

Model JS9020 Hillco Leveling System  
For Serial Numbers JS9020-22001 thru JS9020-22999



# **Model JS9020 Sidehill Leveling System Parts Manual**

SN JS9020-22001 thru JS9020-22999  
For John Deere S680, S690, S780 & S790  
S Series Combines



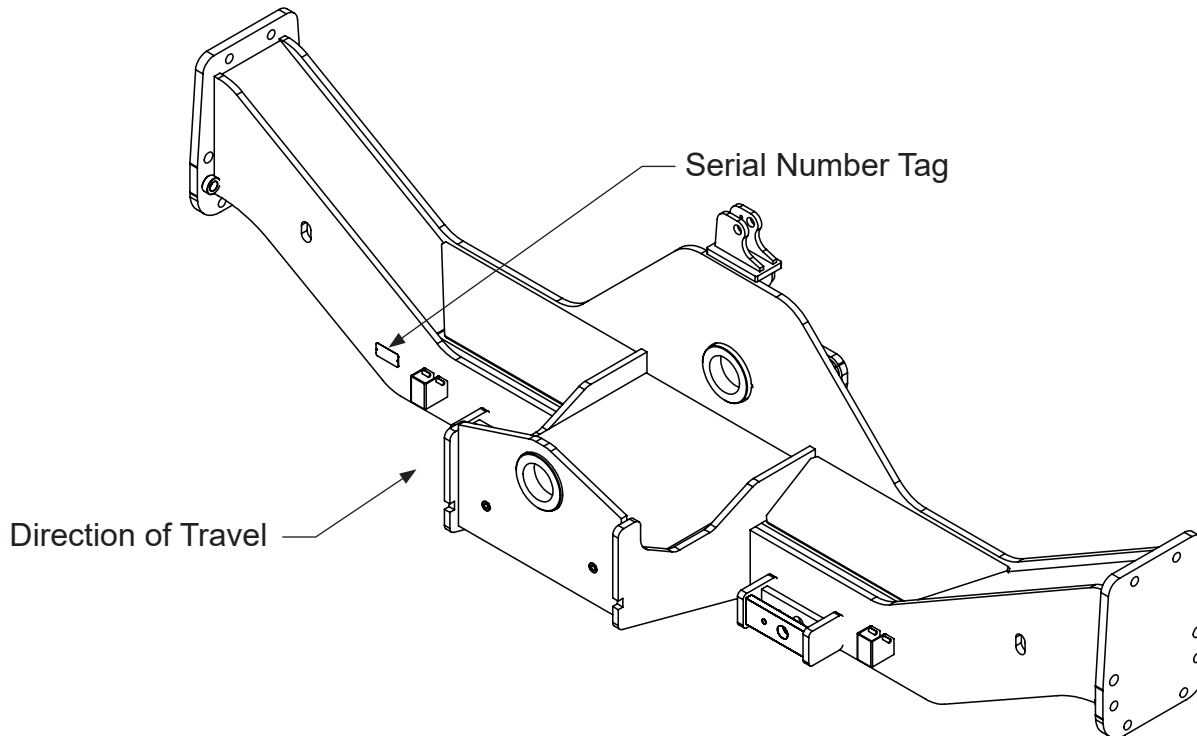
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<b>Contact Information</b>			
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	Fax		208-937-2280

## **GENERAL INFORMATION**

### **SERIAL NUMBER LOCATION**



### **TEXT AND ILLUSTRATIONS**

The arrangement of this parts catalog is for easy identification of parts. All parts are illustrated in exploded views in proper relation to each other. Some diagrams refer to other pages for further information. Reference numbers used in the illustrations refer to line numbers in the part lists. The part lists appear to the right or below all diagrams and correspond with those diagrams. Included in the part lists, along with the reference numbers are part numbers, part descriptions and the quantity of the part required per leveling system.

### **ABBREVIATIONS**

**SN** “Serial Number” refers to the serial number given to each leveling system (by Hillco Technologies), as well as the serial number given to the combine (by the specific combine manufacturer) the leveling system is installed. See above for the leveling system’s serial number location. This abbreviation is used interchangeably in both instances. Each Model JS9020 Leveling System uses the following serial number format: JS9020-XXXXX (sequential numbers).

**ASM** “Assembly” refers to a whole grouping of parts (shown in the diagram corresponding with the page where “ASM” is shown unless otherwise noted). Some assemblies have parts that are sold separately, however some must be purchased as a single unit. Hillco Product Specialists will be able to assist you with any questions.

**NS** “Not Shown” refers to a part that is not depicted in the illustration.

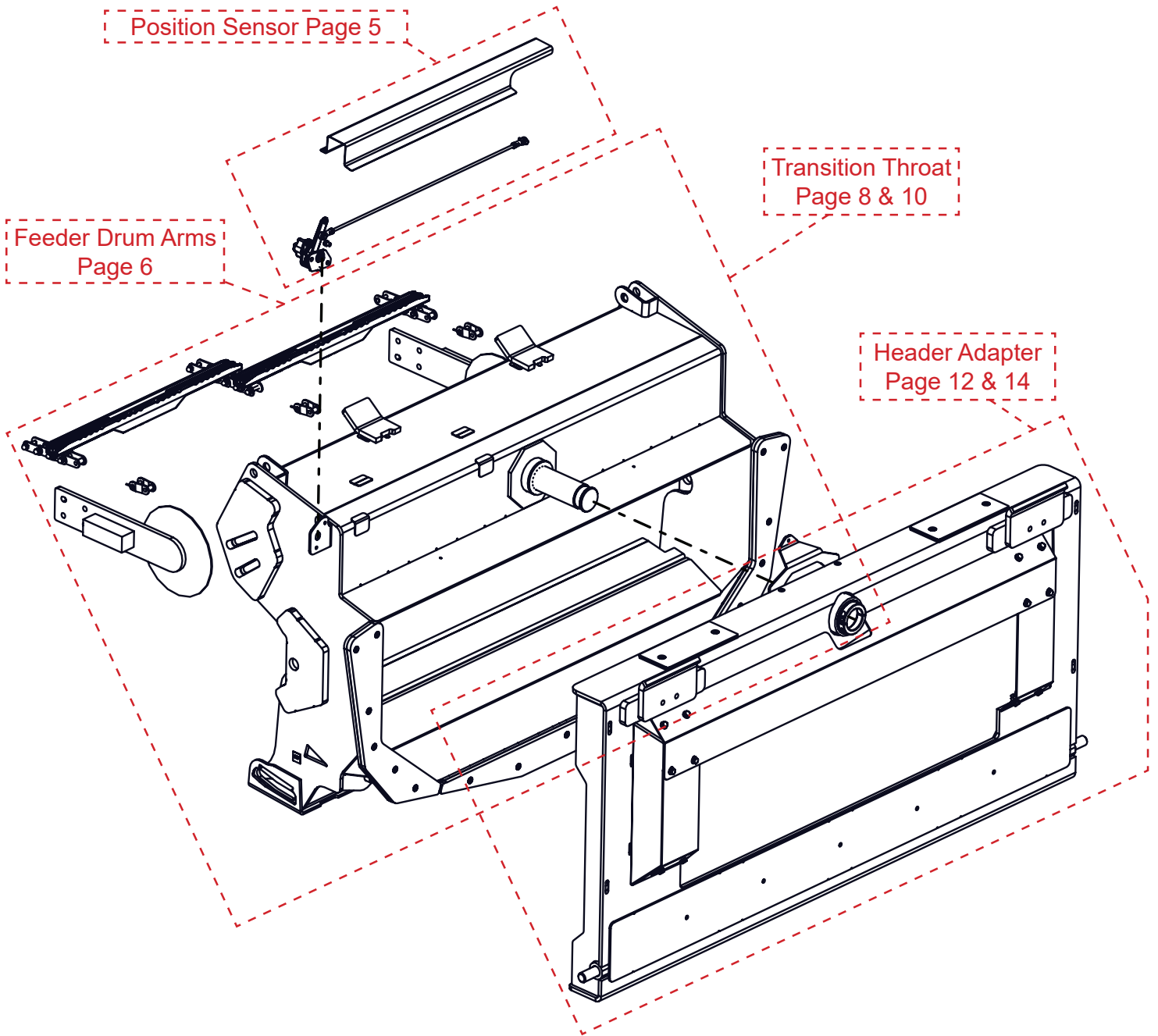
### **RIGHT AND LEFT IDENTIFICATION**

The reference to right-hand and left-hand in this catalog is identified by the operator sitting in the operator’s seat, looking toward the front of the machine (in normal forward travel).

### **PART ORDERS**

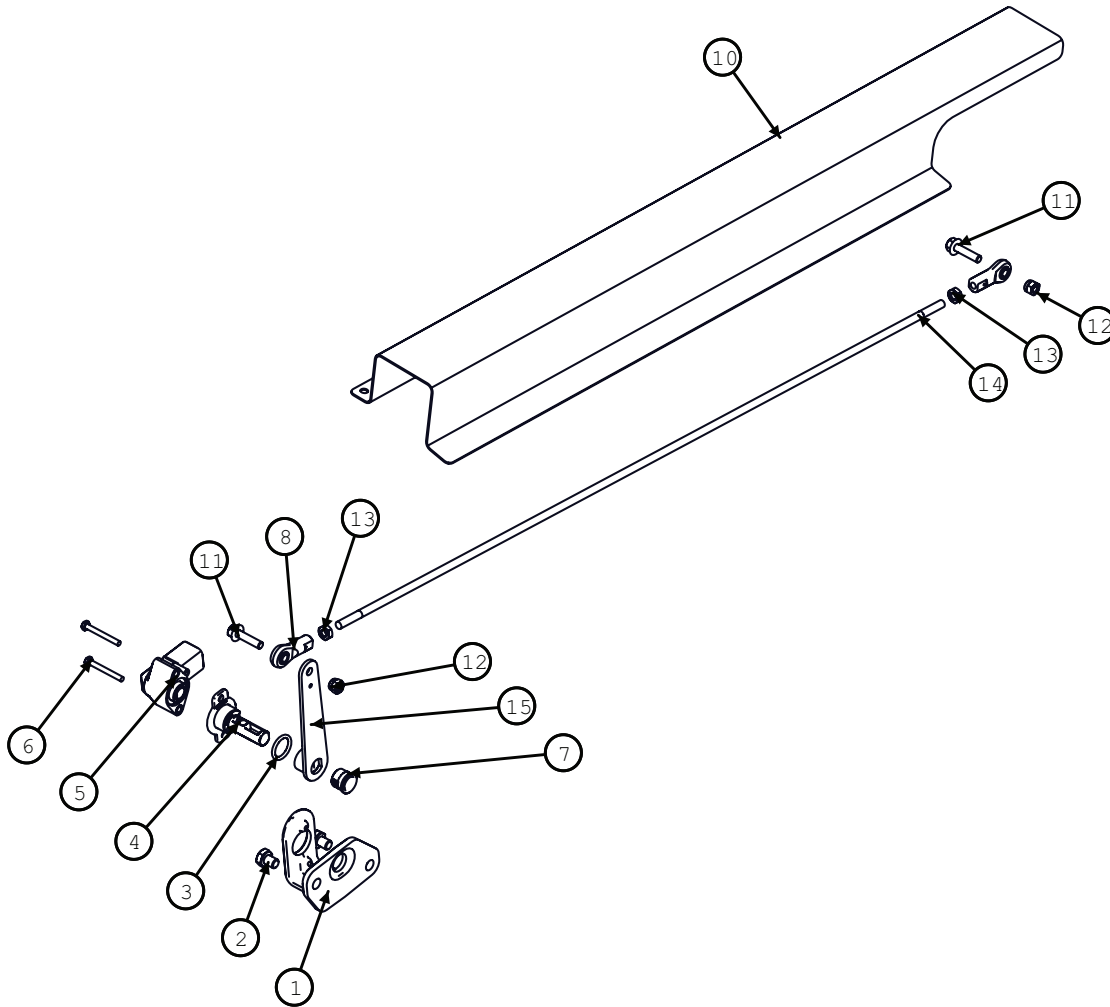
Orders must specify product model, serial number, correct part number, complete description, quantity required, method of shipment, shipping address, and billing address.

## TRANSITION



Model JS9020 Hillco Leveling System  
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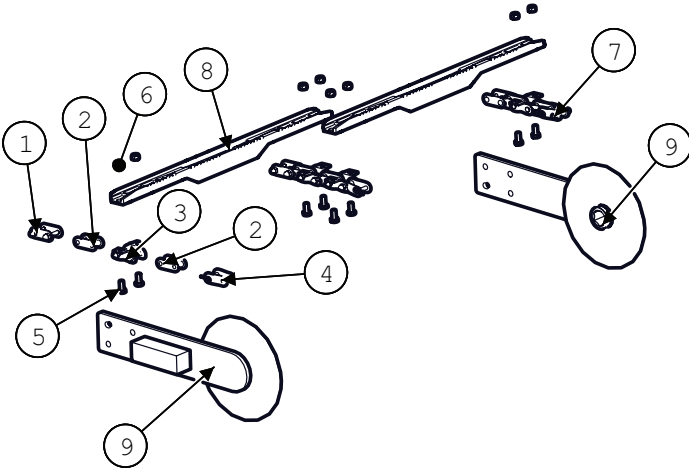
**TRANSITION TILT SENSOR**



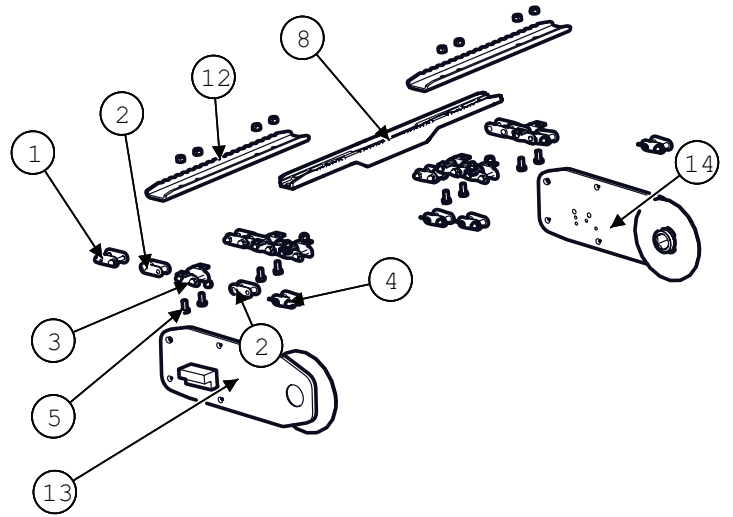
TRANSITION POSITION SENSOR			
BOM ID	Part No.	Qty	Description
1	151321	1	BRACKET, SENSOR
2	122.008.020	2	BOLT,HX,CL8.8 M8X20
3	151391	1	O-RING, 11/16 ID
4	151401	1	SENSOR SHAFT,
5	151381	1	SENSOR, ROTATION,
6	170.004.035	2	BOLT, HX,CL8.8
7	151361	1	BUSHING,
8	151881	2	ROD END, BALL JOINT,
9	201.006.036	1	PIN,ROLL M6X36
10	1295541	1	SENSOR LINKAGE SHIELD
11	122.006.025	2	BOLT,HX,FL,CL10.9 M6X25
12	191.006	2	NUT,HX,NYL,CL8 M6
13	184.004	2	NUT,HX,JAM,GR5 1/4-28
14	1295502	1	SENSOR ROD
15	151371	1	ARM, TILT SENSOR

