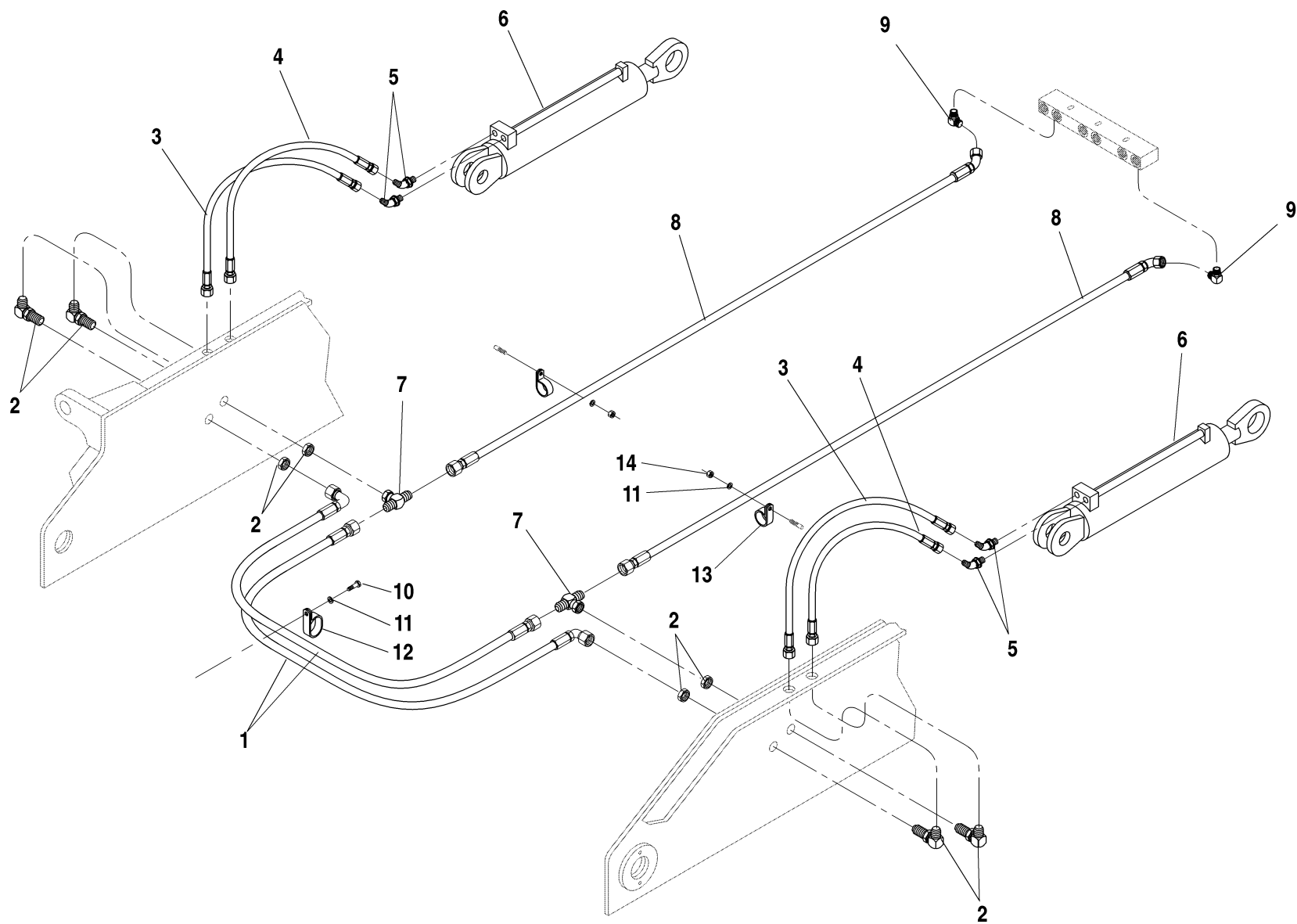
ITEM	PART NO.	QTY.	DESCRIPTION			Rev. 000
1	34847B	1	Cylinder, Hoist (See Page 5.2.1 for Breakdown)			
2	68107X	2	Hyd. Hose, 3/4" x 48"			
3	P27827	1	Cartridge, Counterbalance Valve			
REF	P40491	-	Seal Kit for Item 3			
4	P33165	2	90° Elbow, O-Ring, Long			
5	P18964	5	Connector, O-Ring			
6	68986B	1	Hyd. Hose, 3/4" x 128"			
7	68985B	1	Hyd. Hose, 3/4" x 124"			
8	P00013	4	Capscrew, Hx., 1/4"-20 x 3"			
9	P01402	1	Flatwasher 1/4"			
10	68972A	1	Clamp, Multiple Hose			
11	P01308	4	Lockwasher, 1/4"			
12	P01506	4	Nut, Hx., 1/4"-20			
13	P17805	2	Connector, O-Ring			
14	P18936	1	Connector			
15	P30173	5	Hyd. Hose, 1/4" x 20"			
16	P19248	1	90° Elbow			
17	P18935	1	90° Elbow			
				644D-34 S/N 181-		
HOIST HYDRAULIC CIRCUIT 5.1.1.1						644D



ITEM	PART NO.	QTY.	DESCRIPTION
1	37898X	2	Hyd. Hose, 1/2" x 57"
2	P21632	2	90° Elbow, Swivel
3	P21916	4	90° Elbow, Bulkhead
4	P28381	4	Adapter, O-Ring
5	P24689	2	Hyd. Hose, 1/2" x 30"
6	37897X	2	Hyd. Hose, 1/2" x 25"
7	P21229	4	45° Elbow, O-Ring
8	34828B	2	Cylinder, Rear Carriage Tilt
(See Page 5.4.1 for Breakdown)			
9	P24651	2	Tee, Swivel Nut
10	65466B	2	Hyd. Tube, 3/4" O.D.
11	37872X	2	Hyd. Hose, 3/4" x 71"
12	P27388	2	Tee, Union
13	P00205	1	Capscrew, Hx., 3/8"-16 x 1 1/4"
14	P01310	1	Lockwasher, 3/8"
15	37368X	1	Clamp, Hose, Double

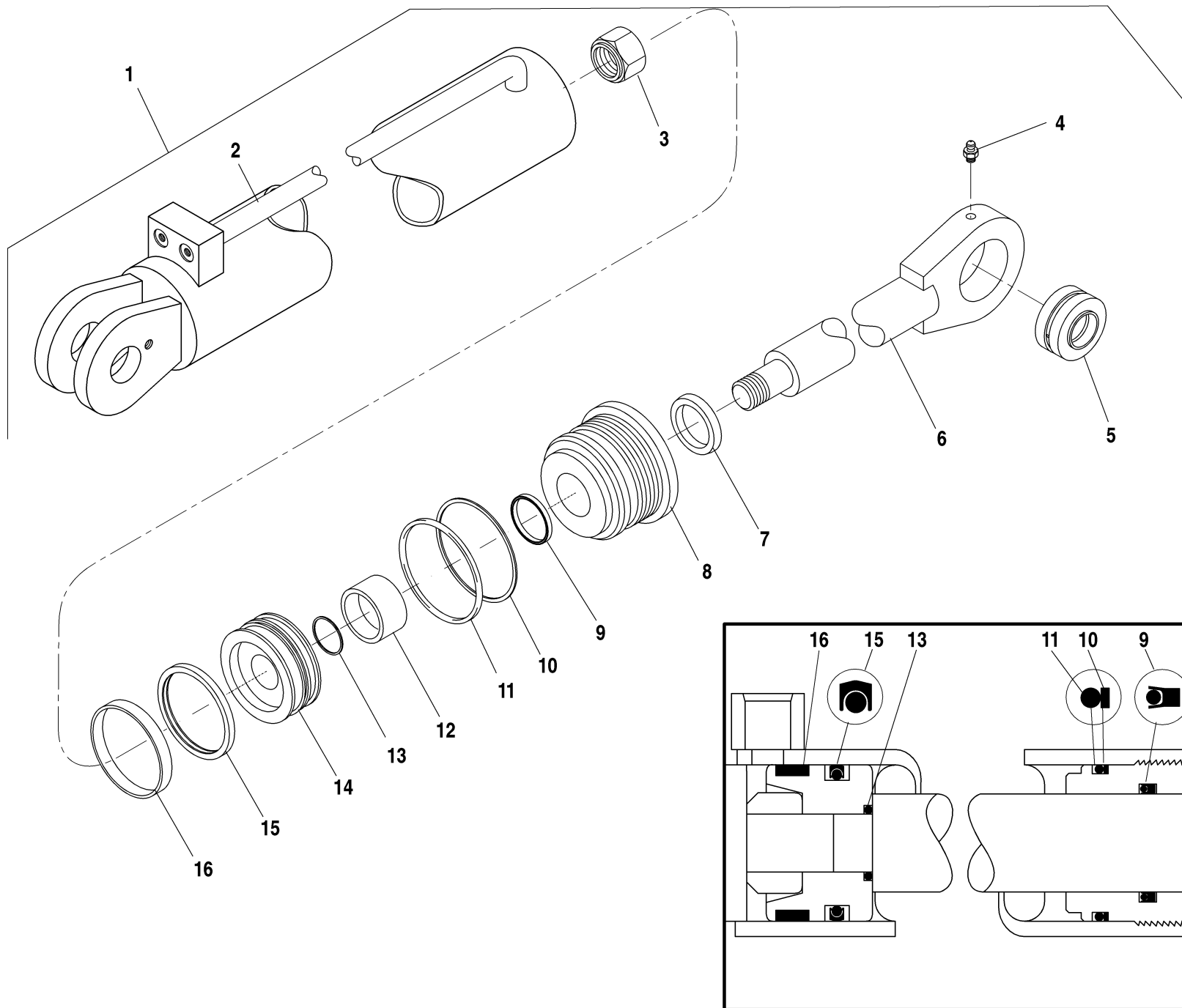
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1	37898X	2	Hyd. Hose, 1/2" x 57"
2	P21916	4	90° Elbow, Bulkhead
3	68113X	2	Hyd. Hose, 1/2" x 30"
4	68112X	2	Hyd. Hose, 1/2" x 25"
5	P21229	4	45° Elbow, O-Ring
6	34828B	2	Cylinder, Rear Carriage Tilt (See Page 5.4.1 for Breakdown)
7	P24651	2	Tee, Swivel Nut
8	68108X	2	Hyd. Hose, 3/4" x 71"
9	P18924	2	90° Elbow, O-Ring
10	P00205	1	Capscrew, Hx., 3/8"-16 x 1 1/4"
11	P01310	3	Lockwasher, 3/8"
12	37368X	1	Clamp, Hose, Double
13	P18195	2	Clamp, Hose
14	P05108	2	Nut, Hx., 3/8"-16

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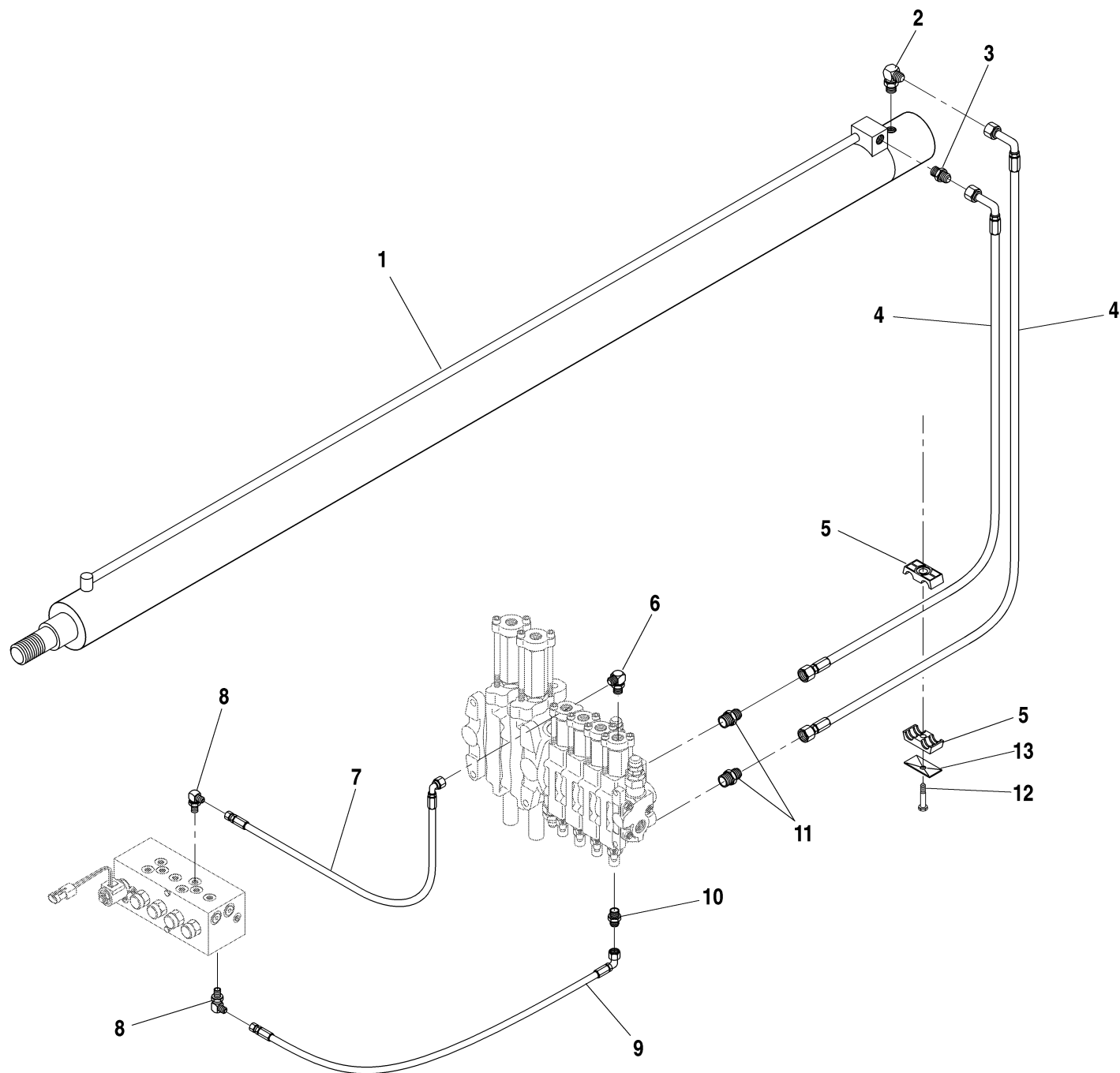
ITEM	PART NO.	QTY.	DESCRIPTION
1	34828B	-	Cylinder Assembly, Rear Carriage Tilt
2	P32239	1	Barrel Weldment
3	P19217	1	Nut, Crownlock
4	P16611	1	Zerk, Grease
5	P13449	1	Bushing, Self-Aligned
6	P32319	1	Rod Weldment
7	N.S.S.	1	*Wiper
8	P32331	1	Rod Bearing
9	N.S.S.	1	*Loaded Urethane U-Cup
10	N.S.S.	1	*Back-Up Ring
11	N.S.S.	1	*O-Ring
12	P32342	1	Stroke Limiter
13	N.S.S.	1	*O-Ring
14	P23799	1	Piston
15	N.S.S.	1	*Piston Seal
16	N.S.S.	1	*Wear-Ring
REF	①P32314	1	Seal Kit (Includes Items 7, 9, 10, 11,13, 15 & 16)

NOTES:

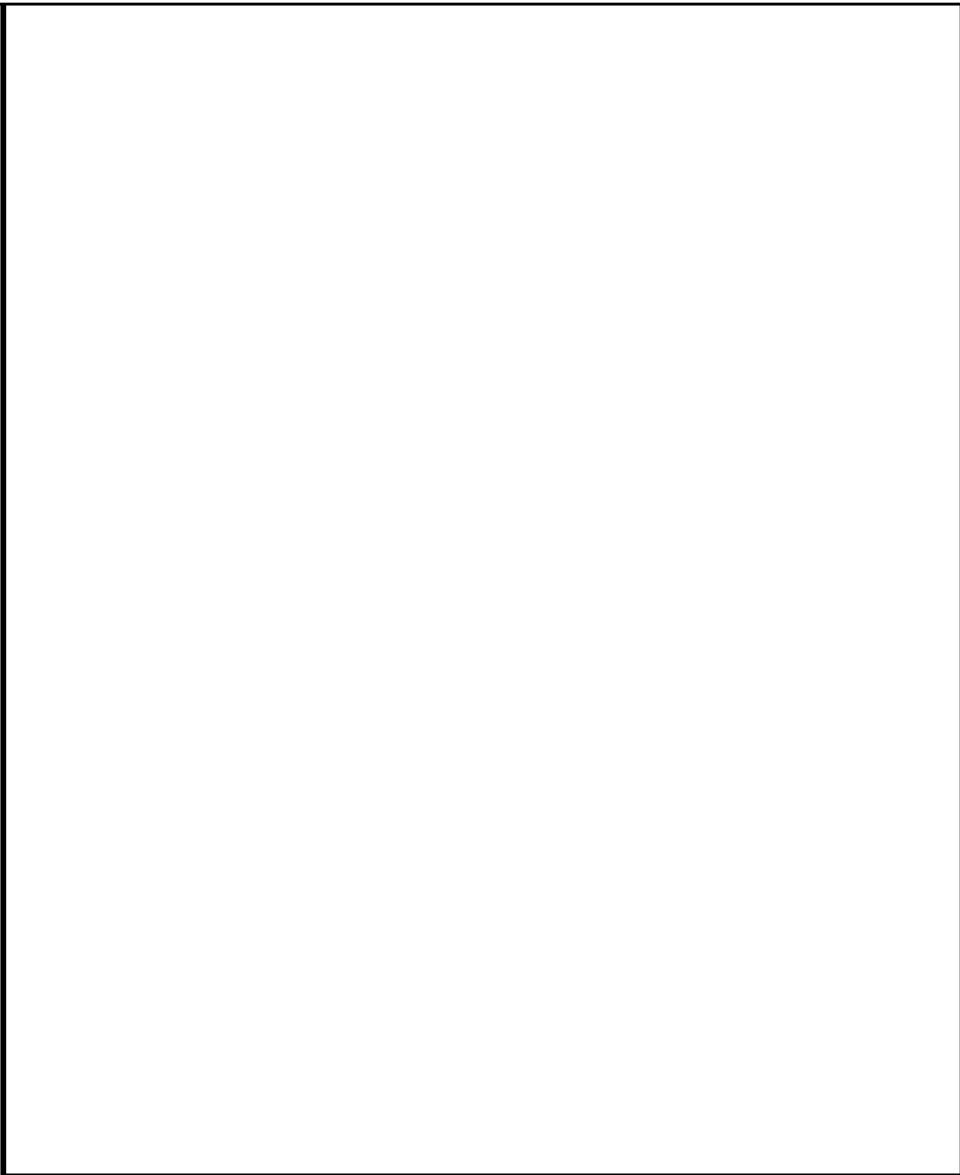
* Items Included in Seal Kit.

N.S.S. = Not Sold Separately

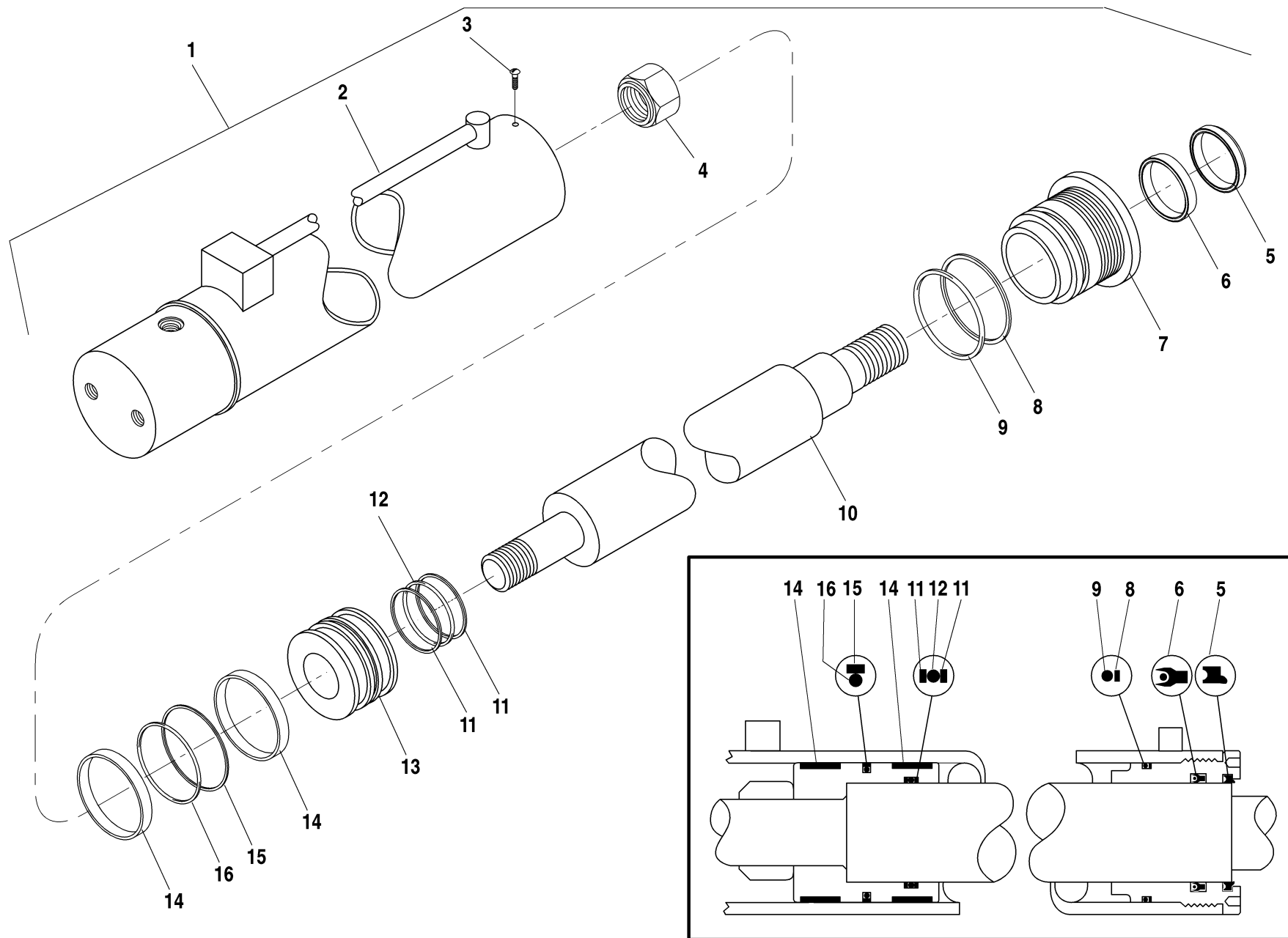
644D-34 S/N 108–



ITEM	PART NO.	QTY.	DESCRIPTION
1	34845B	1	Cylinder, Transfer (See Page 5.6.1 for Breakdown)
2	P18956	1	90° Elbow, O-Ring
3	P18944	1	Connector, O-Ring
4	37892X	2	Hyd. Hose, 3/8" x 154"
5	37733X	1	Clamp, Hyd. Hose
6	P18935	1	90° Elbow
7	P30174	1	Hyd. Hose, 1/4" x 16"
8	P19248	2	90° Elbow
9	37298X	1	Hyd. Hose, 1/4" x 14"
10	P19836	1	Connector, O-Ring
11	P15406	2	Connector, O-Ring
12	37735X	1	Bolt
13	37734X	1	Cover



644D-34 S/N 108--

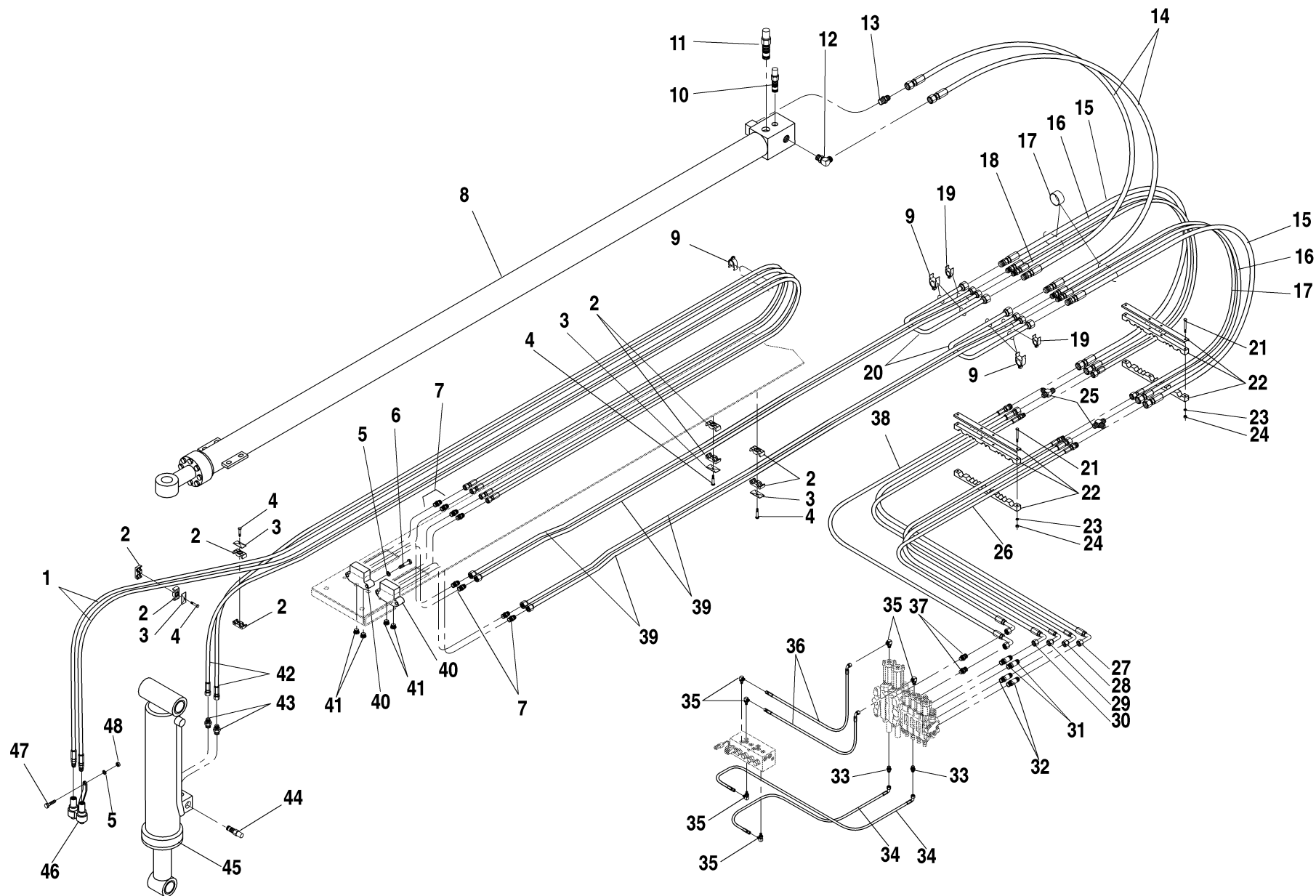


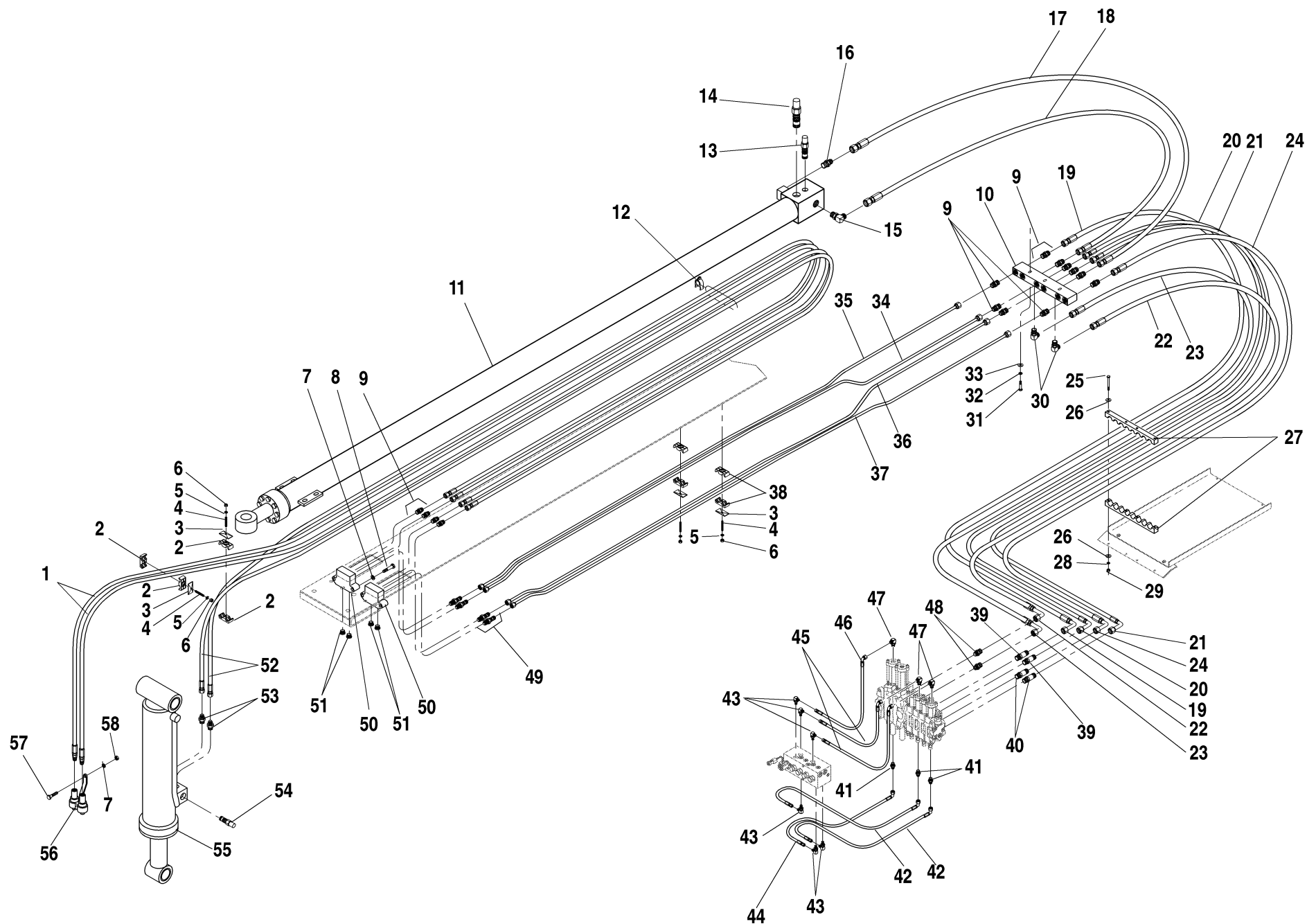
ITEM	PART NO.	QTY.	DESCRIPTION
1	34845B	1	Cylinder Assembly, Transfer
2	68370X	1	Barrel Weldment
3	68377X	1	*Screw, Self-Tapping
4	P40459	1	Nut, Crownlock
5	N.S.S	1	*Wiper
6	N.S.S	1	*Seal
7	P32279	1	Head, Rod Bearing
8	N.S.S	1	*Back-Up Ring
9	N.S.S	1	*O-Ring
10	68371X	1	Rod
11	N.S.S	2	*Back-Up Ring
12	N.S.S	1	*O-Ring
13	68372X	1	Piston
14	N.S.S	2	*Wear Ring
15	N.S.S	1	*Piston Seal
16	N.S.S	1	*O-Ring
REF	P30656	1	Seal Kit

NOTES:
 * Items Included in Seal Kit.

