

Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999



# **Model JS7020 Sidehill Leveling System Parts Manual**

SN JS7020-22001 thru JS7020-22999

For John Deere S650, S660, S670, S760, & S770  
Series Combines

D-120618CMA01D



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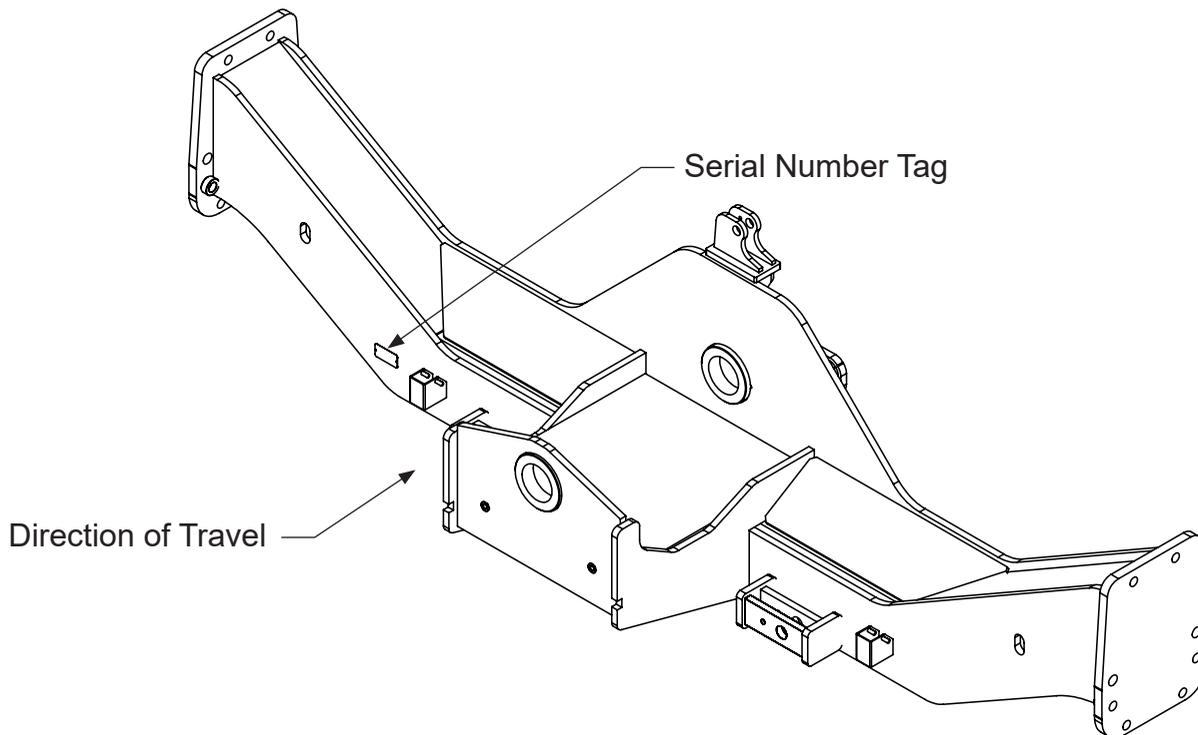
### Contact Information

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107 1st Avenue  
Nezperce, Idaho 83543

Phone	800-937-2461
	208-937-2461
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 JS7020 Leveling System uses the following serial number format: JS7020-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.