**Feeder Drum Arms and Chain Extensions**

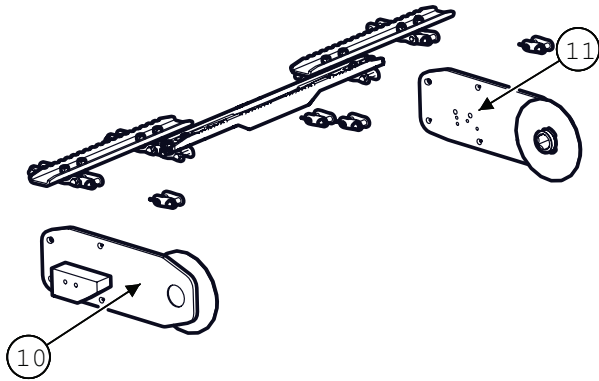
**10" Drum, 3 Strand**



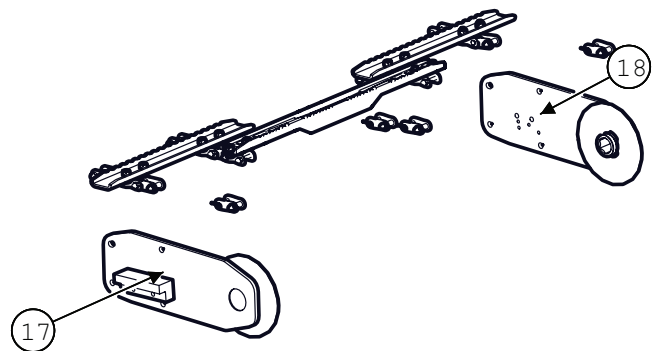
**8" Drum, Full Travel, Hydraulic Fore/Aft**



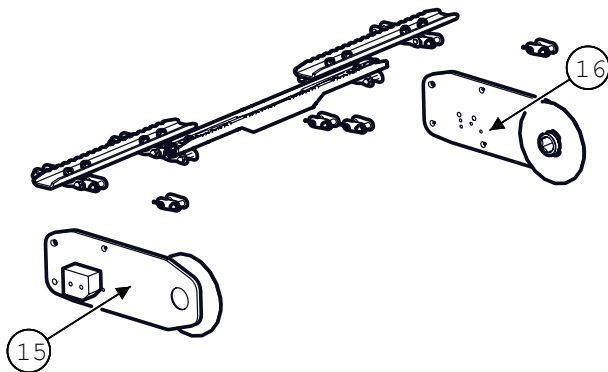
**8" Drum, Limited Travel**



**8" Drum, Full Travel**



**8" Drum, Limited Travel, Hydraulic Fore/Aft**

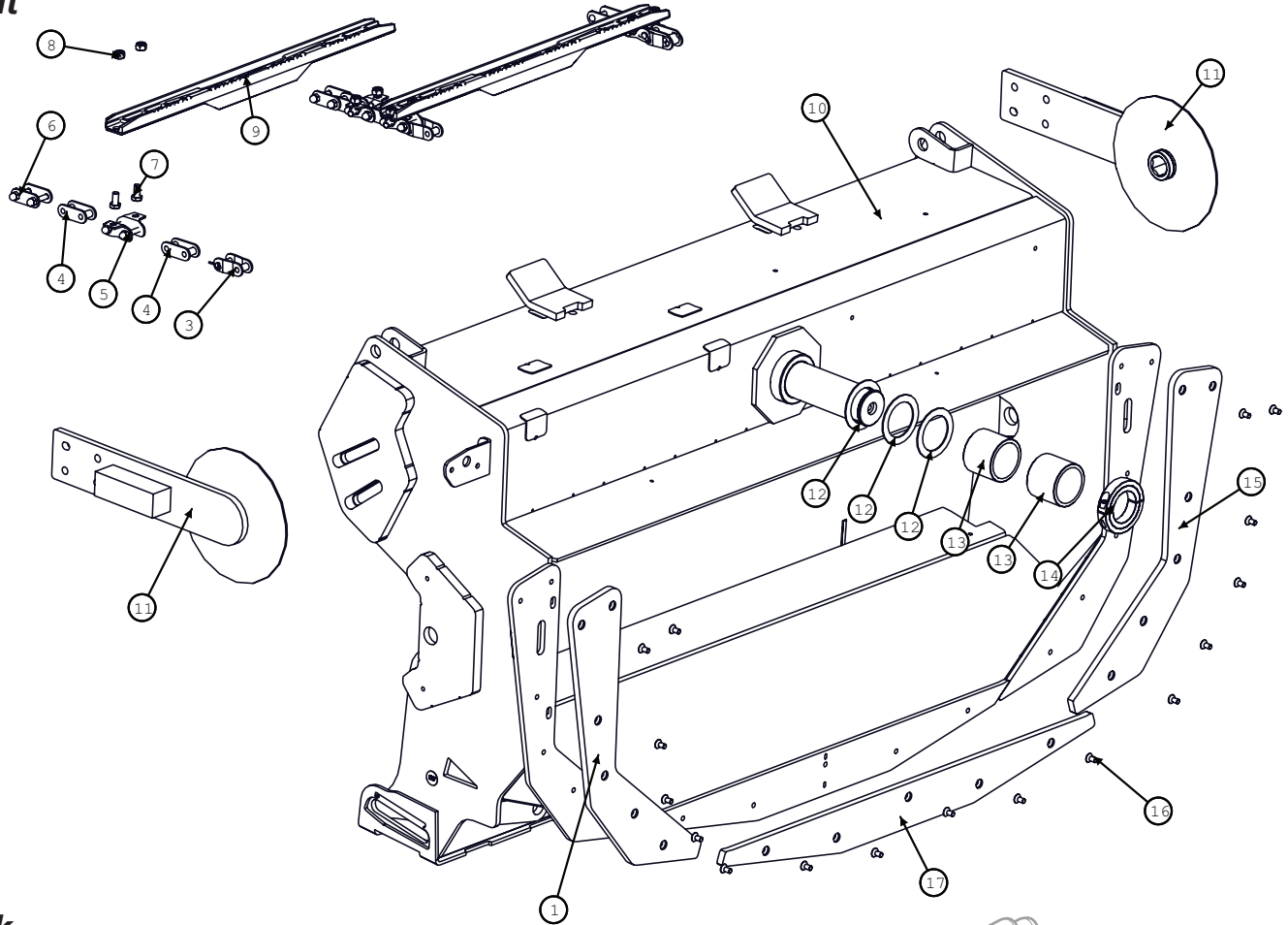


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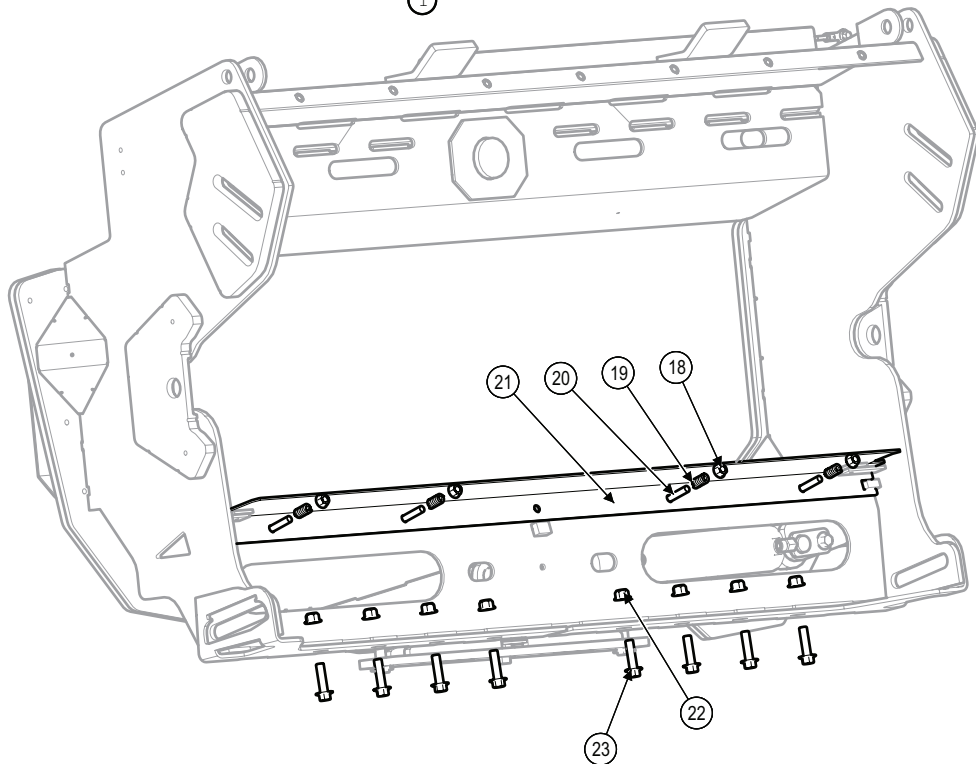
<b>Feeder Drum Arms &amp; Feeder Chain</b>			
<b>10" DRUM, 3-STRAND,</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
140261	1	3	COUPLER, CA557 CHAIN LINK
146391	2	6	LINK, FEMALE, CA557
146381	3	4	CHAIN LINK WITH K6 SIDEBAR
146641	4	3	LINK, OFFSET COUPLER CA557
120.010.020	5	10	BOLT,HX,CL10.9 M10
126.01	6	10	NUT,HX,STV,CL10 M10
146211	7	3	NUT 8MM X 1.25 ACORN
146402	8	2	SLAT, CAST
1269141	9	2	10" FEEDR DRUM ARM
<b>8" DRUM, LIMITED TRAVEL</b>			
140261	1	4	COUPLER, CA557 CHAIN LINK
146391	2	8	LINK, FEMALE, CA557
146381	3	6	CHAIN LINK WITH K6 SIDEBAR
146641	4	4	LINK, OFFSET COUPLER CA557
120.010.020	5	12	BOLT,HX,CL10.9 M10
126.01	6	12	NUT,HX,STV,CL10 M10
146211	7	6	NUT 8MM X 1.25 ACORN
146402	8	3	SLAT, CAST
1324681	10	1	8" DRUM ARM, LIMITED TRAVEL
1324671	11	1	8" DRUM ARM, LIMITED TRAVEL
155308	12	2	SHORT CONVEYOR
<b>8" DRUM, FULL TRAVEL, HYDRAULIC FORE/AFT</b>			
140261	1	4	COUPLER, CA557 CHAIN LINK
146391	2	8	LINK, FEMALE, CA557
146381	3	6	CHAIN LINK WITH K6 SIDEBAR
146641	4	4	LINK, OFFSET COUPLER CA557
120.010.020	5	12	BOLT,HX,CL10.9 M10
126.01	6	12	NUT,HX,STV,CL10 M10
146211	7	6	NUT 8MM X 1.25 ACORN
146402	8	3	SLAT, CAST
155308	12	2	SHORT CONVEYOR
1319641	13	1	8" DRUM ARM, FULL TRAVEL, HYDRAULIC FORE/AFT
1319631	14	1	8" DRUM ARM, FULL TRAVEL, HYDRAULIC FORE/AFT
<b>8" DRUM, LIMITED TRAVEL, HYDRAULIC FORE/AFT</b>			
140261	1	4	COUPLER, CA557 CHAIN LINK
146391	2	8	LINK, FEMALE, CA557
146381	3	6	CHAIN LINK WITH K6 SIDEBAR
146641	4	4	LINK, OFFSET COUPLER CA557
120.010.020	5	12	BOLT,HX,CL10.9 M10
126.01	6	12	NUT,HX,STV,CL10 M10
146211	7	6	NUT 8MM X 1.25 ACORN
146402	8	3	SLAT, CAST
155308	12	2	SHORT CONVEYOR
1324841	15	1	8" DRUM ARM, LIMITED TRAVEL, HYDRAULIC FORE/AFT
1324831	16	1	8" DRUM ARM, LIMITED TRAVEL, HYDRAULIC FORE/AFT
<b>8" DRUM, FULL TRAVEL</b>			
140261	1	4	COUPLER, CA557 CHAIN LINK
146391	2	8	LINK, FEMALE, CA557
146381	3	6	CHAIN LINK WITH K6 SIDEBAR
146641	4	4	LINK, OFFSET COUPLER CA557
120.010.020	5	12	BOLT,HX,CL10.9 M10
126.01	6	12	NUT,HX,STV,CL10 M10
146211	7	6	NUT 8MM X 1.25 ACORN
146402	8	3	SLAT, CAST
155308	12	2	SHORT CONVEYOR
1324711	17	1	8" DRUM ARM, FULL TRAVEL
1324701	18	1	8" DRUM ARM, FULL TRAVEL

Model JS9020 Hillco Leveling System  
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**TRANSITION THROAT - NON HYDRAULIC FORE/AFT**

**Front**



**Back**



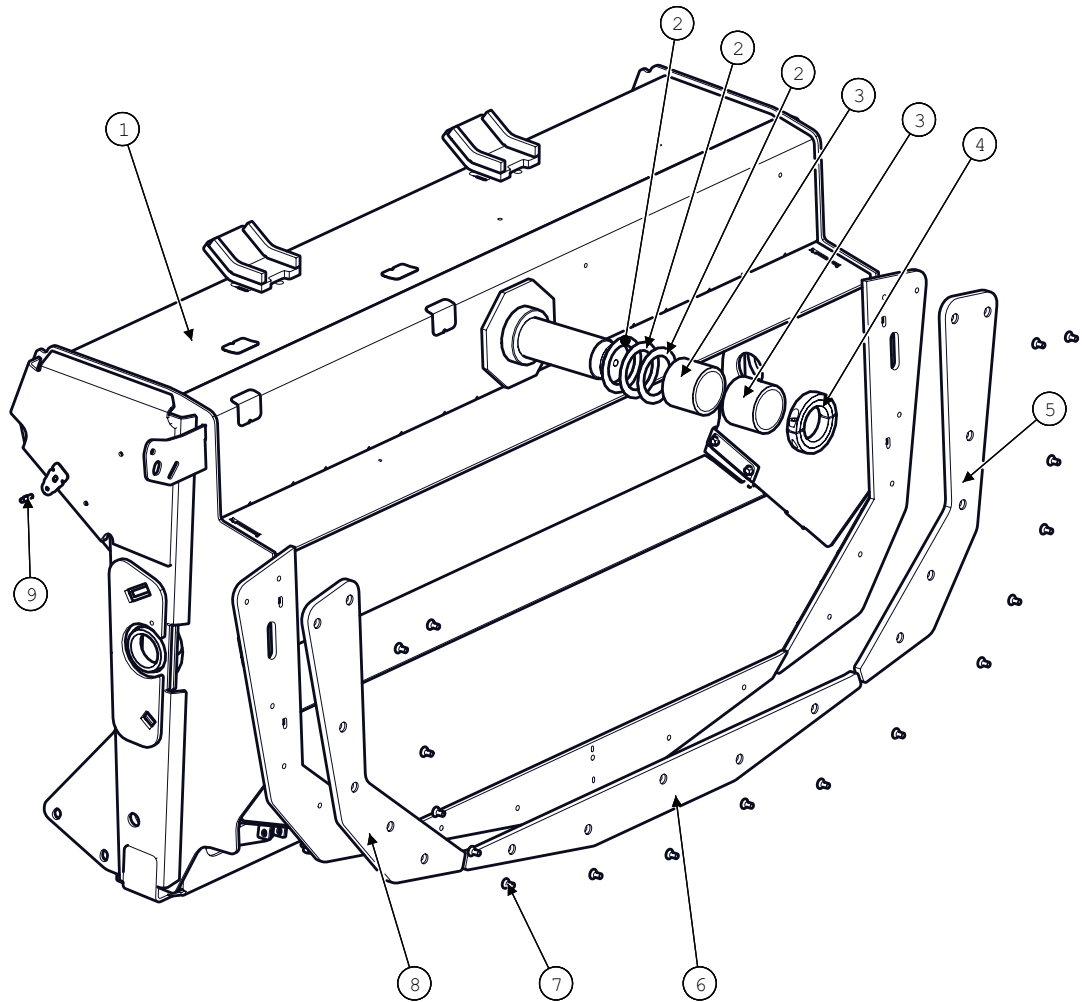
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<b>Transition Throat</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	1250571	1	RIGHT WEARPAD
3	146641	3	LINK, OFFSET COUPLER CA557
4	146391	6	LINK, FEMALE, CA557
5	146381	4	CHAIN LINK WITH K6 SIDEBAR
6	140261	3	COUPLER, CA557 CHAIN LINK
7	120.01	8	BOLT,HX,CL10.9 M10
8	126.01	8	NUT,HX,STV,CL10 M10
9	146402	2	SLAT, CAST ( See previous pages for more slat options)
10	1290461	1	THROAT, SIDEHILL
11	1269141	2	FEEDR DRUM ARM (10" - See previous pages for more drum arm options)
12	162.014.040	3	BUSHING,MACH,NR
13	1241721	2	PIVOT BUSHING
14	150742	1	COLLAR,CLAMPING,2-1/2 ID 3-3/4 OD, 2 PIECE HEAVY
15	1250561	1	LEFT WEARPAD
16	164.008.016	17	SCREW,FHSC,CL10.9 M8X16
17	1250581	1	BOTTOM WEARPAD
18	191.010	4	NUT,HX,NYL,CL10 M10
19	143591	4	SPRING, COMPRESSION
20	163.010.060	4	BOLT,CARR,CL8.8 M10
21	1313751	1	FLEX FLOOR
22	128.012	8	NUT,HX,FL,STV,CL10 M12
23	122.012.045	8	BOLT,HX,FL,CL10.9 M12X45