N.S.S. = Not Sold Separately

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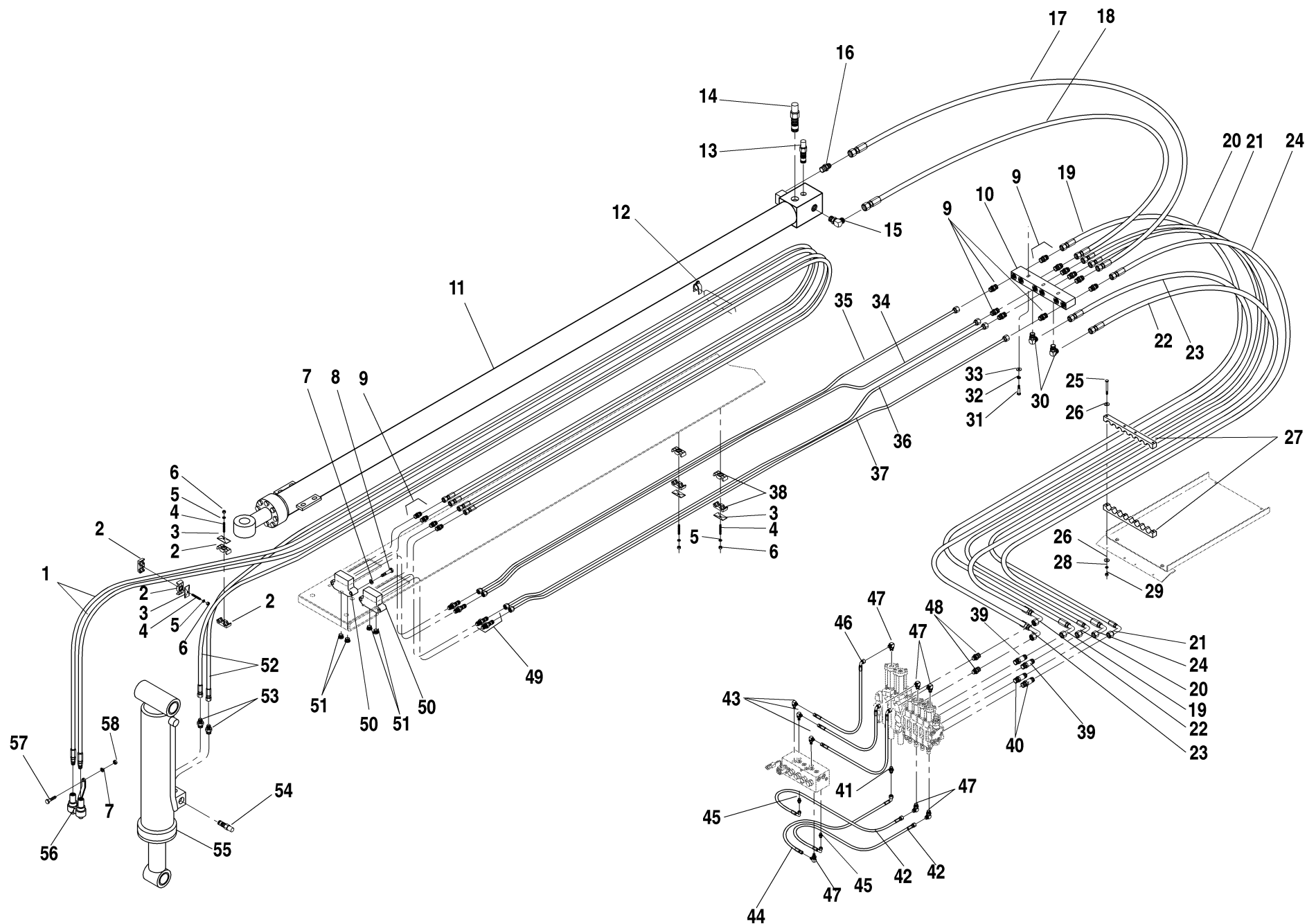
ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	68117X	2	Hyd. Hose, 1/2" x 333"	35	69069B	1	Hyd. Tube, Boom, R/S Outer
2	37732X	4	Clamp Body, 3/4"	36	69078B	1	Hyd. Tube, Boom, L/S Inner
3	37734X	4	Clamp Cover	37	69079B	1	Hyd. Tube, Boom, L/S Outter
4	68743A	4	Setscrew., 5/16"-18 x 2 1/2"	38	37733X	2	Clamp Body, 5/8"
5	P01309	4	Lockwasher, 5/16"	39	P18964	2	Connector, O-Ring
6	P01507	4	Nut, Hx., 5/16"- 18	40	P27384	2	Connector, O-Ring, (Long)
7	P01312	4	Lockwasher, 1/2"	41	P18936	1	Connector, O-Ring
8	P00407	4	Capscrew, Hx., 1/2"-13 x 2 1/4"	42	37298X	2	Hyd. Hose, 3/8" x 18"
9	P18964	9	Connector, O-Ring	43	P19248	6	90° Elbow, O-Ring
10	69052C	1	Manifold, Hydraulic	44	P30173	1	Hyd. Hose, 1/4" x 20"
11	34848B	1	Cylinder, Boom Extension (See Page 5.8.1 for Breakdown)	45	P30174	2	Hyd. Hose, 1/4" x 16"
12	P20465	4	Clamp, Hyd. Hose, 3/4"	46	37821X	1	Hyd. Hose, 1/4" x 22"
13	P27827	1	Valve, Counterbalance - 30 GPM	47	P18935	3	90° Elbow, O-Ring
REF	P40491		Seal Kit for Item 13	48	P18996	1	Connector, O-Ring
14	67580X	1	Valve, Counterbalance - 60 GPM	49	68975A	4	Connector, Special
REF	P30927		Seal Kit for Item 14	50	65944A	2	Manifold, Hydraulic
15	P17802	1	90° Elbow, O-Ring	51	P27937	4	Plug, O-Ring
16	P17805	1	Connector, O-Ring	52	68123X	2	Hyd. Hose, 1/2" x 326"
17	68109X	1	Hyd. Hose, 5/8" x 40"	53	P15406	2	Connector, O-Ring
18	68110X	1	Hyd. Hose, 5/8" x 39"	54	P27847	1	Valve, Counterbalance, 15 GPM
19	68984B	1	Hyd. Hose, 5/8" x 128"	REF	P40484		Seal Kit for Item 54
20	68988B	1	Hyd. Hose, 5/8" x 131"	55	65751B	1	Cylinder, Front Carriage Tilt (See Page 5.11.1 for Breakdown)
21	68987B	1	Hyd. Hose, 5/8" x 135"	56	66347B	1	Quick Coupler (Incl. dust caps & male connectors)
22	68990B	1	Hyd. Hose, 5/8" x 125"	57	P00404	1	Capscrew, Hx., 1/2"-13 x 1 1/2"
23	68989B	1	Hyd. Hose, 5/8" x 127	58	P01510	1	Nut, Hx., 1/2"-13
24	68983B	1	Hyd. Hose, 5/8" x 135				
25	P00013	2	Capscrew, Hx., 1/4"-20 x 3"				
26	P01402	2	Flatwasher, 1/4"				
27	68972A	1	Hose Clamp, Multiple				
28	P01308	2	Lockwasher 1/4"				
29	P01506		Nut, Hx., 1/4"-20				
30	P18924	2	90° Elbow, O-Ring				
31	P00208	3	Capscrew, Hx., 3/8"-16 x 2"				
32	P01310	3	Lockwasher. 3/8"				
33	P01404	3	Flatwasher, 3/8"				
34	69068B	1	Hyd. Tube, Boom, R/S Inner				

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BOOM HYDRAULIC CIRCUIT (3 Section) 5.7.1.1

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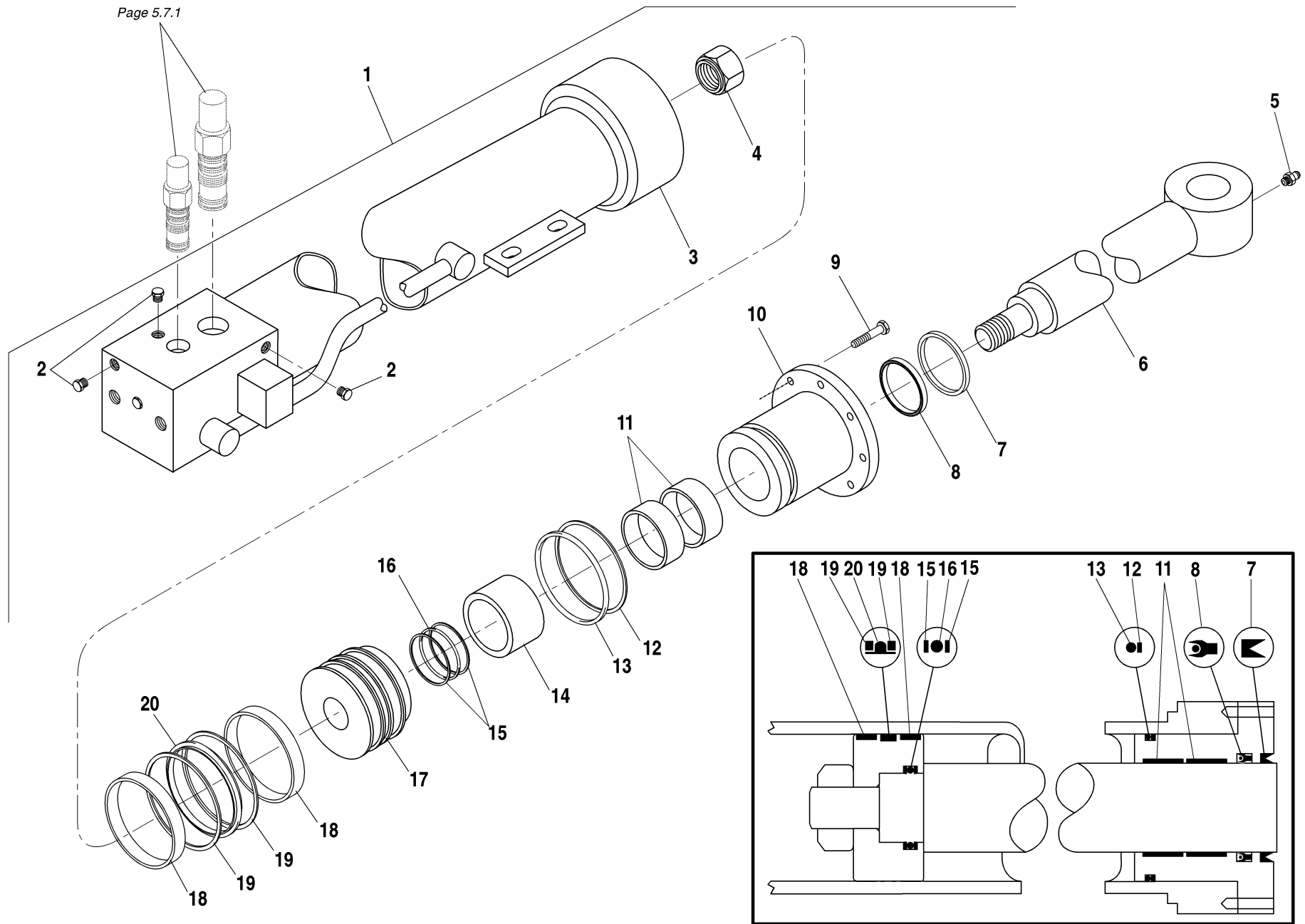


ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	68117X	2	Hyd. Hose, 1/2" x 333"	35	69069B	1	Hyd. Tube, Boom, R/S Outer
2	37732X	4	Clamp Body, 3/4"	36	69078B	1	Hyd. Tube, Boom, L/S Inner
3	37734X	4	Clamp Cover	37	69079B	1	Hyd. Tube, Boom, L/S Outter
4	68743A	4	Setscrew., 5/16"-18 x 2 1/2"	38	37733X	2	Clamp Body, 5/8"
5	P01309	4	Lockwasher, 5/16"	39	P18964	2	Connector, O-Ring
6	P01507	4	Nut, Hx., 5/16"- 18	40	P27384	2	Connector, O-Ring, (Long)
7	P01312	4	Lockwasher, 1/2"	41	P18936	1	Connector, O-Ring
8	P00407	4	Capscrew, Hx., 1/2"-13 x 2 1/4"	42	P32436	1	Hyd. Hose, 3/8" x 18"
9	P18964	9	Connector, O-Ring	43	P19248	7	90° Elbow, O-Ring
10	69052C	1	Manifold, Hydraulic	44	37298X	1	Hyd. Hose, 1/4" x 18"
11	34848B	1	Cylinder, Boom Extension (See Page 5.8.1 for Breakdown)	45	P18960	2	Connector, O-Ring
12	P20465	4	Clamp, Hyd. Hose, 3/4"	46	37821X	1	Hyd. Hose, 1/4" x 22"
13	P27827	1	Valve, Counterbalance - 30 GPM	47	P18935	5	90° Elbow, O-Ring
REF	P40491		Seal Kit for Item 13	48	P18996	1	Connector, O-Ring
14	67580X	1	Valve, Counterbalance - 60 GPM	49	68975A	4	Connector, Special
REF	P30927		Seal Kit for Item 14	50	65944A	2	Manifold, Hydraulic
15	P17802	1	90° Elbow, O-Ring	51	P27937	4	Plug, O-Ring
16	P17805	1	Connector, O-Ring	52	68123X	2	Hyd. Hose, 1/2" x 326"
17	68109X	1	Hyd. Hose, 5/8" x 40"	53	P15406	2	Connector, O-Ring
18	68110X	1	Hyd. Hose, 5/8" x 39"	54	P27847	1	Valve, Counterbalance, 15 GPM
19	68984B	1	Hyd. Hose, 5/8" x 128"	REF	P40484		Seal Kit for Item 54
20	68988B	1	Hyd. Hose, 5/8" x 131"	55	65751B	1	Cylinder, Front Carriage Tilt (See Page 5.11.1 for Breakdown)
21	68987B	1	Hyd. Hose, 5/8" x 135"	56	66347B	1	Quick Coupler (Incl. dust caps & male connectors)
22	68990B	1	Hyd. Hose, 5/8" x 125"	57	P00404	1	Capscrew, Hx., 1/2"-13 x 1 1/2"
23	68989B	1	Hyd. Hose, 5/8" x 127	58	P01510	1	Nut, Hx., 1/2"-13
24	68983B	1	Hyd. Hose, 5/8" x 135				
25	P00013	2	Capscrew, Hx., 1/4"-20 x 3"				
26	P01402	2	Flatwasher, 1/4"				
27	68972A	1	Hose Clamp, Multiple				
28	P01308	2	Lockwasher 1/4"				
29	P01506		Nut, Hx., 1/4"-20				
30	P18924	2	90° Elbow, O-Ring				
31	P00208	3	Capscrew, Hx., 3/8"-16 x 2"				
32	P01310	3	Lockwasher. 3/8"				
33	P01404	3	Flatwasher, 3/8"				
34	69068B	1	Hyd. Tube, Boom, R/S Inner				

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BOOM HYDRAULIC CIRCUIT (3 Section) 5.7.1.2

644D



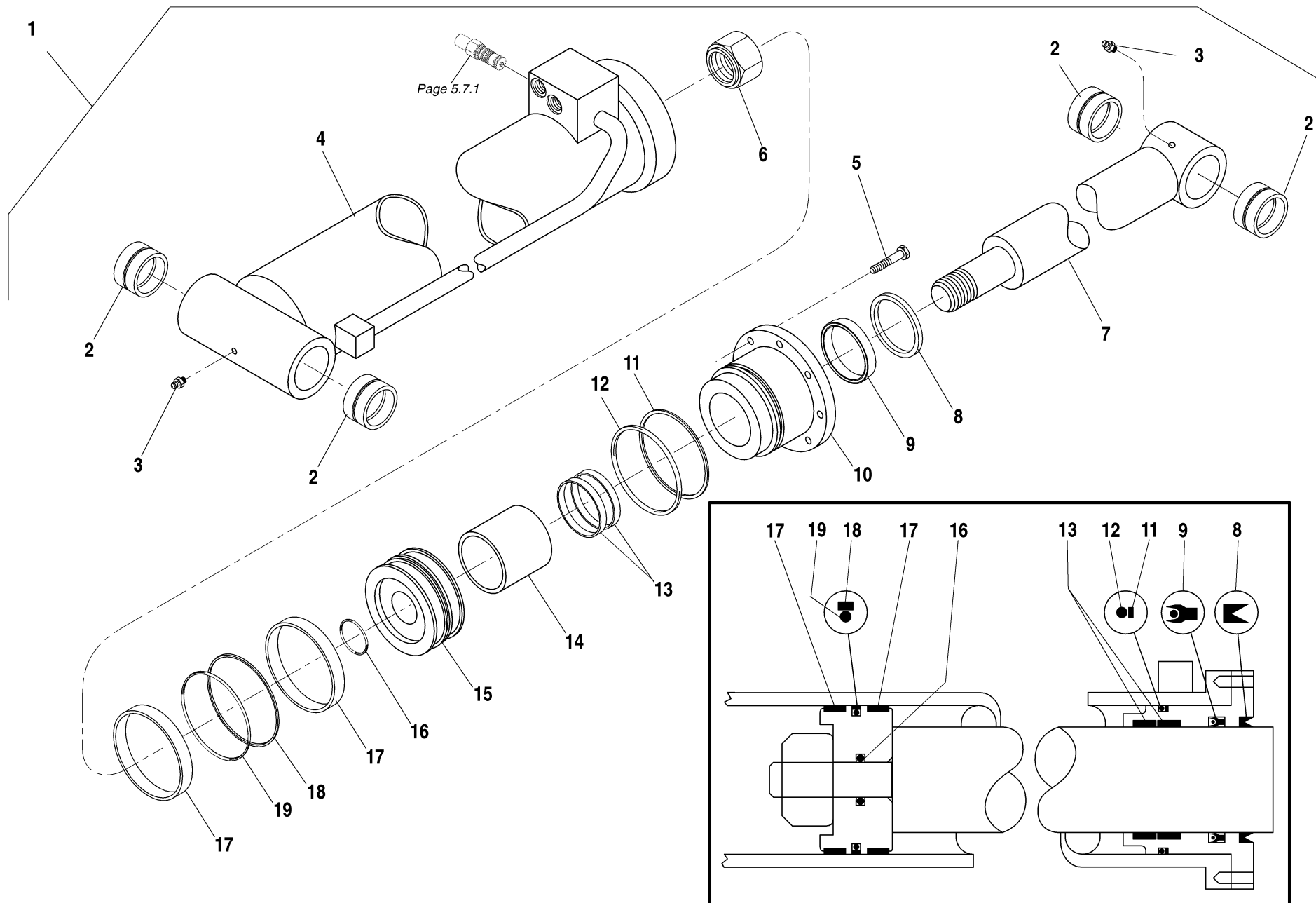
1	34848B	1	Cylinder Assembly, Boom Extension
2	P27993	4	O-Ring Plug
3	68357X	1	Barrel Weldment
4	P30667	1	Nut, Crownlock
5	P16611	1	Grease Fitting
6	68358X	1	Rod Assembly
7	N.S.S.	1	*Wiper
8	N.S.S.	1	*Seal
9	68362X	8	Capscrew, Hx.,
10	68361X	1	Head, Rod Bearing
11	N.S.S.	2	*Wear Ring
12	N.S.S.	1	*Back-Up Ring
13	N.S.S.	1	*O-Ring
14	68359X	1	Stroke Limiter
15	N.S.S.	2	*Back-Up Ring
16	N.S.S.	1	*O-Ring
17	68360X	1	Piston
18	N.S.S.	2	*Wear Ring
19	N.S.S.	2	*Back-Up Ring
20	N.S.S.	1	*Piston Seal

*** Items Included in Seal Kit.**

N.S.S. = Not Sold Separately

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ITEM	PART NO.	QTY.	DESCRIPTION
1	65751B	1	Cylinder Assembly, Front Carriage Tilt
2	P19106	4	Bushing
3	P16611	2	Grease Fitting
4	68350X	1	Barrel Weldment
5	P40460	8	Capscrew, Hx.,
6	P27279	1	Nut, Crownlock
7	68351X	1	Rod Weldment
8	N.S.S	1	*Wiper
9	N.S.S	1	*Seal
10	P30674	1	Head, Rod Bearing
11	N.S.S	1	*Backup-Ring
12	N.S.S	1	*O-Ring
13	N.S.S	2	*Wear-Ring
14	68352X	1	Stroke Limiter
15	P29878	1	Piston
16	N.S.S	1	*O-Ring
17	N.S.S	1	*Wear Ring
18	N.S.S	1	*Backup-Ring
19	N.S.S	1	*O-Ring
Ref	P30653	1	Seal Kit

NOTES:
* Items Included in Seal Kit.

N.S.S. = Not Sold Separately

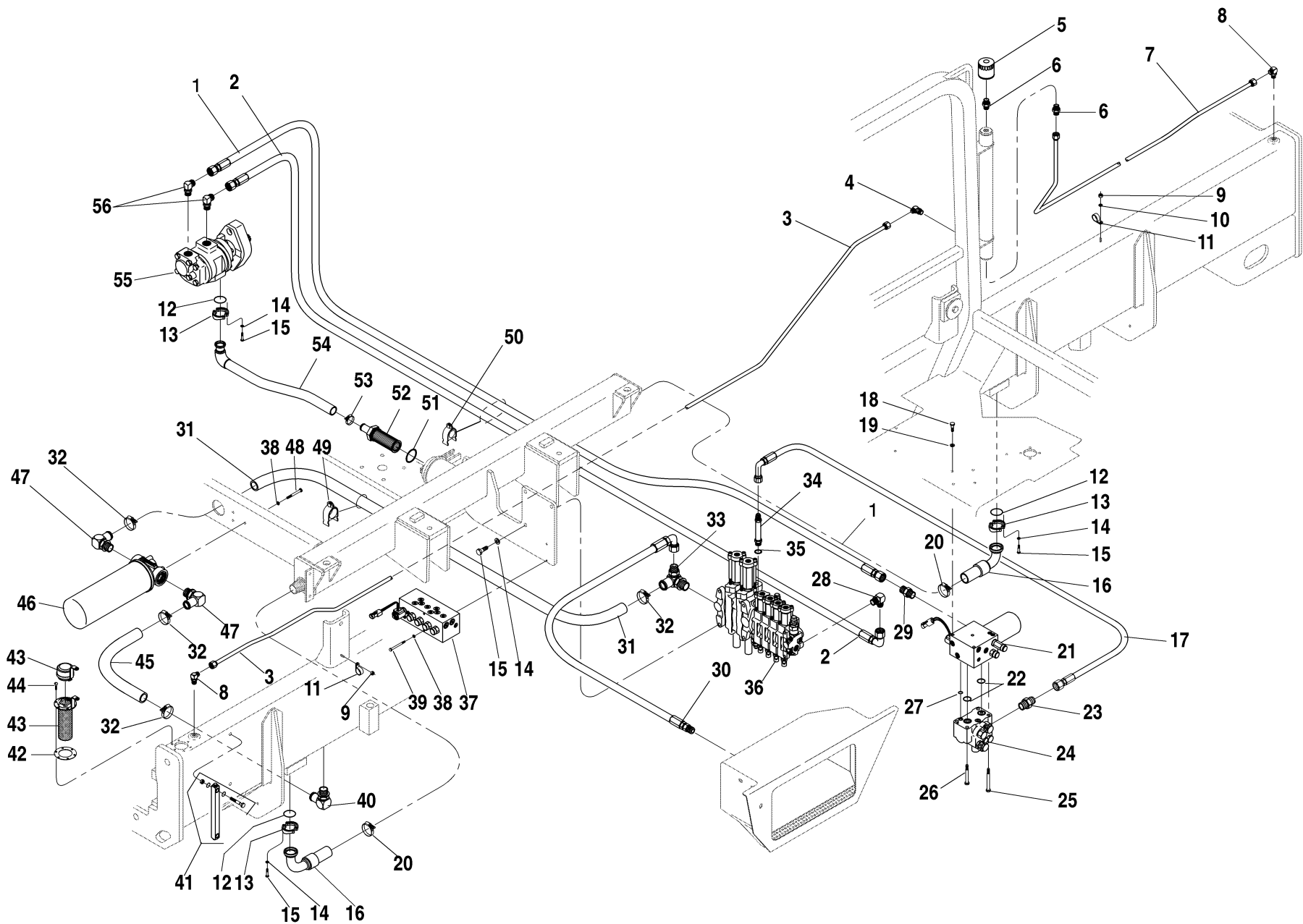
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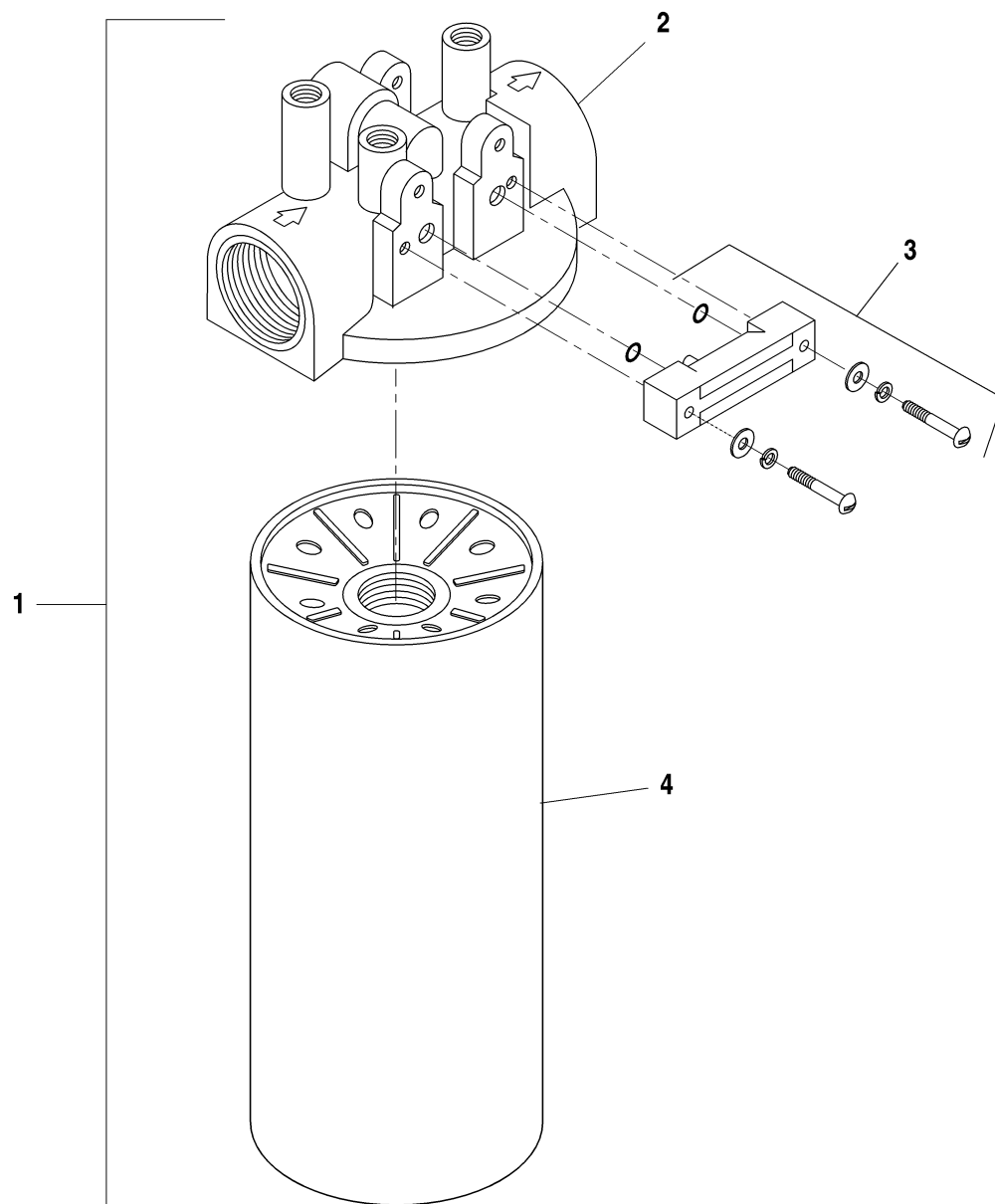
Section 6 — Pump, Suction - Return and Valve Plate Components

Pump, Suction - Return Hydraulic Circuit	6.1.1
Hydraulic Return Filter Assembly	6.2.1
Selector Valve Assembly.	6.3.1
Pump Assembly	6.4.1
Hydraulic Control Valve Assembly	6.5.1
Valve Section Assembly (Boom).	6.6.1
Valve Section Assembly - Transfer/Auxiliary/Frame Tilt	6.7.1
Valve Section Assembly - Carriage Fork Tilt.	6.8.1
Relief Valve Assembly.	6.9.1
Relief Valve Assembly Mid Inlet	6.10.1
Filter Mounting Block Assembly	6.11.1



ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	37193X	1	Hyd. Hose, 3/4" x 98"	36	67028B	1	Valve, Mid-Inlet 6 Section (See Pages 6.5.1–6.10.1 for Breakdown)
2	P26621	1	Hyd. Hose, 3/4" x 112"	37	65597C	1	Valve, Selector (See Page 6.2.1 for Breakdown)
3	66927B	1	Hydraulic Tube, Breather Front	38	P01309	5	Lockwasher, 5/16"
4	P18952	1	90° Connector	39	P00125	2	Capscrew, Hx., 5/16"-18 x 4 1/4"
5	39022A	1	Breather, Hydraulic Tank	40	38985A	1	Elbow
6	P18944	1	Connector	41	P27809	1	Sight Gauge, Hydraulic Oil
7	66926B	1	Hydraulic Tube, Breather, Rear	42	68088X	2	Gasket
8	P21173	2	90° Connector	43	67891B	1	Filler Cap/ Strainer Assembly (Includes Item 42– 44)
9	P01508	2	Nut, Hx., 3/8"-16	44	P03541	6	Tapping Screw, Slotted Rd, Hd., 10-32 x 1/2"
10	P01310	2	Lockwasher, 3/8"	45	66444X	1	Hose, 1 1/2" O.D., 16" Long
11	P30249	2	Clamp	46	37710X	1	Return Filter (See Page 6.2.1 for Breakdown)
12	P12971	2	O-Ring	47	38985A	3	90° Adapter, O-Ring
13	14315A	4	Flange, Half	48	P00112	2	Capscrew, Hx., 5/16"-18 x 3"
14	P01312	11	Lockwasher, 1/2"	49	37696X	1	Cushion Clamp, 1 3/4"
15	P00404	11	Capscrew, Hx., 1/2"-13 x 1 1/2"	50	37000X	2	Cushion Clamp, 1 1/8"
16	65507A	2	Hose, Suction Frame	51	37698X	1	O-Ring
17	P18922	1	Hyd. Hose, 3/4" x 24"	52	67783A	1	Strainer, Hyd
18	P00202	3	Capscrew, Hx., 3/8"-16 x 3/4"	53	67593X	1	Hose Clamp
19	P01310	6	Lockwasher, 3/8"	54	66754X	1	Hyd. Hose, Suction
20	67592X	4	Clamp, Hose, High Torque (Replaces P14043)	55	67787D	1	Pump, Hydraulic (See Page 6.4.1 for Breakdown)
21	67680C	1	Valve, Filter Mounting (See Page 6.11.1 for Breakdown)	56	P17802	2	90° Elbow, O-Ring
22	P40659	2	O-Ring	644D-34 S/N 108–			
23	P17805	1	Adapter, O-Ring				
24	66922C	1	Valve, Priority Charge				
REF	37083X	-	Repair Kit, Priority Charge Valve				
25	P01826	2	Capscrew, Socket Hd., 3/8"-16 x 3"				
26	P01822	2	Capscrew, Socket Hd., 3/8"-16 x 2"				
27	P22254	1	O-Ring				
28	P19055	1	Connector, O-Ring				
29	P17805	1	Adapter, O-Ring				
30	66756X	1	Hyd. Hose,				
31	66443X	1	Hyd. Hose, 1 1/2" x 57"				
32	P14043	4	Hose Clamp				
33	67743B	1	Adapter, Tee				
34	39537A	1	Adapeter (Long)				
35	10728957	1	O-Ring				

PUMP, SUCTION - RETURN HYDRAULIC CIRCUIT 6.1.1

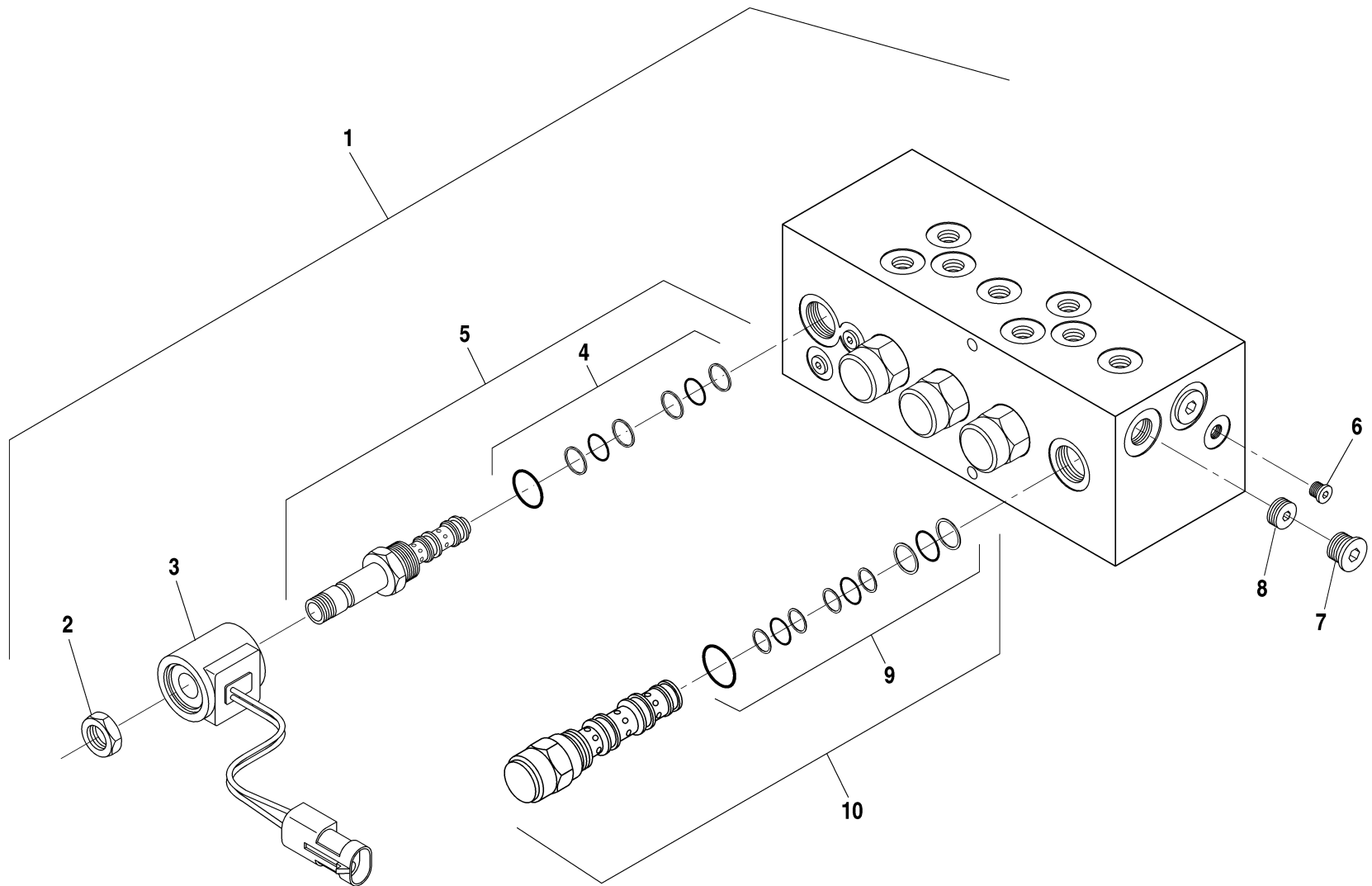


ITEM	PART NO.	QTY.	DESCRIPTION
1	37710X	1	Return Filter Assembly
2	N.S.S.	1	Head Assembly
3	68378X	1	Indicator Assembly (Includes Mounting Hardware)
4	68379X	1	Filter

N.S.S. = Not Sold Separately

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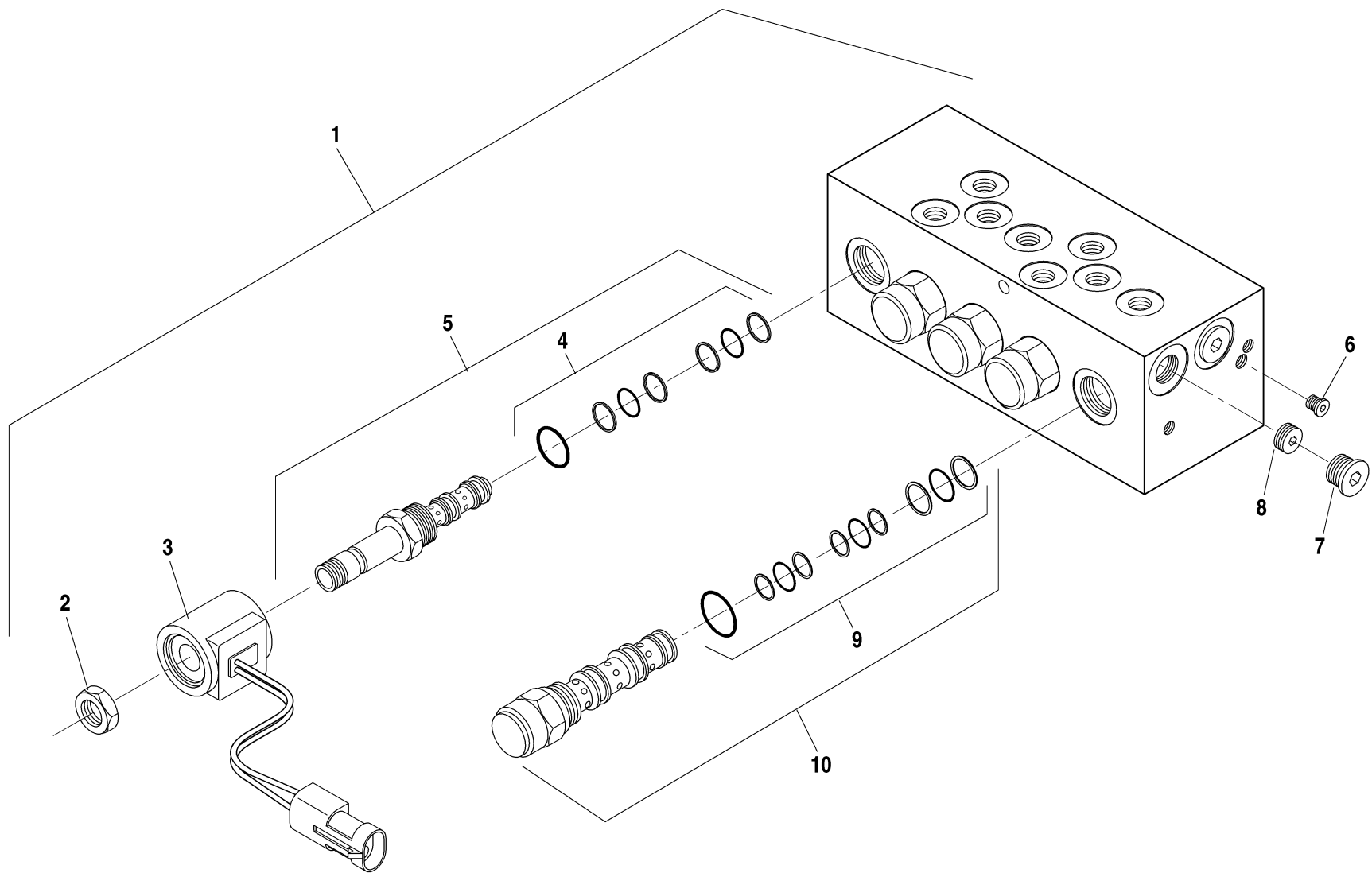
644D-34 S/N 108-



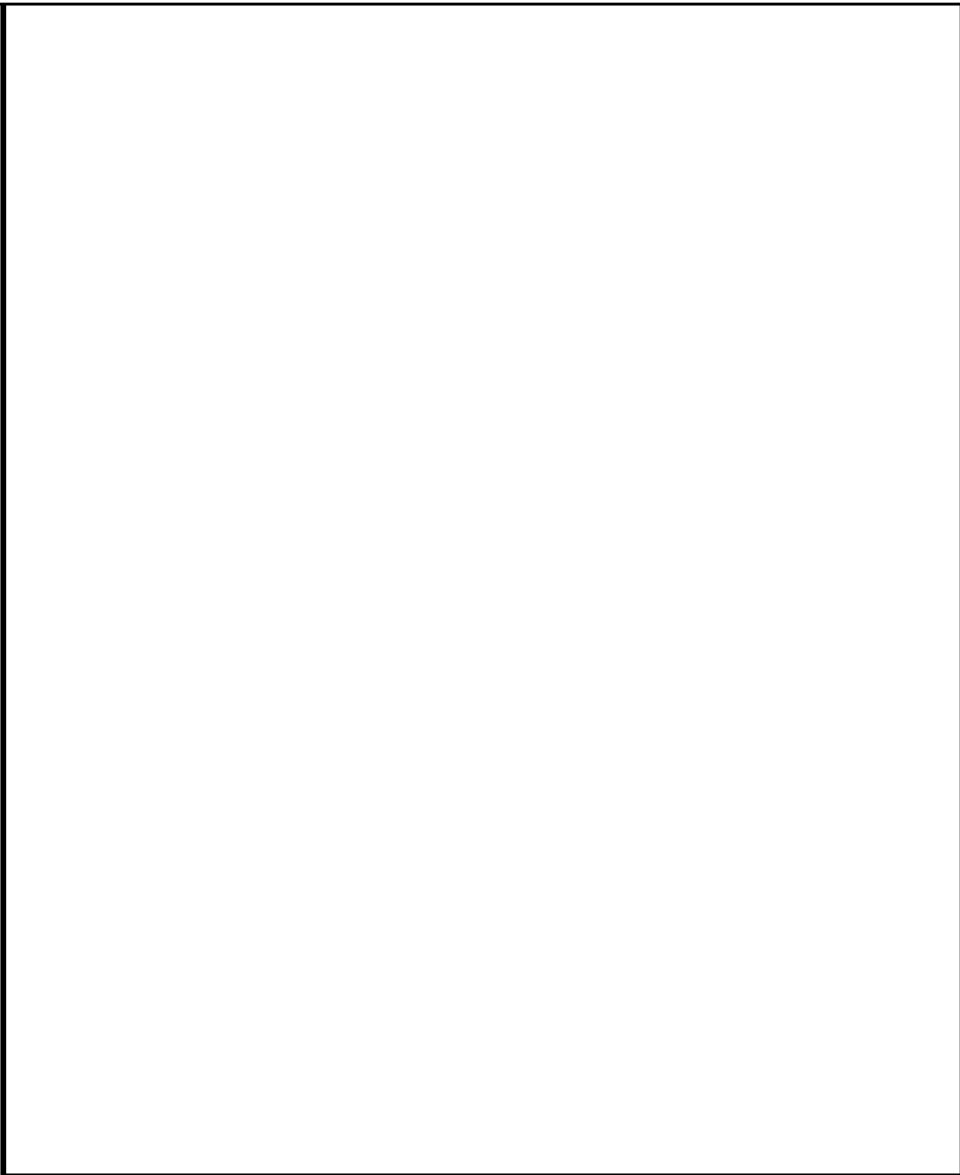
ITEM	PART NO.	QTY.	DESCRIPTION
1	65597C	1	Selector Valve
2	P40662	1	Nut
3	38329A	1	Coil
4	37355X	1	Seal Kit
5	37352X	1	Solenoid Valve
6	P27931	4	Plug, Hollow Hex, SAE #2
7	P27933	4	Plug, Hollow Hex, SAE #4
8	37571X	4	Orifice Plug
9	37005X	4	Seal Kit
10	37764X	4	Valve, Piloted, 3-Way

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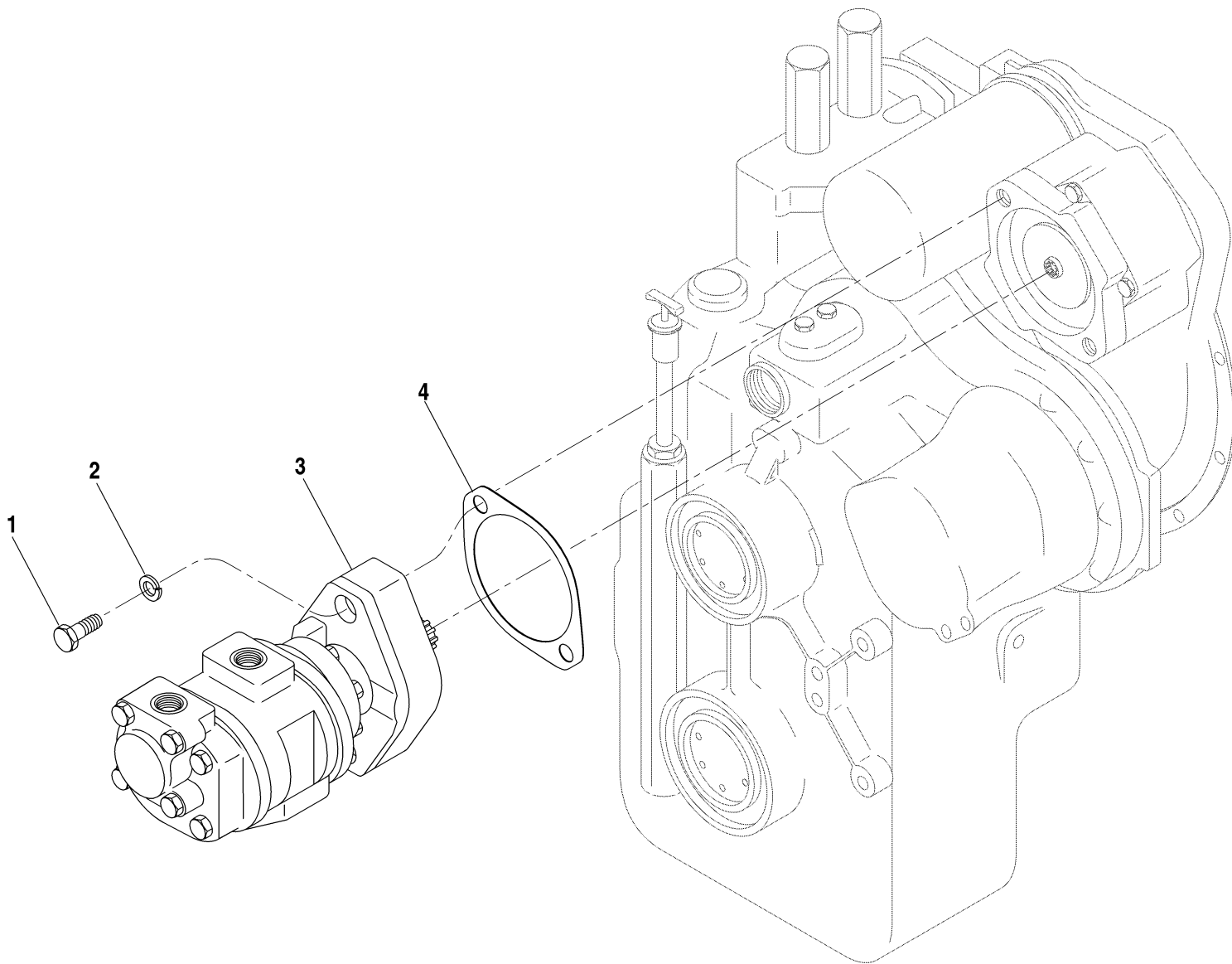
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ITEM	PART NO.	QTY.	DESCRIPTION
1	1100061	1	Selector Valve
2	P40662	1	Nut
3	38329A	1	Coil
4	37355X	1	Seal Kit
5	37352X	1	Solenoid Valve
6	P27931	4	Plug, Hollow Hex, SAE #2
7	P27933	4	Plug, Hollow Hex, SAE #4
8	37571X	4	Orifice Plug
9	1100339	4	Seal Kit
10	1100372	4	Valve, Piloted, 3-Way



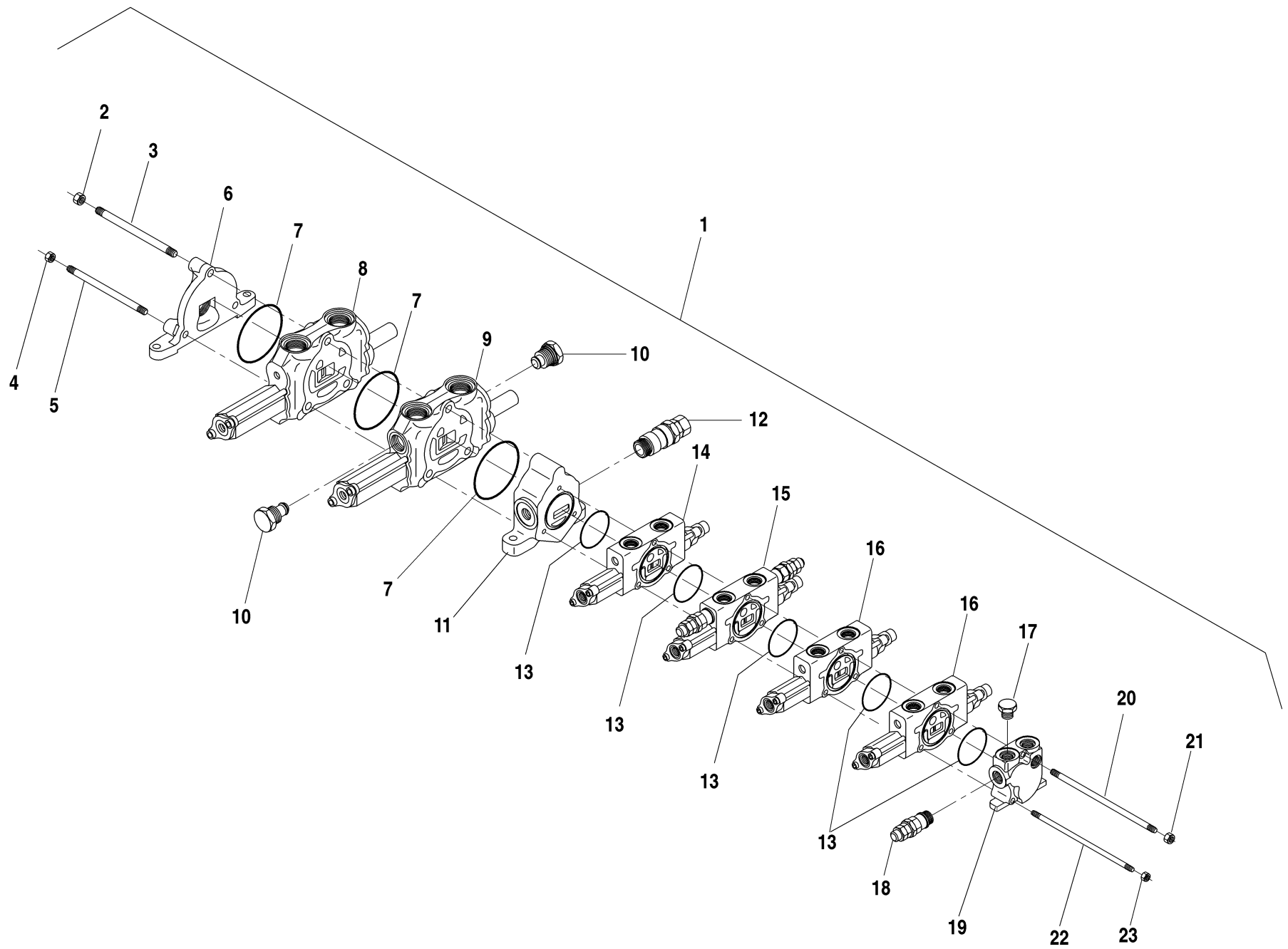
644D-34 S/N 1342-



ITEM	PART NO.	QTY.	DESCRIPTION
1	P00409	2	Capscrew, Hx., 1/2"-13 × 2 3/4"
2	P01312	2	Lockwasher, 1/2"
3	67787D	1	Pump, Hydraulic
4	P19921	1	Gasket (Replaces 67522X O-Ring)

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ITEM	PART NO.	QTY.	DESCRIPTION
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1	67028B	1	6 Section Mid-Inlet Valve Assembly
2	P05029	1	Locknut, Hx., 1/2"-20 Grade C
3	37909X	1	Tie Rod, 1/2"-20
4	P05028	2	Locknut, Hx., 7/16"-20 Grade C
5	37910X	2	Tie Rod, 7/16"-20
6	37902X	1	Outlet Section
7	P91782	3	O-Ring
8	37908X	1	Valve Section Assembly - Boom Extension (See Page 6.6.1 for Breakdown)
9	37907X	1	Valve Section Assembly - Boom Hoist (See Page 6.6.1 for Breakdown)
10	37953X	2	Shut-Off Plug
11	37901X	1	Mid-Inlet Section
12	37952X	1	Relief Valve Assembly (See Page 6.10.1 for Breakdown)
13	37923X	❶	O-Ring
14	37904X	3	Valve Section Assembly - Frame Tilt (See Page 6.7.1 for Breakdown)
15	37906X	1	Valve Section Assembly - Carriage Fork Tilt (See Page 6.8.1 for Breakdown)
16	37905X	2	Valve Section Assembly - Transfer/Auxilliary (See Page 6.7.1 for Breakdown)
17	P15447	1	O-Ring Plug, Hex
18	37951X	1	Relief Valve Assembly (See Page 6.9.1 for Breakdown)
19	37900X	1	Inlet Section
20	37919X	1	Tie Rod, 3/8"-24 (For 6 Section Valve)
21	P05027	1	Locknut, Hx., 3/8"-24 Grade C
22	37913X	2	Tie Rod, 5/16"-18 (For 6 Section Valve)
23	P05001	2	Locknut, Hx., 5/16"-18 Grade C

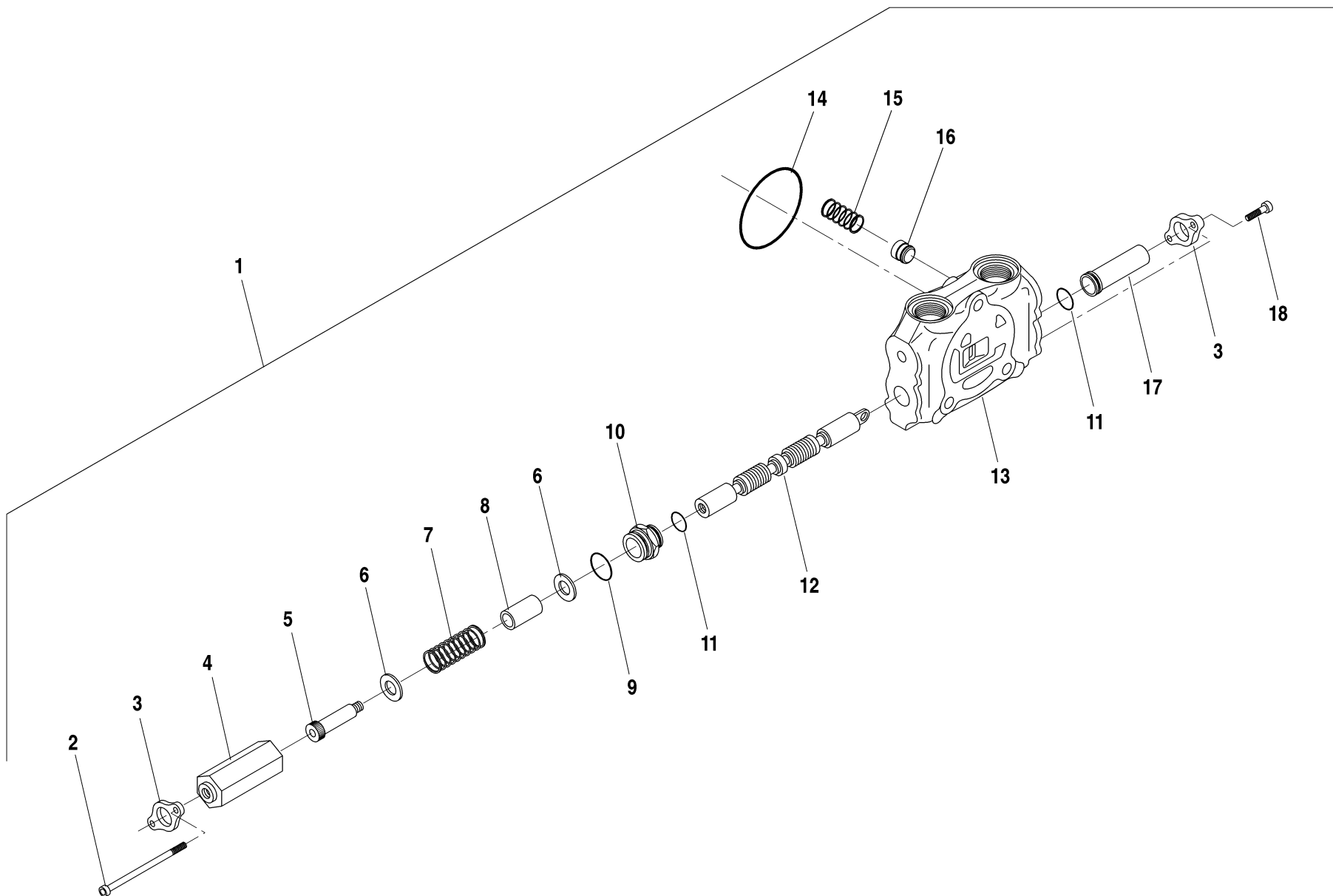
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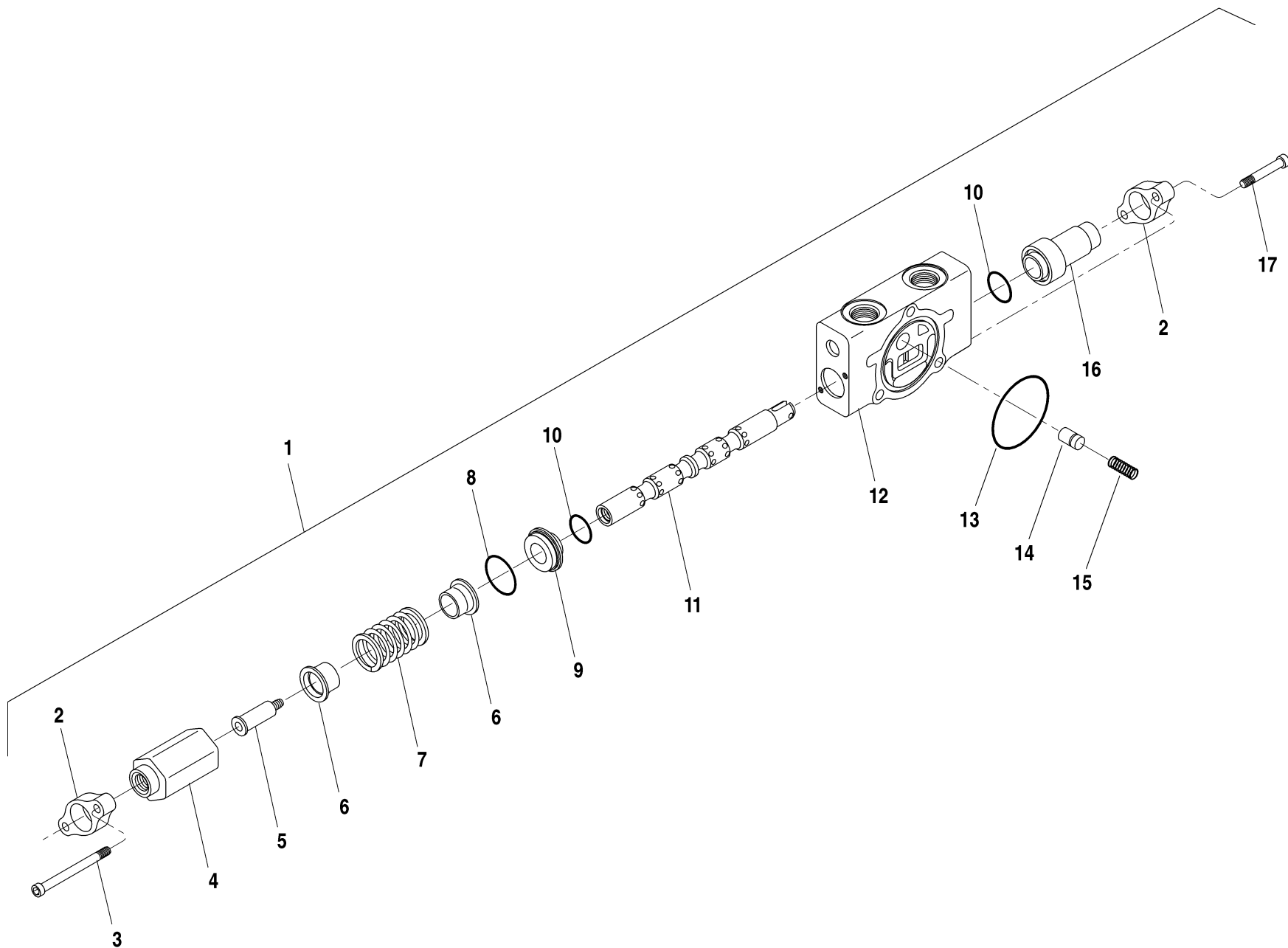
❶ 5 Required for 6 Section Valve.