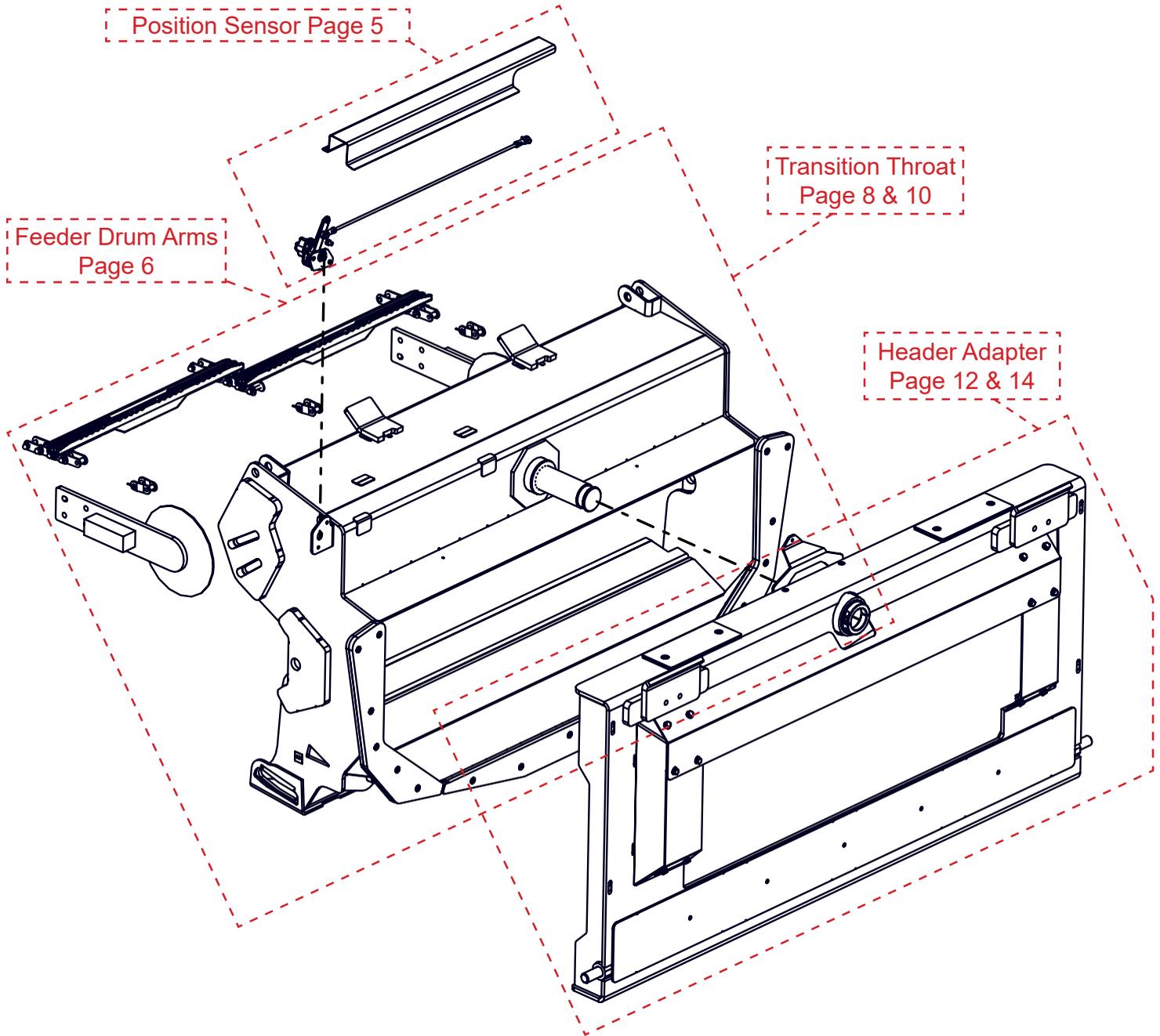
### **RIGHT AND LEFT IDENTIFICATION**

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**

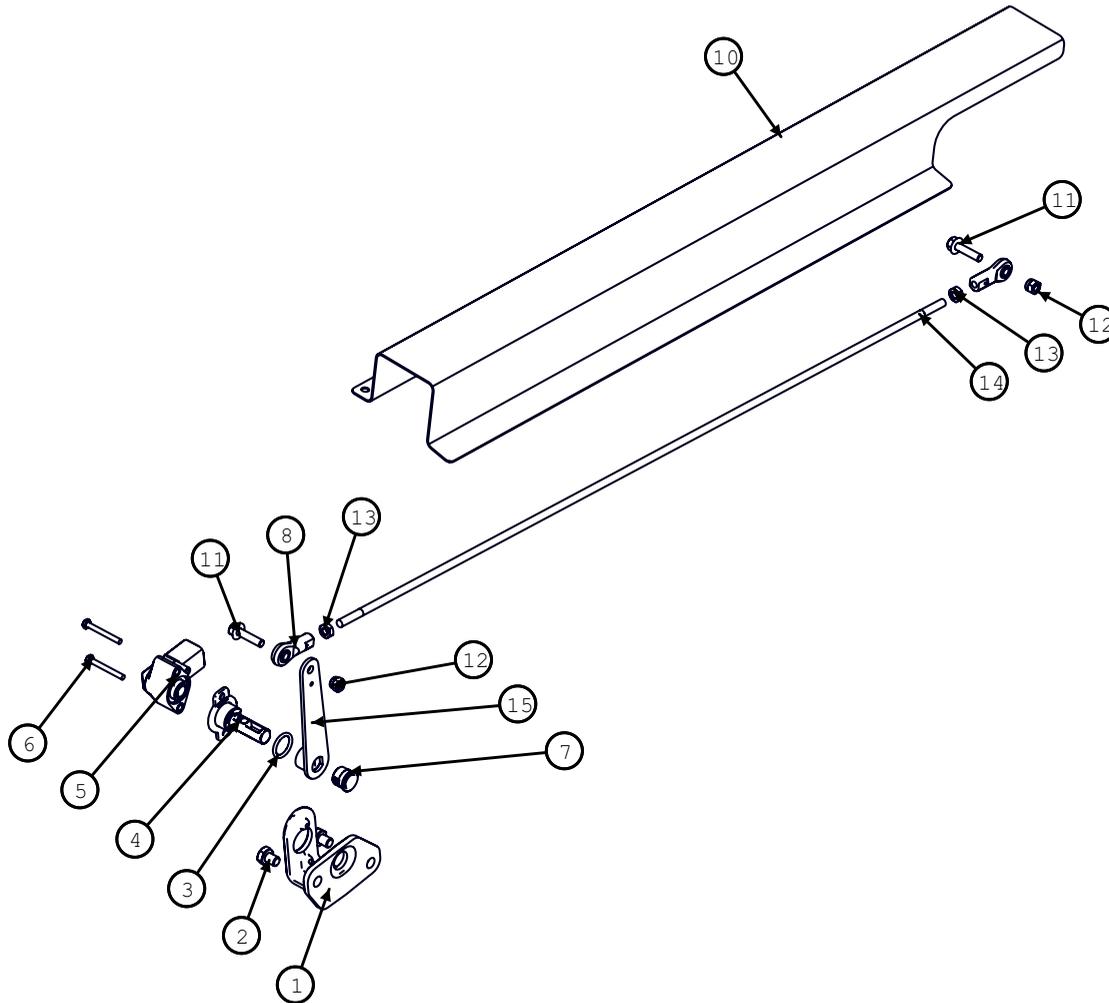
Orders must specify product model, serial number, correct part number, complete description, quantity required, method of shipment, shipping address, and billing address.

**TRANSITION**



Model JS7020 Hillco Leveling System  
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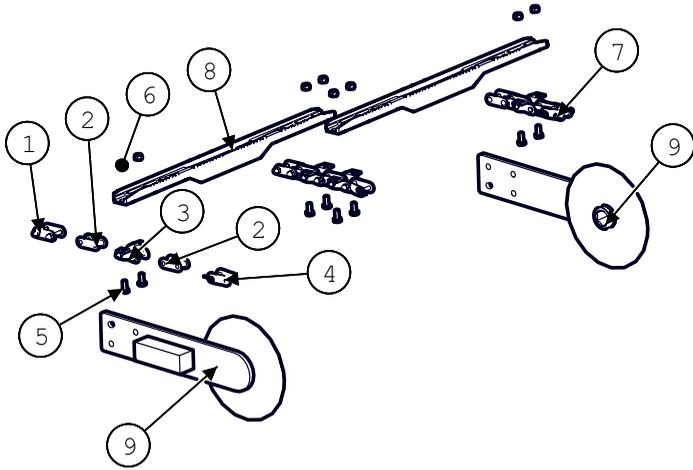
**TRANSITION TILT SENSOR**



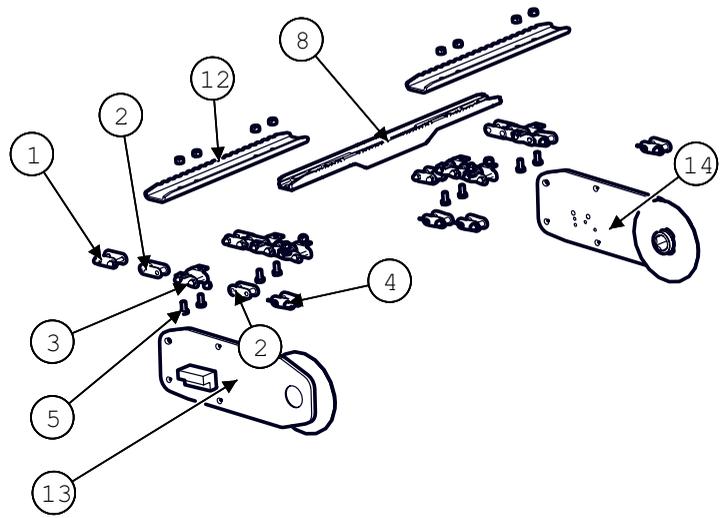
TRANSITION POSITION SENSOR			
BOM ID	Part No.	Qty	Description
1	151321	1	BRACKET, SENSOR
2	122.008.020	2	BOLT,HX,CL8.8 M8X20
3	151391	1	O-RING, 11/16 ID
4	151401	1	SENSOR SHAFT,
5	151381	1	SENSOR, ROTATION,
6	170.004.035	2	BOLT, HX,CL8.8
7	151361	1	BUSHING,
8	151881	2	ROD END, BALL JOINT,
9	201.006.036	1	PIN,ROLL M6X36
10	1295541	1	SENSOR LINKAGE
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