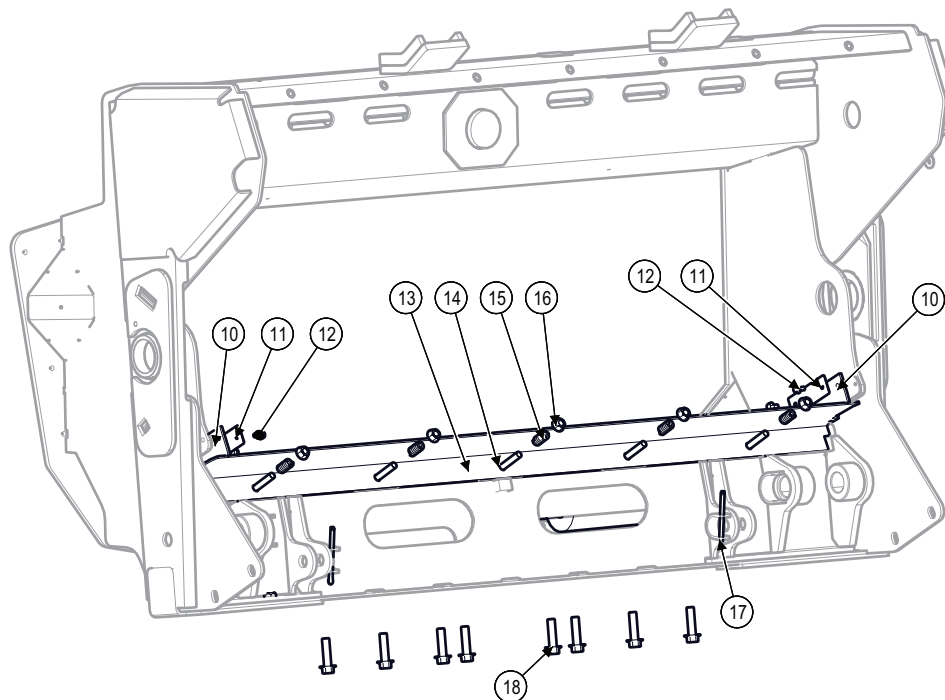
Model JS9020 Hillco Leveling System  
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**TRANSITION THROAT - HYDRAULIC FORE/AFT**

**Front**



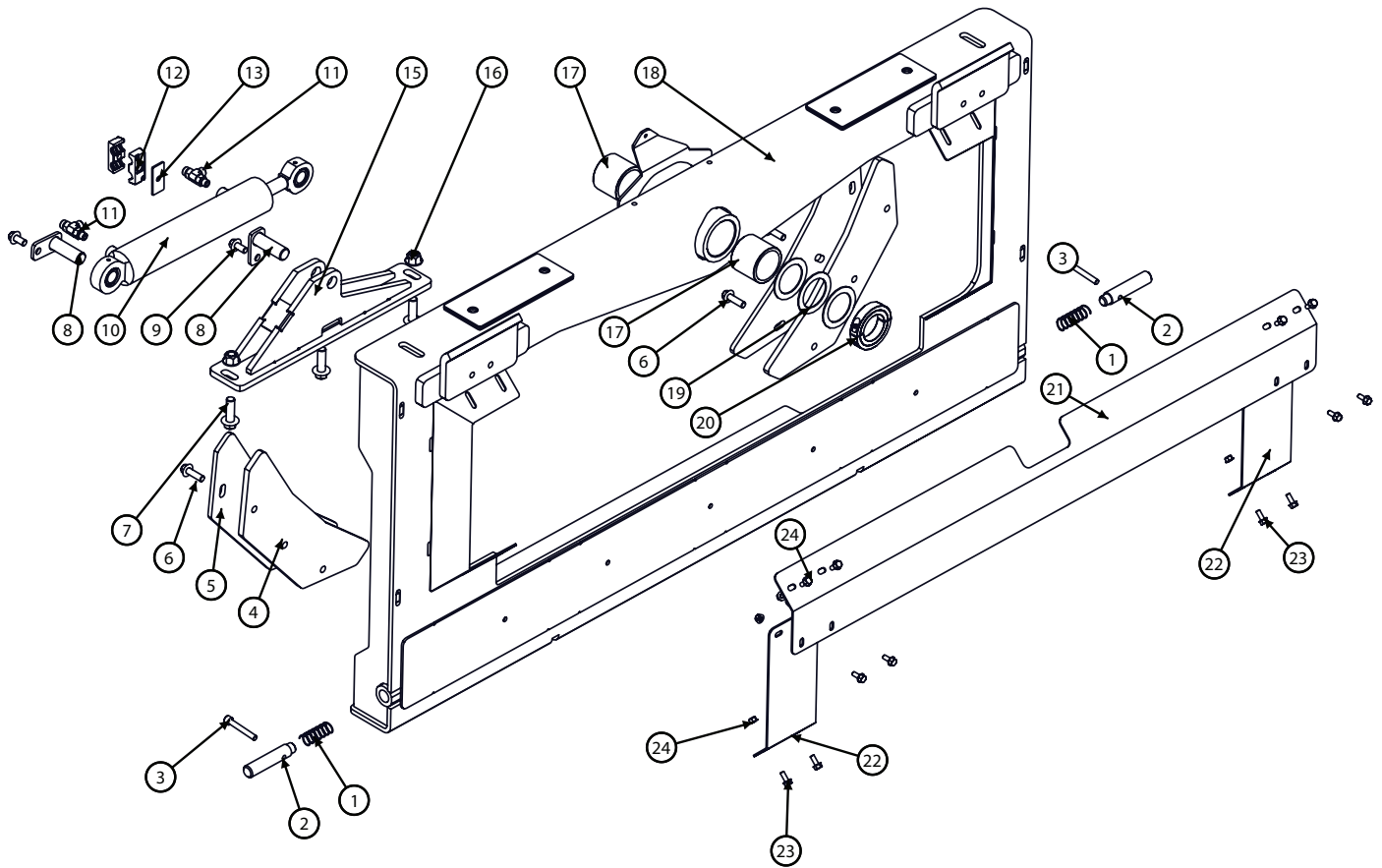
**Back**



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<b>Transition Throat - Hydraulic Fore/Aft</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	1318241	1	THROAT, SIDEHILL
2	162.014.040	3	BUSHING,MACH,NR
3	1241721	2	PIVOT BUSHING
4	150742	1	COLLAR,CLAMPING,2-1/2 ID 3-3/4 OD, 2 PIECE HEAVY
5	1250561	1	LEFT WEARPAD
6	1250581	1	BOTTOM WEARPAD
7	164.008.016	17	SCREW,FHSC,CL10.9 M8X16
8	1250571	1	RIGHT WEARPAD
9	151341	1	BALL STUD
10	1323252	2	SEAL
11	1323241	2	STIFFENER, SEAL
12	122.006.012	3	BOLT,HX,FL,CL10.9 M6X12
13	1318882	1	FLEX FLOOR
14	163.010.060	5	BOLT,CARR,CL8.8 M10
15	143591	5	SPRING, COMPRESSION
16	191.010	5	NUT,HX,NYL,CL10 M10
17	142.004.048	2	PIN,COTTER 1/4
18	122.012.045	8	BOLT,HX,FL,CL10.9 M12X45

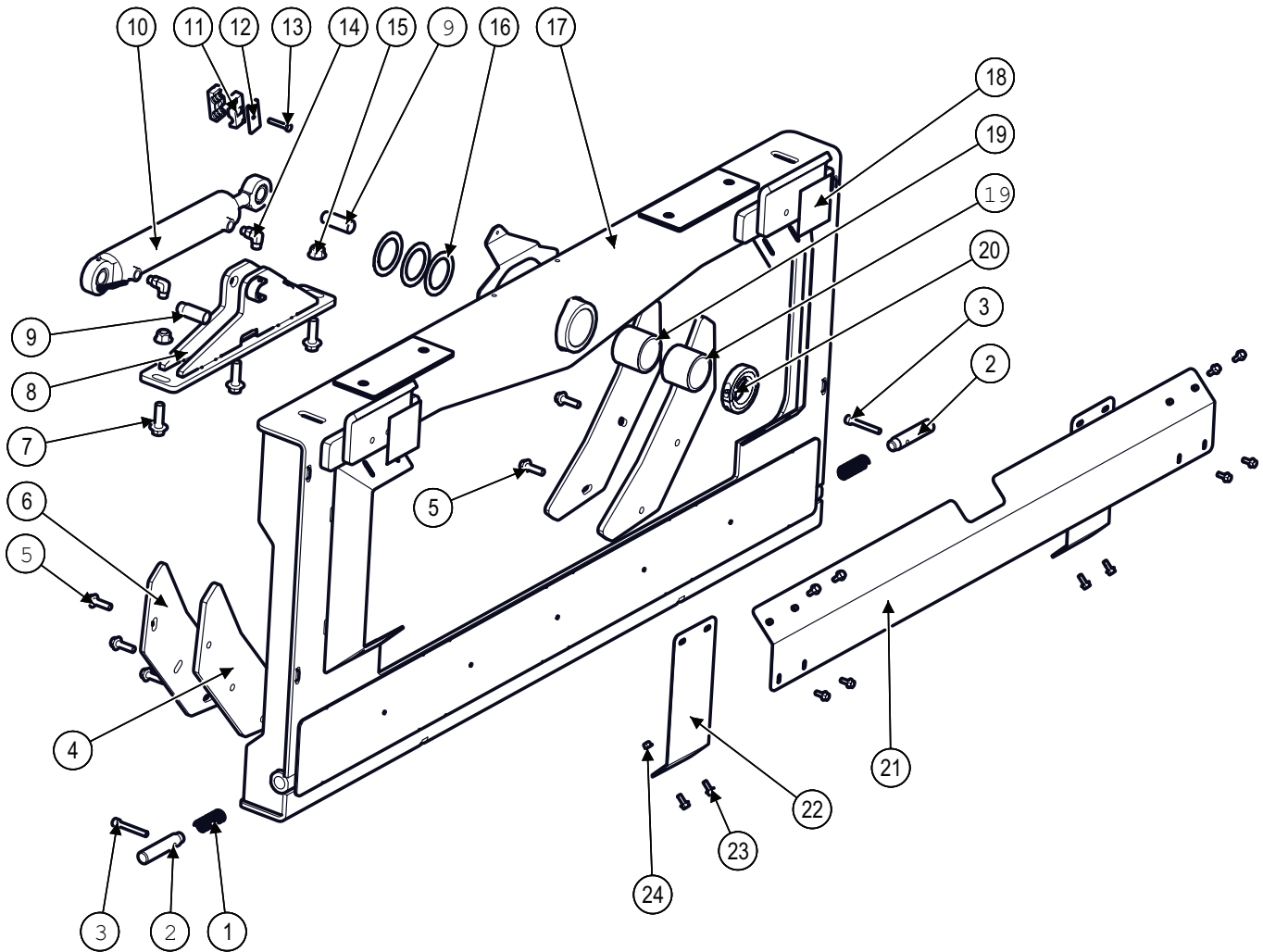
**TRANSITION HEADER ADAPTER - NON HYDRAULIC FORE/AFT**



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<b>Transition Header Adapter</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	135531	2	SPRING, COMPRESSION
2	1229193	2	LOCKOUT PIN
3	195.010.070	2	SCREW,SHC,CL10.9 M10X70
4	1250551	2	BACKING WEARPAD
5	1250541	2	BACKING PLATE
6	122.012.040	6	BOLT,HX,FL,CL10.9 M12X40
7	122.016.050	3	BOLT,HX,FL,CL10.9,M16X50
8	1253884	2	CYLINDER PIN
9	122.012.025	2	BOLT,HX,FL,CL10.9 M12X25
10	138582	1	CYLINDER 2-1/2 X 10
11	1007.06	2	STR,THD,RUN-06
12	139431	2	CLAMP, 3/4" TWIN BEHRINGER PAIR
13	139451	1	COVER PLATE,TWIN
15	1250713	1	SLAVE CYL ROD MOUNT
16	128.016	2	NUT,HX,FL,STV,CL10 M16
17	1241721	2	TM, GRAPHITE MICARTA
18	1320921	1	HEADER ADAPTER
19	162.014.040	3	BUSHING,MACH,NR
20	150742	1	COLLAR, CLAMPING
21	1250522	1	TOP SHIELD
22	1250534	2	SIDE SHIELD
23	122.008.020	12	BOLT,HX,FL,CL10.9 M8X20
24	128.008	12	NUT,HX,FL,STV,CL10 M8

**TRANSITION HEADER ADAPTER - HYDRAULIC FORE/AFT**



Model JS9020 Hillco Leveling System  
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<b>Transition Header Adapter - Hydraulic Fore/Aft</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	135531	2	SPRING, COMPRESSION
2	1229193	2	LOCKOUT PIN
3	195.010.070	2	SCREW,SHC,CL10.9 M10X70
4	1250551	2	BACKING WEARPAD
5	122.012.040	6	BOLT,HX,FL,CL10.9 M12X40
6	1250541	2	BACKING PLATE
7	122.016.050	3	BOLT,HX,FL,CL10.9,M16X50
8	1320941	1	CYLINDER MOUNT,
9	1320891	2	PIN, 1" X 2-1/2
10	138582	1	CYLINDER 2-1/2 X 10
11	139431	1	CLAMP, 3/4" TWIN BEHRINGER PAIR
12	139451	1	COVER PLATE,TWIN
13	170.008.045	1	BOLT,HX,CL8.8 M8X45
14	1003.06.06	2	-6MORB X -6MORFS
15	128.016	2	NUT,HX,FL,STV,CL10 M16
16	162.014.040	3	BUSHING,MACH,NR
17	1320921	1	HEADER ADAPTER
18	100784	2	LABEL, PINCH POINT
19	1241721	2	TM, GRAPHITE MICARTA
20	150742	1	COLLAR,CLAMPING,2-1/2 ID 3-3/4 OD, 2 PIECE HEAVY
21	1250522	1	TOP SHIELD
22	1250534	2	SIDE SHIELD
23	122.008.020	12	BOLT,HX,FL,CL10.9 M8X20
24	128.008	12	NUT,HX,FL,STV,CL10 M8