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HYDRAULIC CONTROL VALVE ASSEMBLY - (Mid Inlet) 6.5.1

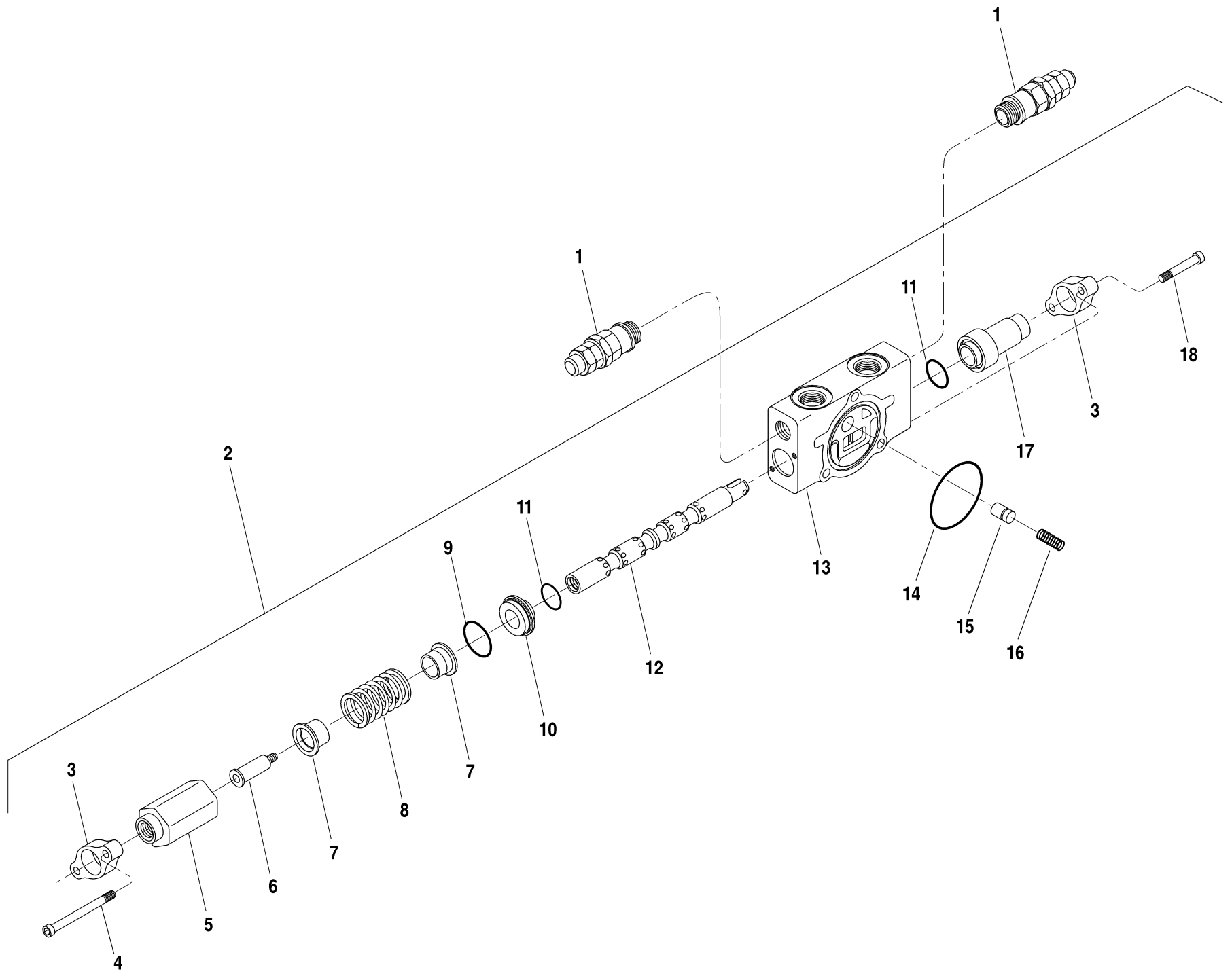
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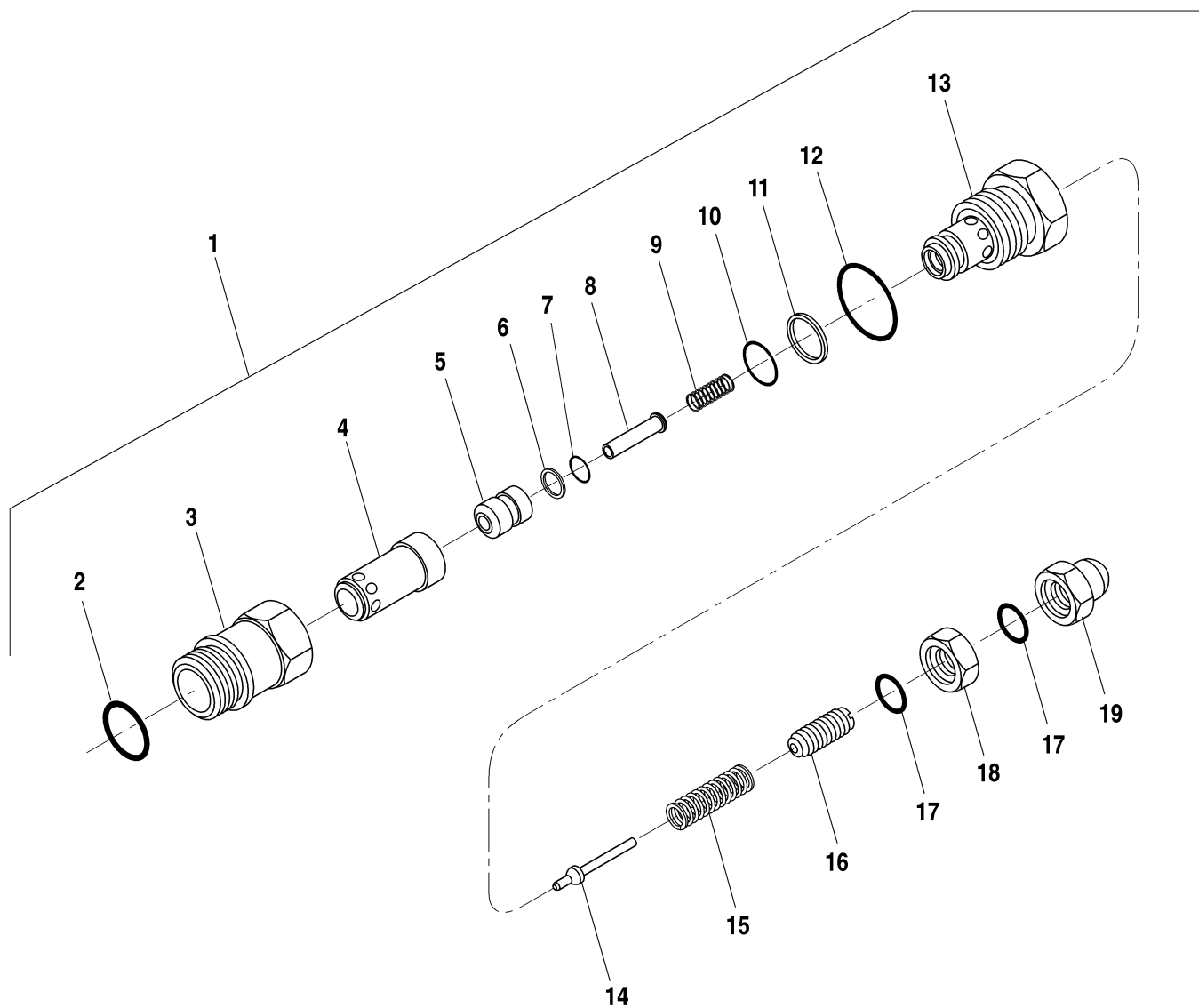


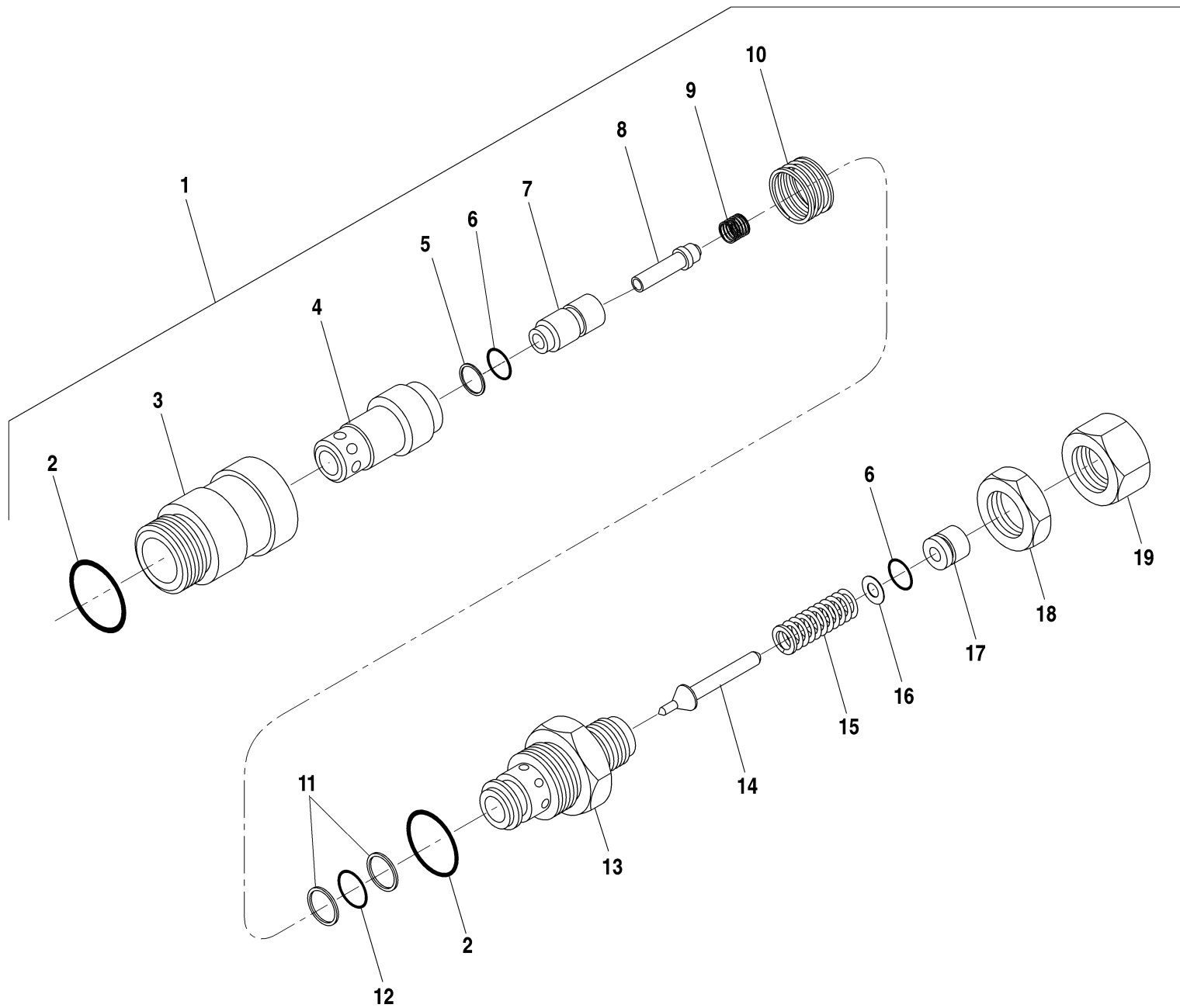


ITEM	PART NO.	QTY.	DESCRIPTION
1	37905X	-	Valve Section Assembly - Transfer/Auxiliary
	37904X	-	Valve Section Assembly - Frame Tilt/Outriggers
2	37962X	2	Plate, Seal
3	P01763	2	Capscrew, Socket Hd., 1/4"-20 x 3"
4	37960X	1	Cap, Spool
5	37964X	1	Spool End
6	37965X	2	Seat, Spring
7	37941X	1	Spring
8	37924X	1	O-Ring
9	37963X	1	Retainer, Spool Cap
10	37925X	2	O-Ring
11	N.S.S.	1	Spool
12	N.S.S.	1	Housing
13	37923X	1	O-Ring
14	37929X	1	Poppet
15	37937X	1	Spring
16	37961X	1	Cap, Spool
17	P01757	2	Capscrew, Socket Hd., 1/4"-20 x 1 1/2"
N.S.S. = Not Sold Separately			
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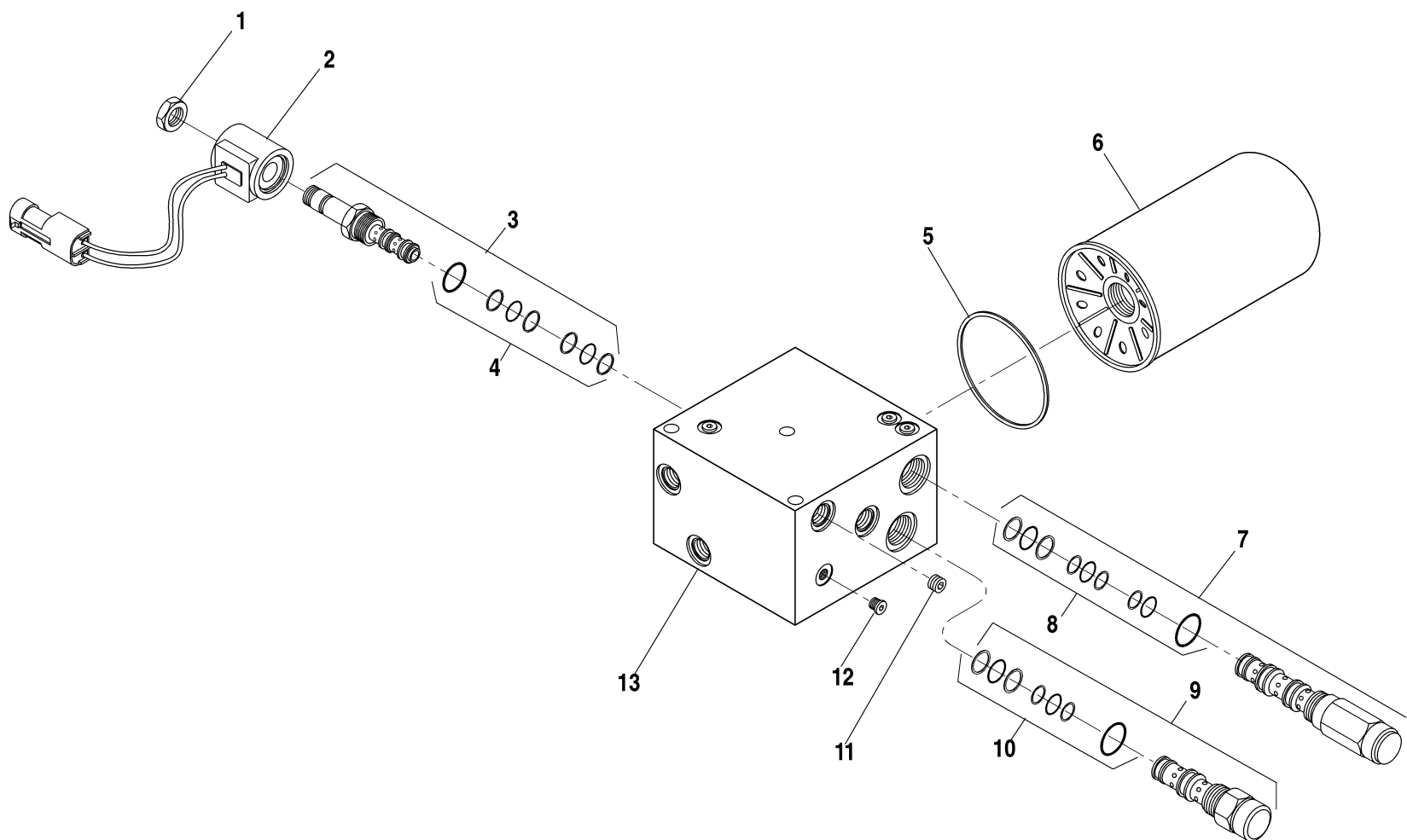


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Section 7 — Control Hydraulics

Joystick Control Hydraulic Circuit 7.1.1

Frame Tilt & Auxilliary Hydraulic Circuit 7.2.1

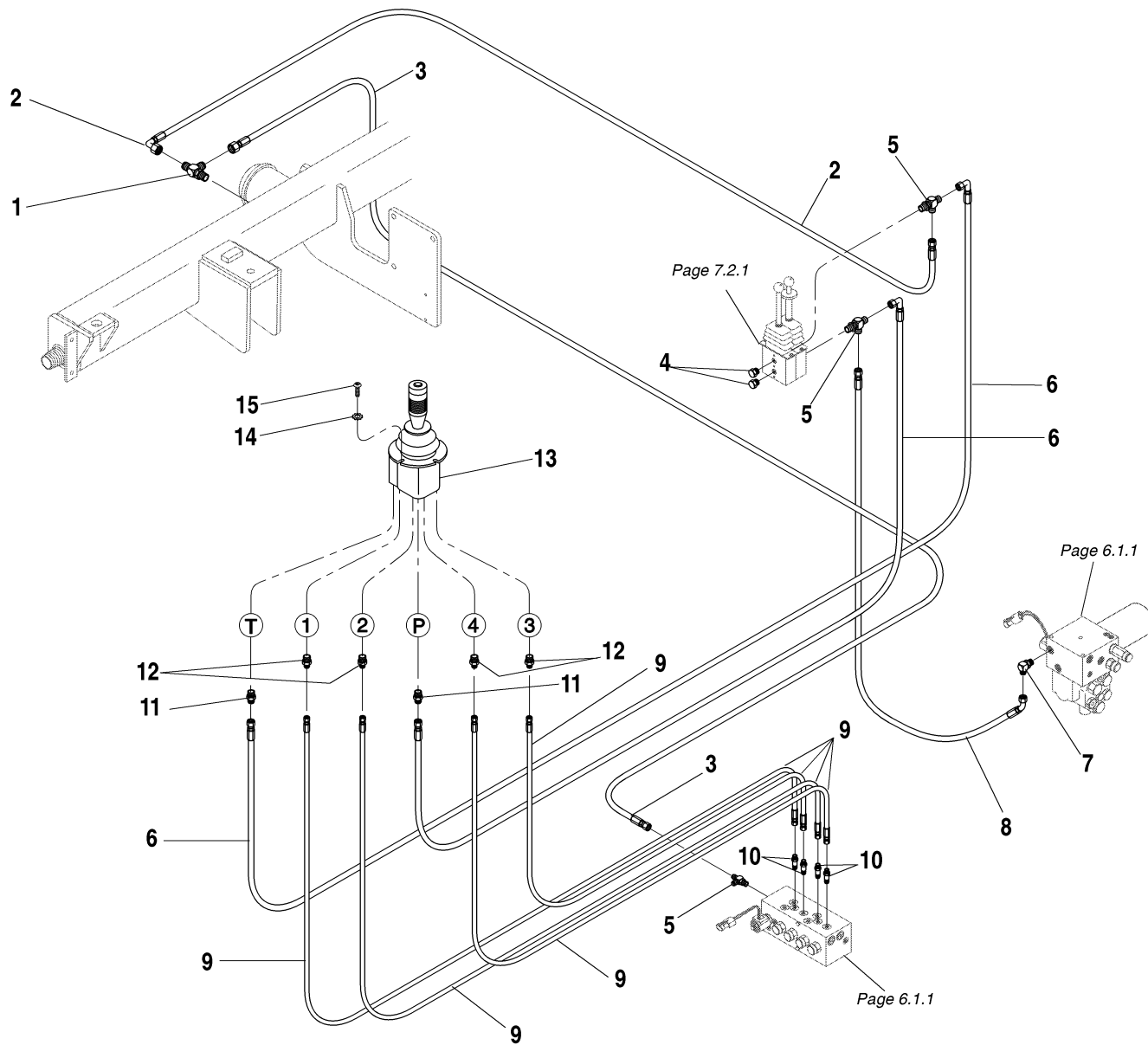
Test Port Hydraulics Circuit. 7.3.1

Joystick Control Valve Assembly 7.4.1

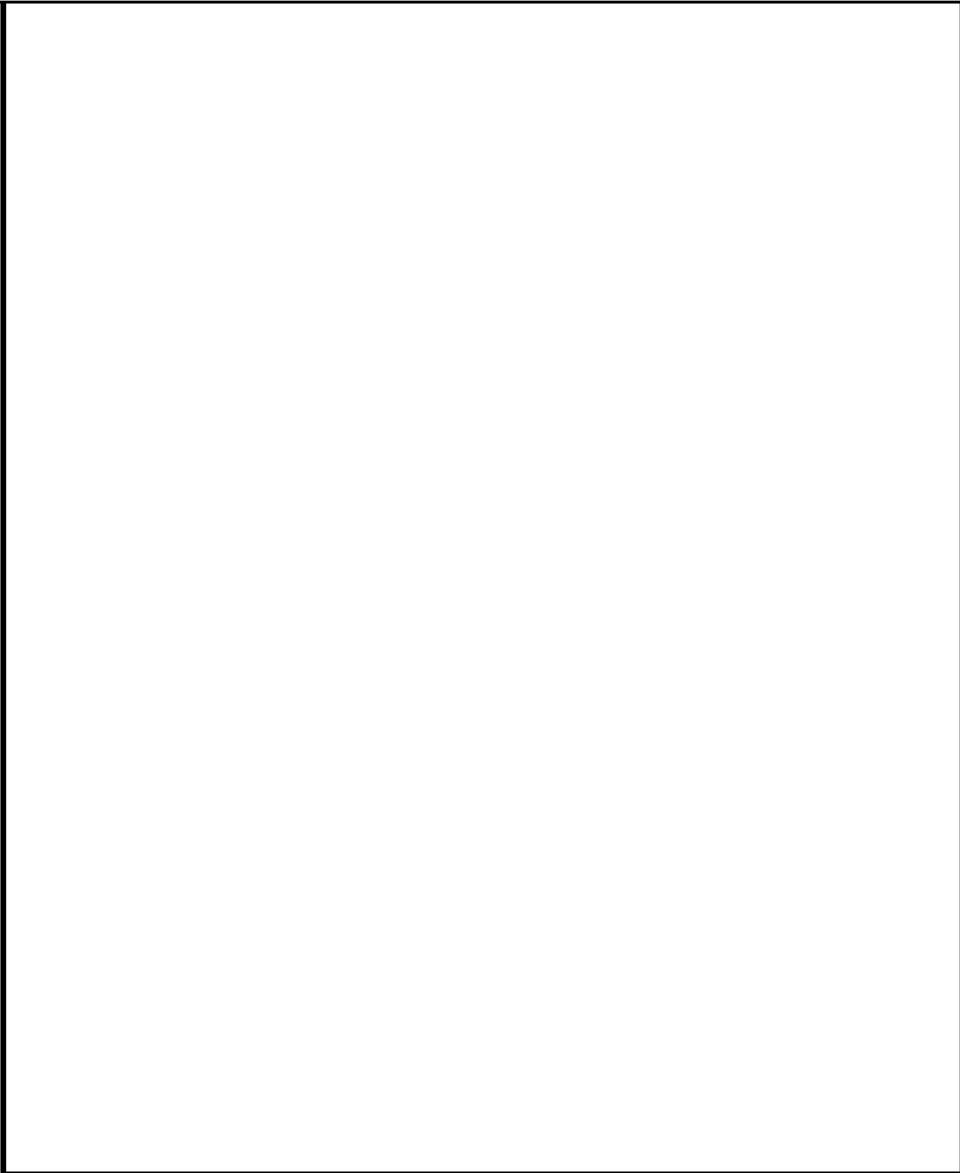
Frame Tilt Control Valve Assembly. 7.5.1

Auxilliary Control Valve Assembly. 7.6.1

Frame Tilt Cylinder Assembly7.7.1



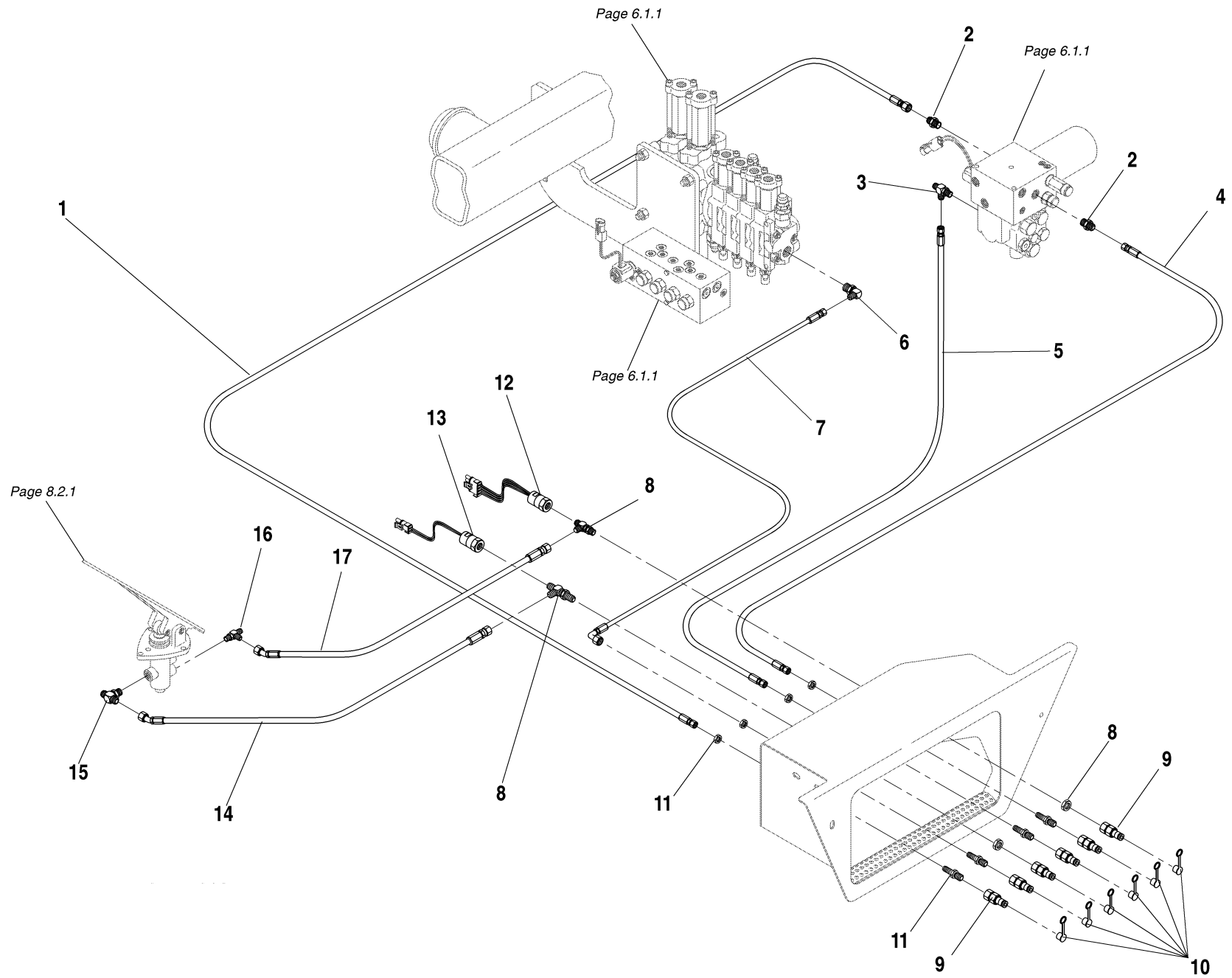
ITEM	PART NO.	QTY.	DESCRIPTION
1	P21219	1	Adapter, Tee
2	66737X	1	Hyd. Hose, 3/8" × 38"
3	P29768	1	Hyd. Hose, 3/8" × 16"
4	P25691	2	Plug, O-Ring
5	P21914	3	Tee, Run, O-Ring
6	P33059	2	Hyd. Hose, 1/4" × 22"
7	P18935	1	90° Elbow, O-Ring
8	P29195	1	Hyd. Hose, 3/8" × 22"
9	37874X	4	Hyd. Hose, 3/8" × 23"
10	P28146	4	Connector, O-Ring (Long)
11	P18936	2	Connector, O-Ring
12	P24612	2	Connector, O-Ring
13	65474B	1	Joystick Control Valve (See Page 7.4.1 for Breakdown)
14	P01357	4	Starwasher, 1/4" External
15	P03196	4	Capscrew, Button Hd. Socket, 1/4"-20 × 3/4"