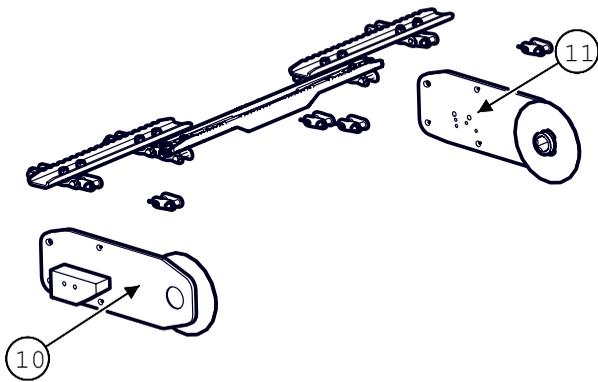
10" Drum, 3 Strand



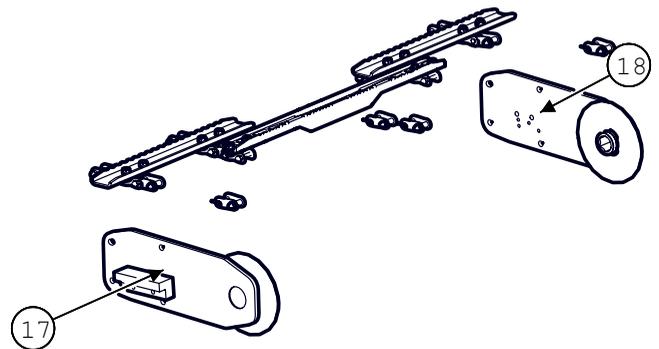
8" Drum, Full Travel, Hydraulic Fore/Aft