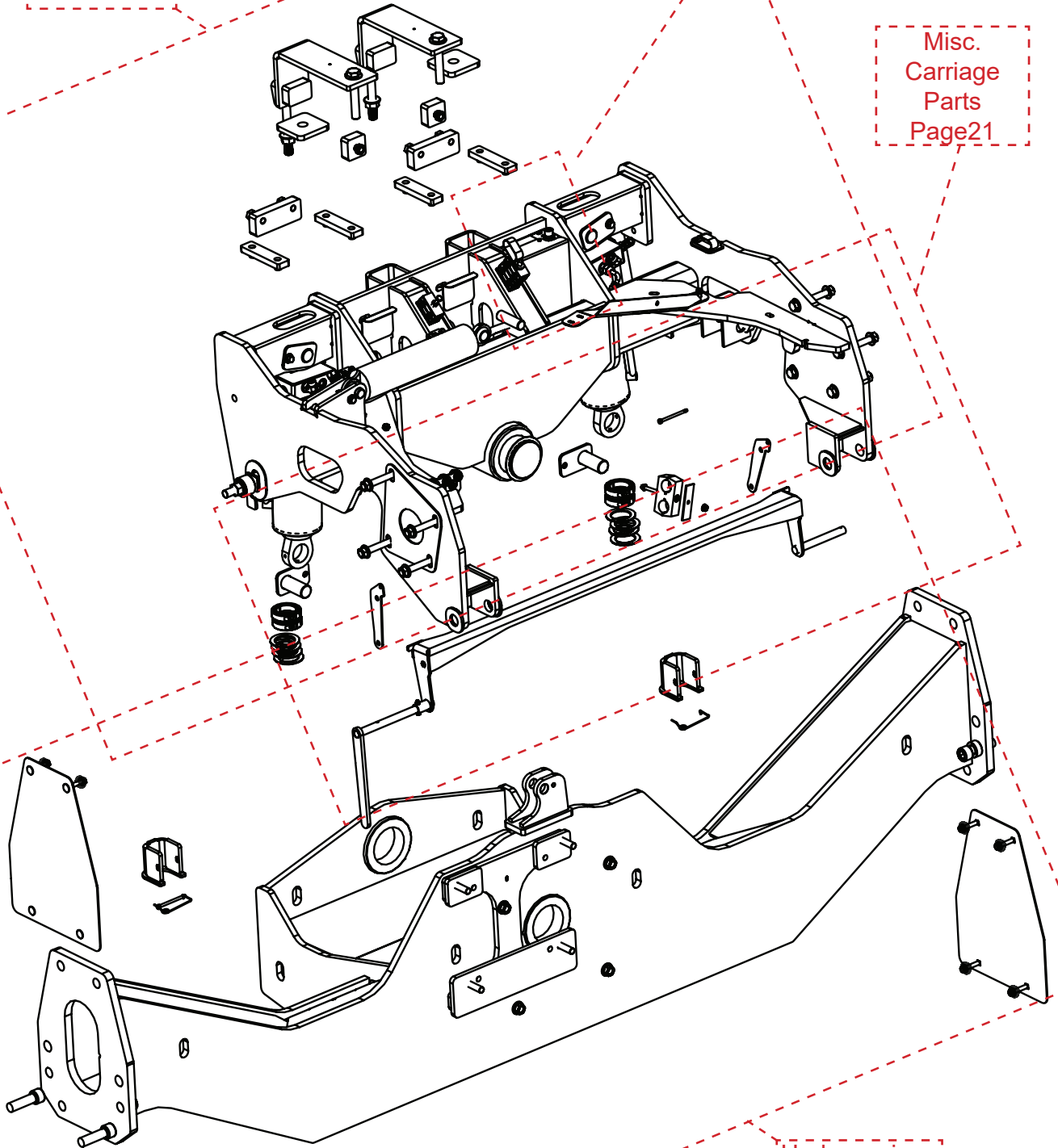
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**Carriage**

Overcarriage  
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Carriage  
Position Sensor  
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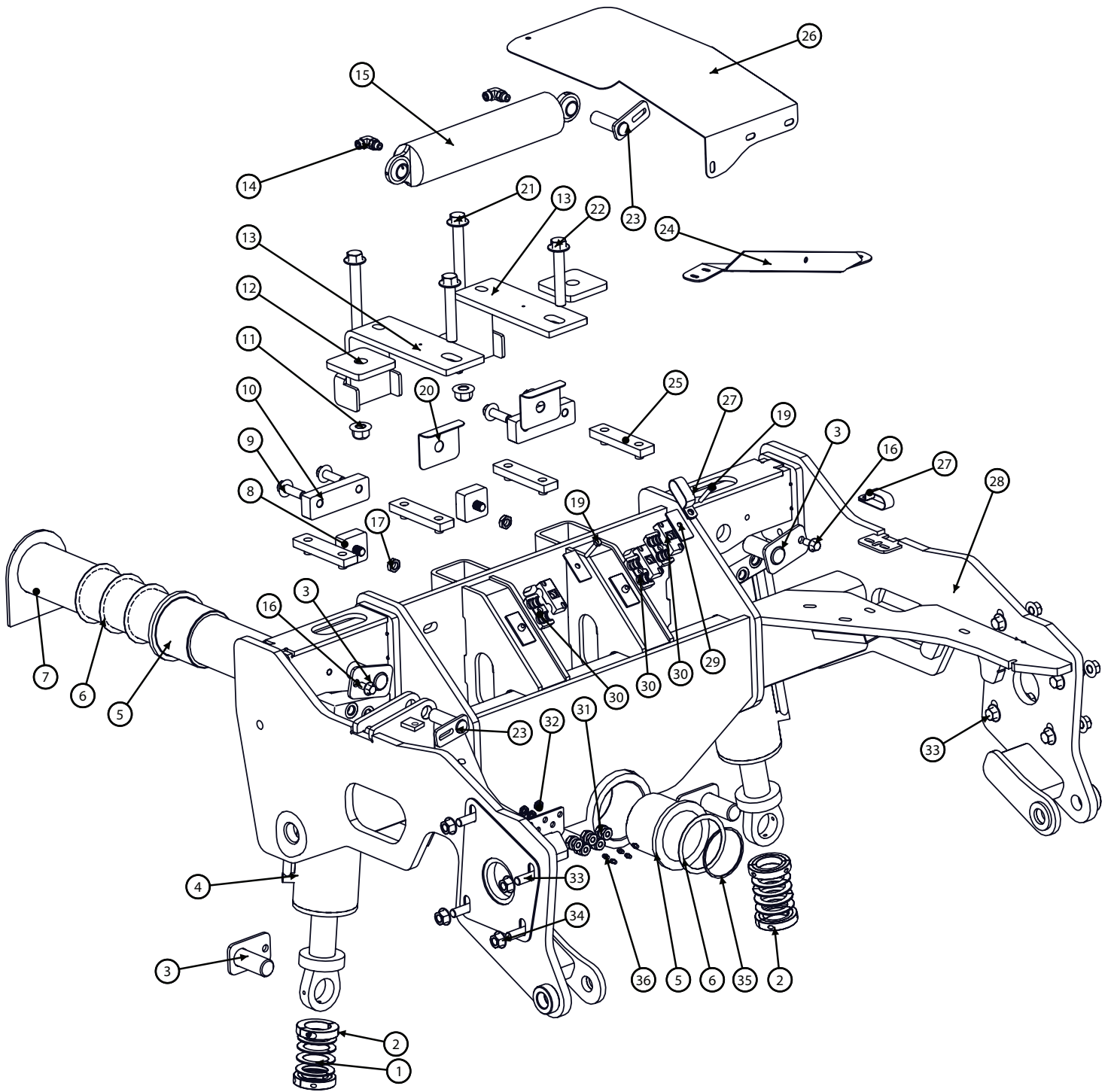
Misc.  
Carriage  
Parts  
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Undercarriage  
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Model JS9020 Hillco Leveling System  
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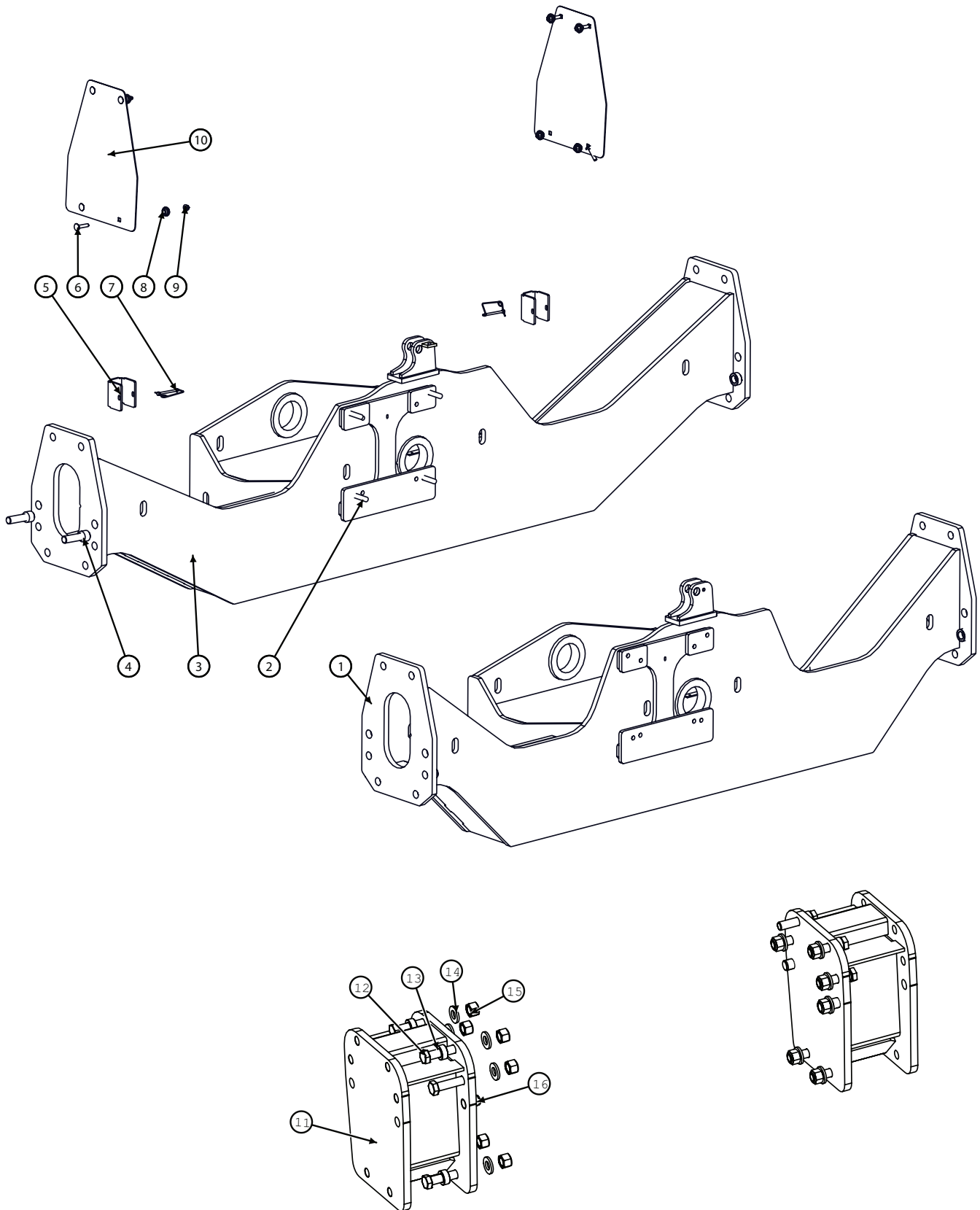
### Overcarriage



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Overcarriage			
BOM ID	Part No.	Qty	Description
1	137501	8	WASHER, QUICK REPAIR
2	153241	4	COLLAR, CLAMPING
3	1230552	4	PIN, MAIN CYLINDER
4	155860	2	CYLINDER,LEVELING,DUAL CB
5	1247961	2	PIVOT BUSHING
6	138641	4	4.016ID X 4.7640D X 048
7	1291351	1	PIVOT PIN
8	1296581	2	UPPER CARRIAGE SHIM
9	122.016.035	4	BOLT,HX,FL,CL10.9,M16X35
10	1291731	2	CARRIAGE LOCK (9010)
11	128.020	2	NUT,HX,FL,STV,CL10 M20
12	1297901	2	SPACER, TUBE CLAMP
13	1293631	2	AXLE CLAMP
14	1006.06.06	2	-6FORFS X -6MORFS, 90
15	140342	1	CYLINDER, CROSS PORT
16	122.012.025	2	BOLT,HX,FL,CL10.9 M12X25
17	165.016	2	NUT,HX,JAM,CL8 M16
18	139471	1	STACK BOLT, BEHRINGER
19	101.005.08	2	BOLT,HX,GR5 5/16 -18 X 1 3/4
20	1270042	2	CARRIAGE SHIM
21	122.020.220	2	BOLT,HX,FL,CL10.9 M20
22	122.020.120	2	BOLT,HX,FL,CL10.9 M20
23	1345961	2	CYLINDER PIN, TRIM
24	1274902	1	SUPPORT, HYDRO HOSE
25	1293561	4	LOWER CARRIAGE SHIM
26	1274252	1	TABLE, HYDRO HOSE
27	147781	2	CLAMP 1/4" DOUBLE LOOP 3/8HOLE
28	1291335	1	OVERCARRIAGE
29	139231	2	COVER PLATE,TWIN
30	139481	3	CLAMP, TWIN, BEHRINGER -.620
31	155157	5	BULKHEAD,GREASE,STR,
32	155158	5	BULKHEAD,LOCKNUT
33	122.016.120	8	BOLT, HX, FL, CL10.9, M16X120
34	123.016	8	NUT,HX,FL,CL10 M16
35	138651	1	SNAP RING; 4"
36	138011	5	ZERK,STR, 1/4-28MTAPER

### Undercarriage

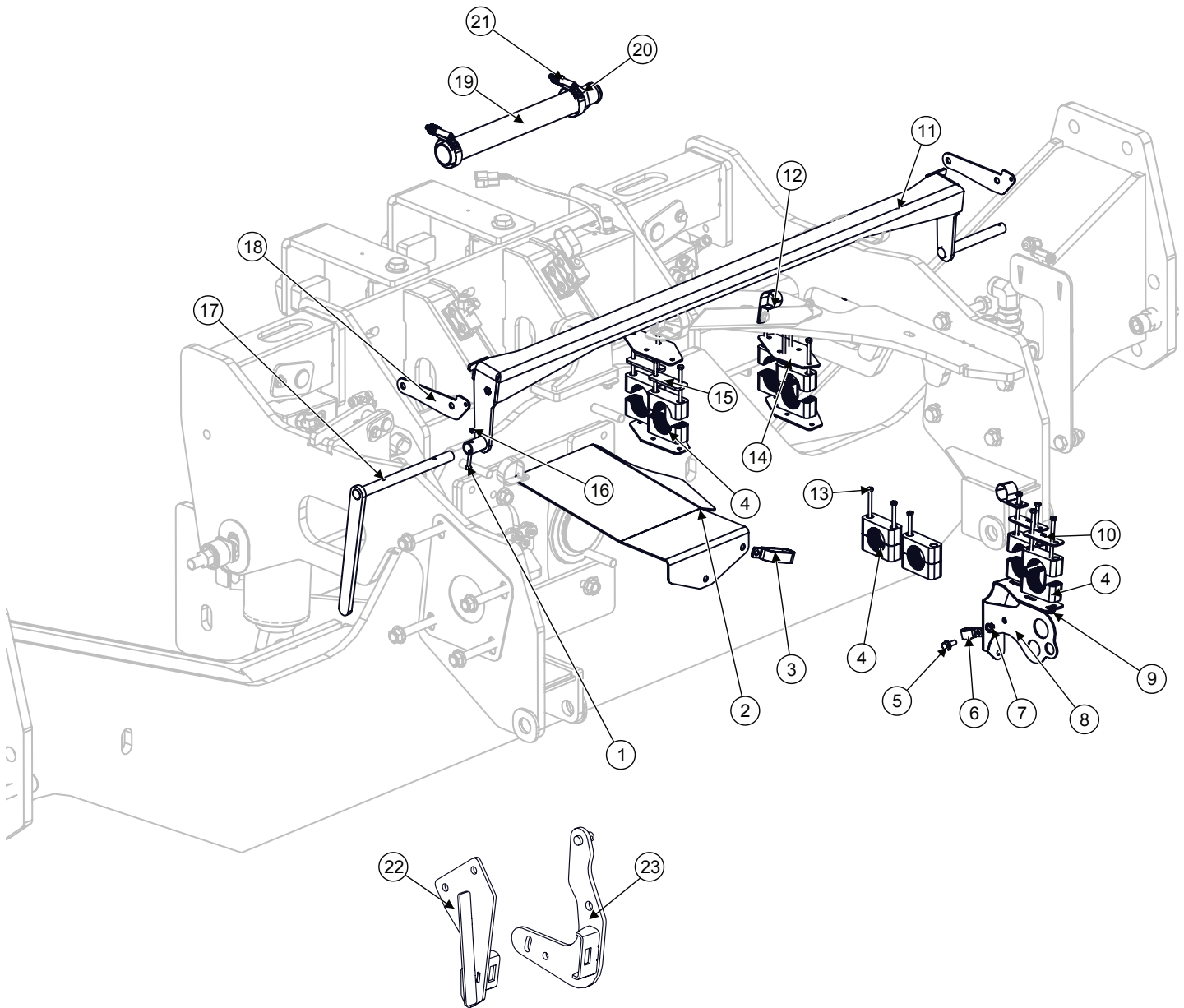


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<b>Undercarriage</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	1292921	1	UNDERCARRIAGE, NARROW, 96.25",
2	155.016.075	4	STUD, DOUBLE-10.9
3	1290812	1	UNDERCARRIAGE, WIDE, 114.75"
4	159.024.080	2	SCREW,SHC,CL12.9 M24
5	1307161	2	CYLINDER STOP
6	163.010.050	7	BOLT,CARR,CL8.8 M10
7	146.004.048	2	PIN,SNAP,LCK
8	151021	8	BUSHING, PLASTIC
9	123.01	8	NUT,HX,FL,CL10 M10
10	1293831	2	CAP, AXLE
11-15	12533141	1	NARROW UNDERCARRIAGE AXLE EXTENSIONS
11	1253132	2	LM WLD, 9.25 AXLE EXTENSION
12	121.024.100	12	M24 X 3 X 110 HEX CAP
13	LM-266382	8	CU TM, SPACER-FINAL DRIVE
14	141121	12	FW M25.4 X 50.0 X 6.0
15	126.024	12	STOVER NUT 24MX3