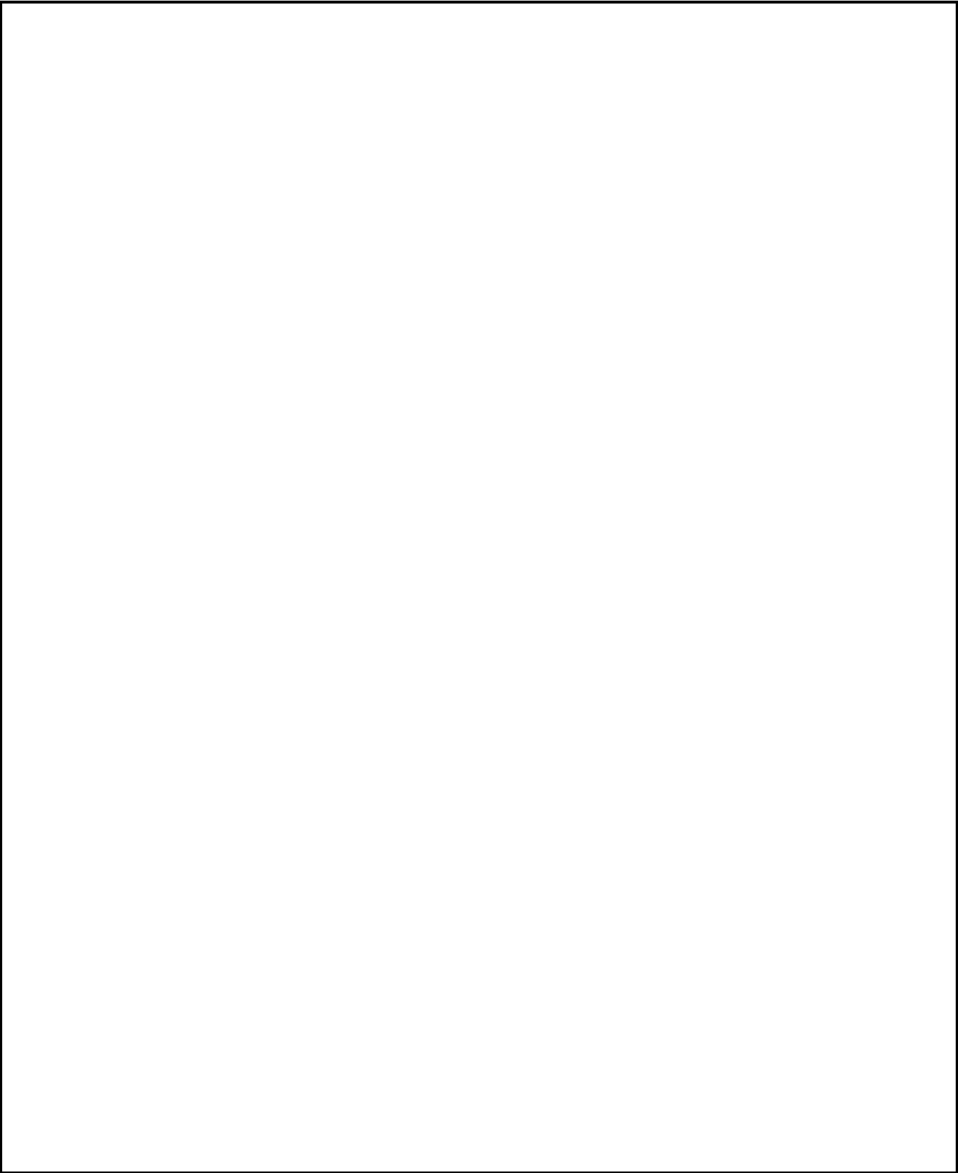
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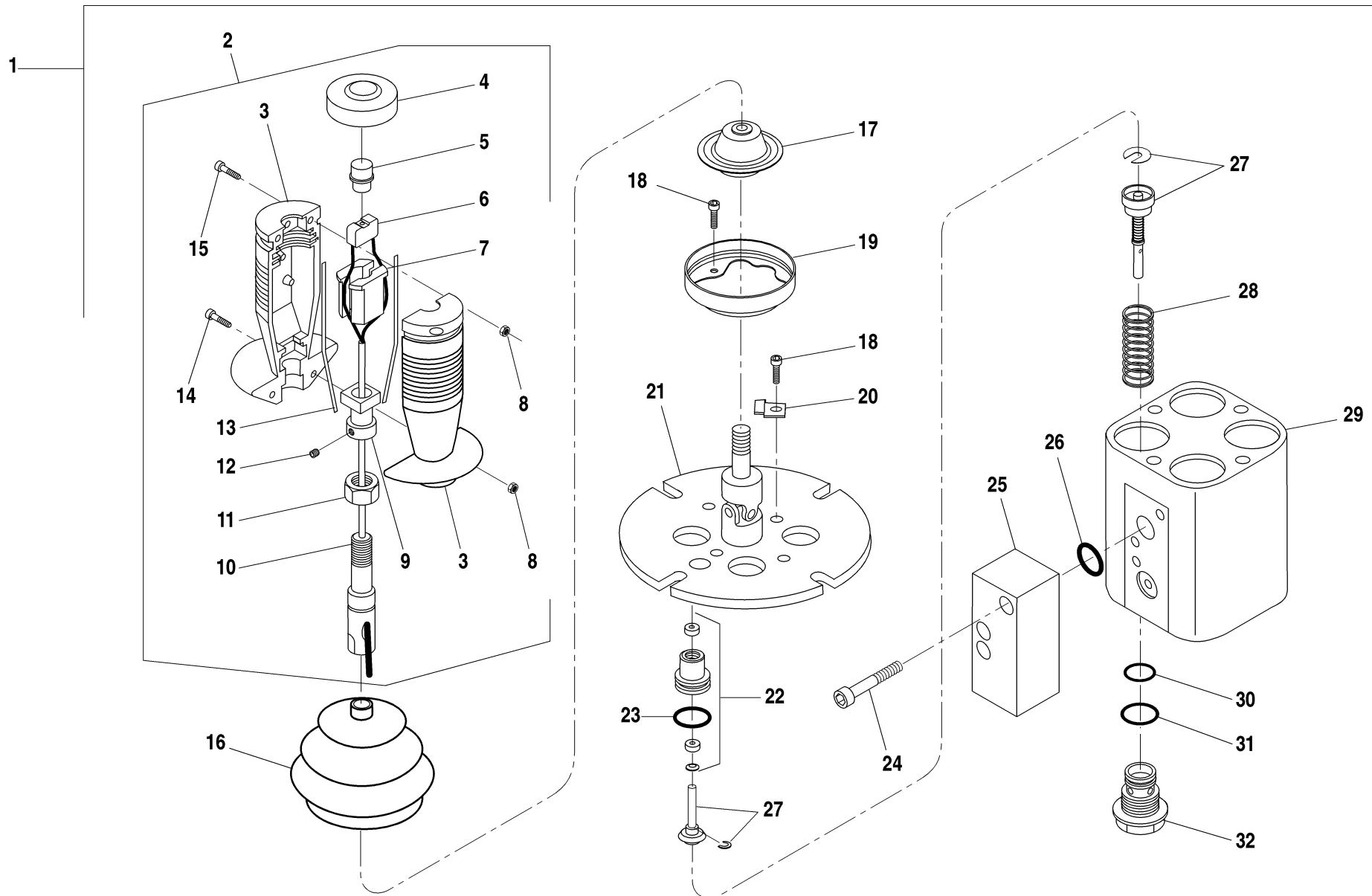
ITEM	PART NO.	QTY.	DESCRIPTION	
1	65213B	1	Cylinder, Frame Tilt (See Page 7.7.1 for Breakdown)	
2	P29947	2	Cartridge, Counterbalance Valve	
REF	P40490	-	Seal Kit for Item 2	
3	P19724	2	90° Elbow	
4	37877X	2	Hyd. Hose, 1/4" × 125"	
5	65848B	1	Control Valve, Auxillary (See Page 7.6.1 for Breakdown)	
6	P31443	1	Control Valve, Frame Tilt (See Page 7.5.1 for Breakdown)	
7	P03196	4	Capscrew, Button Hd. Socket, 1/4"-20 × 3/4"	
8	P01357	4	Starwasher, 1/4" External	
9	P24612	4	Connector, O-Ring	
10	37875X	1	Hyd. Hose, 1/4" × 28"	
11	P25852	1	Hyd. Hose, 1/4" × 19"	
12	37876X	1	Hyd. Hose, 1/4" × 21"	
13	P29152	1	Hyd. Hose, 1/4" × 30"	
14	P18935	4	90° Elbow, O-Ring	
15	P25697	2	Connector, O-Ring	
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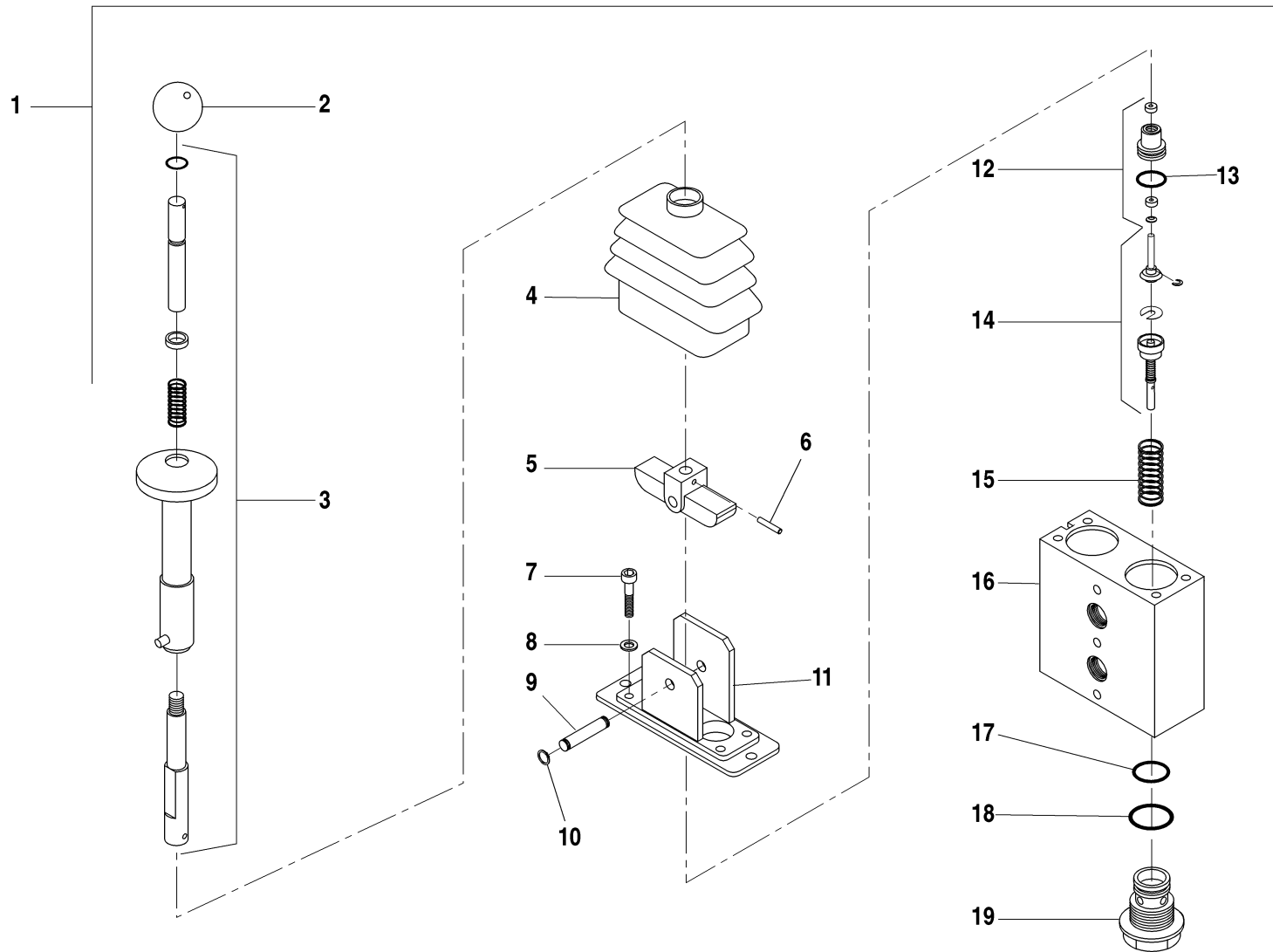


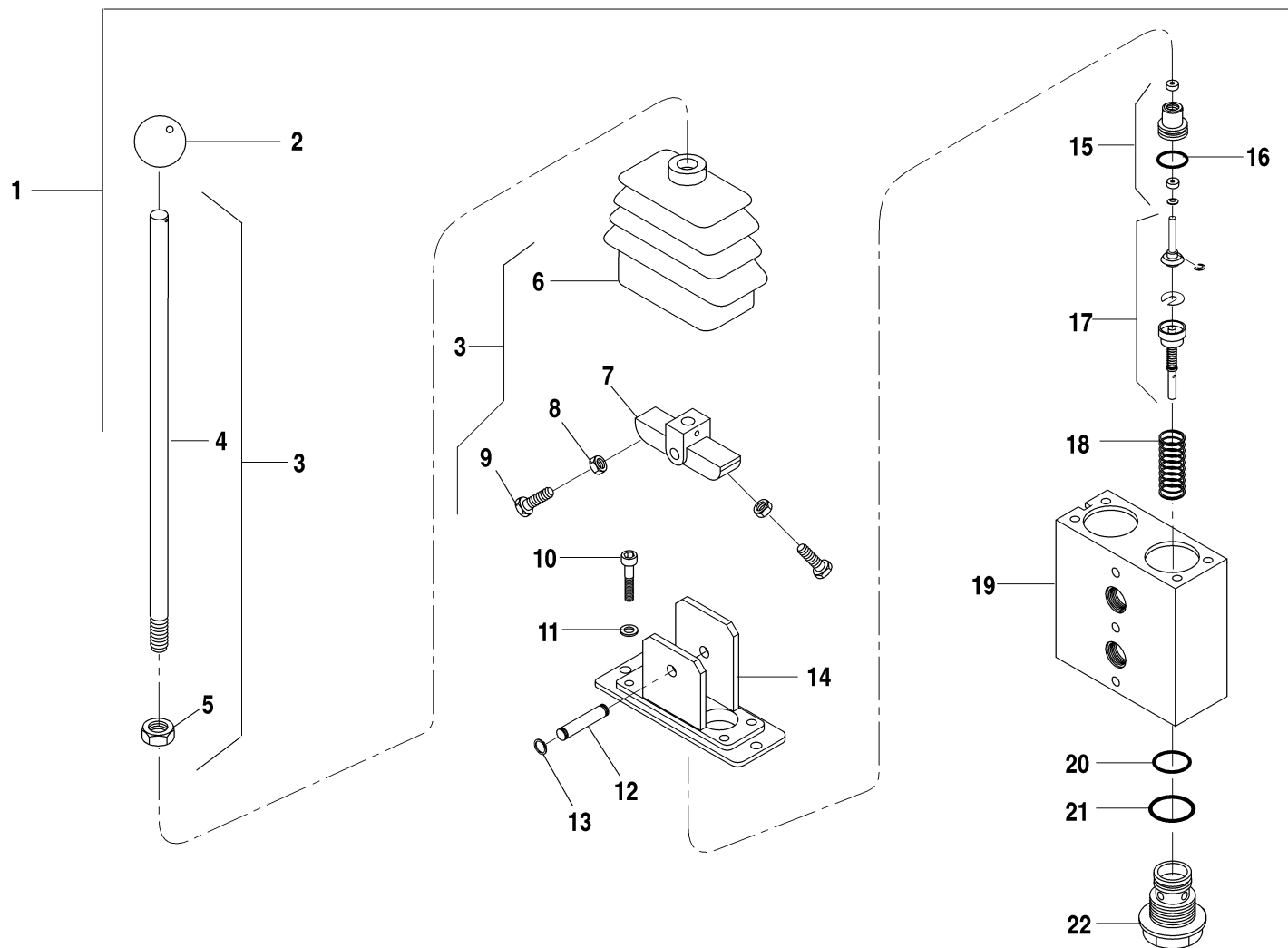
ITEM	PART NO.	QTY.	DESCRIPTION
1	P25861	1	Hyd. Hose, 1/4" x 41"
2	P18936	1	Connector, O-Ring
3	P26604	1	Run, Tee
4	66733X	1	Hyd. Hose, 1/4" x 26"
5	P27164	1	Hyd. Hose, 1/4" x 19"
6	P24609	1	90° Elbow
7	P26625	1	Hyd. Hose, 1/4" x22"
8	P25302	2	Tee, Bulkhead
9	P27374	8	End Tube, Nipple
10	P27805	8	Dust Cap
11	P18948	4	Connector, Bulkhead
12	66680A	1	Switch, Pressure-D.P.S.T. Normally Closed, 850 P.S.I Low Brake Pressure
13	66679A	1	Switch, Pressure-S.P.S.T. Normally Open, 250 P.S.I Brake Pressure
	67062A	-	Switch, Pressure-S.P.S.T. Normally Open, 250 P.S.I Use w/ Roadway Lights
14	66731X	1	Hyd. Hose, 3/8" x 15"
15	P18985		Tee, Branch O-Ring
16	P21918		Tee, O-Ring
17	P25872	1	Hyd. Hose, 3/8" x 23"

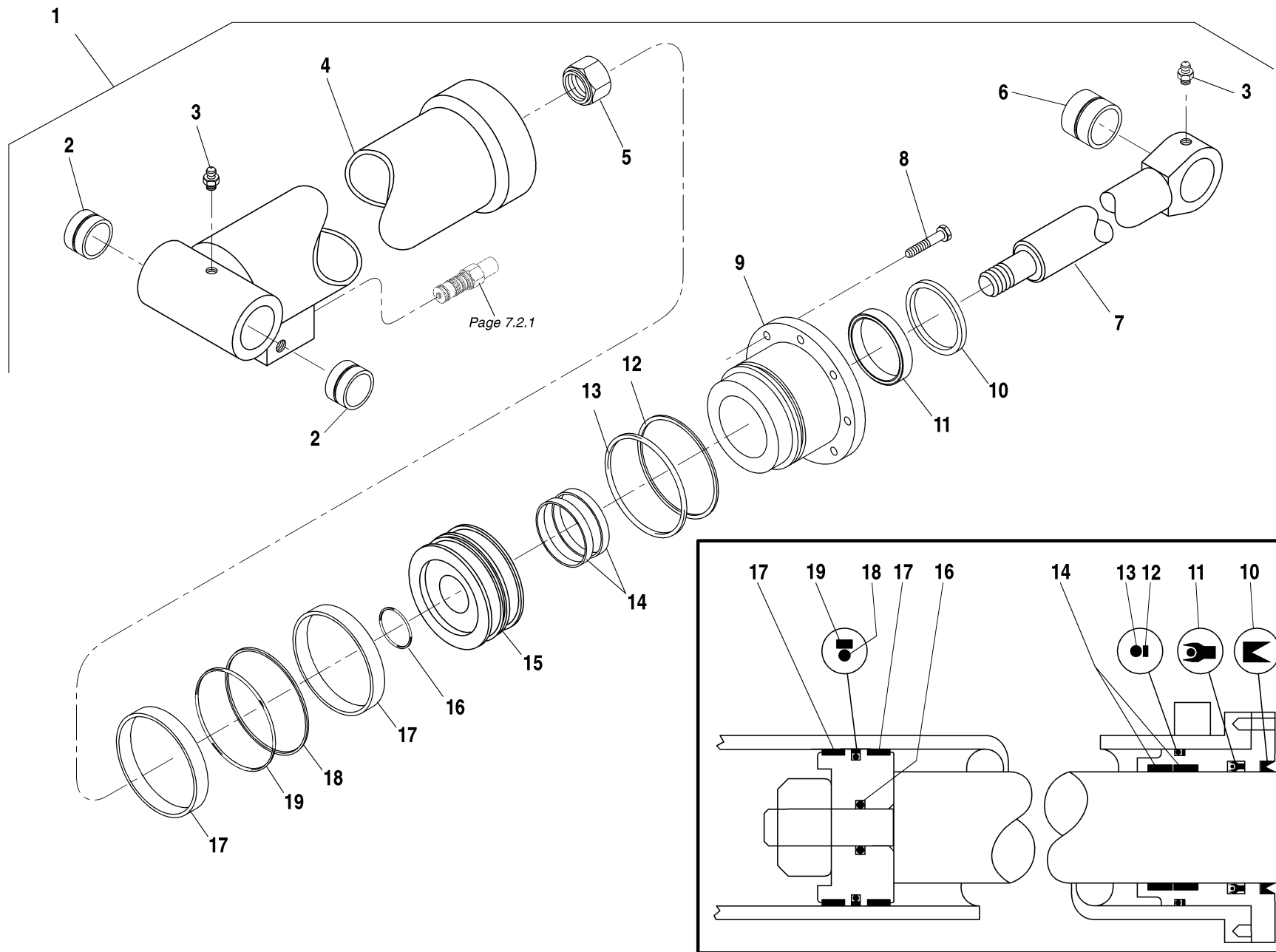


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ITEM	PART NO.	QTY.	DESCRIPTION	
1	65213A	1	Cylinder Assembly, Frame Tilt	
2	16228A	2	Bushing	
3	P16611	2	Grease Fitting	
4	68353X	1	Barrel Weldment	
5	P40460	1	Nut, Crownlock	
6	P25911	1	Bushing	
7	68354X	1	Rod Weldment	
8	68356X	8	Capscrew, Hx.,	
9	68355X	1	Head, Rod Bearing	
10	N.S.S	1	*Wiper	
11	N.S.S	1	*Seal	
12	N.S.S	1	*Back-Up Ring	
13	N.S.S	1	*O-Ring	
14	N.S.S	2	*Wear Ring	
15	P29878	1	Piston	
16	N.S.S	1	*O-Ring	
17	N.S.S	2	*Wear Ring	
18	N.S.S	1	*O-Ring	
19	N.S.S	1	*Piston Seal	
Ref	P30653	1	Seal Kit	
NOTES:				
* Items Included in Seal Kit.				
N.S.S. = Not Sold Separately				
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Section 8 — Steering and Brake Hydraulics

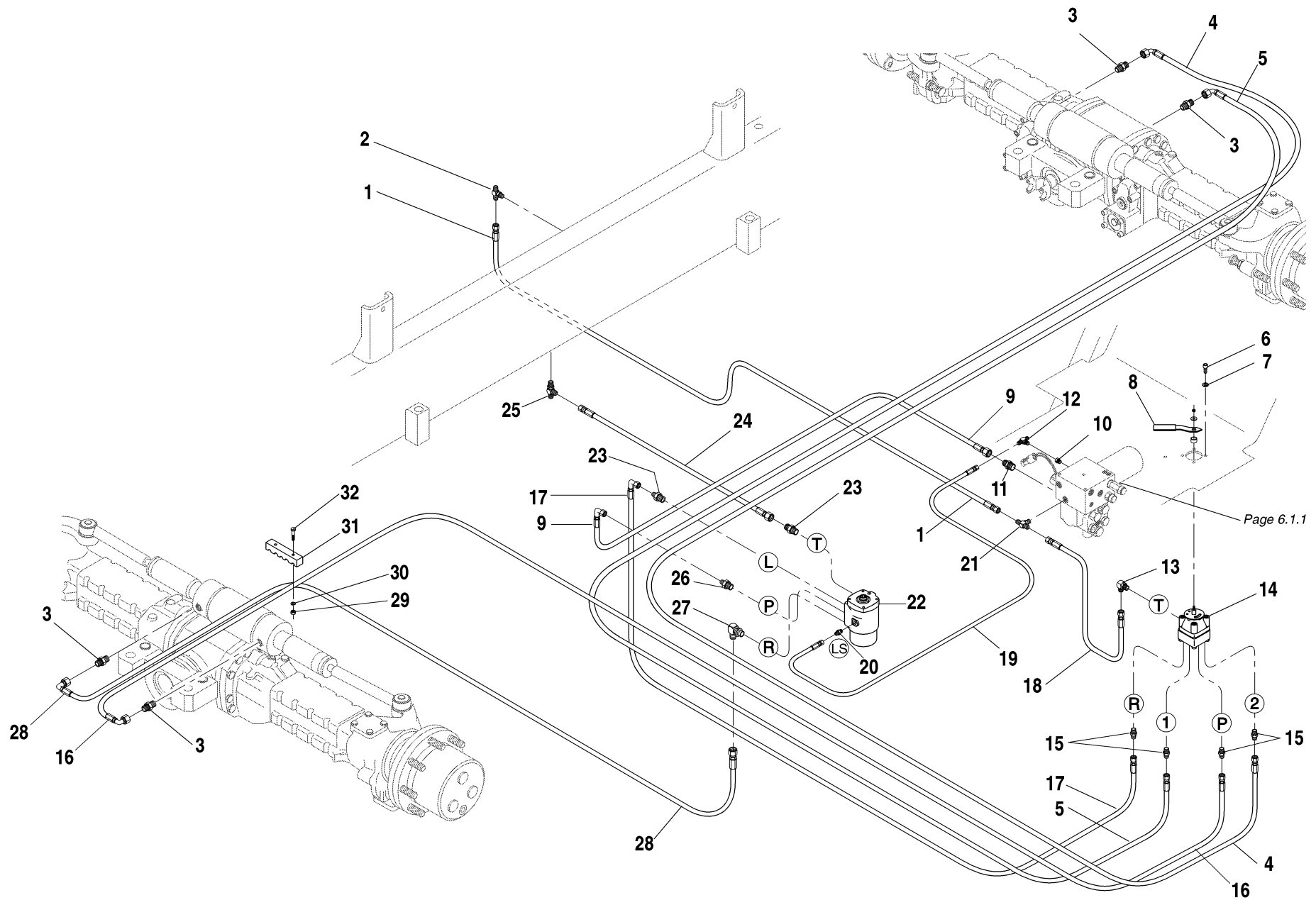
Steering Hydraulic Circuit 8.1.1

Service Brake Hydraulic Circuit. 8.2.1

Service Brake Valve Assembly 8.3.1

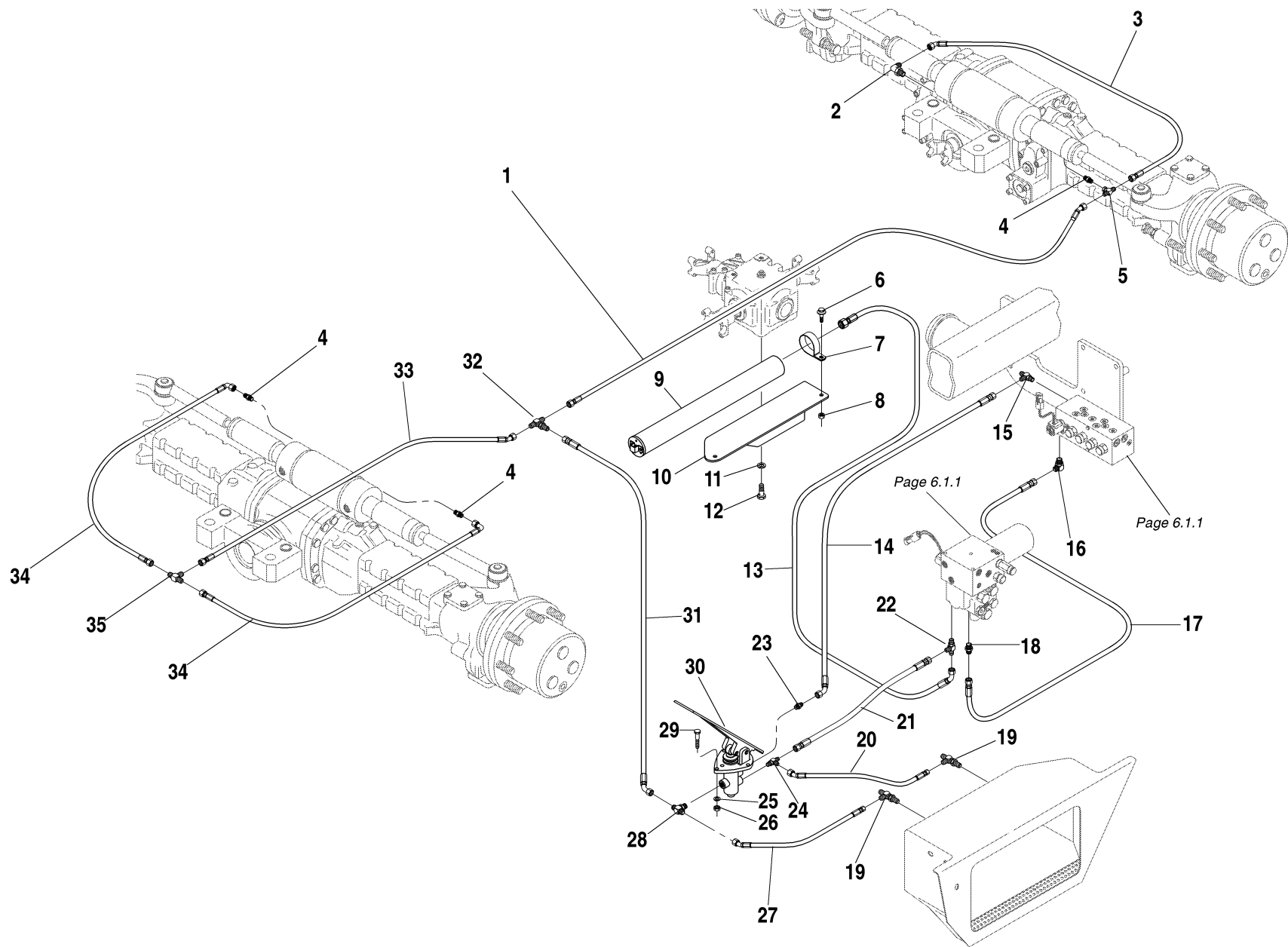
Park Brake Hydraulic Circuit 8.4.1

Accumulator Assembly 8.5.1



ITEM	PART NO.	QTY.	DESCRIPTION	
1	P25213	1	Hyd. Hose, 3/8" x 44"	
2	P21219	1	Adapter, Tee	
3	37713X	4	Adapter, Straight, Male JIC to Male Metric	
4	37829X	1	Hyd. Hose, 3/8" x 128"	
5	P18894	1	Hyd. Hose, 3/8" x 118"	
6	P01816	4	Capscrew, Socket Hd., 3/8"-16 x 3/4"	
7	P01310	4	Lockwasher, 3/8"	
8	P18085	1	Handle, Steering Selector	
9	66739X	1	Hyd. Hose, 3/8" x 71"	
10	67528X	1	Orifice Plug	
11	P15406	1	Adapter	
12	P18936	1	Adapter	
13	P18935	1	90° Elbow	
14	P29100	1	Valve, Steering Selector	
15	P18936	4	Connector, O-Ring	
16	37885X	1	Hyd. Hose, 3/8" x 113"	
17	66738X	1	Hyd. Hose, 3/8" x 92"	
18	P29968	1	Hyd. Hose, 3/8" x 16"	
19	P29273	1	Hyd. Hose, 3/8" x 68"	
20	P18960	1	Adapter, Str	
21	P18958	1	Adapter, Tee	
22	39751B	1	Steer Motor	
REF	P92396	1	Seal Kit, Steer Motor	
23	37053X	2	Connector, O-Ring	
24	66740X	1	Hyd. Hose, 3/8" x 83"	
25	P21219	1	Tee	
26	P19414	1	Check Valve	
27	P18965	1	Adapter,90° Elbow	
28	P33126	1	Hyd. Hose, 3/8" x 143"	
29	P01506	2	Nut, Hx., 1/4"-20	
30	P01308	2	Lockwasher 1/4"	
31	66372X	1	Hose Clamp, Multiple	
32	P00013	2	Capscrew, Hx., 1/4"-20 x 3"	
				644D-34 S/N 108-