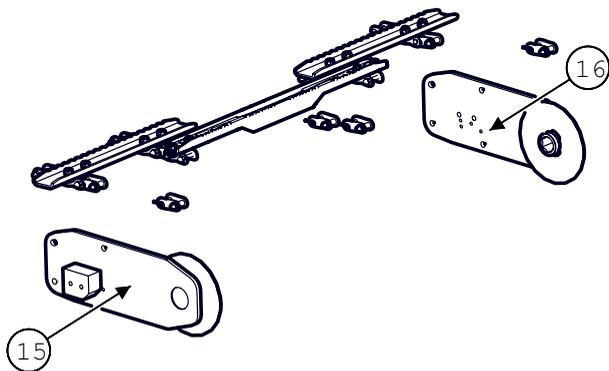
8" Drum, Limited Travel



8" Drum, Full Travel



8" Drum, Limited Travel, Hydraulic Fore/Aft

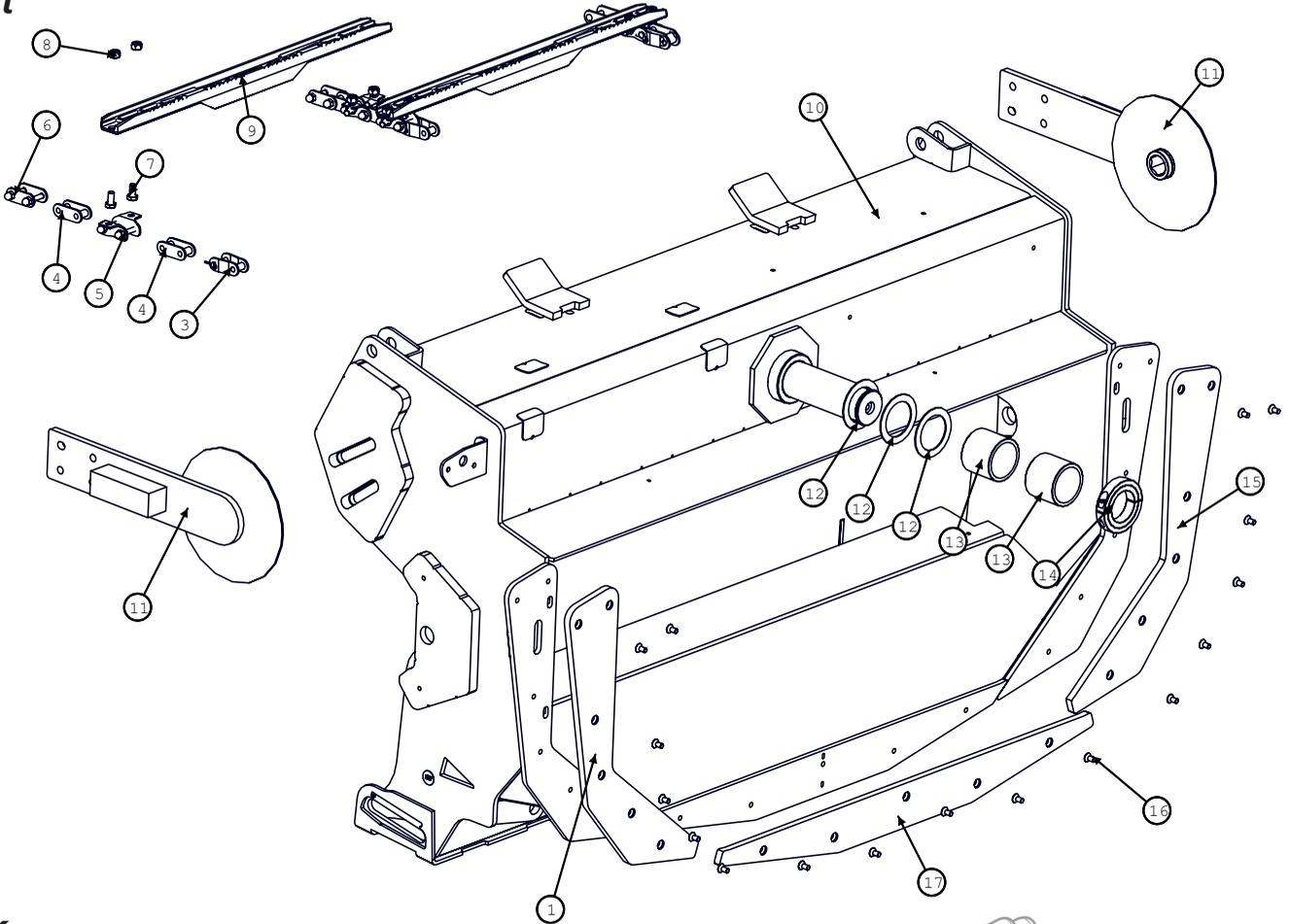


Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

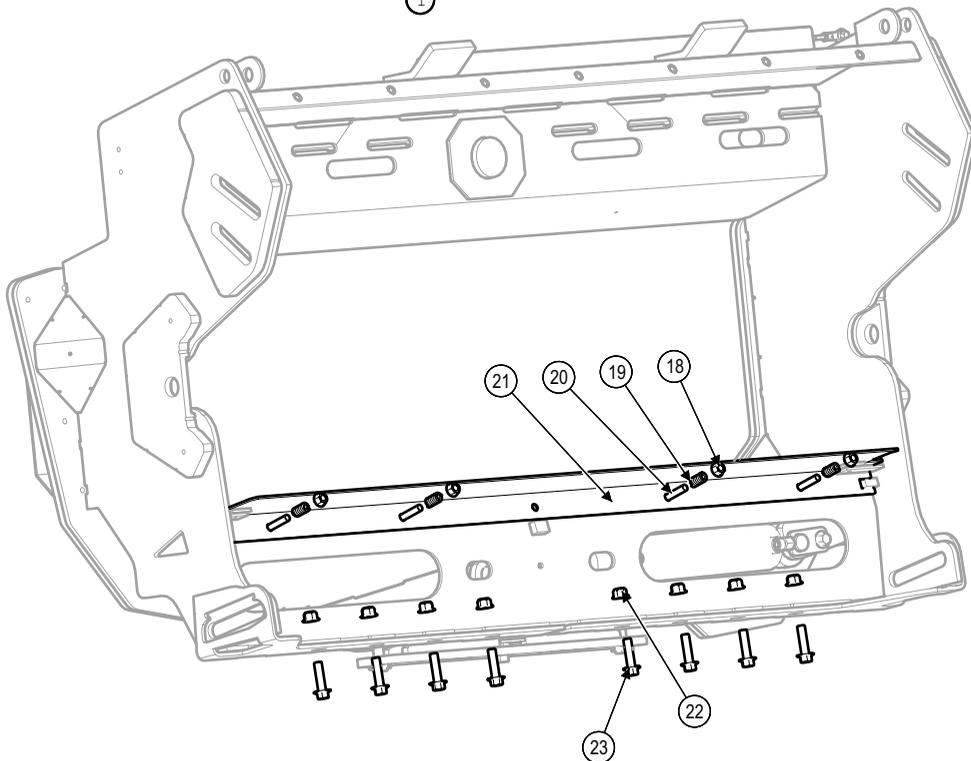
<b>Feeder Drum Arms &amp; Feeder Chain</b>			
<b>10" DRUM, 3-STRAND,</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
140261	1	3	COUPLER, CA557 CHAIN LINK
146391	2	6	LINK, FEMALE, CA557
146381	3	4	CHAIN LINK WITH K6 SIDEBAR
146641	4	3	LINK, OFFSET COUPLER CA557
120.010.020	5	10	BOLT,HX,CL10.9 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 JS7020 Hillco Leveling System  
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**TRANSITION THROAT - NON HYDRAULIC FORE/AFT**

**Front**



**Back**



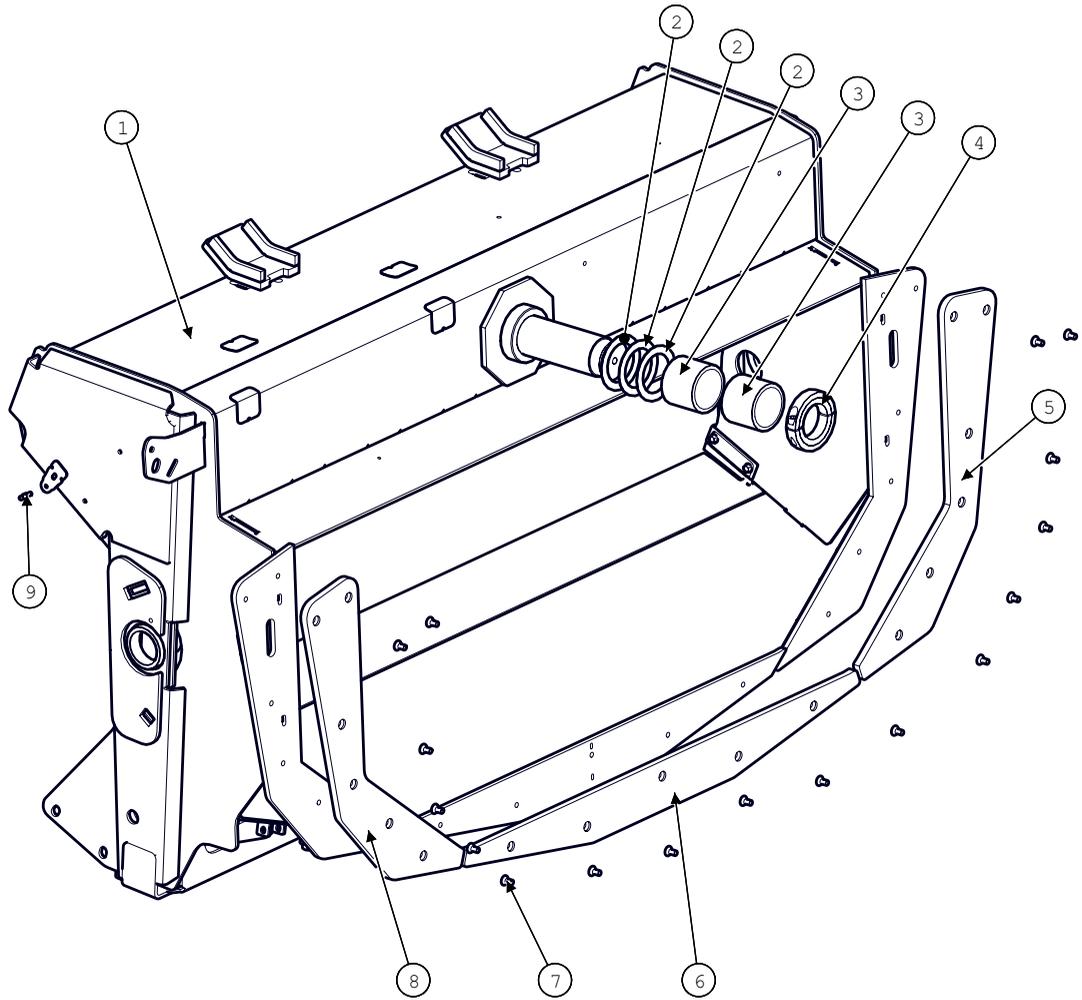
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<b>Transition Throat</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	1250571	1	RIGHT WEARPAD
3	146641	3	LINK, OFFSET COUPLER CA557
4	146391	6	LINK, FEMALE, CA557
5	146381	4	CHAIN LINK WITH K6 SIDEBAR
6	140261	3	COUPLER, CA557 CHAIN 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