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**Carriage Misc. Parts**



Model JS9020 Hillco Leveling System  
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<b>Overcarriage Misc.</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	121.006.035	1	HC-10.9 M6x1.0X35
2	1274252	1	HM PLT, TABLE HYDRO HOSE
3	1151781	1	CLAMP, P-STYLE (JD#AH77884)
4	155171	8	CLAMP, 1.75" BEHRINGER STD
5	122.008.025	1	FLHC-10.9M8X1.25X20
6	135791	1	CLAMP, HOSE 7/8 R/C W 3/8HOLE (JD#AH78237)
7	123.008	1	FLHN-10.9M8X1.25
8	1297312	1	LM WLD, HYDRO HOSE SUPPORT
9	123.006	4	FLHN-10.9 M6
10	140651	2	BEHRINGER STD COVER PLATE
11	1264512	1	LM ASM, LINKAGE, ROCK TRAP
NS	1339772	1	COMPLETE ROCK TRAP KIT
12	143601	2	CLAMP, HOSE 1-1/8" R/C W 3/8
13	170.006.090	15	HC-8.8 M6 X 1.00 X 90
14	1274231	4	STUD,DBL-END,CL10.9 M16X90
15	1276391	2	HM CLAMP SPACER
16	191.006	1	HN-8.8M6X1.0 NYLOCK
17	1264501	1	LM ASM, HANDLE, ROCK TRAP
18	1290742	2	LM SHT, ROCK TRAP LINKAGE, UPPER
NS	1348562	2	STONE DOOR LINKAGE
19	1276351	1	HOSE, 1-1/2" BELLOWSFLEX HARDWALL 14"
20	1063.24.24	1	UNION, -24MB x -24MB
21	152061	2	CLAMP, HOSE, WORM GEAR, 1.5" TO 2.5"
<b>HIGH MOISTURE KIT ROCK TRAP LINKAGE</b>			
22	1348311	2	FEEDERHOUSE DOOR BRACKET
23	1348341	2	FEEDERHOUSE DOOR STANDOFF

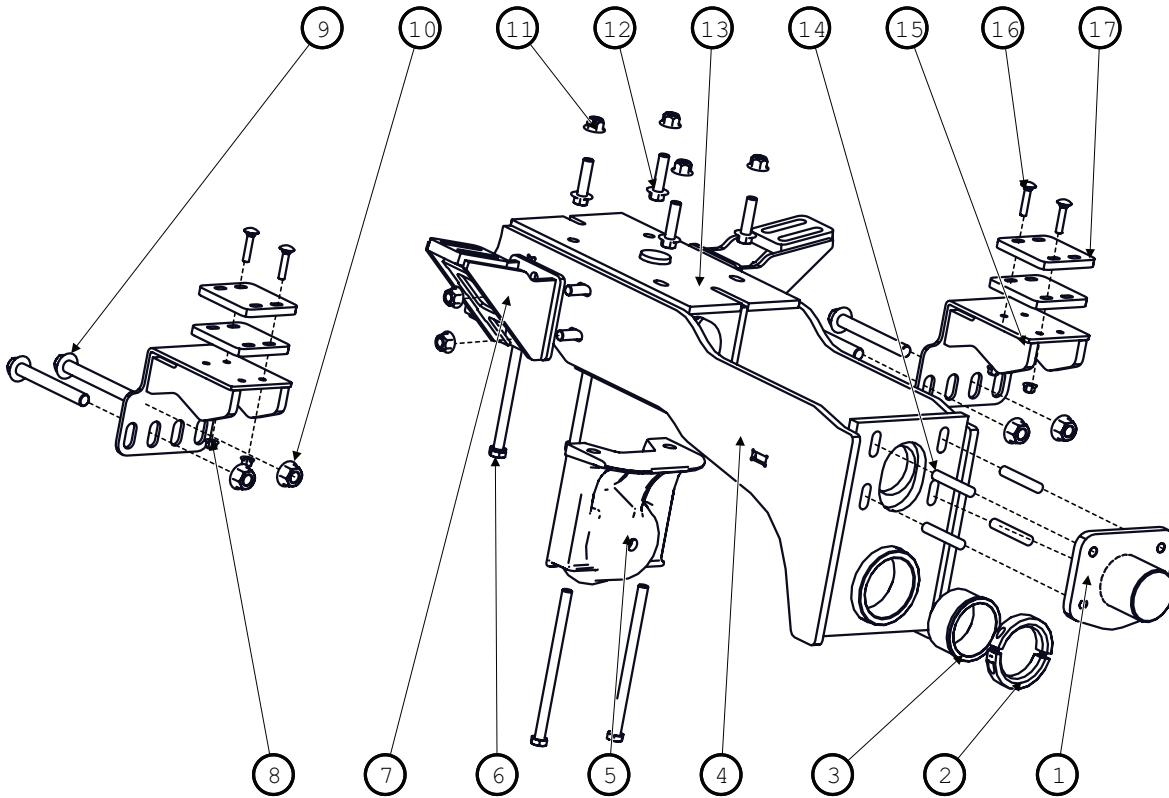


Model JS9020 Hillco Leveling System  
For Serial Numbers JS9020-22001 thru JS9020-22999

<b>Carriage Position Sensor</b>			
<b>BOM ID</b>	<b>Hillco Part No.</b>	<b>Qty</b>	<b>Description</b>
1	141341	2	WIRE TIE 3/16"x15"
2	1347142	1	CLINOMETER
3	115.#06	2	SCREW,PHM,SH 6-32X1/4
4	153641	2	CABLE TIE MOUNT,
5	1347272	1	SENSOR MNT
6	151361	1	BUSHING (JD#R41076)
7	151371	1	ARM, ASSY, TILT SENSOR, HM (AXE17303)
8	114.#06	2	PAN HEAD SCREW 6-32X3/8
9	151321	1	BRACKET, SENSOR MNT (HXE16001)
10	151401	1	SHAFT, ROUGH SERVICE DEVICE (AXE14888)
11	151391	1	O-RING, 11/16ID (P48347)
12	178.008.010	2	BOLT M8X10
13	201.006.036	1	PIN, ROLL 6mm x 36mm
14	1347161	1	SENSOR PACKAGE HARNESS
15	123.006	2	M6 X 1.0
16	170.004.035	2	BOLT M4X35
17	151381	1	SENSOR, ROTATION, HALL 2CH +/-120DE (AXE14246)
18	151331	1	LINKAGE, POSITION (AH226146)
19	151341	1	BALL STUD (H168732)

Model JS9020 Hillco Leveling System  
 For Serial Numbers JS9020-22001 thru JS9020-22999

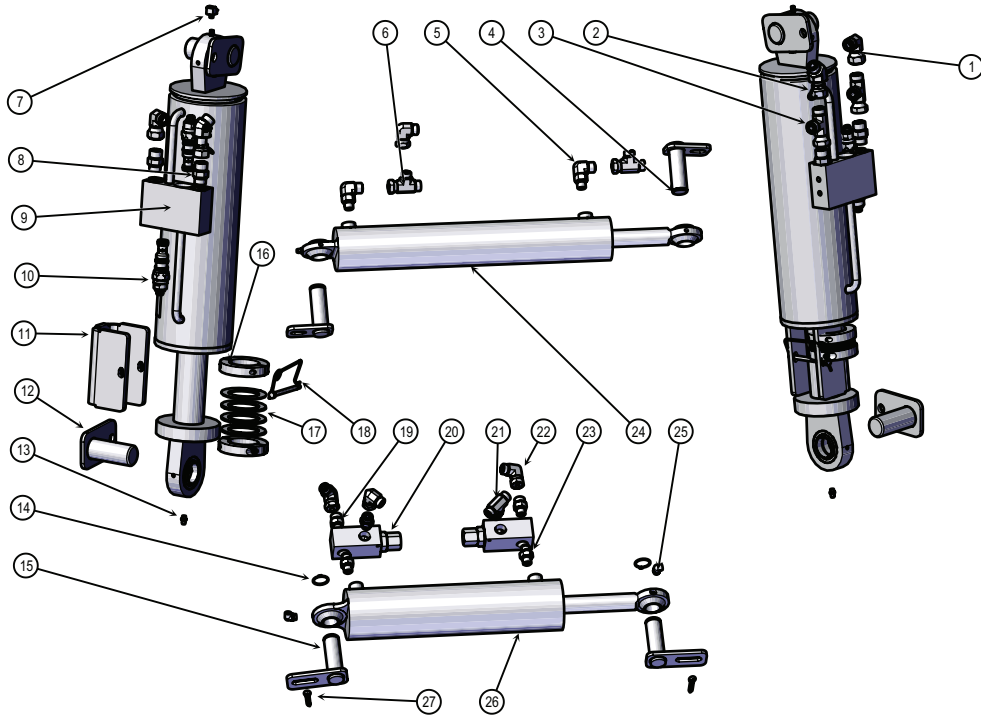
**DROP AXLE**



Drop Axle			
BOM ID	Part No.	Qty	Description
1	1291071	1	PIVOT PIN
2	145491	1	COLLAR, CLAMPING 3-1/2 X 4-3/4
3	1235092	1	BUSHING, PIVOT
4	1291022	1	DROP AXLE
5	152471	1	STAND-OFF, REAR AXLE
6	121.016.250	4	M16X250
7	1313541	2	WING
8	128.010	4	NUT,HX,FL,STV,CL10 M10
9	122.020.160	4	M20x160
10	123.020	4	NUT,HX,FL,CL10 M20
11	128.016	8	NUT,HX,FL,STV,CL10 M16X2.
12	122.016.060	4	M16X60
13	122.016.050	4	M16X50
14	155.016.090	4	STUD,DBL-END,CL10.9 M16X90
15	1299792	2	ROTATION STOP
16	163.010.050	4	M10x50
17	1299892	4	ROTATION STOP 16°

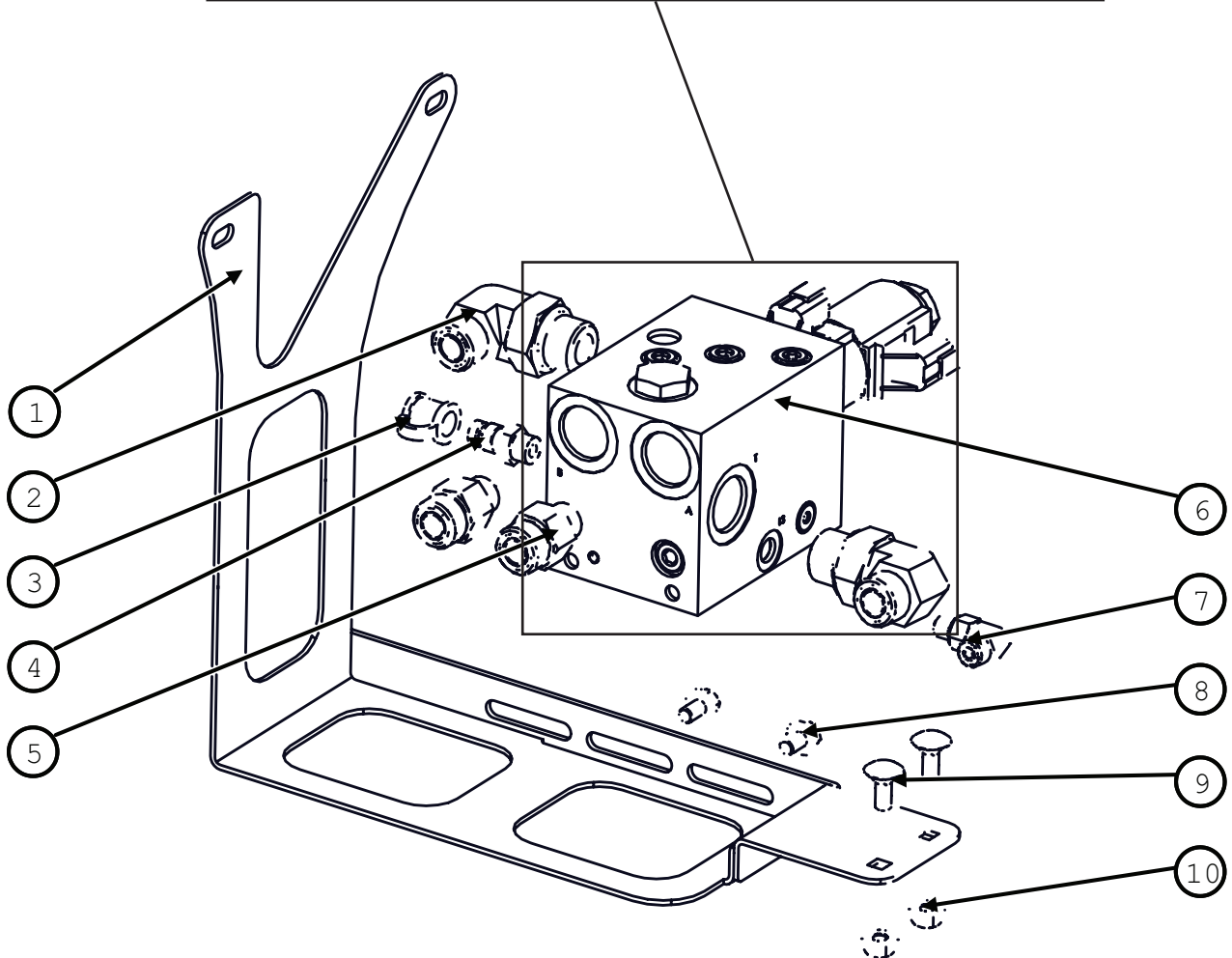
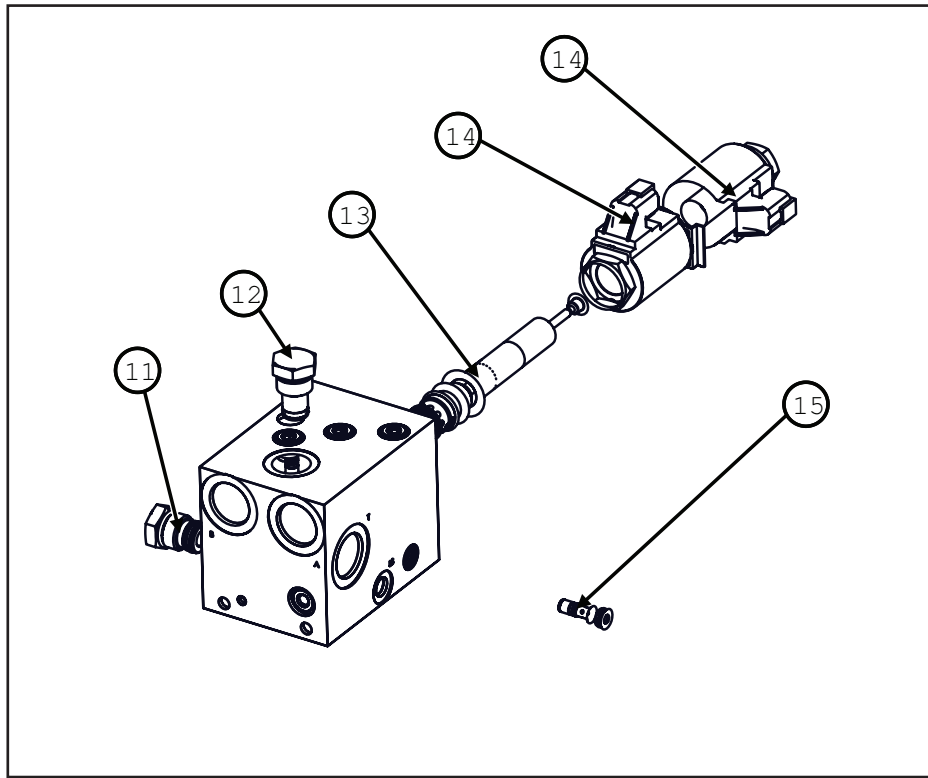
Model JS9020 Hillco Leveling System  
 For Serial Numbers JS9020-22001 thru JS9020-22999