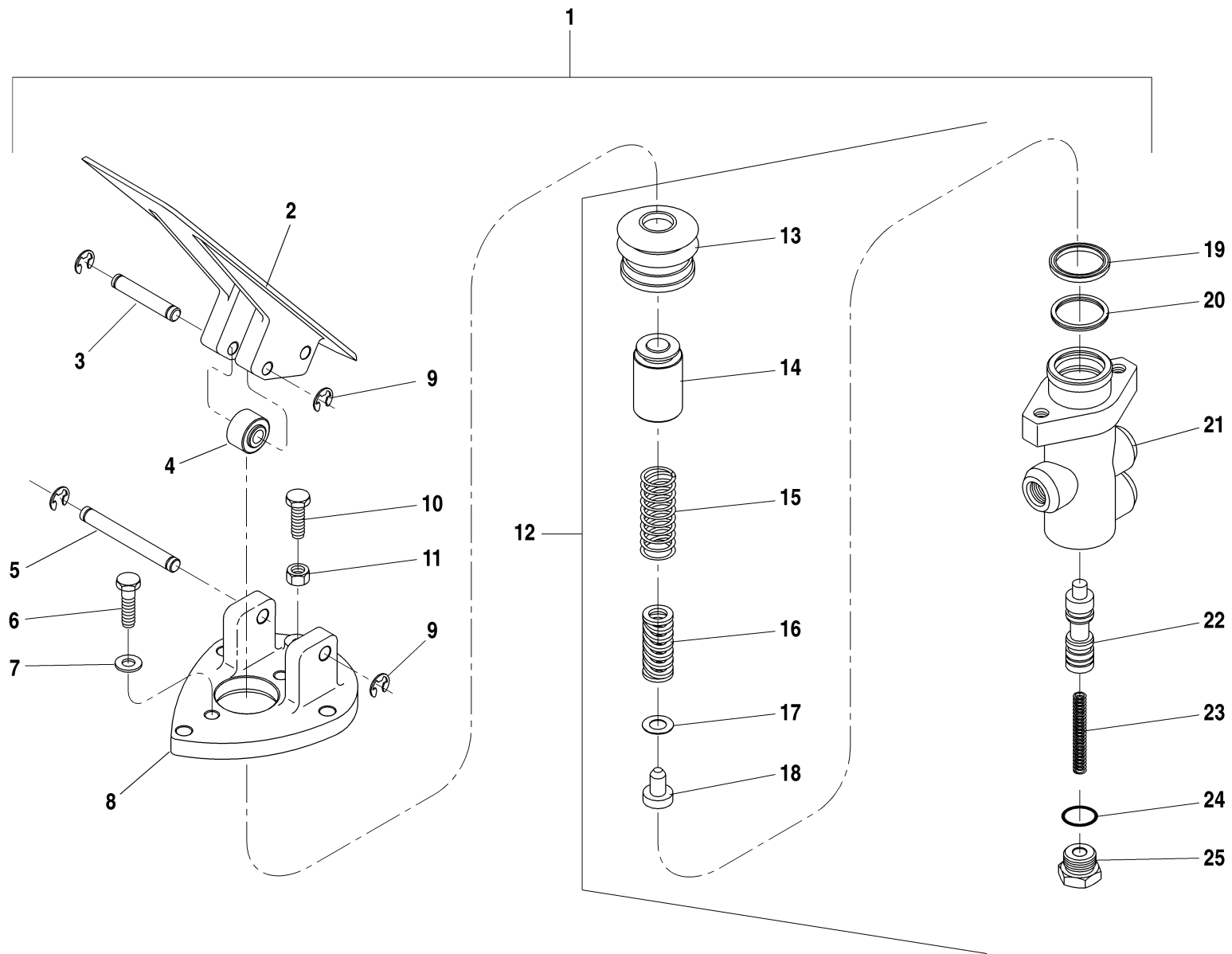
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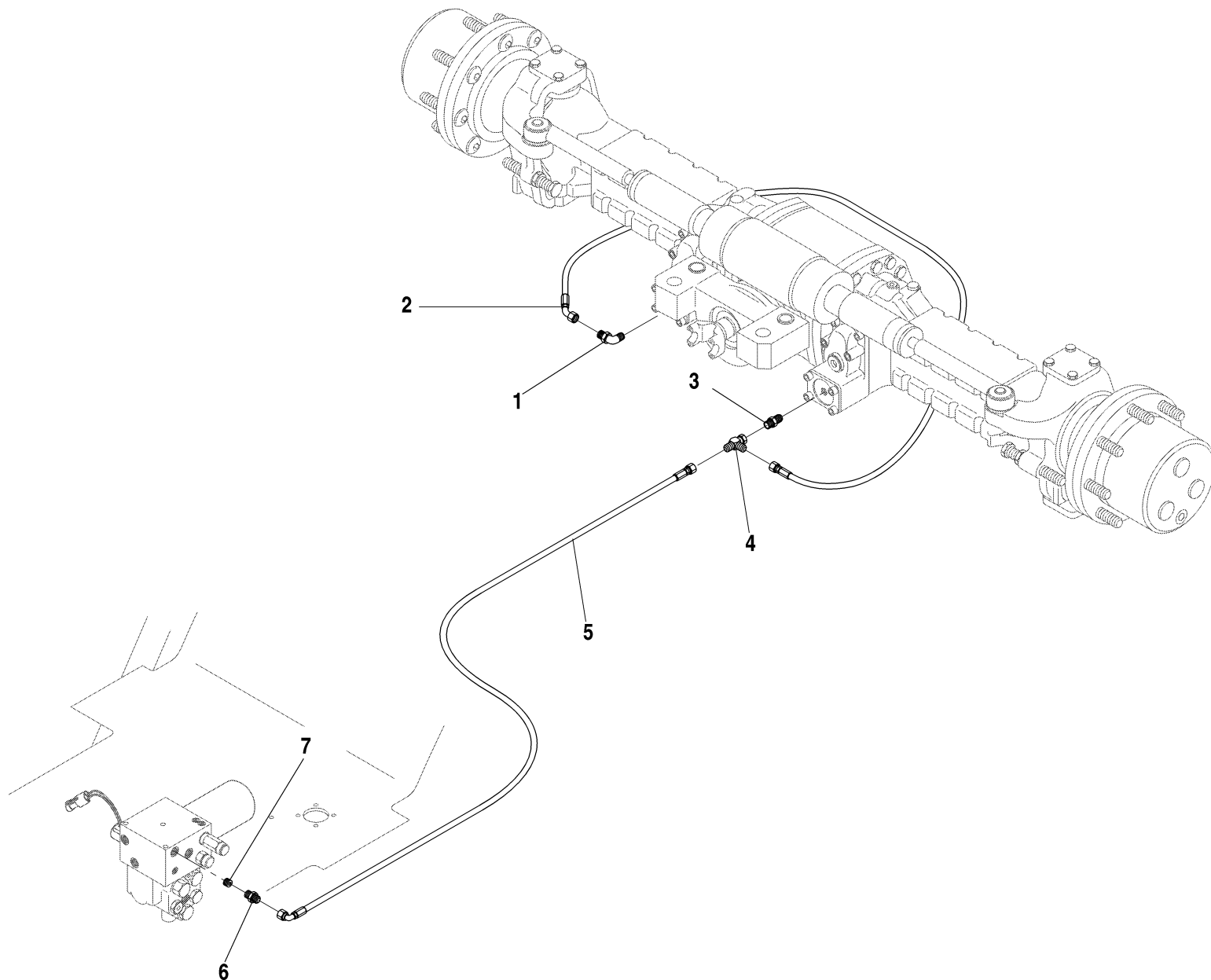


ITEM	PART NO.	QTY.	DESCRIPTION
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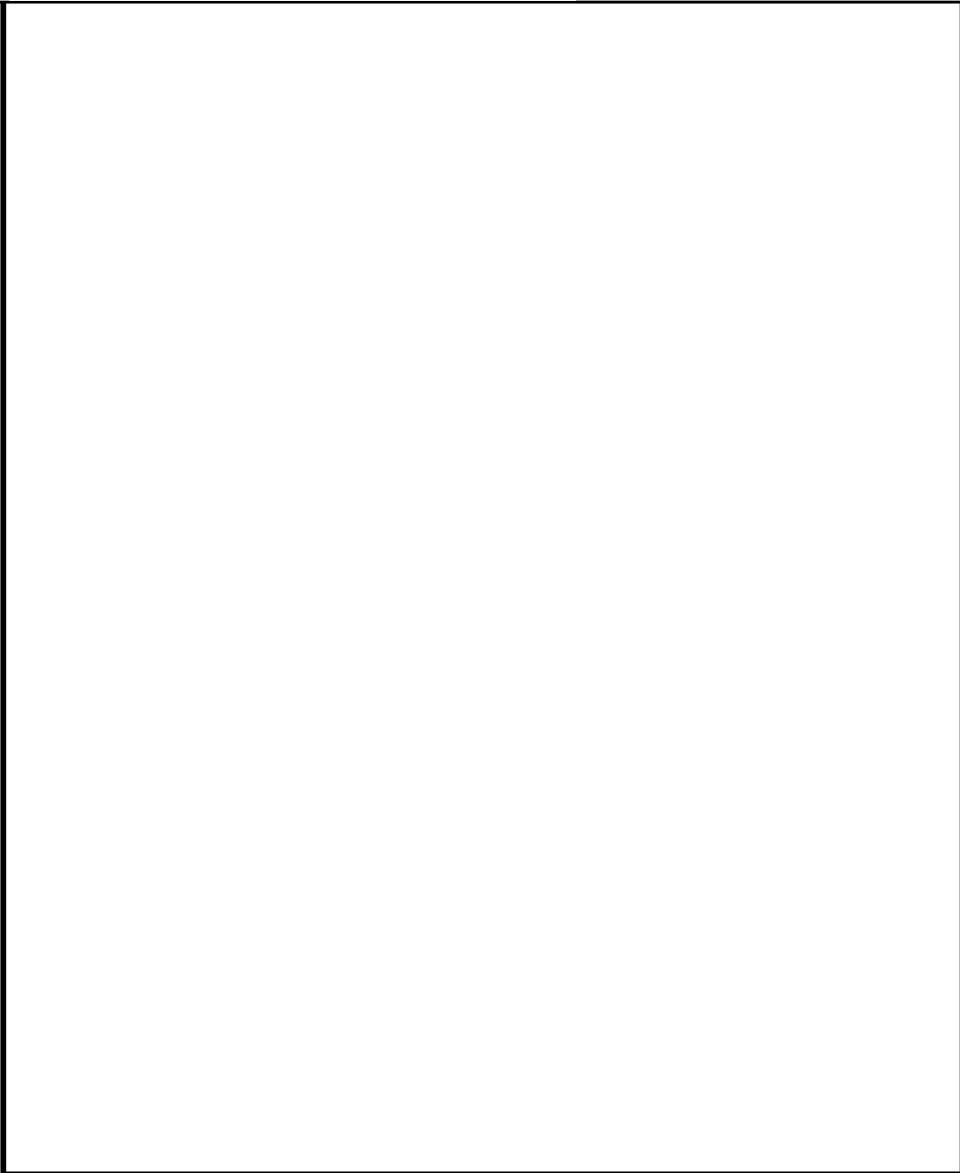
1	37882X	1	Hyd. Hose, 1/4" x 64"
2	37769X	1	90° Adapter, Male JIC to Male Metric
3	37880X	1	Hyd. Hose, 1/4" x 29"
4	P25396	1	Adapter, O-Ring
5	P19845	1	Adapter, Swivel Tee
6	10705344	2	Capscrew, Hx, Flg., 3/8"-16 x 1"
7	10237460	2	Clamp, Support, 2 1/4"
8	10705108	2	Nut, Hx, Flg., 3/8"-16
9	1100389	1	Accumulator (Replaces 37714X) (See Page 8.5.1 for Breakdown)
10	1100390	1	Bracket, Accumulator
11	10701406	2	Flatwasher, 1/2"
12	10700403	2	Capscrew, Hx., 1/2"-13x 1 1/4"
13	1100391	1	Hyd. Hose, 3/8" x 41"
14	1100094	1	Hyd. Hose, 3/8" x 27"
15	P21914	1	Adapter, RunTee
16	P18935	1	90° Adapter,
17	P27170	1	Hyd. Hose, 1/4" x 28"
18	P18936	1	Connector, O-Ring
19	P28823	1	Tee, Bulkhead
20	66732X	1	Hyd. Hose, 3/8" x 18"
21	P25872	1	Hyd. Hose, 3/8" x 23"
22	P21914	1	Tee, O-Ring
23	P18936	1	Connector, O-Ring
24	P21914	1	Tee, O-Ring
25	P01310	3	Lockwasher 3/8"
26	P01508	5	Nut, Hx., 3/8"-16
27	66731X	1	Hyd. Hose, 3/8" x 15"
28	P18985	1	Tee, Branch O-Ring
29	P00207	3	Capscrew, Hx., 3/8"-16 x 1 3/4"
30	65581B	1	Valve, Brake (See Page 8.3.1 for Breakdown)
31	37280X	1	Hyd. Hose, 3/8" x 32"
32	P18945	1	Adapter, Bulkhead Tee
33	66734X	2	Hyd. Hose, 3/8" x 58"
34	P30175		Hyd. Hose, 3/8" x16"
35	P18995		Adapter, Tee

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ITEM	PART NO.	QTY.	DESCRIPTION
1	37769X	1	90° Elbow, Bulkhead
2	37881X	1	Hyd. Hose, 1/4" x 44"
3	P25396	1	Adapter
4	P19412	1	Adapter, Swivel Tee
5	66735X	1	Hyd. Hose, 1/4" x 94"
6	P18936	1	Adapter
7	67528X	1	Orifice Plug



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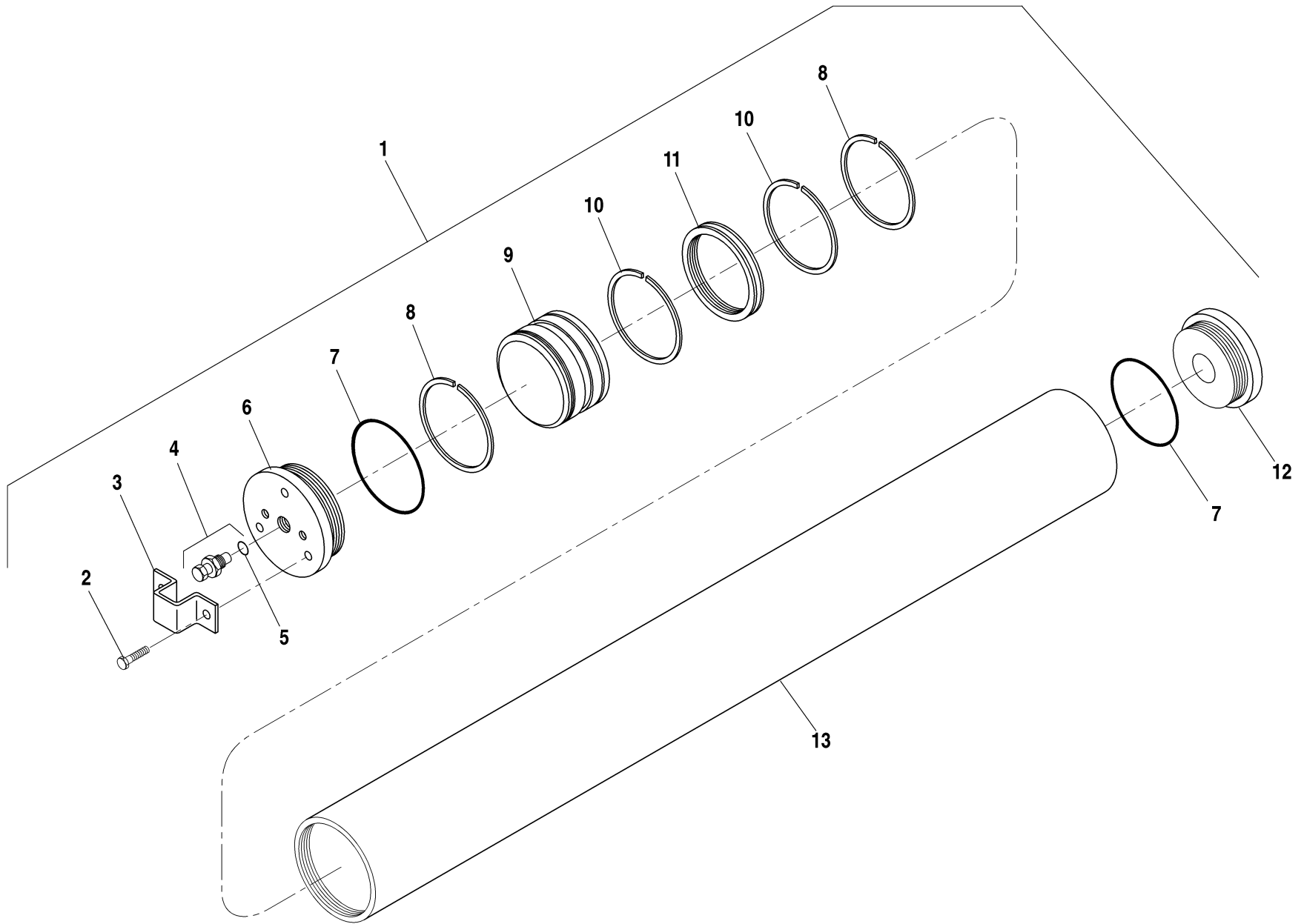


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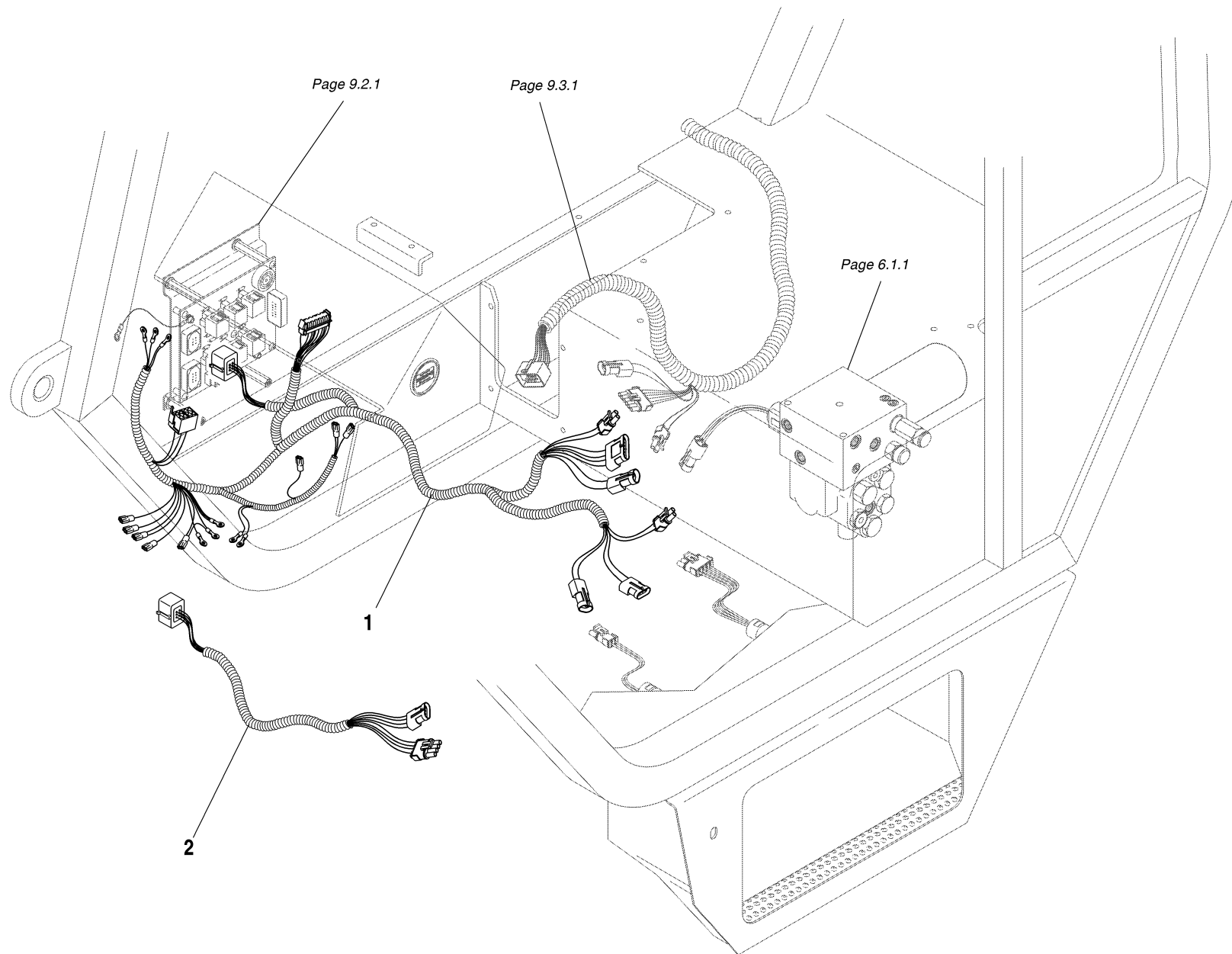
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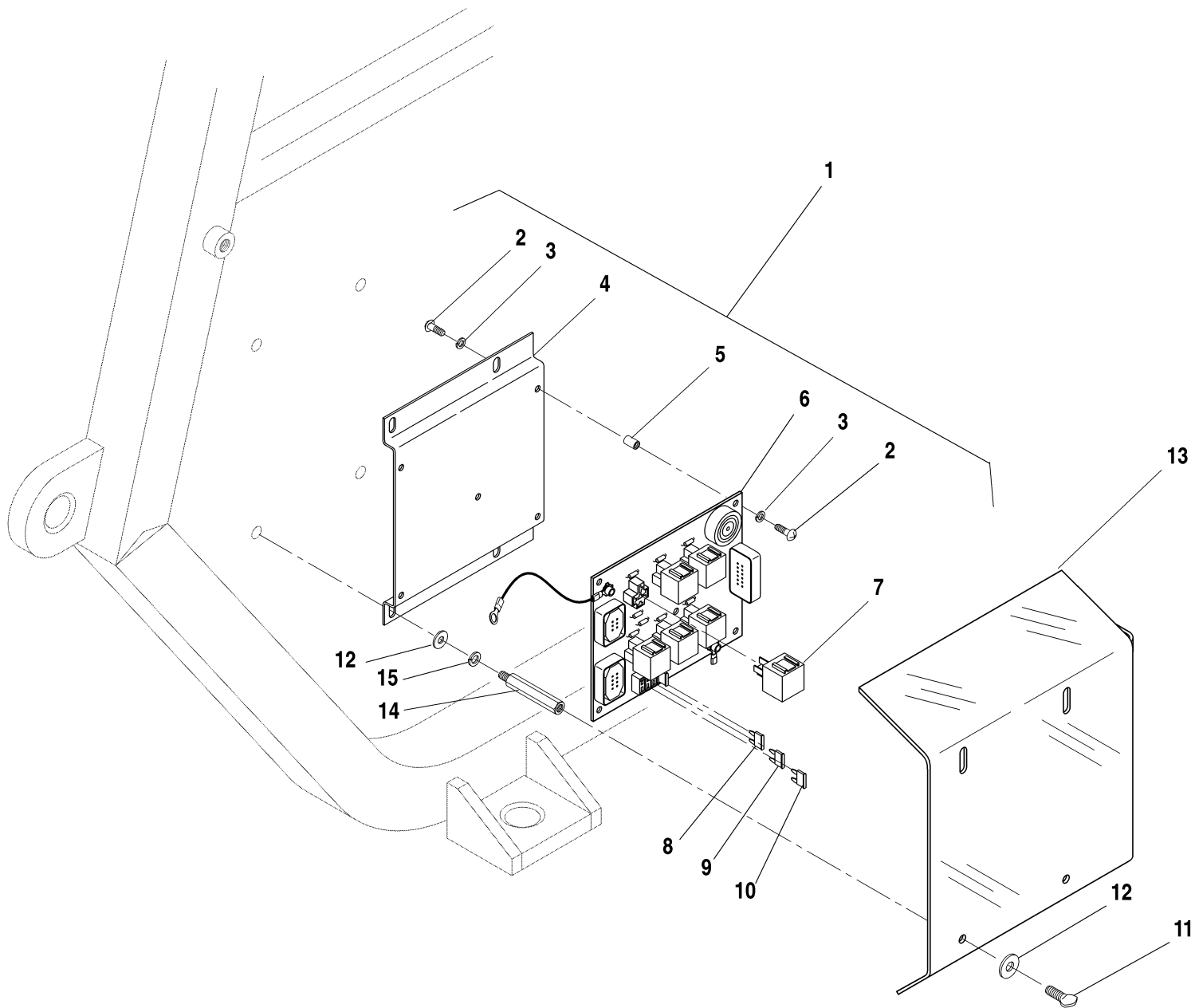
Section 9 — Electrical

Electrical Group - Operator’s Compartment 9.1.1

Electrical Mounting Panel - Circuit Board, Fuses & Relays. 9.2.1

Electrical Group - Frame, Engine & Transmission Control 9.3.1



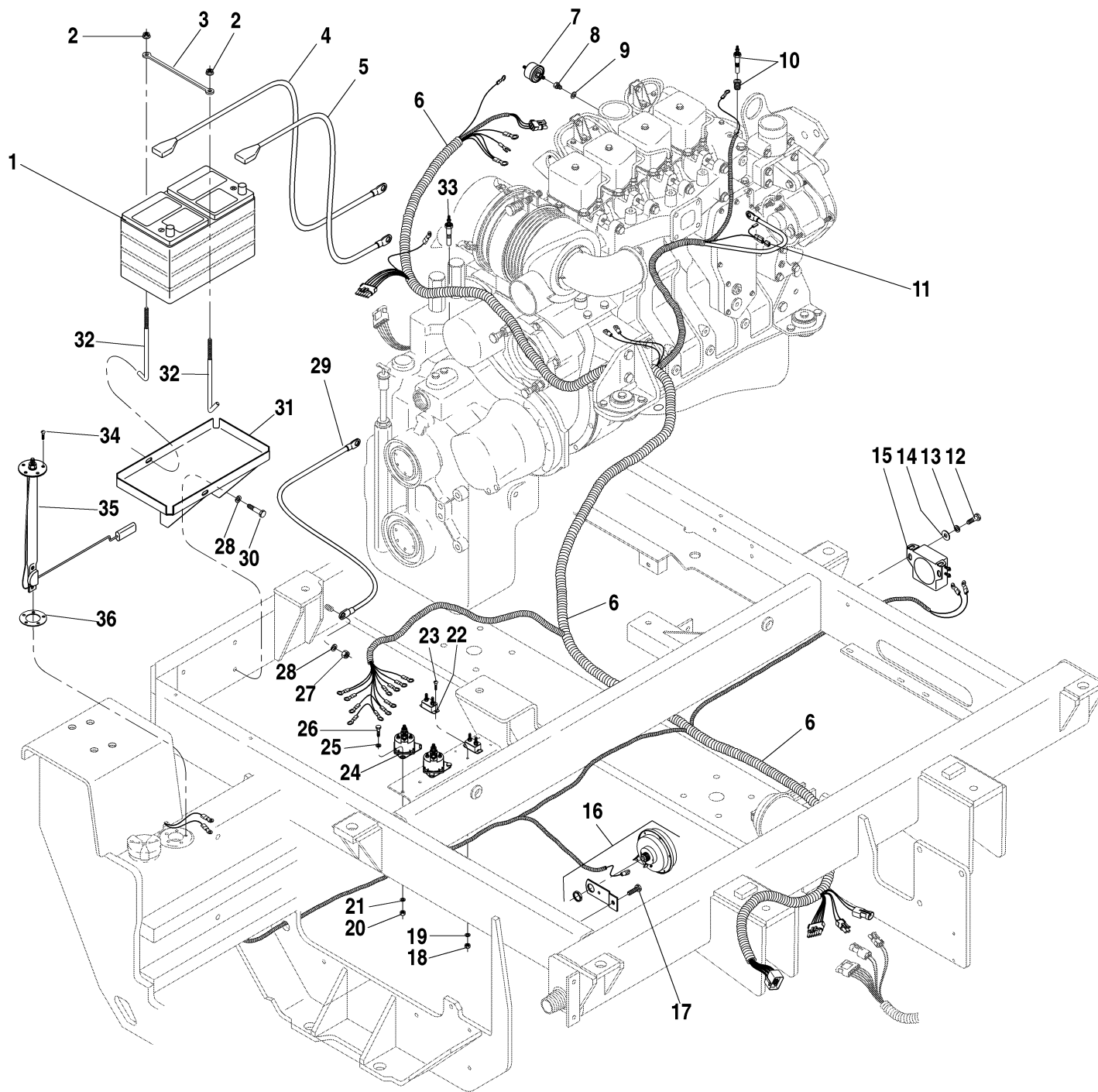


ITEM	PART NO.	QTY.	DESCRIPTION
1	67654C	1	Circuit Board assembly (Includes items 2-10)
2	67173X	10	Screw, Slotted Rd. Hd., #8-32 x 3/8"
3	P01305	10	Lockwasher, #8
4	67681B	1	Mounting Panel, Circuit Board
5	67159X	5	Standoff, #8-32 x 1/4" Long
6	N.S.S.	1	Circuit Board
7	66820X	6	Relay
8	66827X	1	Fuse, 7.5 Amp (Brown)
9	66828X	1	Fuse, 10 Amp (Red)
10	66829X	1	Fuse, 15 Amp (Blue)
11	38251A	3	Thumb Screw, 1/4"-20
12	P01402	7	Flatwasher 1/4"
13	38319B	1	Cover, Circuit Board
14	38327A	4	Standoff, 3 1/4" Long Hex
15	P01308	4	Lockwasher, 1/4"