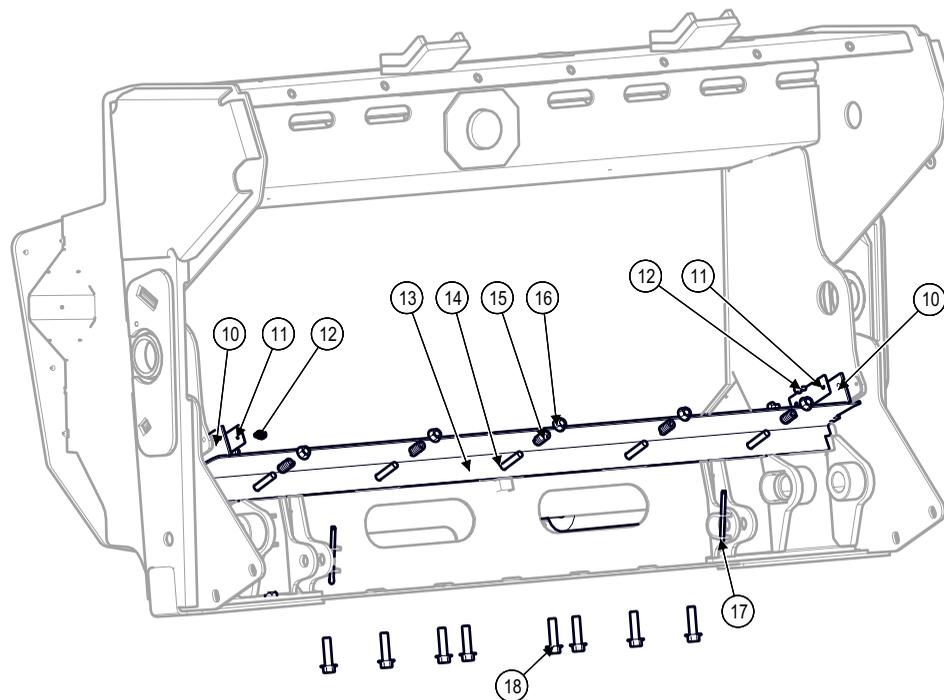
Model JS7020 Hillco Leveling System  
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**TRANSITION THROAT - HYDRAULIC FORE/AFT**

**Front**



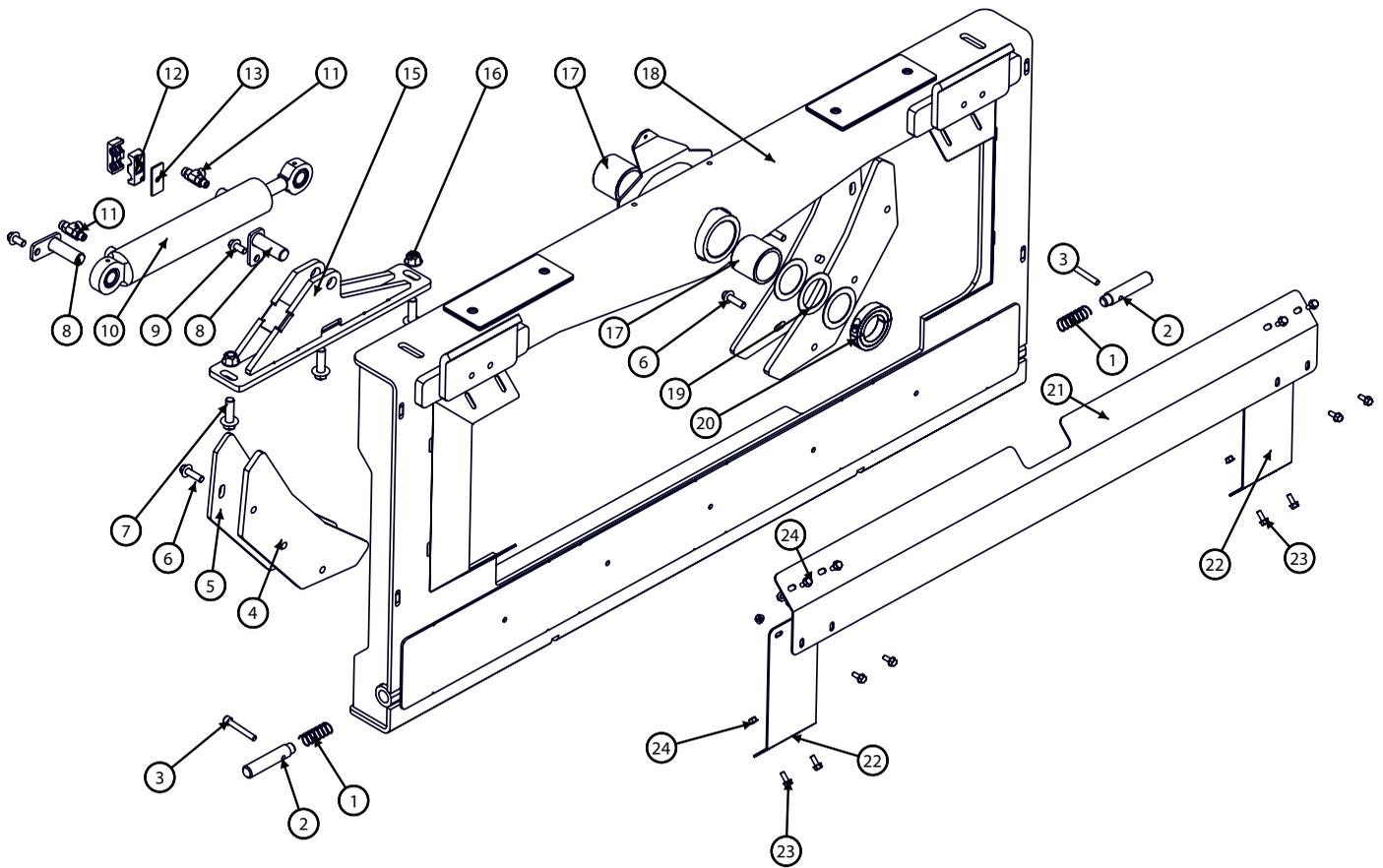
**Back**



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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