**Hydraulic Components**



Hydraulic Components			
BOM ID	Part No.	Qty	Description
1	1006.08.08	2	HA, 90° -8FORFS X -8MORFS
2	1005.08.08	2	-6FORFS X -6MORFS
3	1008.08	2	SWV,NUT,RUN -8ORFS
4	1253884	2	CYLINDER PIN,
5	1003.06.06	2	-6MORB X -6MORFS
6	1008.06	2	SWIVEL NUT, RUN, -6ORFS
7	135761	2	1/4-28 MALE X 1/8 FPT 45 DEG
8	1001.08.08	4	HA,STR -8MORB X -8MORFS
9	155860	2	4-1/2 BORE, 11" STROKE, 22.5" CPC
10	155593	4	COUNTERBALANCE VALVE T11 CAVITY, 5K PSI
11	1293721	2	CYLINDER STOP
12	1230552	4	PIN, MAIN CYLINDER
13	138011	2	1/4-28MTAPER
14	148	2	EXT 1"
15	1345961	2	CYLINDER PIN,
16	153241	4	2"IDx3"OD
17	137501	8	3"ODx2"IDx1/8T
18	146.004.048	2	PIN,SNAP,LCK 1/4X3
19	1001.06.06	3	-6MORBx-6MORFS
20	155770	2	RELIEF VALVE ASM
21	1009.06	1	STR THD, BRANCH,
22	1006.06.06	4	COUNTERBALANCE VALVE -6FORFS x -6MORFS
23	1027.06.06	2	-6MORBx-6MORB
24	147491	1	CYLINDER, SLAVE, 21" CPC 12-1/2" STROKE, 2-1/2" BORE
25	135771	2	ADAPTER,GREASE,90°
26	140342	1	CYLINDER,MASTER 3"B,8-3/4"S,1-3/8"R,17-1/4CPC
27	142.004.016	2	PIN, COTTER 1/4" X 1"

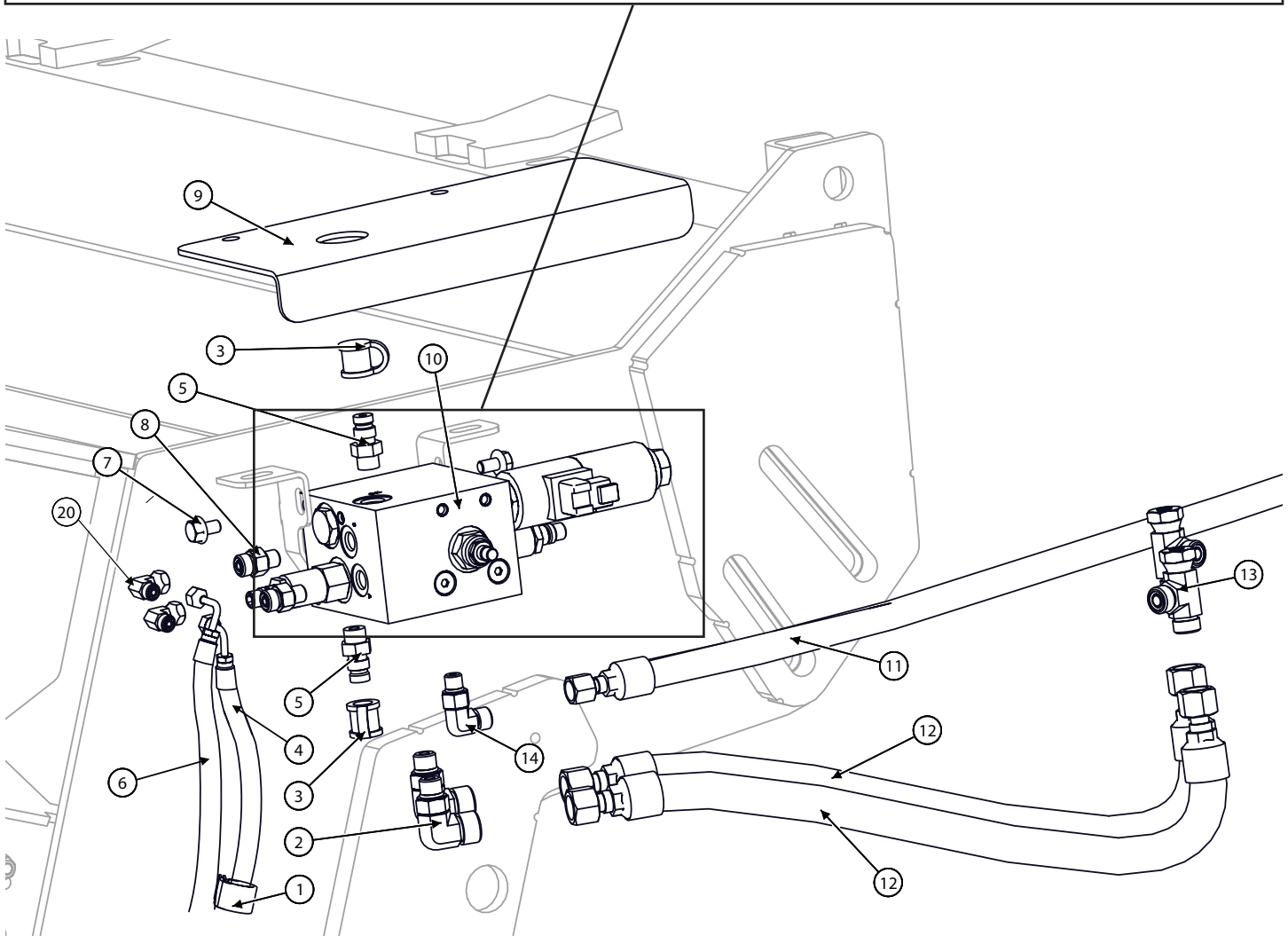
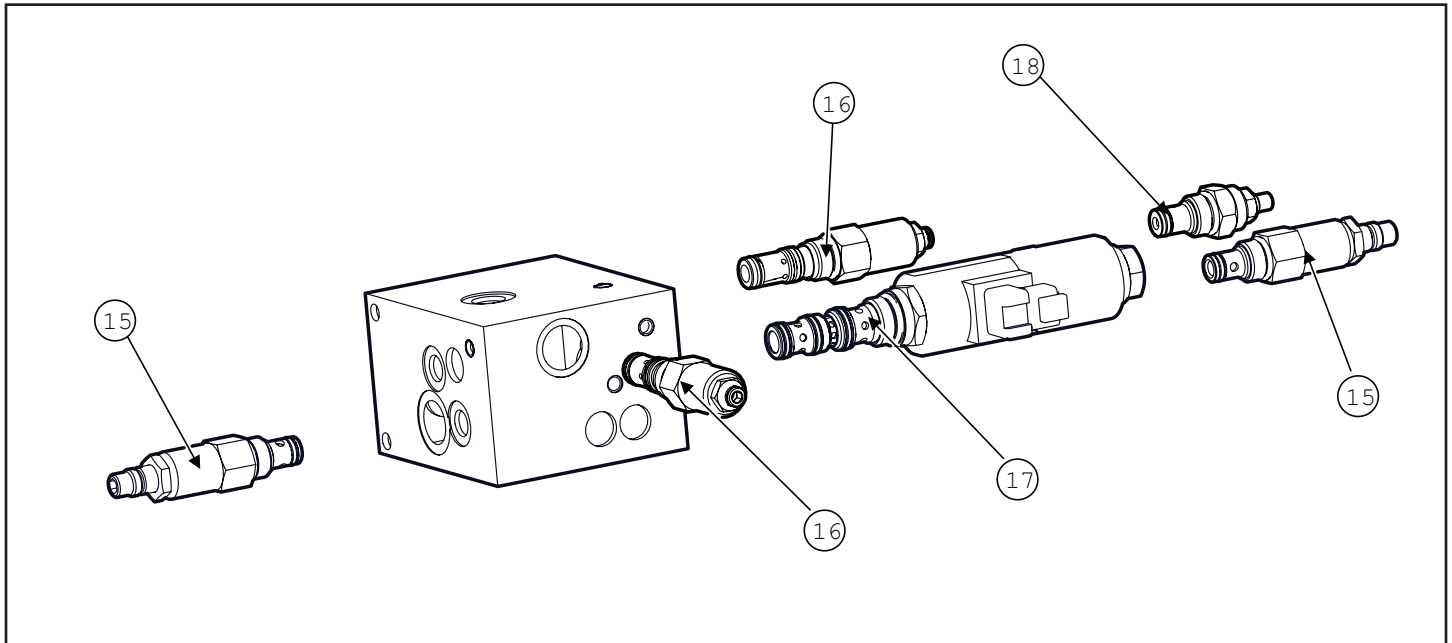
**Leveling Manifold**



Model JS9020 Hillco Leveling System  
For Serial Numbers JS9020-22001 thru JS9020-22999

Leveling Manifold			
BOM ID	Part No.	Qty	Description
1	1313601	1	MANIFOLD MOUNT
2	1003.12.10	2	HA,90°, -12MORB X -10MORFS
3	144001	1	DUST COVER
4	143991	1	COUPLER,
5	1001.12.10	2	-12MORB X -10MORFS
6	1343021	1	HIGH-FLOW (COMATROL P/N11191146)
7	1003.04.04	1	HA,90°
8	111.005.008	2	BOLT,HX,FL,GR5 5/16-18X1/2
9	163.008.020	2	BOLT,CARR,CL8.8 M8X20
10	123.008	2	M8x1.25
11	155234	1	CAVITY PLUG, 3 WAY, 10 SERIES
12	155238	1	CAVITY PLUG, 2 WAY, 10 SERIES
13	155855	1	CARTRIDGE VALVE,3 POS,4 WAY, PROPORTIONAL, 16GPM
14	155854	2	SOLENOID COIL,M19,PROP,DEUTSCH
15	155236	1	CHECK VALVE, REVERSE DIRECTION

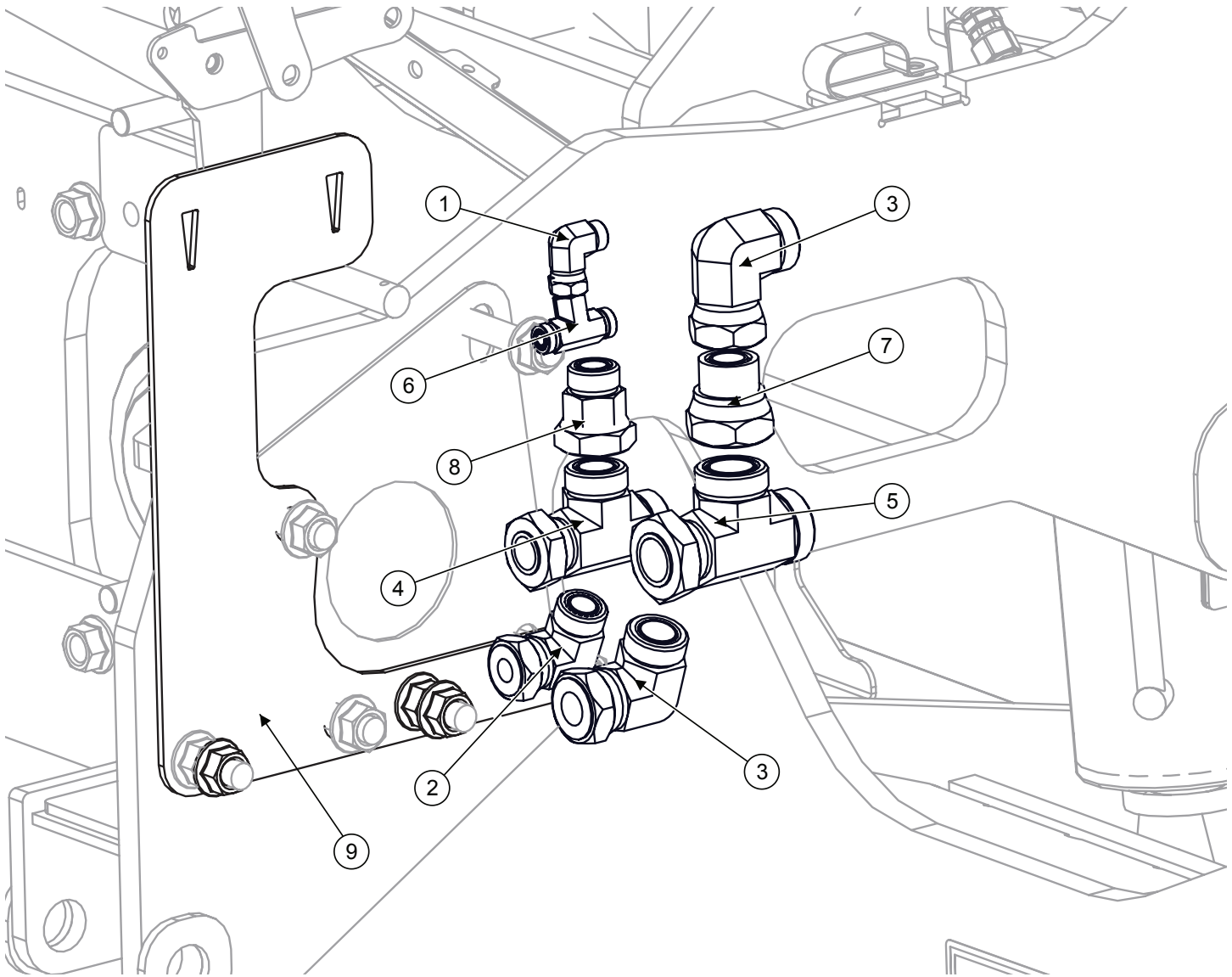
**Header Trim Manifold**  
(Only on combines without factory Header Tilt.)