N.S.S. = Not Sold Separately

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ITEM	PART NO.	QTY.	DESCRIPTION
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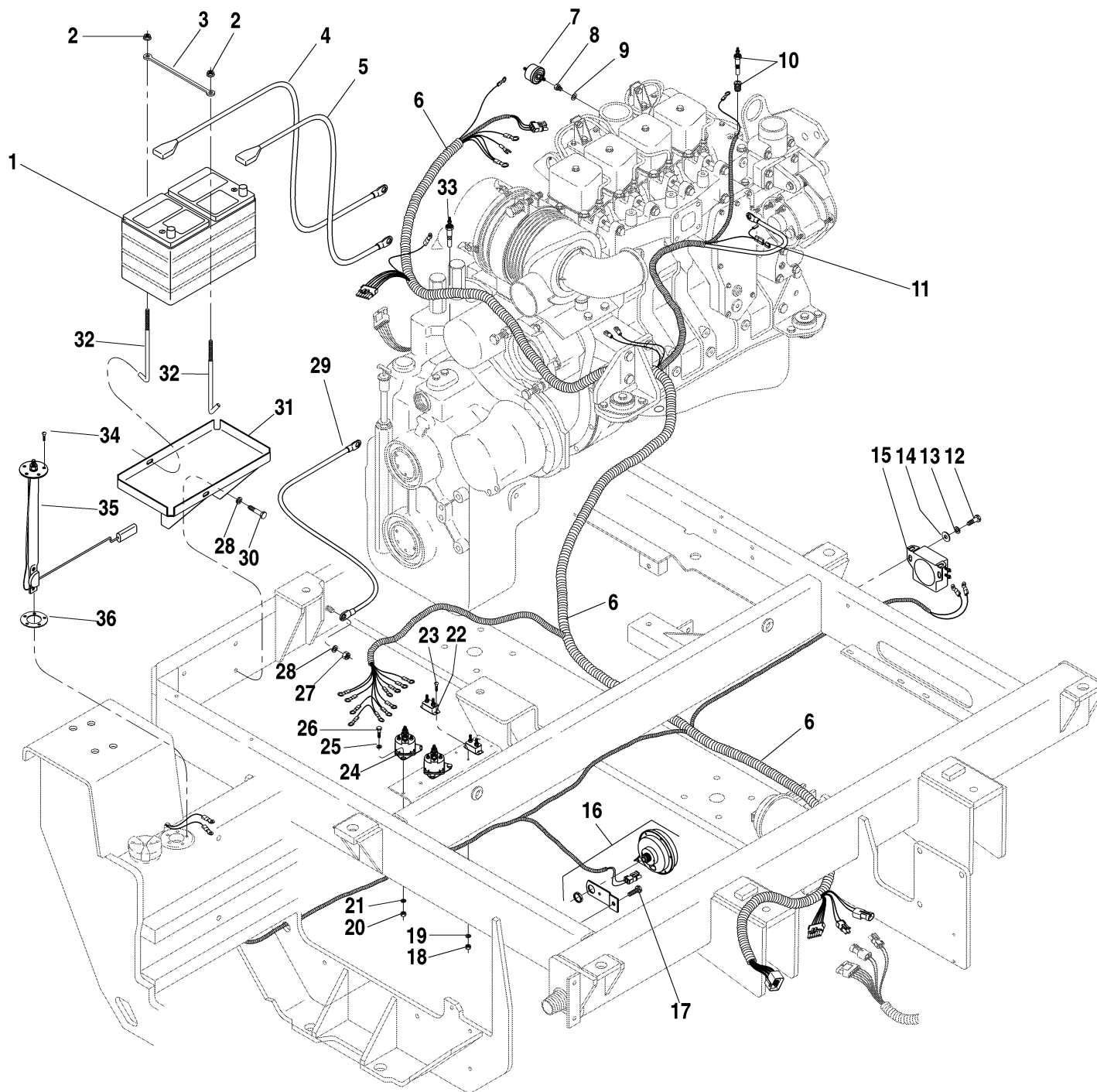
1	❶	1	Battery, 12 Volt,BCI Group 31, 925 CCA
2	P01506	2	Nut, Hx., (Included with Item 32)
3	37708X	1	Tie Down, Battery
4	65742C-21	1	Battery Cable, Negative, 30"
5	65742C-22	1	Battery Cable, Positive, 24"
6	67120D	1	Wire Harness, Frame, Engine & Transmission
7	P23217	1	Sender, Oil Pressure
8	66115X	1	Adapter
9	66114X	1	Washer
10	P23222	1	Sender, Water Temperature
11	P21787	1	Diode Module
12	P00003	2	Capscrew, Hx., 1/4"-20 x 3/4"
13	P01308	2	Lockwasher, 1/4"
14	P01402	2	Flatwasher, 1/4'
15	P13774	1	Alarm, Back-Up (Reverse)
16	P13707	1	Horn
17	P00102	1	Capscrew, Hx., 5/16"-18 x 3/4"
18	P01404	4	Nut, Hx., #10-24
19	P01306	4	Lockwasher, #10
20	P01506	4	Nut, Hx., 1/4"-20
21	P01308	4	Lockwasher, 1/4"
22	P29694	2	Circuit Breaker
23	P02054	4	Screw, Slotted,Rd. Hd., #10-24 x 1/2"
24	67789A	2	Starter Relay
25	P01402	4	Flatwasher, 1/4"
26	P00003	4	Capscrew, Hx., 1/4"-20 x 3/4"
27	P01508	1	Nut, Hx., 3/8"-16
28	P01310	5	Lockwasher, 3/8"
29	38200C-3	1	Cable, Ground
30	P00202	4	Capscrew, Hx., 3/8"-16 x 3/4"
31	67439B	1	Battery Tray
32	37704X	2	Hold Down, Battery
33	P19472	1	Sender, Transmission Oil Temperature
34	P02334	5	Screw, Slotted Rd. Hd., 10-32 x 1"
35	1100525	1	Sender, Fuel (Replaces 67155X)
36	68089X	1	Gasket, Fuel Sender

NOTES:

- ❶ Obtain Locally.

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ITEM	PART NO.	QTY.	DESCRIPTION
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1	❶	1	Battery, 12 Volt,BCI Group 31, 925 CCA
2	P01506	2	Nut, Hx., (Included with Item 32)
3	37708X	1	Tie Down, Battery
4	65742C-21	1	Battery Cable, Negative, 30"
5	65742C-22	1	Battery Cable, Positive, 24"
6	68667D	1	Wire Harness, Frame, Engine & Transmission
7	P23217	1	Sender, Oil Pressure
8	66115X	1	Adapter
9	66114X	1	Washer
10	P23222	1	Sender, Water Temperature
11	P21787	1	Diode Module
12	P00003	2	Capscrew, Hx., 1/4"-20 x 3/4"
13	P01308	2	Lockwasher, 1/4"
14	P01402	2	Flatwasher, 1/4'
15	P13774	1	Alarm, Back-Up (Reverse)
16	68663B	1	Horn
17	P00102	1	Capscrew, Hx., 5/16"-18 x 3/4"
18	P01404	4	Nut, Hx., #10-24
19	P01306	4	Lockwasher, #10
20	P01506	4	Nut, Hx., 1/4"-20
21	P01308	4	Lockwasher, 1/4"
22	P29694	2	Circuit Breaker
23	P02054	4	Screw, Slotted,Rd. Hd., #10-24 x 1/2"
24	67789A	2	Starter Relay
25	P01402	4	Flatwasher, 1/4"
26	P00003	4	Capscrew, Hx., 1/4"-20 x 3/4"
27	P01508	1	Nut, Hx., 3/8"-16
28	P01310	5	Lockwasher, 3/8"
29	38200C-3	1	Cable, Ground
30	P00202	4	Capscrew, Hx., 3/8"-16 x 3/4"
31	67439B	1	Battery Tray
32	37704X	2	Hold Down, Battery
33	P19472	1	Sender, Transmission Oil Temperature
34	P02334	5	Screw, Slotted Rd. Hd., 10-32 x 1"
35	1100525	1	Sender, Fuel (Replaces 67155X)
36	68089X	1	Gasket, Fuel Sender

NOTES:

- ❶ Obtain Locally.

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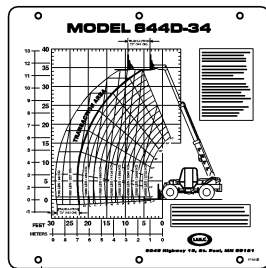
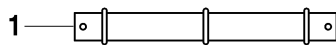
Rev. 002

Section 10 — Decals

Decal Group Common. 10.1.1

Section 10 — Optional Equipment

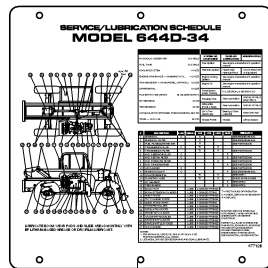
Window Assembly Enclosed Cab 10.5.1
Door Assembly Enclosed Cab 10.6.1
Windshield Assembly 10.7.1
Windshield Wiper Assembly 10.8.1
Insulatoin Assembly Enclosed Cab 10.9.1



2



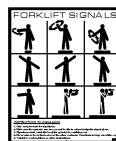
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4



5



6

DO NOT OPERATE MACHINE WHEN
LOW BRAKE PRESSURE LIGHT IS ON

7

TRANSMISSION
DECLUTCH

8



9



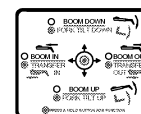
10



11



12



15

HYDRAULIC BREATHER
DO NOT FILL

16



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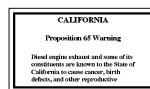
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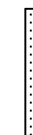


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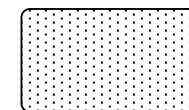


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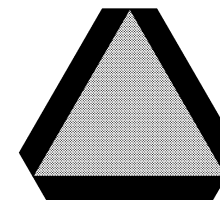
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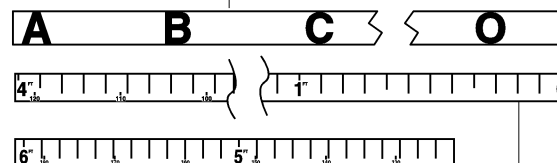
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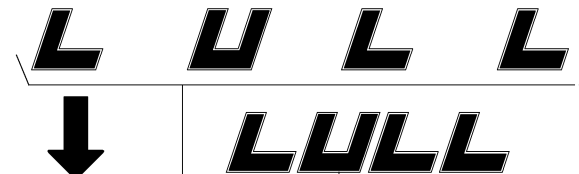
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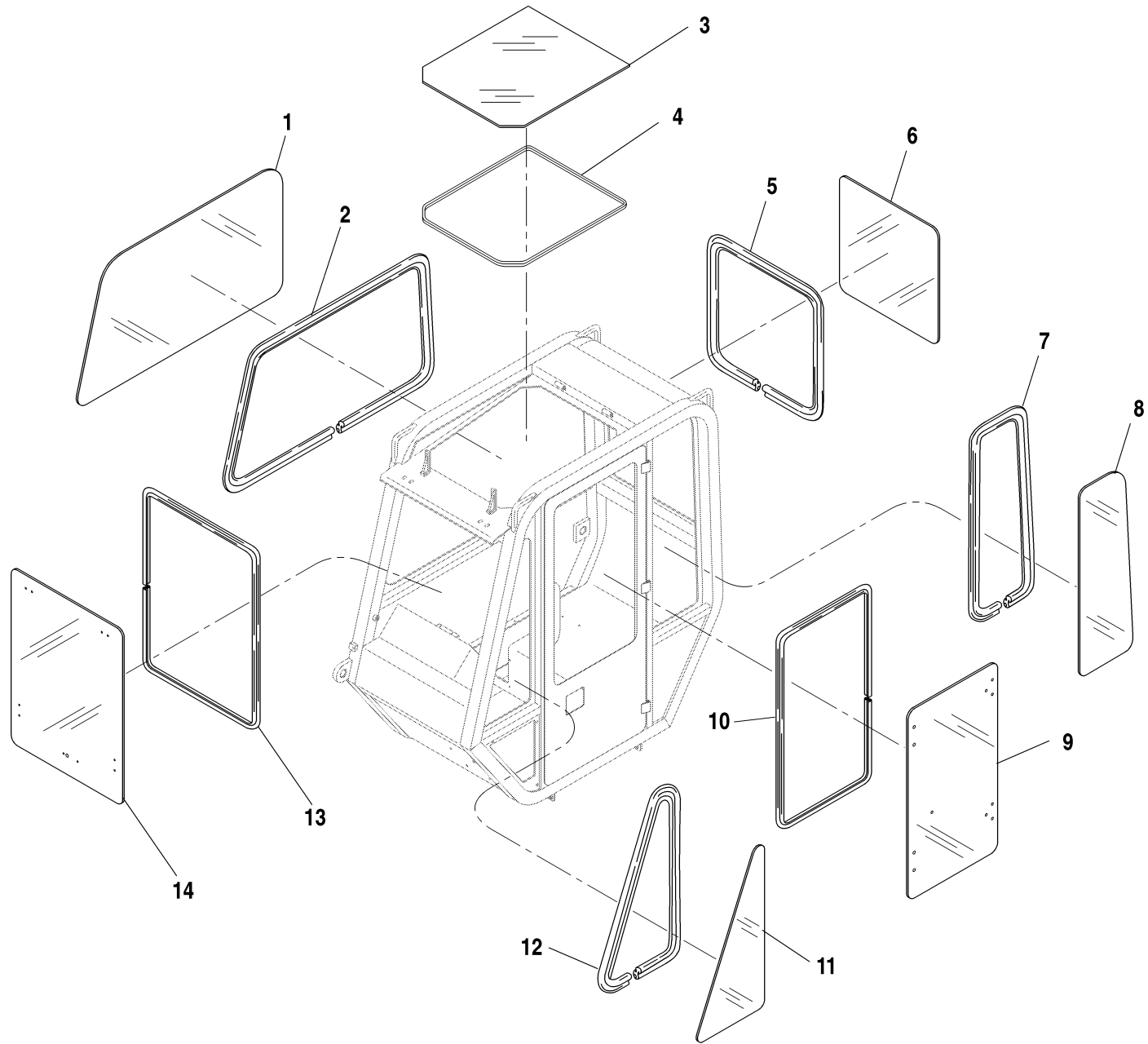
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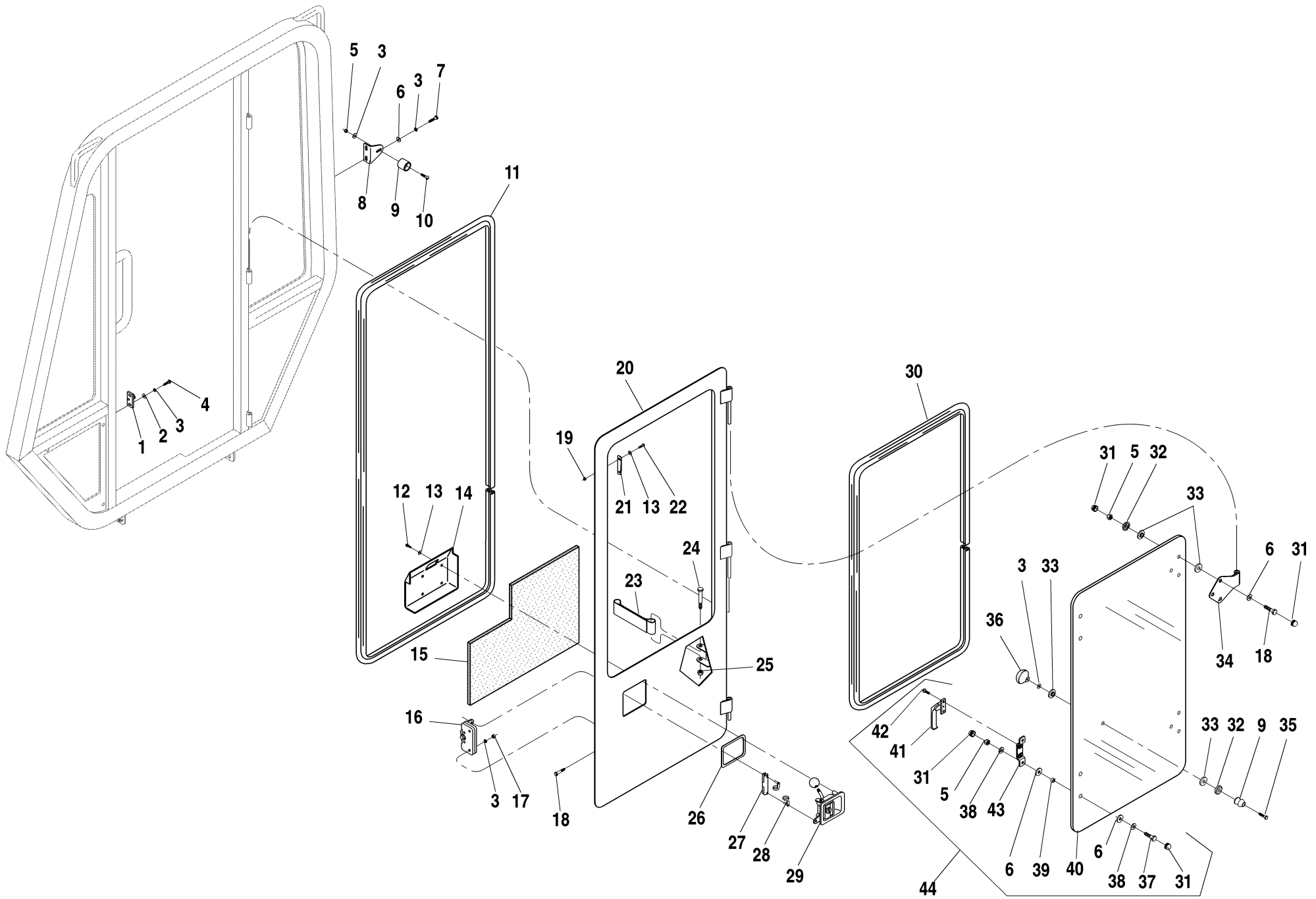
10.1.1
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ITEM	PART NO.	QTY.	DESCRIPTION
1	38718A	1	3-Ringer Hanger, Flip Card
2	67893B	1	Flip Card, Load Chart Capacities 644D-34
3	37364X	1	Holder, Flip Card
4	67712B	1	Flip Card, Lube Schedule
5	67683B	1	*Decal, Safty
6	39617B	1	*Decal, Forklift Signals
7	24906A	1	*Decal, Low Brake Pressure Warning
8	35082A	1	*Decal, Transmission Declutch
9	30487A	1	Frame Tilt
10	67270A	1	Aux
11	21319A	2	*Decal, Don't Be Careless
12	67229A	1	*Decal, Parking Brake
13	20989A	1	*Decal, Diesel Fuel Only
14	20988A	1	*Decal, Hydraulic Oil Only
15	67267A	1	*Decal, Boom Movement Control
16	39619A	1	*Decal, Hydraulic Breather
17	20964B	1	Plate, Caution
18	66044B	2	*Decal, OmniQuip
19	35092A	1	*Decal, Disconnect Battery
20	21318A	1	*Decal, Caution, Carry Load Low
21	24752B	2	*Decal, Carriage Safety
22	15731B	4	Decal, Letter "L"
23	15732B	2	Decal, Letter "U"
24	P18991	2	*Reflector, Red
25	P18992	2	*Reflector, Yellow
26	39376C	1	*Decal, "Lull" Logo - Large (18")
	38843B	2	*Decal, "Lull" Logo - Small (8")
27	26431B	2	*Decal, American Flag
28	N.S.S.	1	Plate, Serial Number
29	N.S.S	1	Plate, Attachment Capacity
30	P32958	14	Pop-Rivet, Aluminum, 1/8" dia. x.337" long
31	12750A	1	Plate, Steer Selector
32	39369A	1	Decal, California Proposition 65 Warning
33	38335C	1	Decal, Boom Extension Indicator
34	67269B	1	Decal, Pressure Test Ports
35	N12350	1	*No-Slip Surfacing (2" x 14" Adhesive Strip)

ITEM	PART NO.	QTY.	DESCRIPTION
36	39087A	1	*Foot Mat, No-Slip Adhesive Surfacing
37	25252B	1	Slow Moving Vehicle Sign
38	67886B	1	Decal, 644D
39	38304D	1	Decal, Transfer Extension Indicator, Cab
40	67796B	1	Decal, Transfer, Indicator, Frame
41	16346A	1	Decal, Arrow
42	68422B	2	Decal, LULL, Boom
43	68421B	1	Decal, LULL, Counterweight
NOTES:			
* Items Included in Decal Replacement Kit 1100779.			
N.S.S. = Not Sold Separately			
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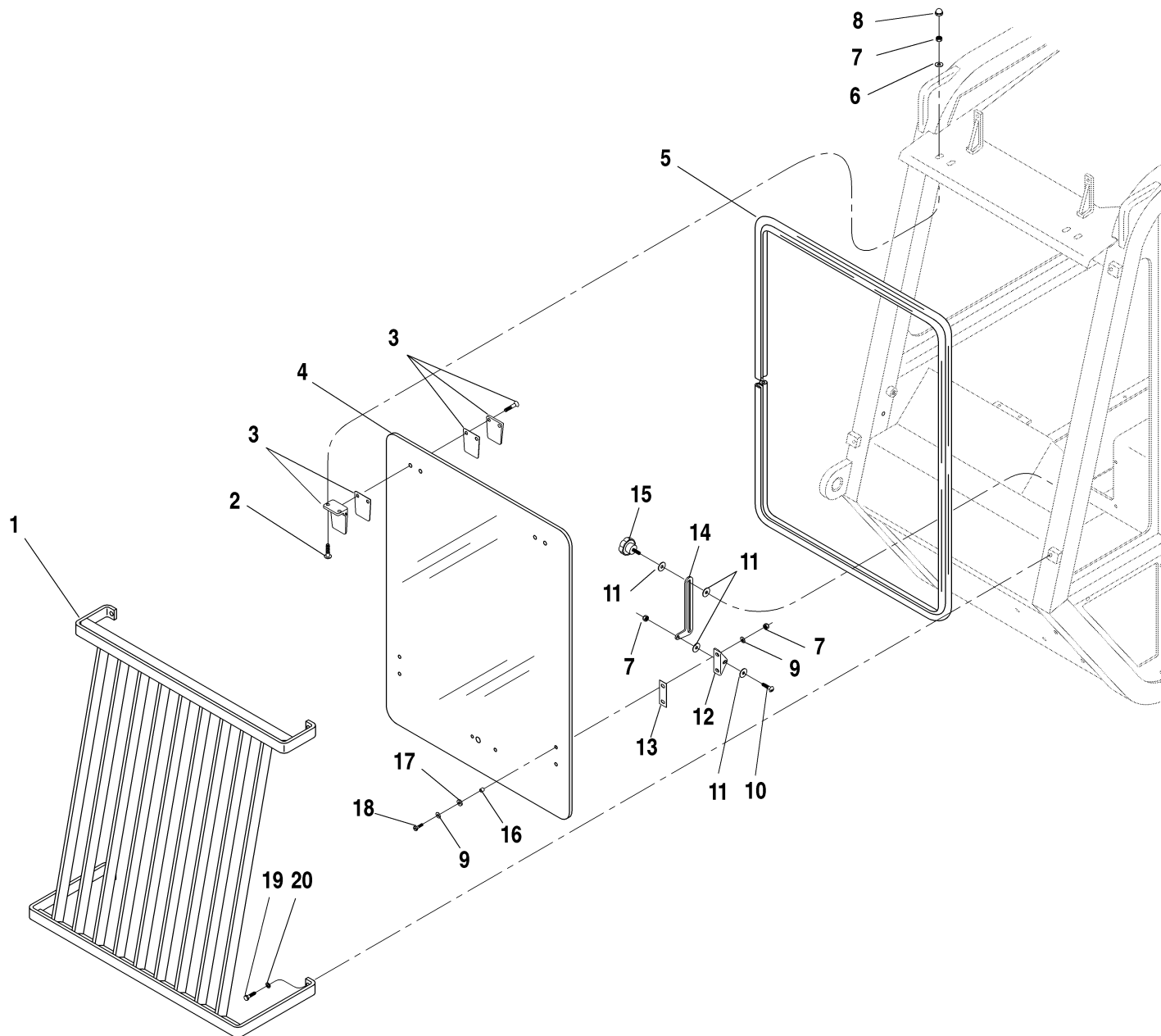


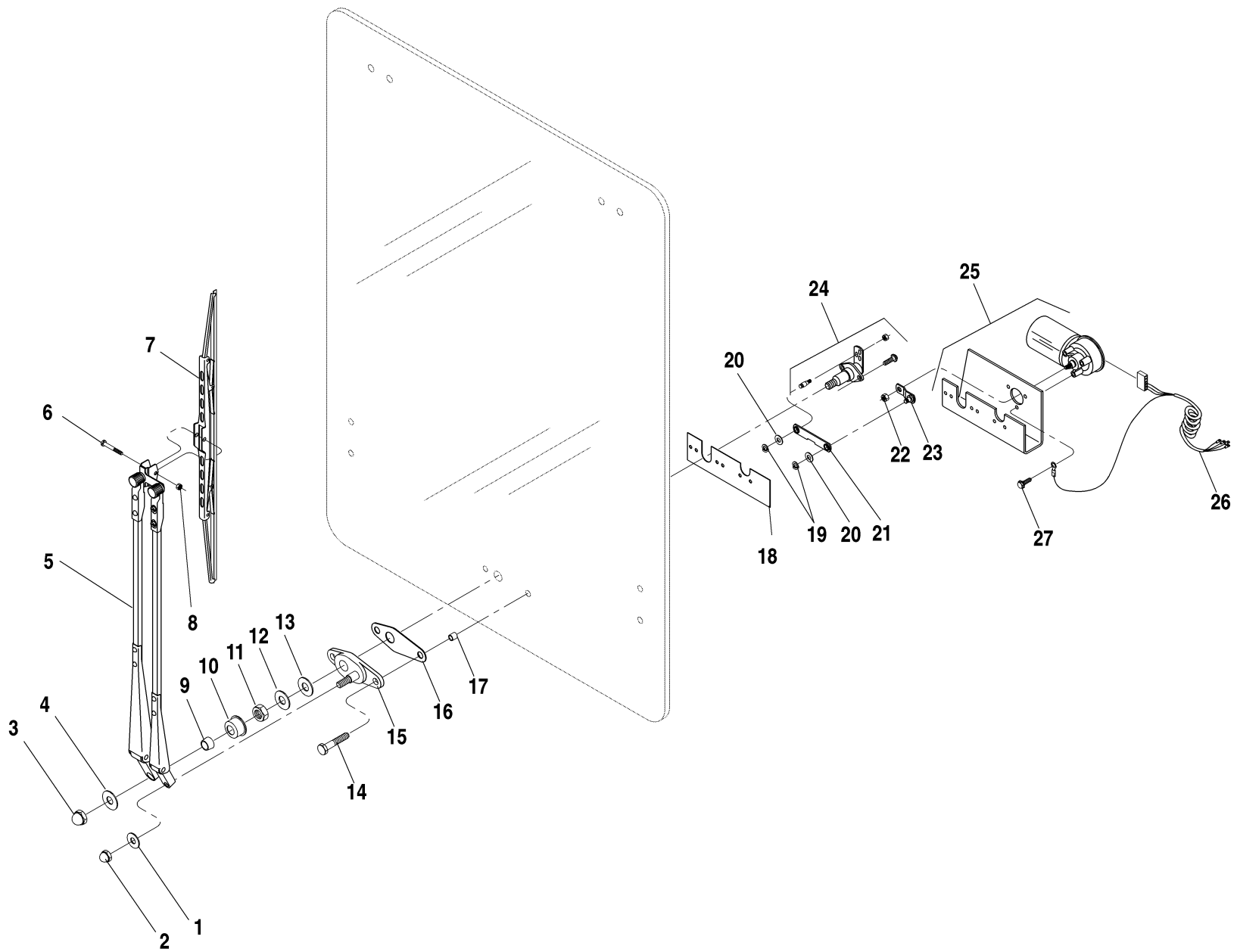


ITEM	PART NO.	QTY.	DESCRIPTION
1	37413X	1	Striker Mount
2	P01402	2	Flatwasher, 1/4"
3	P01308	2	Lockwasher, 1/4"
4	P00005	2	Capscrew, Hx., 1/4"- 20 × 1"
5	37394X	11	Locknut, Hx., 1/4" × 20
6	37398X	14	Flatwasher, 1/4"
7	P00003	1	Capscrew, Hx., 1/4"- 20 × 3/4"
8	39799A	1	Bracket, Door Holder
9	37407X	1	Door Holder, Plunger & Socket
10	37391X	1	Screw Slotted Rd, Hd., 1/4"-20 × 3/4"
11	N12365	1	Seal, Door
12	P02057	4	Screw Slotted Rd, Hd., #10-24 × 3/4"
13	P01400	4	Flatwasher, #10
14	37414X	1	Cover, Latch
15	38870B	1	Ins, door
16	37412X	1	Latch, Rotary
17	P01656	2	Locknut, Hx., 1/4"-20
18	P00007	2	Capscrew, Hx., 1/4"- 20 × 1 1/2"
19	P01654	4	Locknut, Hx., #10-24
20	38913C	1	Door
21	37415X	2	Bracket, Latch, Window
22	P02059	4	Screw Slotted Rd, Hd., #10-24 × 1"
23	37416X	1	Strap
24	P00110	1	Capscrew, Hx., 5/16" -18 × 2 1/2"
25	P16057	1	Locknut, Hx., 5/16" × 18
26	37411X	1	Seal, Latch
27	P91534	1	Link, Connecting
28	P91533	2	Pin, Spring
29	P91531	1	Handle, Paddle Assembly
30	N12364	1	Seal, Door Glass
31	37406X	10	Cap, Acorn
32	37410X	12	Glass Mount
33	37409X	12	Washer, Shoulder, Glass Mount
34	39790B	2	Hinge
35	P04060	1	Capscrew, Hx., M6.1 × 50mm GR 8.8
36	37408X	1	Knob
37	P00006	4	Capscrew, Hx., 1/4"- 20 × 1 1/4"

ITEM	PART NO.	QTY.	DESCRIPTION
38	37392X	2	Washer, Fiber
39	39222A	4	Spacer, Window
40	38872B	1	Glass, Door, Hinged
41	37405X	2	Latch
42	37391X	2	Screw, Slotted Rd. Hd., 1/4"-20 × 3/4"
43	67596X	2	Mount, Handle
44	37403X	2	Kit, Handle Mounting

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ITEM	PART NO.	QTY.	DESCRIPTION
1	P01400	1	Flatwasher,
2	P91581	1	Nut, Acorn #10-24
3	P91583	1	Nut, Acorn
4	P91584	1	Flatwasher
5	37390X	1	Wiper Arm, Dual
6	P91577	1	Screw, Slotted, #4-40 × 7/8"
7	P32558	1	Blade, Wiper
8	P01650		Locknut, Hx., 4-40
9	P91585	1	Driver
10	P91586	1	Cap, Rubber
11	P91581	1	Nut, Hx
12	P91588	1	Washer, Steel
13	P91589	1	Washer, Plastic
14	37399X	2	Capscrew, Hx., 1/4"-28 × 3/4"
15	P32556	1	Adapter, Pantographic
16	P91579	1	Gasket
17	39222A	2	Sleeve, Plastic
18	39223A	1	Gasket, Wiper Motor
19	P91601	2	Spring Clip
20	P91600	2	Flatwasher
21	P91599	1	Link
22	P01531	1	Nut, Hx., 3/8"-24
23	P32555	1	Driver Arm
24	P32554	1	Shaft, Pivot
25	P32551	1	Wiper Motor (Includes Bracket)
REF	P32568	1	Wiper Motor
26	38366B	1	Cable, Wiper Motor
27	P91598	3	Screw