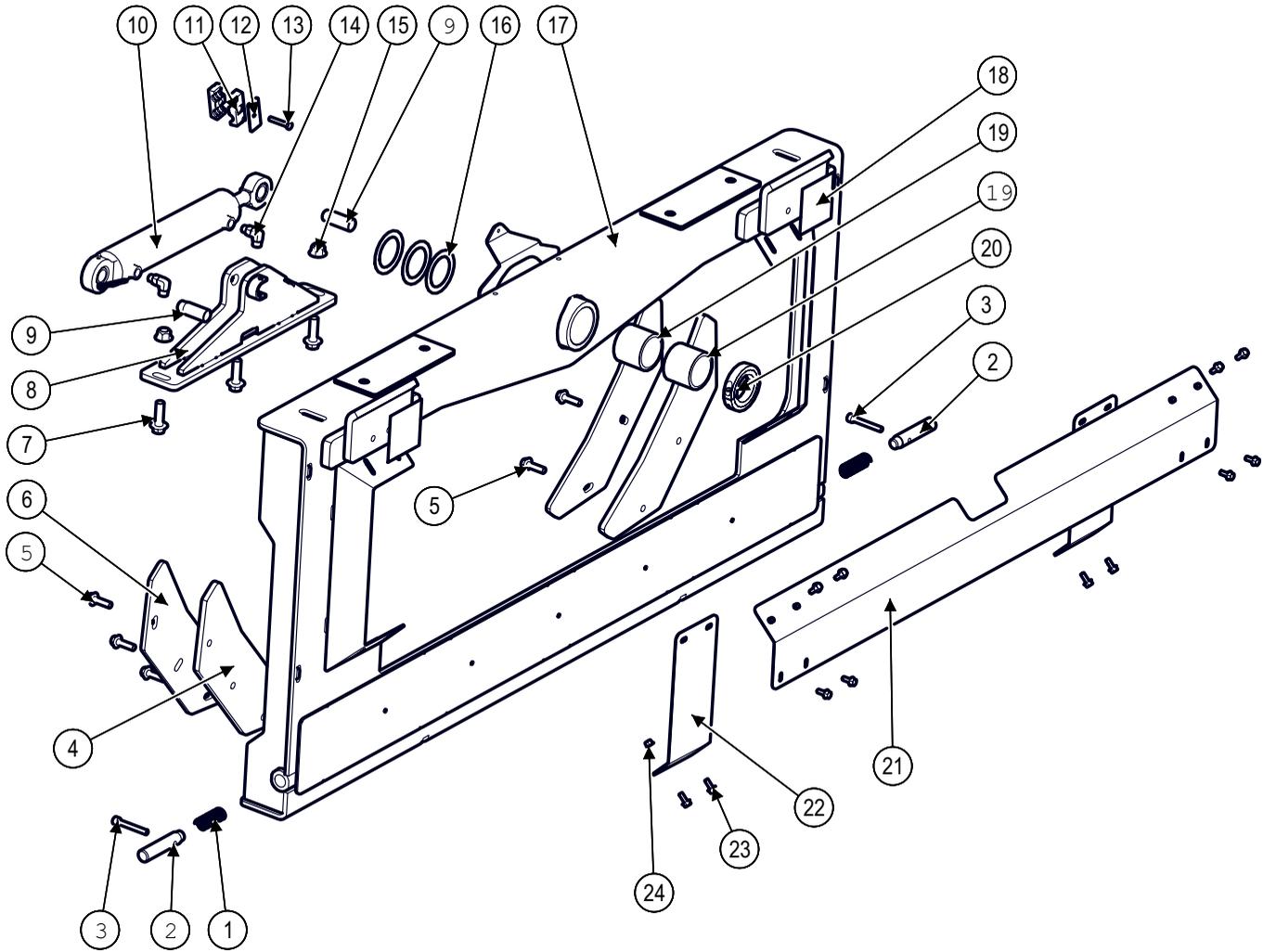
**TRANSITION HEADER ADAPTER - NON HYDRAULIC FORE/AFT**



Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

<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 JS7020 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

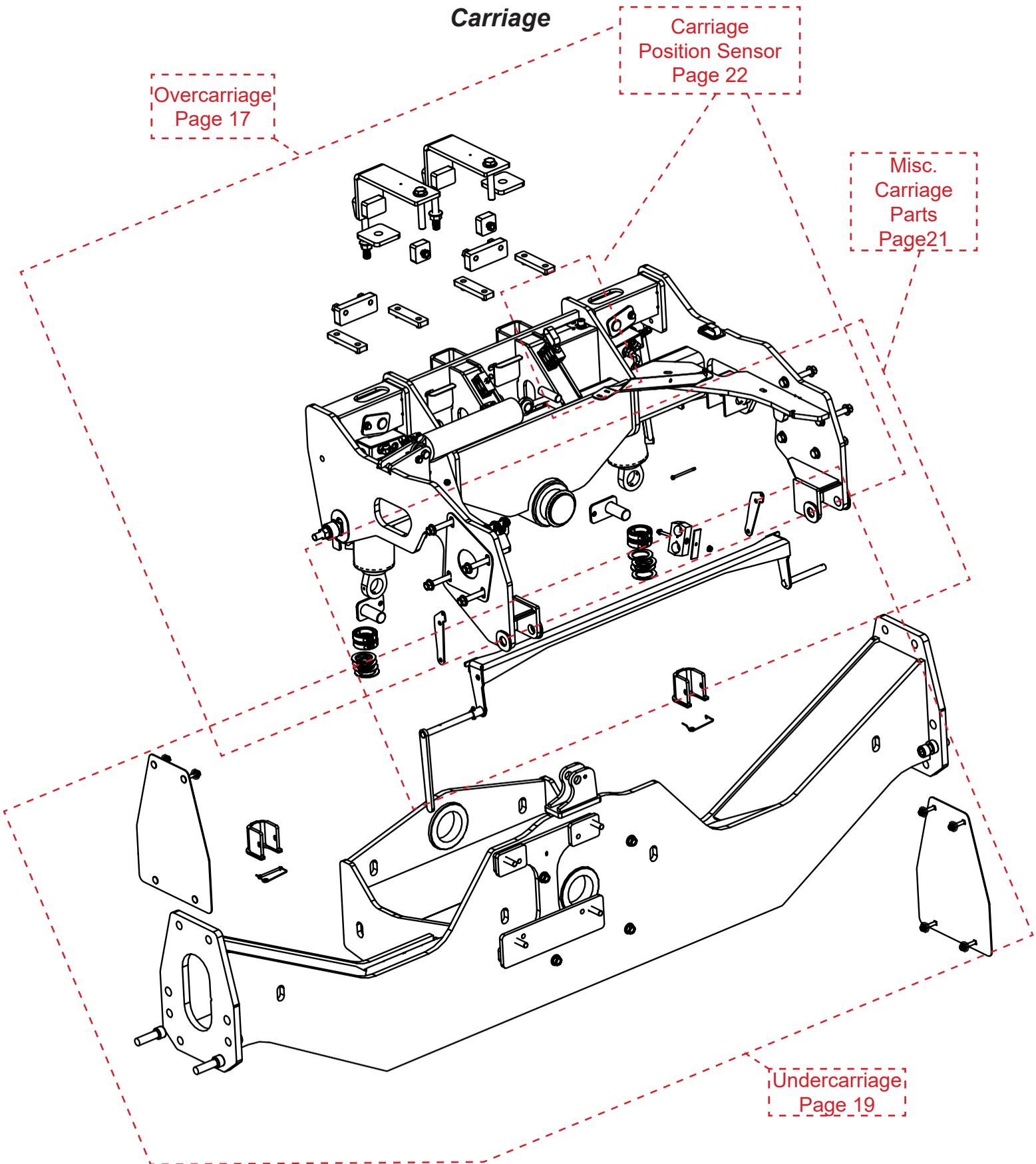
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**Carriage**