Model JS9020 Hillco Leveling System  
For Serial Numbers JS9020-22001 thru JS9020-22999

<b>Header Trim Manifold</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	135791	2	CLAMP, HOSE
2	1003.08.06	2	-8MORB X -6MORFS
3	144001	2	DUST COVER
4	1322112	1	100R17-04 67",
5	143991	2	COUPLER,
6	1322101	1	100R17-04X80",
7	111.005.008	2	BOLT,HX,FL,GR5 5/16-18X1/2
8	1001.04.04	2	HA,STR
9	1316464	1	SHIELD, TRIM SHIELD
10	1331781	1	MANIFOLD, CUSTOM, TRIM
11	1320721	1	100R17AR-04X138",
12	1320711	2	100R17AR-06X38",
13	1008.06	2	SWIVEL NUT, RUN, -6ORFS
14	1003.04.04	1	HA,90°
15	155243	2	CARTRIDGE, PRESSURE RELIEF,
16	155742	2	CARTRIDGE, COUNTERBALANCE CP08-3L CAVITY
17	155249	1	CARTRIDGE VALVE, 3 POS,4 WAY (INCLUDES 155248)
18	HC-145501	1	VALVE, NEEDLE
19	155248	2	SOLENOID COIL, CARTRIDGE, PROP
20	1006.04.04	2	-4FORFS X -4MORFS 90°

**John Deere Header Lift Manifold Fittings**



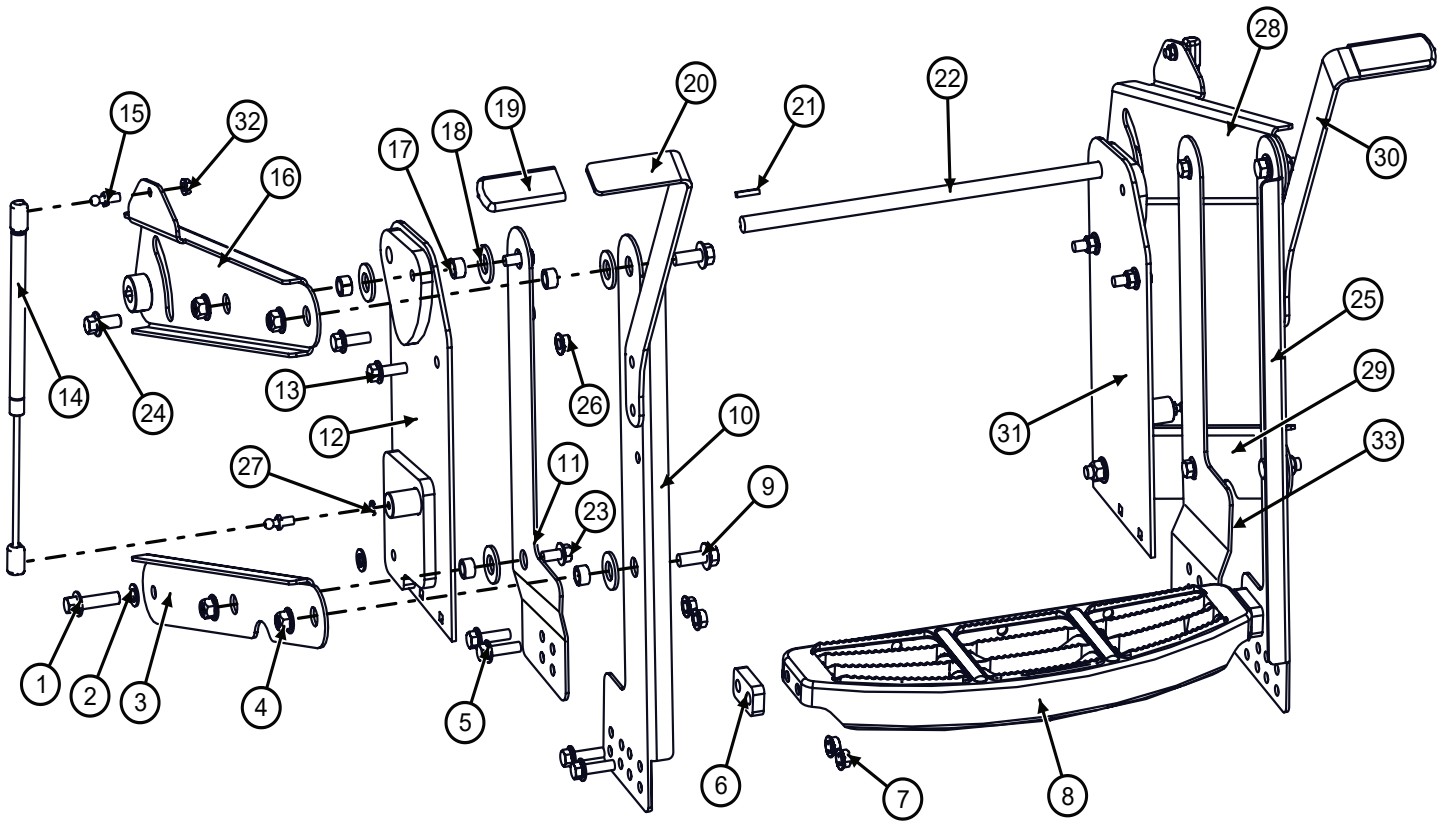
John Deere Header Lift Manifold Fittings			
BOM ID	Part No.	Qty	Description
1	1006.06.06	1	ELBOW, 90°, -6FF x -6MF
2	1006.12.12	1	ELBOW, 90°, -12MF x -12FF
3	1006.16.16	2	ELBOW, 90°, -16MF x -16FF
4	1008.16	1	TEE, SWIVEL NUT, RUN, #16
5	1008.20	1	TEE, SWIVEL NUT, RUN, #20
6	1008.06	1	TEE, SWIVEL NUT, RUN, -6FF x -6MF
7	1004.20.16	1	STR, -20FF x -16MF
8	1004.16.12	1	STR, 16FF x 12MF
9	1297821	1	MANIFOLD SPACER

Model JS9020 Hillco Leveling System  
For Serial Numbers JS9020-22001 thru JS9020-22999

**Hydraulic Hoses**

Hydraulic Hoses			
Part No.	Qty	Where Used	Description
1138942	1	Grease Hose	100R1-03,
1138951	1	Grease Hose	100R1-03, 40"
1138963	1	Grease Hose	100R1-03, 54"
1138974	2	Grease Hose	100R1-03, 77"
1152451	1	CONNECTS YELLOW PORT TO SLAVE CYL BASE PORT ON STOCK CM EQUIPPED COMBINES	100R17AR-04X80",
1152461	1	CONNECT C/M BLUE PORT TO ROD PORT ON STOCK CM EQUIPPED COMBINES	100R17AR-04X70",
1273461	2	Extend Steer Hoses	100R17AR-06X15",
1273462	2	Replaces AH223259; Connect Proportionator Case Drain to Transmission	100R17AR-08X62",
1274141	1	Reverse Hydro Hose	797TC-20 X 124",
1293431	2	Leveling Cylinder Cross Over	100R17AR-06X47",
1295602	2	Leveling Manifold to Leveling Cyl	100R17AR-10X103",
1295882	1	Connects Master Cyl to Slave Cyl	451TC, 3/8" X 195"
1297441	1	Extends AH226085 to Proportionator Pump Supply	100R17AR-12X66",
1297452	1	Replaces AH219243; Connects Rear Filter Port to Proportionator Motor Return	100R17AR-10X127",
1297481	1	Extends AH226119 to the Trans Lube	100R17AR-06X31",
1297641	1	Extends Right Brake Hose	100R17AR-06X78",
1297651	1	Extends Left Brake Line; Extends Lube Line	100R17AR-06X60",
1297842	1	Return, Manifold to Tee	451TC, 3/4 X 60"
1297852	1	Pressure, Manifold to Tee	451TC-5/8" X 66"
1297863	1	Load Sense, Manifold to Tee	100R17AR-04X138",
1297922	1	Replaces JD Hose; Connects Manifold to Tee	100R17AR-12X91",
1297933	1	Replaces Left Header Lift Pressure Hose	451TC, 3/4" X 44",
1298291	1	Extends ProDrive Case Drain	100R17AR-16X36",
1298322	1	Replaces Right Header Lift Pressure Hose	451TC, 3/4"X42",
1298331	1	Replaces the Header Lift Pressure Hose	451TC, 1"X 90",
1299191	1	Extends JH Hose to Shift Block	100R17AR-04X15",
1305181	1	Replaces Forward Hydro Hose	797TC-20 121",
1320711	2	CONNECT "P" & "T" PORTS OF TRIM MANIFOLD TO JD MANIFOLD	100R17AR-06X38",
1320721	1	TRIM MANIFOLD LOAD SENSE TO JD HDR LIFT MANIFOLD	100R17AR-04X138",
1322101	1	CONNECTS "B" PORT TO SLAVE CYLINDER BASE PORT	100R17-04X80",
1322112	1	CONNECTS ROD PORT TO A PORT OF TRIM MANIFOLD	100R17-04 67",
1331391	1	Connects Master Cyl to Slave Cyl	451TC, 3/8" X 175"
1336991	2	CONNECT COUNTER BALANCE VALVE TO LEFT LEVELING CYLINDER	100R17-AR06 X 13",
1348501	1	EXTENDS PROPORTIONATOR MOTOR SUPPLY HOSE	100R17AR-08X60",

**DOUBLE STEP RETRACTABLE LADDER**



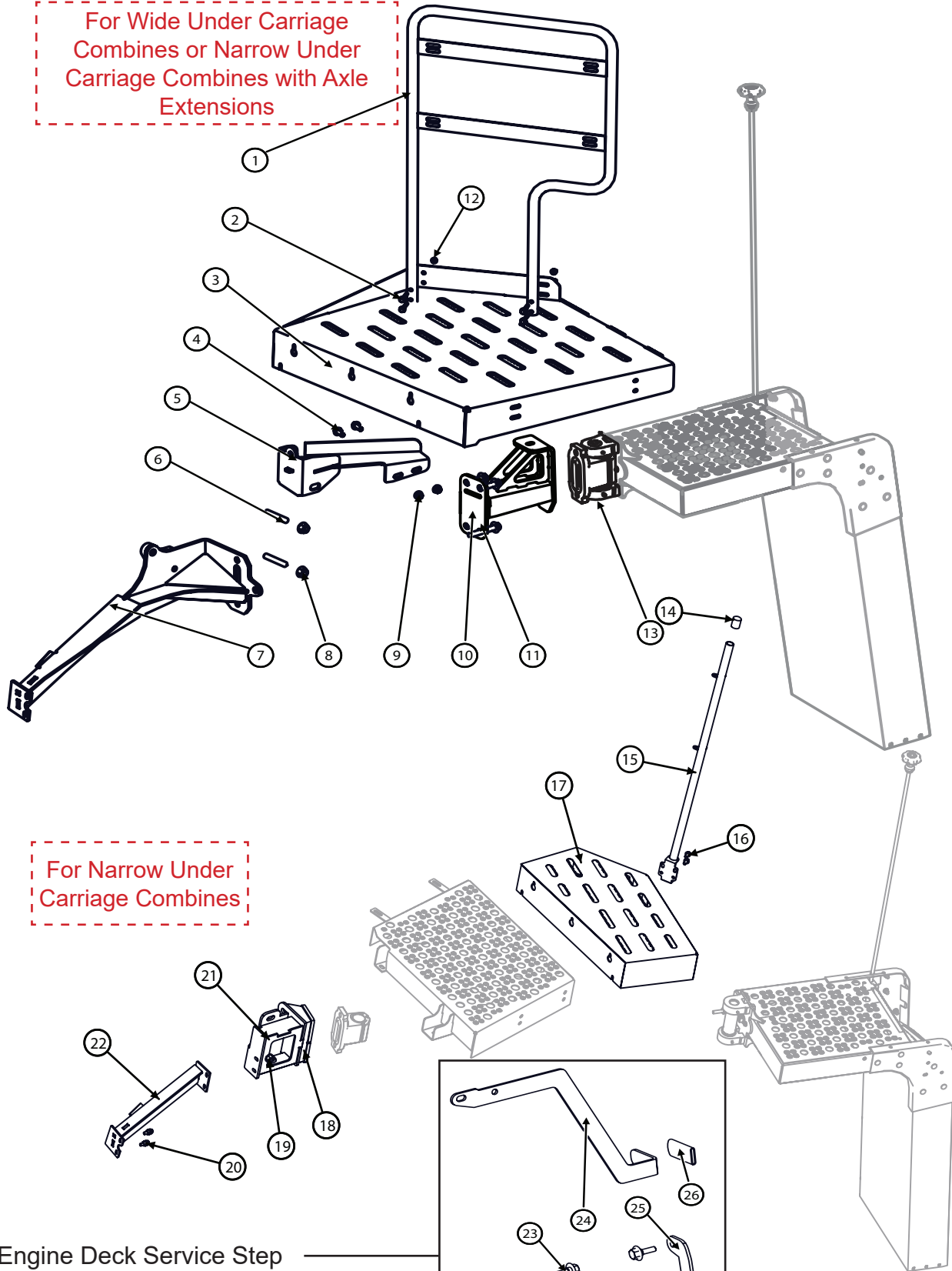
Model JS9020 Hillco Leveling System  
For Serial Numbers JS9020-22001 thru JS9020-22999

**Retractable Ladder**

BOM ID	Part No.	Qty	Description
1-32	P500971	1	ASSEMBLY, MOVING STEP (HILLSIDE)
1	122.012.045	2	FLHC-10.9M12X1.75X45
2	162.014.008	4	MACHINE BUSHING 14GA NR 1/2ID
3	1329802	1	LM LINK, LWR RIGHT PARALLEL
4	128.012	10	FLHN-10.9M12X1.75 STVR
5	122.010.035	8	SCREW, FLANGED HEX CAP, 10.9
6	1300191	4	LM SPACER, STEP
7	123.010	12	FLHN-10.9 M10 X 1.50
8	152601	1	STEP, PLATFORM, STEP (HXE19816)
9	122.012.030	4	FLHC-10.9 M12X1.75X30
10	1330281	1	LM PLT, VERTICAL OUTER RIGHT
11	1300113	1	LM LINK, VERTICAL INNER,
12	1300061	1	LM WLD, RHT LADDER MNT
13	122.010.030	4	FLHC 10.9 M10 X 1.5 X 30
14	155327	2	STRUT, LIFT, 100LB, 15OPC, 6" STROKE
15	134931	4	LIFT SUPPORT BRACKETS (PAIR)
16	1329781	1	LM WLD, TOP RIGHT LINK
17	1299181	10	LM BUSHING, LADDER PIVOT
18	153.010.012	10	MACHINE BUSHING 10GA WR 3/4ID
19	151921	2	GRIP, JD#W25634
20	1306352	1	LM PLT, HANDLE, LEFT
NS	1316512	1	LM PLT, HANDLE, LEFT - SHORT
21	10049.03.00016	2	KEY, STR, 3/16 X 3/16 X 1
22	1298191	1	LM RND, ROCK SHAFT
23	122.012.030	4	FLHC-10.9M10X1.75X20
24	122.012.025	2	FLHC-10.9M12X1.75X25
25	1330291	1	LM PLT, VERTICAL OUTER LEFT
26	123.010	4	FLHN-10.9M10X1.5 STVR
27	136.005	2	LOCK WASHER 5/16"
28	1329851	1	LM WLD, TOP LEFT LINK
29	1329812	1	LM LINK, LWR LEFT PARALLEL
30	1300183	1	LM PLT, LADDER HANDLE RIGHT
NS	1316502	1	LM PLT, HANDLE, RIGHT - SHORT
31	1300051	1	LM WLD, LEFT LADDER MNT
32	119.005	2	FLHN 5/16-18
33	1337642	1	LM LINK, VERTICAL INNER, L

### Ladder Wedges & Service Ladder Extension

For Wide Under Carriage  
Combines or Narrow Under  
Carriage Combines with Axle  
Extensions

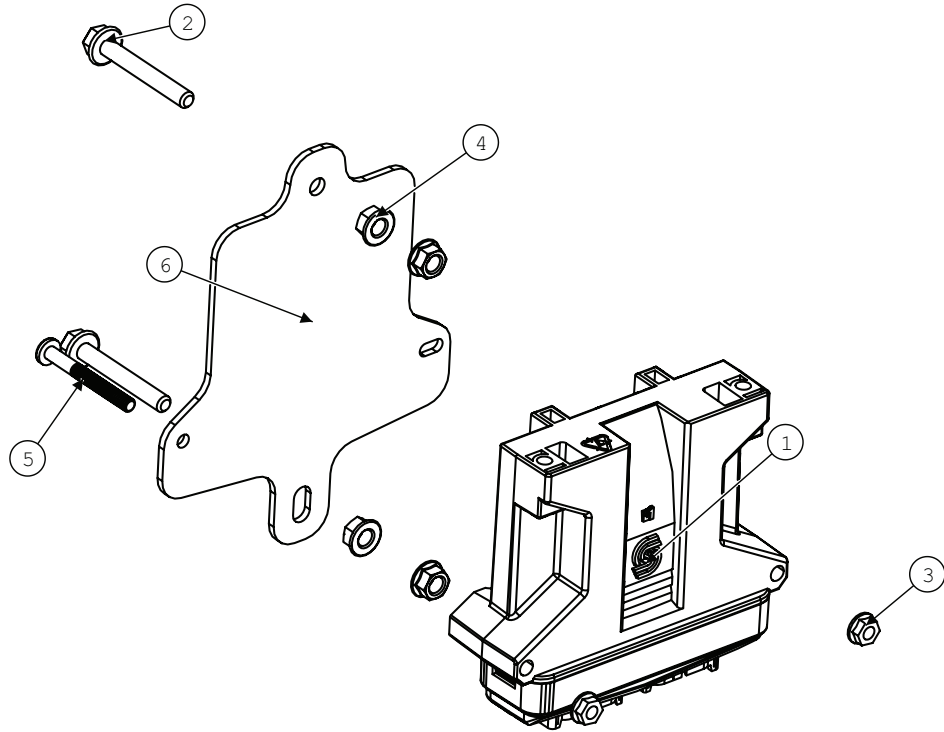


Model JS9020 Hillco Leveling System  
For Serial Numbers JS9020-22001 thru JS9020-22999