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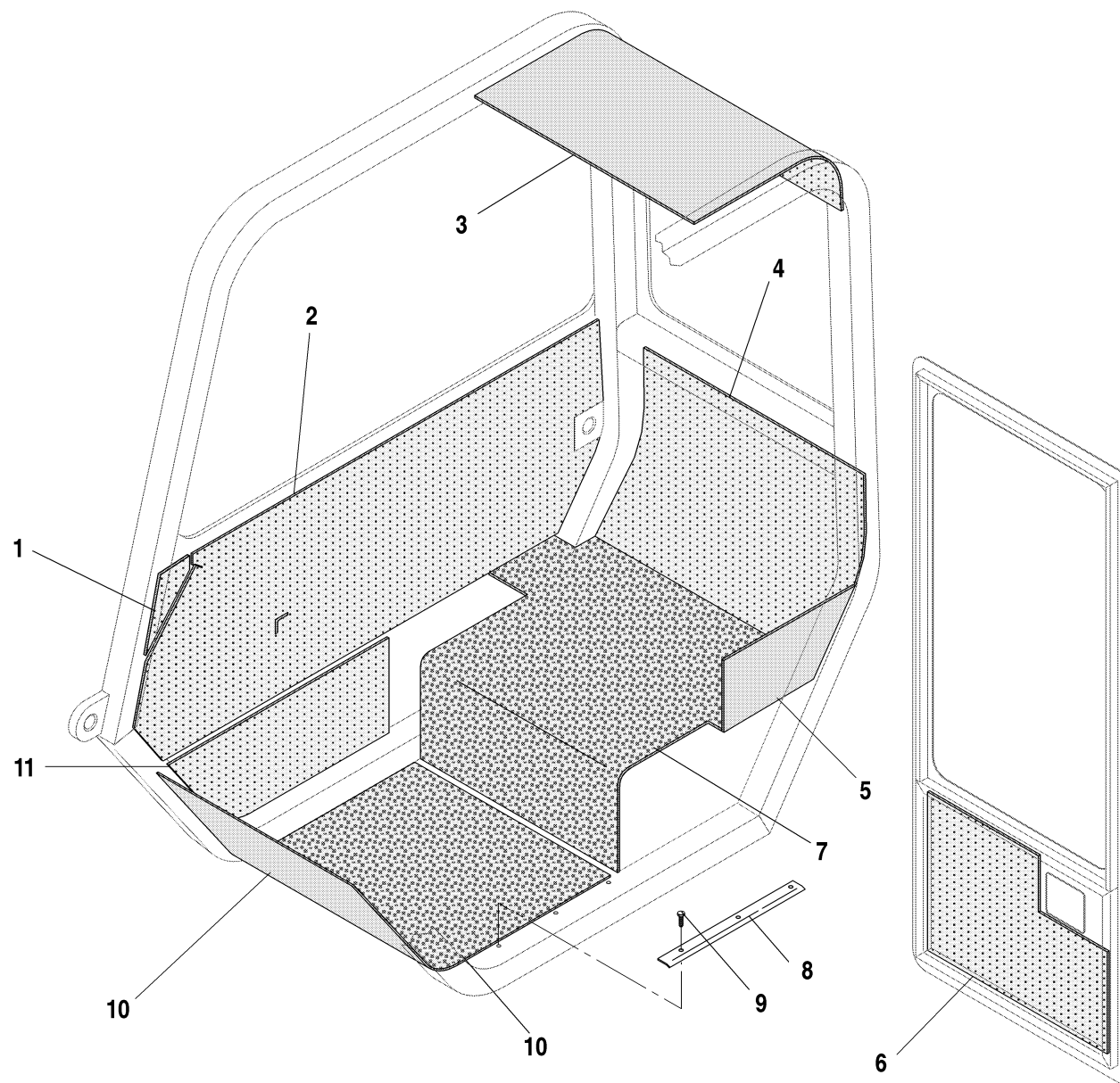


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Section 11 — Attachments

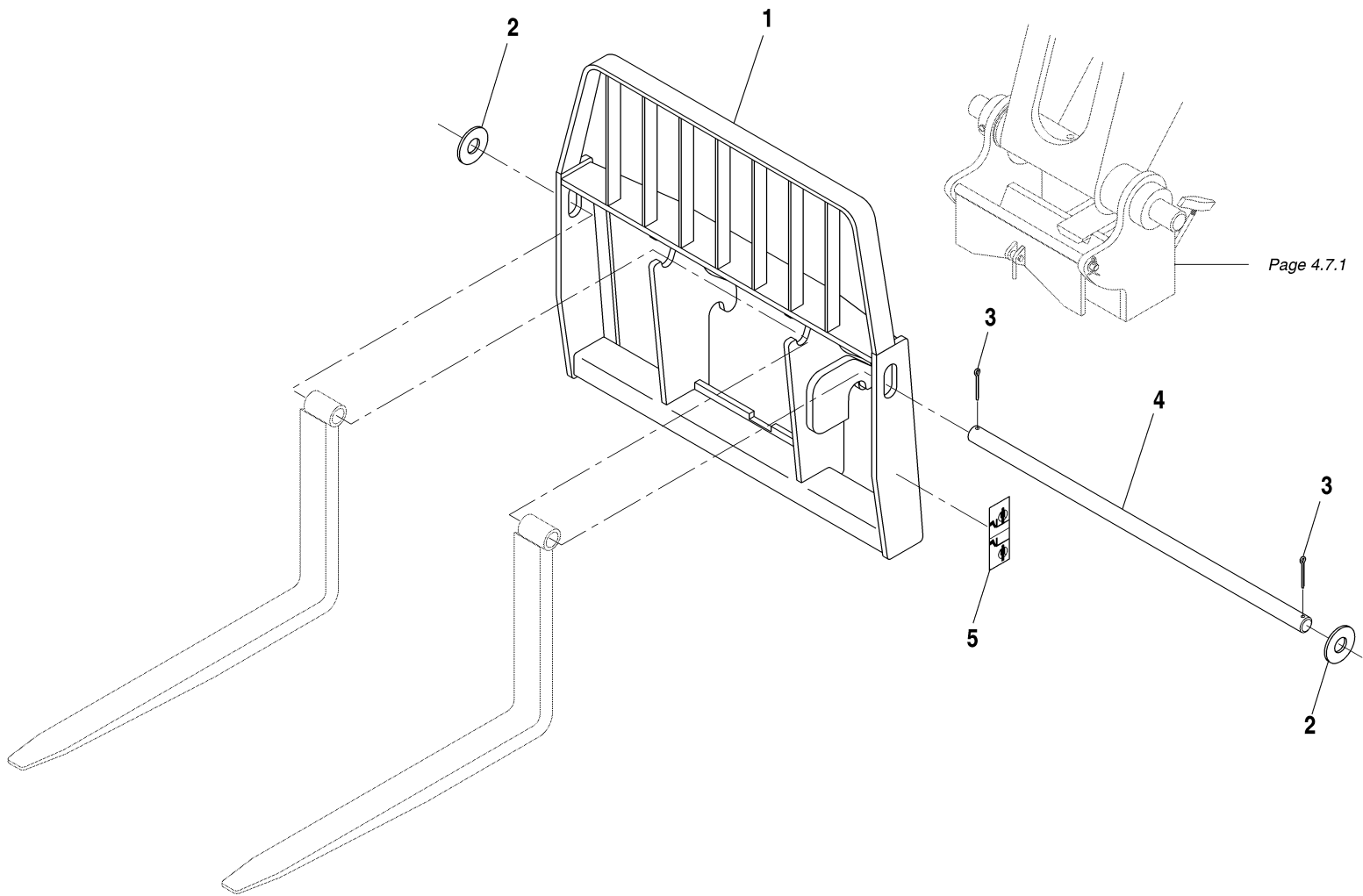
Standard (Non-Tilt) Fork Carriage Assembly 11.1.1

Framers (Non-Tilt) Fork Carriage Assembly 11.2.1

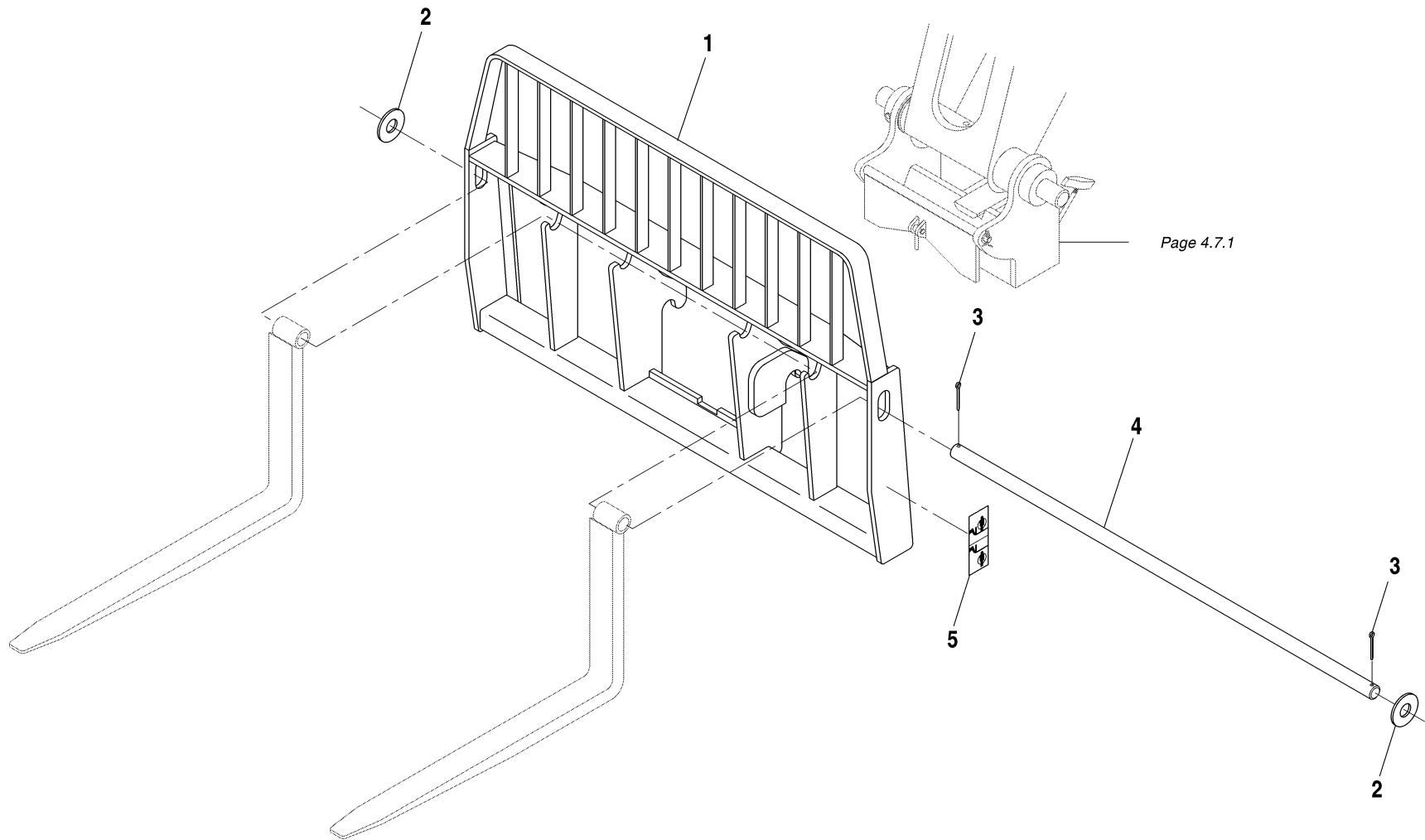
Standard Tilting Fork Carriage Assembly 11.3.1

Framers Tilting Fork Carriage Assembly. 11.4.1

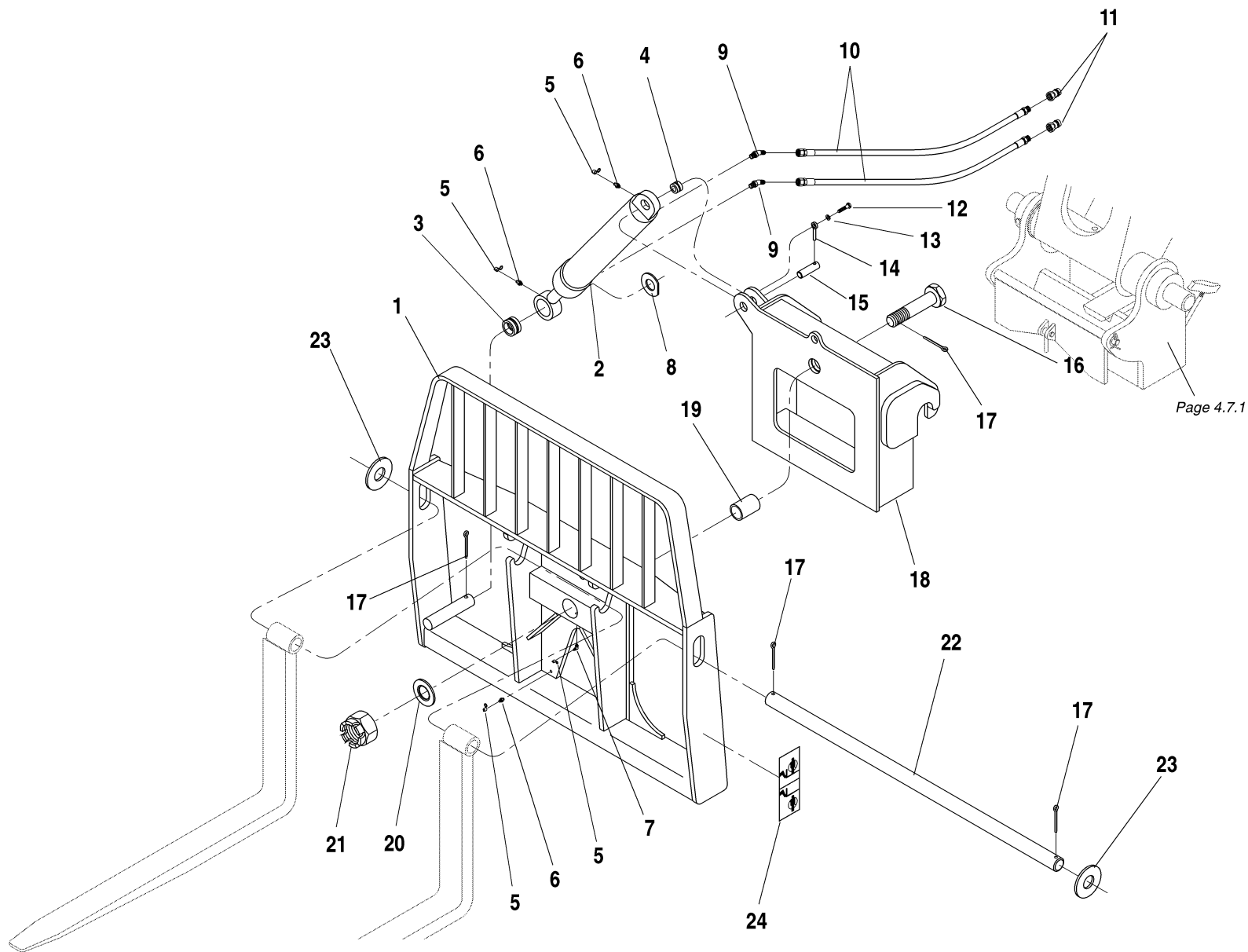
Tilt Carriage Cylinder Assembly 11.5.1



ITEM	PART NO.	QTY.	DESCRIPTION		Rev. 000
REF	48000	-	Standard (Non-Tilt) Fork Carriage Assembly (Includes items 1–5)		
1	38000D	1	Carriage, Standard (Non-Tilt)		
2	18129A	2	Washer, Fork Shaft		
3	P03906	2	Cotter Pin, 3/8" × 3"		
4	38064A	1	Fork Shaft		
5	24752B	2	Decal, Carriage Safety		
REF	38026B	-	Pallet Fork, 42" × 4" × 2"		
REF	38025B	-	Pallet Fork, 48" × 4" × 2"		
REF	38117B	-	Pallet Fork, 60" × 4" × 2"		
REF	38118B	-	Cubing Fork, 48" × 2" × 2"		
REF	17103B	-	Lumber Fork, 48" × 6" × 1 1/2"		
				644D-34 S/N 108–	
STANDARD (NON-TILT) FORK CARRIAGE ASSEMBLY 11.1.1					644D ▼



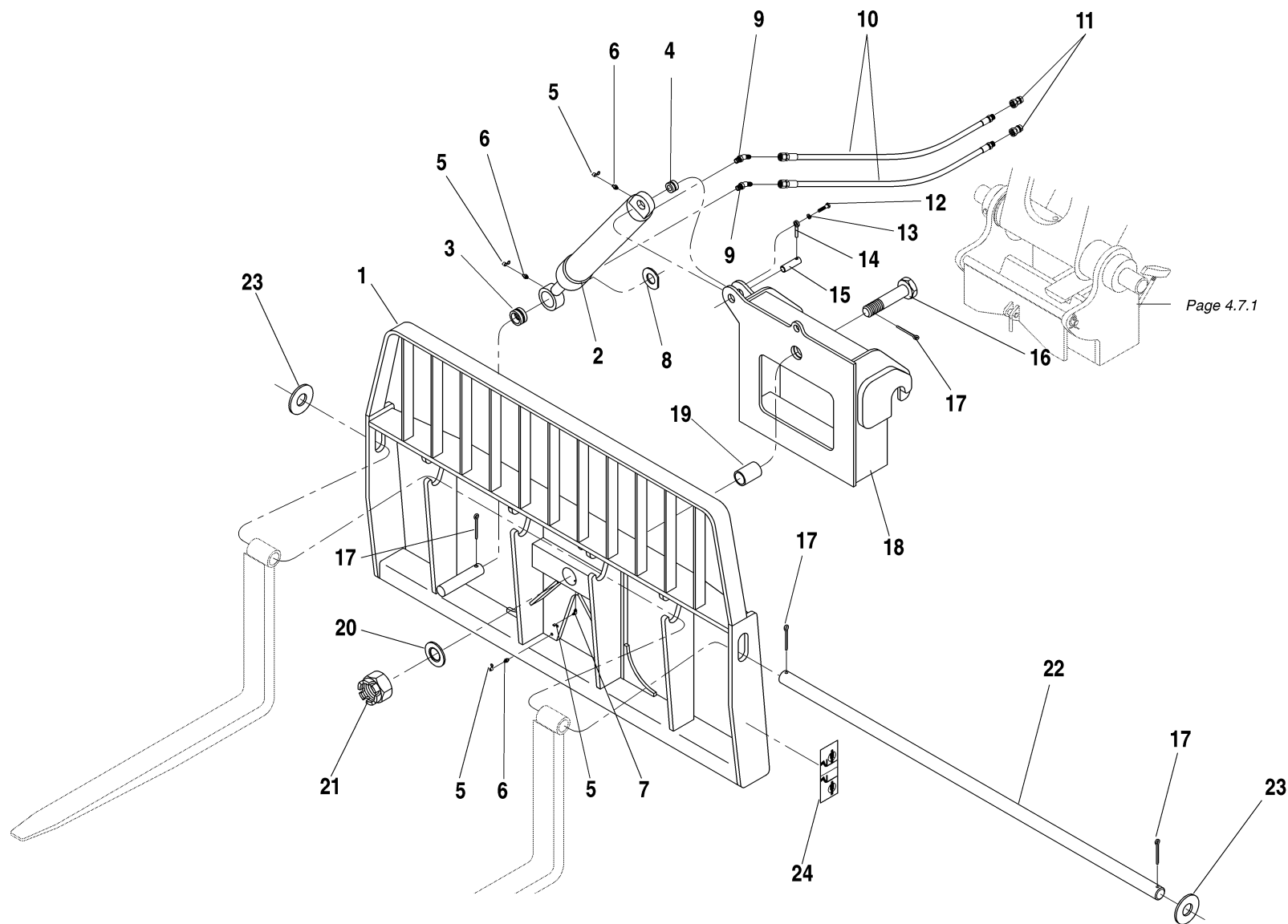
ITEM	PART NO.	QTY.	DESCRIPTION		Rev. 000
REF	48002	-	Framers (Non-Tilt) Fork Carriage Assembly (Includes items 1–5)		
1	38001D	1	Carriage, Framers (Non-Tilt)		
2	18129A	2	Washer, Fork Shaft		
3	P03906	2	Cotter Pin, 3/8" × 3"		
4	16207A	1	Fork Shaft		
5	24752B	2	Decal, Carriage Safety		
REF	38026B	-	Pallet Fork, 42" × 4" × 2"		
REF	38025B	-	Pallet Fork, 48" × 4" × 2"		
REF	38117B	-	Pallet Fork, 60" × 4" × 2"		
REF	38118B	-	Cubing Fork, 48" × 2" × 2"		
REF	17103B	-	Lumber Fork, 48" × 6" × 1 1/2"	644D-34 S/N 108–	
REF	23610B	-	Lumber Fork, 60" × 6" × 1 1/2"		



ITEM	PART NO.	QTY.	DESCRIPTION
REF	48001	-	Standard Tilting Fork Carriage Assembly (Includes items 1-23)
1	38002D	1	Carriage, Standard Tilting
2	66218B	1	Cylinder, Tilting Carriage w/O-Ring Ports (See Page 11.5.1 for Breakdown)
3	16228A	1	Bushing, Cylinder - Rod End
4	16227A	1	Bushing, Cylinder - Base End
5	P32689	5	Cover, Grease Fitting
6	P16611	4	Grease Fitting
7	P15337	1	Grease Fitting, 90°
8	16323A	1	Washer, Special
9	P19815	2	45° Elbow, O-Ring
10	37863X	2	Hyd. Hose, 3/8" × 40" (O-Ring Ends)
11	66136X	2	Male, Quick Coupler
12	P00403	1	Capscrew, Hx., 1/2"-13 × 1 1/4"
13	P01312	1	Lockwasher, 1/2"
14	35707A	1	Lock Pin
15	38014A	1	Pin, Tilt Cylinder
16	38065A	1	Pivot Shaft
17	P03906	4	Cotter Pin, 3/8" × 3"
18	38004C	1	Inner Carriage
19	38013A	1	Sleeve, Pivot
20	38066A	1	Washer, Pivot
21	37794X	1	Castle Nut, Hx., 2"-12
22	38064A	1	Fork Shaft
23	18129A	2	Washer, Fork Shaft
24	24752B	2	Decal, Carriage Safety
REF	38026B	-	Pallet Fork, 42" × 4" × 2"

ITEM	PART NO.	QTY.	DESCRIPTION
REF	38025B	-	Pallet Fork, 48" × 4" × 2"
REF	38117B	-	Pallet Fork, 60" × 4" × 2"
REF	38118B	-	Cubing Fork, 48" × 2" × 2"
REF	17103B	-	Lumber Fork, 48" × 6" × 1 1/2"
REF	23610B	-	Lumber Fork, 60" × 6" × 1 1/2"
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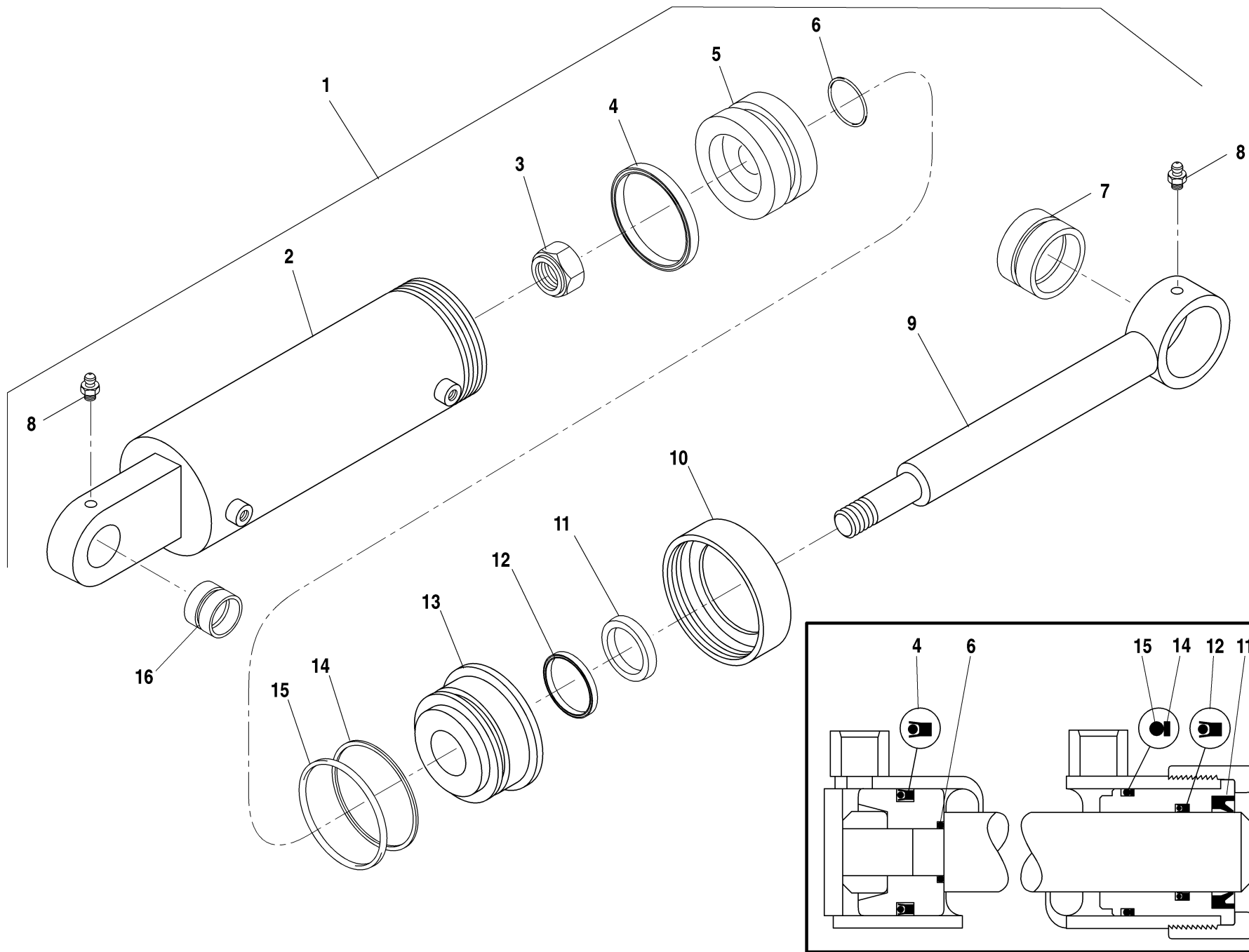
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ITEM	PART NO.	QTY.	DESCRIPTION
REF	48003	-	Framers Tilting Fork Carriage Assembly (Includes items 1–23)
1	38003D	1	Carriage, Framers Tilting
2	66218B	1	Cylinder, Tilting Carriage w/O-Ring Ports (Includes Items 3 & 4) (See Page 11.5.1 for Breakdown)
3	16228A	1	Bushing, Cylinder - Rod End
4	16227A	1	Bushing, Cylinder - Base End
5	P32689	5	Cover, Grease Fitting
6	P16611	4	Grease Fitting
7	P15337	1	Grease Fitting, 90°
8	16323A	1	Washer, Special
9	P19815	2	45° Elbow, O-Ring
10	37863X	2	Hyd. Hose, 3/8" × 40" (O-Ring Ends)
11	66136X	2	Male, Quick Coupler, O-Ring
12	P00403	1	Capscrew, Hx., 1/2"-13 × 1 1/4"
13	P01312	1	Lockwasher, 1/2"
14	35707A	1	Lock Pin
15	38014A	1	Pin, Tilt Cylinder
16	38065A	1	Pivot Shaft
17	P03906	4	Cotter Pin, 3/8" × 3"
18	38004C	1	Inner Carriage
19	38013A	1	Sleeve, Pivot
20	38066A	1	Washer, Pivot
21	37794X	1	Castle Nut, Hx., 2"-12
22	16207A	1	Fork Shaft
23	18129A	2	Washer, Fork Shaft
24	24752B	2	Decal, Carriage Safety
REF	38026B	-	Pallet Fork, 42" × 4" × 2"

ITEM	PART NO.	QTY.	DESCRIPTION
REF	38025B	-	Pallet Fork, 48" × 4" × 2"
REF	38117B	-	Pallet Fork, 60" × 4" × 2"
REF	38118B	-	Cubing Fork, 48" × 2" × 2"
REF	17103B	-	Lumber Fork, 48" × 6" × 1 1/2"
REF	23610B	-	Lumber Fork, 60" × 6" × 1 1/2"
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REF	37050X	1	Seal Kit
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NOTES:

- * Items Included in Seal Kit.

N.S.S. = Not Sold Separately

[illegible]

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N12354	 3.3.1, 10.5.1	P00245	 3.3.1	P01305	 9.2.1			P01662	2.1.1, 2.1.1.1, 2.1.1.2
N12356	 10.5.1, 10.7.1	P00284	2.1.1, 2.1.1.1, 2.1.1.2	P01306	.. 3.2.1, 9.3.1, 9.3.1.1			P01680	 2.2.1
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P32558	 10.8.1	P91577	 10.8.1	10701308	 4.2.1	1100334	1.5.1, 1.6.1	17103B	 11.1.1, 11.2.1, 11.3.1, 11.4.1
P32568	 10.8.1	P91579	 10.8.1	10701312	 2.4.1.1	1100339	6.3.1.1		
P32575	 3.4.1, 3.4.1.1	P91581	 10.8.1	10701402	 4.2.1	1100372	6.3.1.1	18129A	 11.1.1, 11.2.1, 11.3.1, 11.4.1
P32578	 7.4.1	P91583	 10.8.1	10701404	 2.4.1.1	1100389	..8.2.1, 8.2.1.1, 8.5.1		
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P32689	... 4.1.1, 4.3.1, 4.4.1, 11.3.1, 11.4.1	P91585	 10.8.1	10701658	 2.4.1.1	1100391	8.2.1.1	20988A	 10.1.1
P32693	 7.4.1	P91586	 10.8.1	10704281	 1.6.1, 3.6.1	1100392	1.1.1	20989A	 10.1.1
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