Overcarriage  
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Carriage  
Position Sensor  
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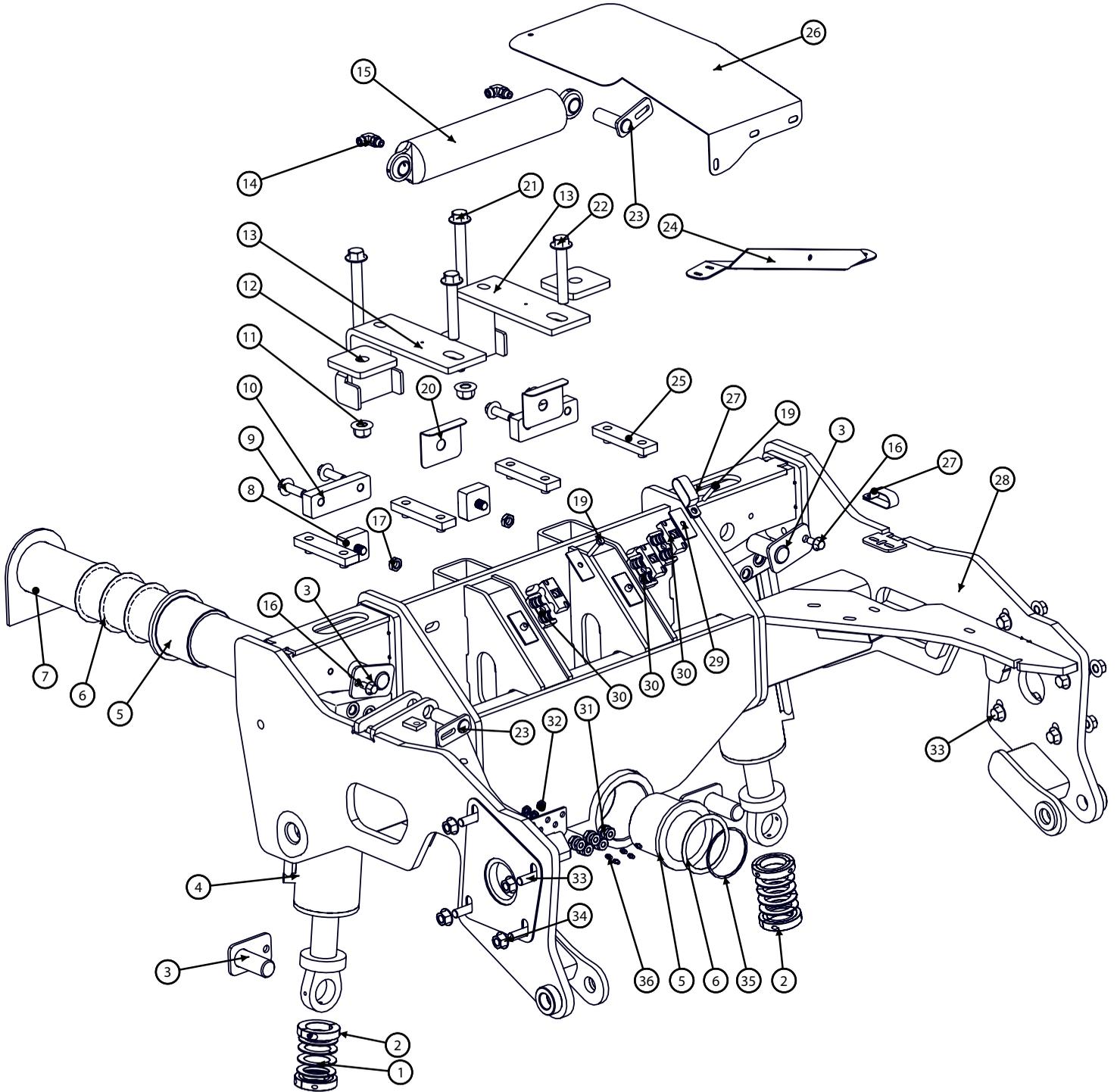
Misc.  
Carriage  
Parts  
Page 21



Undercarriage  
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Model JS7020 Hillco Leveling System  
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**Overcarriage**