**Ladder Wedge**

<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	1346971	1	HANDRAIL 700SERIES
2	122.008.050	4	M8X50
3	1343161	1	PLATFORM, DUAL TIRE
4	122.012.035	2	M12X35
5	1343141	1	PIVOT LOCKOUT
6	155.016.090	2	STUD, DOUBLE-10.9
7	1342721	1	INNER PLATFORM BEAM
8	128.016	2	M16x2.0
9	123.008	2	CYLINDER,LEVELING,DUAL CB
10	1343093	1	10" PIVOT EXTENSION
11	122.016.060	3	M16X60
12	123.008	4	M8x1.25
13	1310061	1	PIVOT
14-22	1314181	1	NARROW UNDERCARRAIGE LADDER
14	151681	1	SHORT CAP,BLK,1-1/4IDX1-1/2L
15	1296681	1	HANDRAIL CORNER
16	122.010.020	1	BOLT,HX,FL,CL10.9 M10X20
17	1301102	4	NARROW PLATFORM
18	1300681	1	PIVOT EXTENSION
19	123.016	2	NUT,HX,FL,CL10 M16
20	122.016.050	1	BOLT,HX,FL,CL10.9 M16X50
21	122.016.050	12	BOLT, HX, FL, CL 10.9 M16X50
22	1296081	1	LADDER BRACE
<b>Engine Deck Service Step</b>			
23-26	1340581	1	SERVICE LADDER EXTENSION
23	1348281	2	SERVICE LADDER HINGE
24	1340591	1	HANDLE, SERVICE LADDER EXTENSION
25	1340571	1	SERVICE LADDER EXTENSION
26	151921	1	GRIP

**Controller Harnesses**

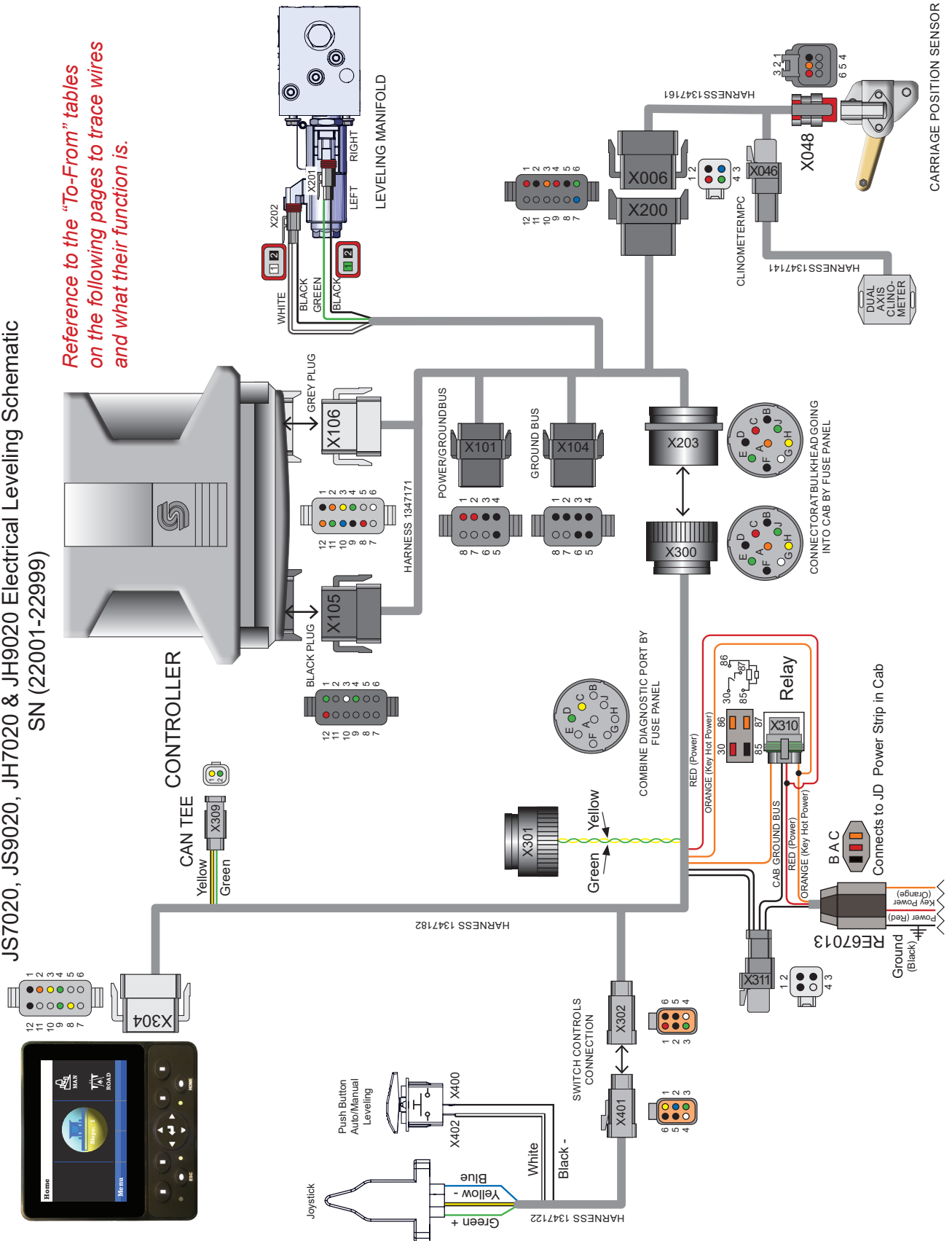


Electrical Components			
BOM ID	Part No.	Qty	Description
1	1346644	1	CONTROLLER, DANFOSS PLUS 1-24 PIN
2	122.008.060	2	FLHC-M08X1.25X60
3	119.004	2	PHMS-GR5-1/4-20 X 2-1/4"
4	123.008	4	FLHN 10.9 M8 X 1.25
5	114.004.036	2	SCREW,PHM,CH,SERR
6	1295201	1	EM PLT, CONTROLLER MNT

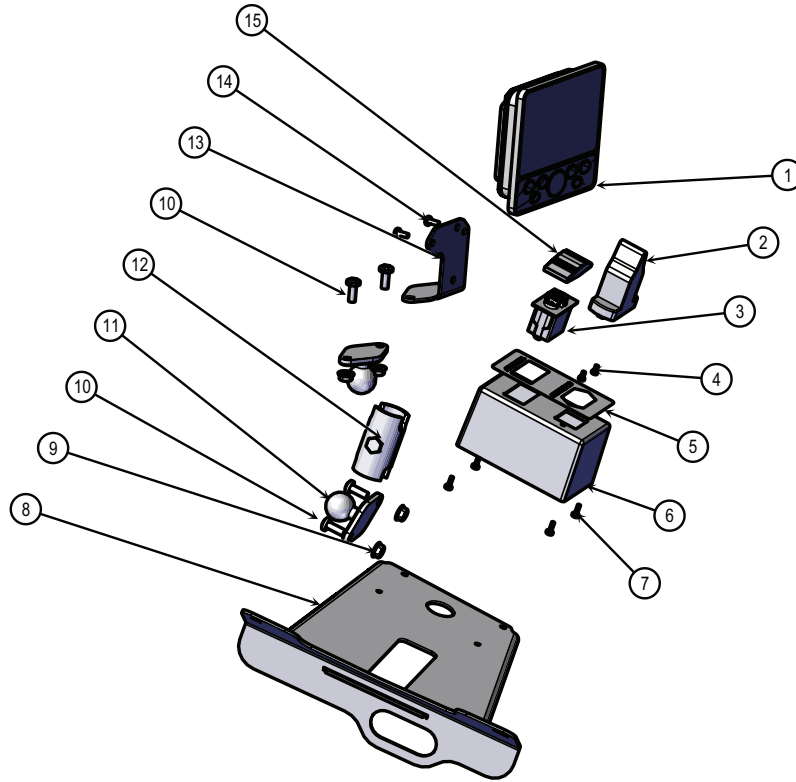
### Electrical Schematics

JS7020, JS9020, JH7020 & JH9020 Electrical Leveling Schematic  
 SN (22001-22999)

*Reference to the "To-From" tables on the following pages to trace wires and what their function is.*

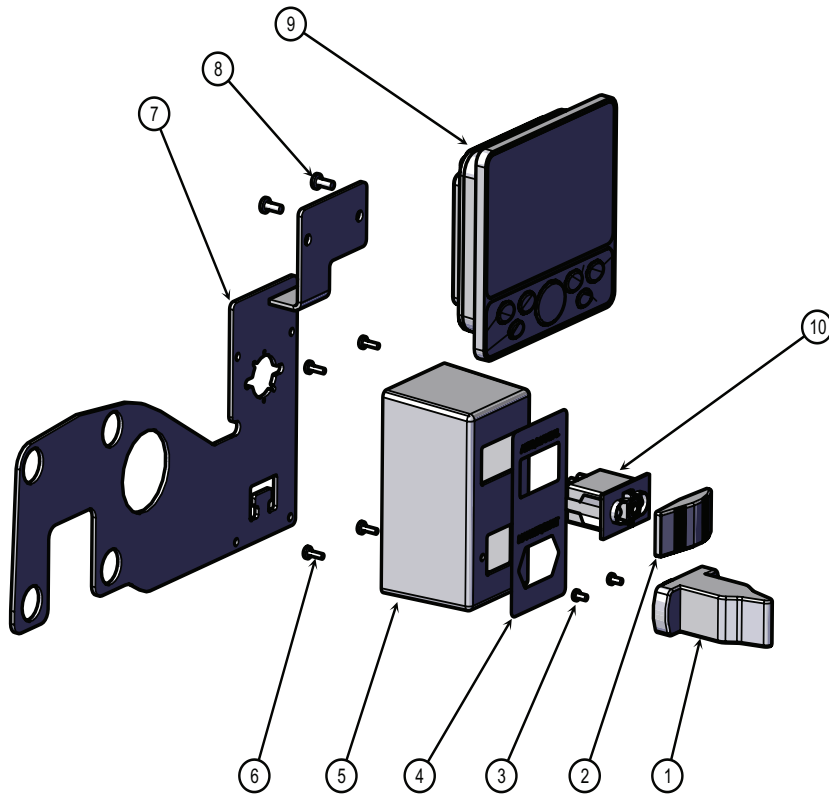


**600 Series Monitor**



600 Series Monitor			
BOM ID	Part No.	Qty	Description
1	1358373	1	PROGRAM, LEVELER DISPLAY
2	155784	1	JOYSTICK, SINGLE AXIS
3	155785	1	SWITCH, SPST MOMENTARY
4	171.003.006	2	SCREW,PHM,CH M3
5	1346991	1	BOX, SWITCH MOUNT
6	155796	1	DECAL, SWITCH BOX, LEVELING SYSTEM
7	114.#06.006	4	6-32X3/8
8	1347561	1	MONITOR MOUNT, S
9	123.006	4	M6 X 1.0
10	171.006.016	4	M6x1.0x16
11	153851	2	RAM 2-7/16" X 1-5/16" BASE W/ 1" BALL
12	153871	1	RAM, DBL SOCKET ARM FOR 1" BALL, 2" SOCKET TO SOCKET LENGTH
13	1347582	1	DISPLAY MOUNT
14	171.004.010	2	M4X10
15	EC-149581	1	CONTURA BLACK ACTUATOR WAYTEK 44361

**700 Series Monitor**



700 Series Monitor			
BOM ID	Part No.	Qty	Description
1	155784	1	JOYSTICK, SINGLE AXIS
2	EC-149581	1	CONTURA BLACK ACTUATOR WAYTEK 44361
3	171.003.006	2	SCREW,PHM,CH M3
4	155796	1	DECAL, SWITCH BOX, LEVELING SYSTEM
5	1346991	1	BOX, SWITCH MOUNT
6	114.#06.006	4	6-32X3/8
7	1347232	1	MOUNT, 700 SERIES LEVELER CONTROLS
8	171.004.010	2	M4X10
9	1358373	1	PROGRAM, LEVELER DISPLAY
10	155785	1	SWITCH, SPST MOMENTARY

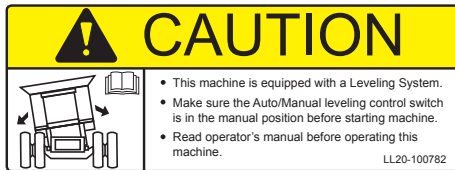
Model JS9020 Hillco Leveling System  
 For Serial Numbers JS9020-22001 thru JS9020-22999  
**Decals and Literature**



1) LL-133741



2) LL-151041



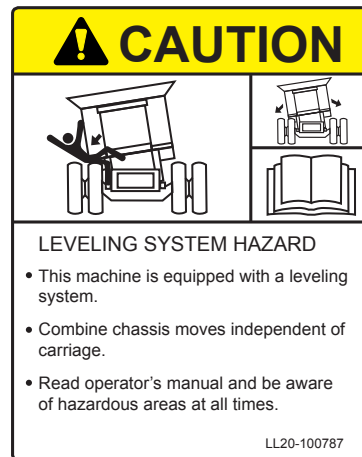
3) LL20-100782



4) LL20-100784



5) LL20-100783



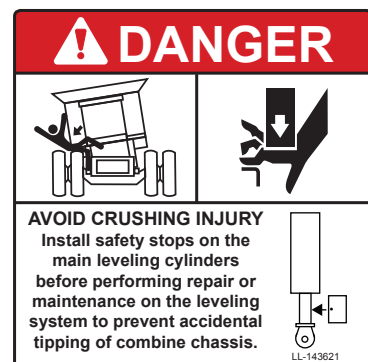
6) LL20-100787



7) LL20-100786



8) LL20-100788



9) LL-143621

Model JS9020 Hillco Leveling System  
For Serial Numbers JS9020-22001 thru JS9020-22999

DECALS AND LITERATURE				
REF.	PART NO.	QTY.	PART NAME	DESCRIPTION
1	LL-133741	1	LABEL, GREASE 50 HRS	OC BULKHEAD
1	LL-133741	2	LABEL, GREASE 50 HRS	RIGHT & LEFT MAIN LEV CYL BOTTOM
1	LL-133741	1	LABEL, GREASE 50 HRS	MASTER CYLINDER ROD
2	LL-151041	2	DECAL, HILLSIDE LEVELING SYSTEM	SIDE OF COMBINE
3	LL-153691	2	DECAL, 20 YEAR ANIVERSARY	SIDE OF COMBINE
4	LL20-100782	1	CAUTION LEVELING SYSTEM CAB	WINDOW IN CAB
5	LL20-100783	2	DANGER, CRUSHING HAZARD	RIGHT & LEFT UNDERCARRIAGE
5	LL20-100783	2	DANGER, CRUSHING HAZARD	SIDES OF DROP AXLE ASSEMBLY
6	LL20-100784	2	DECAL, DANGER PINCH POINT	RIGHT & LEFT UPPER TRANS FACE PLT
7	LL20-100786	1	WARNING ELECTRICAL CRUSHING HAZARD	FRONT OF ELECTRICAL CONTROL BOX
8	LL20-100787	1	CAUTION - LEVELING SYSTEM HAZARD	ON LADDER PLATFORM
9	LL20-100788	1	DANGER - HYDRAULIC HAZARD	ON SIDE OF COMBINE ABOVE THE HYDRAULIC MANIFOLD
9	LL20-100788	2	DANGER - HYDRAULIC HAZARD	FOR EACH LEVELING CYLINDER
10	LL-143621	2	DANGER, AVOID CRUSHING INJURY	IN AREA NEAR SAFETY STOP STORAGE LOCATION
NS	LL-147651	1	LABEL, FEMA MEMBER TAG	NEAR SERIAL NUMBER TAG
NS	LA-255961	1	TAG, SERIAL NUMBER	
NS	LL-289641	1	CM LABEL, MECHANICAL CYLINDER STOP	
NS	D-120620CMA01A	1	MANUAL, PARTS	
NS	D-111124CMA01B	1	MANUAL, OPERATORS	
NS	D-050611SLR01	1	WARRANTY REGISTRATION CARD	
NS	LL-239412	1	LABEL, STEERING WHEEL	TIED TO STEERING WHEEL DURING INSTALLATION
NS	D-120412CMA01	3	DEALER PDI & INSTALL CHECKLIST	

Model JS9020 Hillco Leveling System  
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***Notes***

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