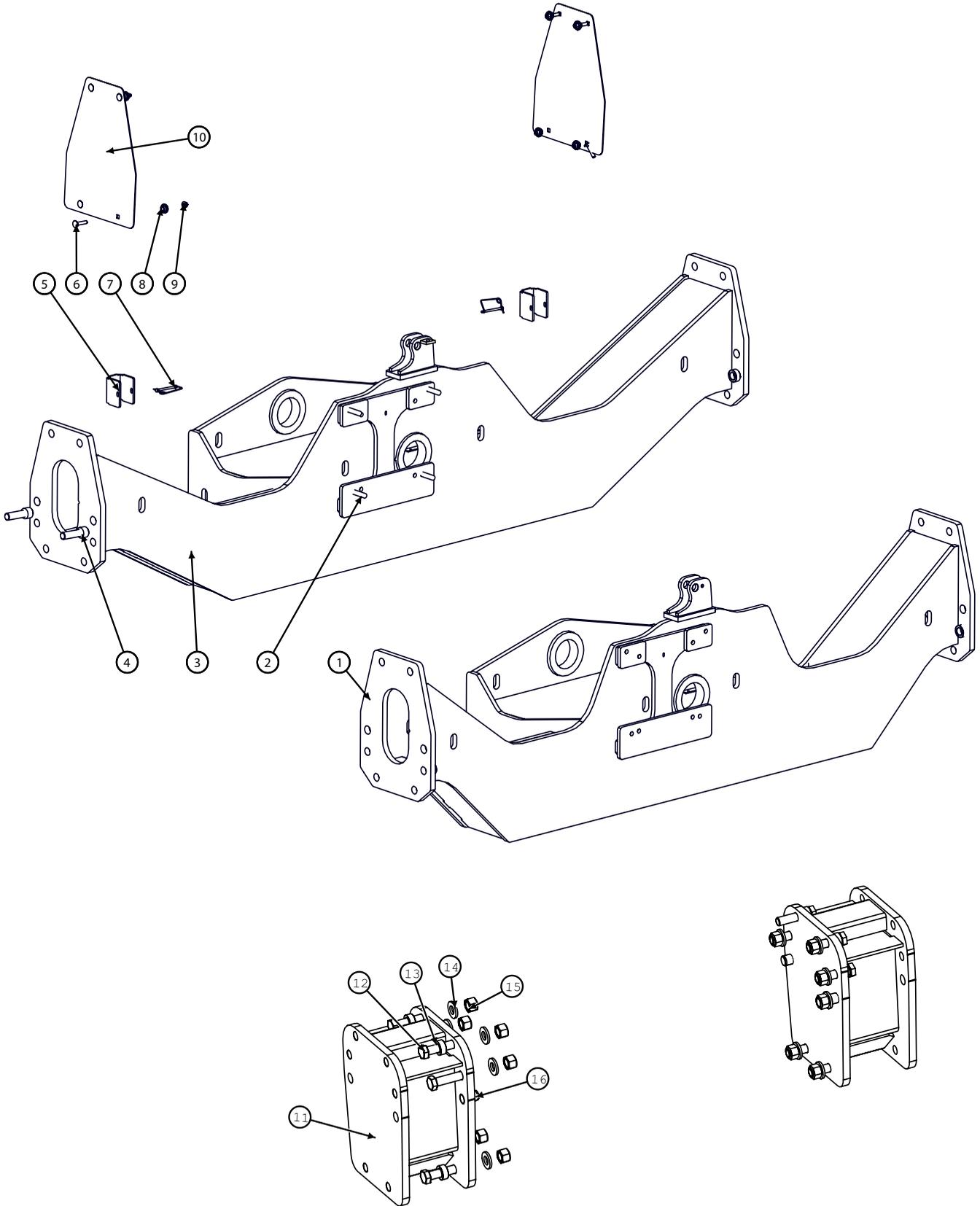


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Overcarriage			
BOM ID	Part No.	Qty	Description
1	137501	8	WASHER, QUICK REPAIR
2	153241	4	COLLAR, CLAMPING
3	1230552	4	PIN, MAIN CYLINDER
4	155860	2	CYLINDER,LEVELING,DUAL CB
5	1247961	2	PIVOT BUSHING
6	138641	4	4.016ID X 4.7640D X 048
7	1291351	1	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

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**Undercarriage**

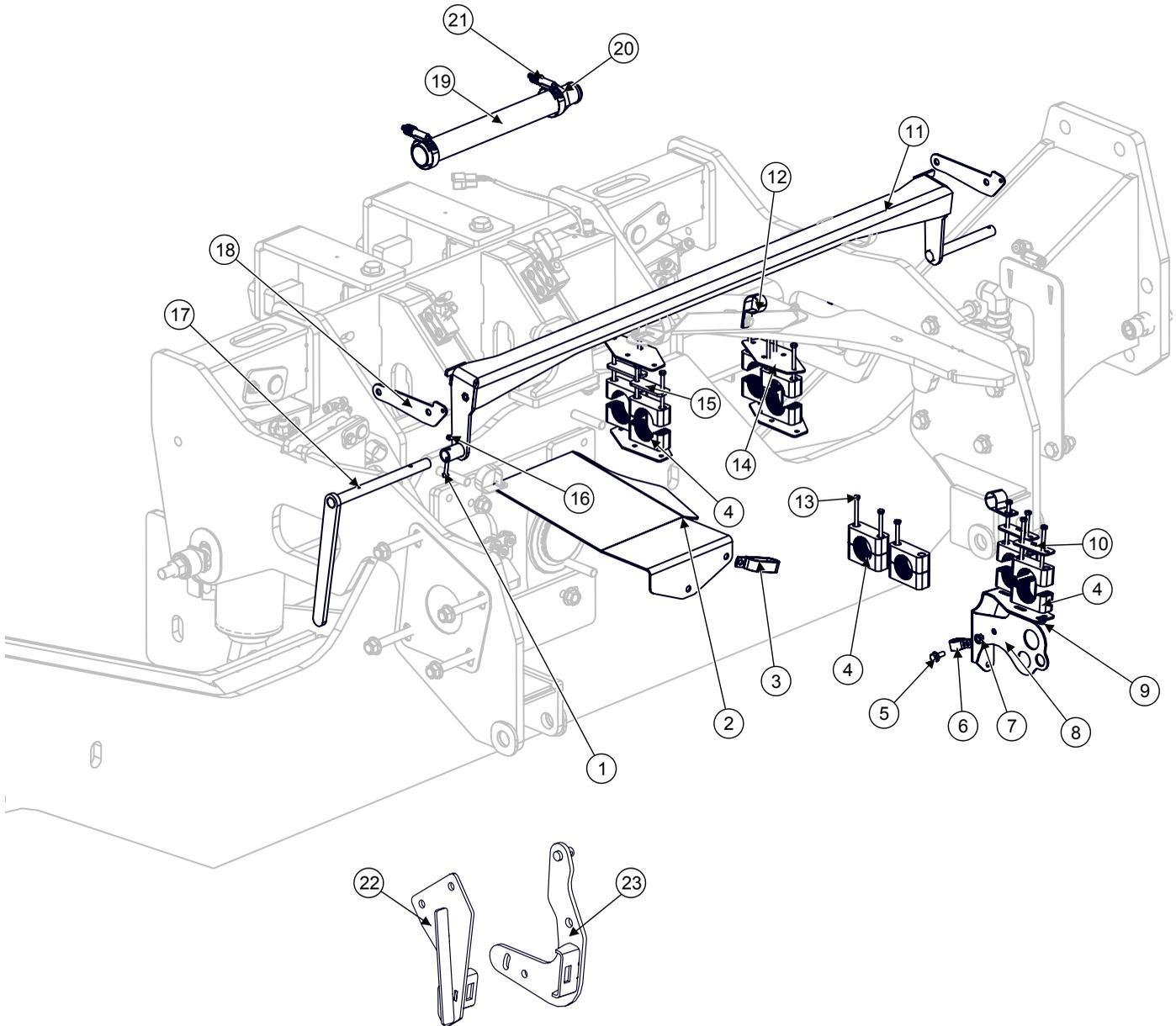


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<b>Undercarriage</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	1292921	1	UNDERCARRIAGE, NARROW, 96.25"
2	155.016.075	4	STUD, DOUBLE-10.9
3	1290812	1	UNDERCARRIAGE, WIDE, 114.75"
4	159.024.080	2	SCREW,SHC,CL12.9 M24
5	1307161	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**

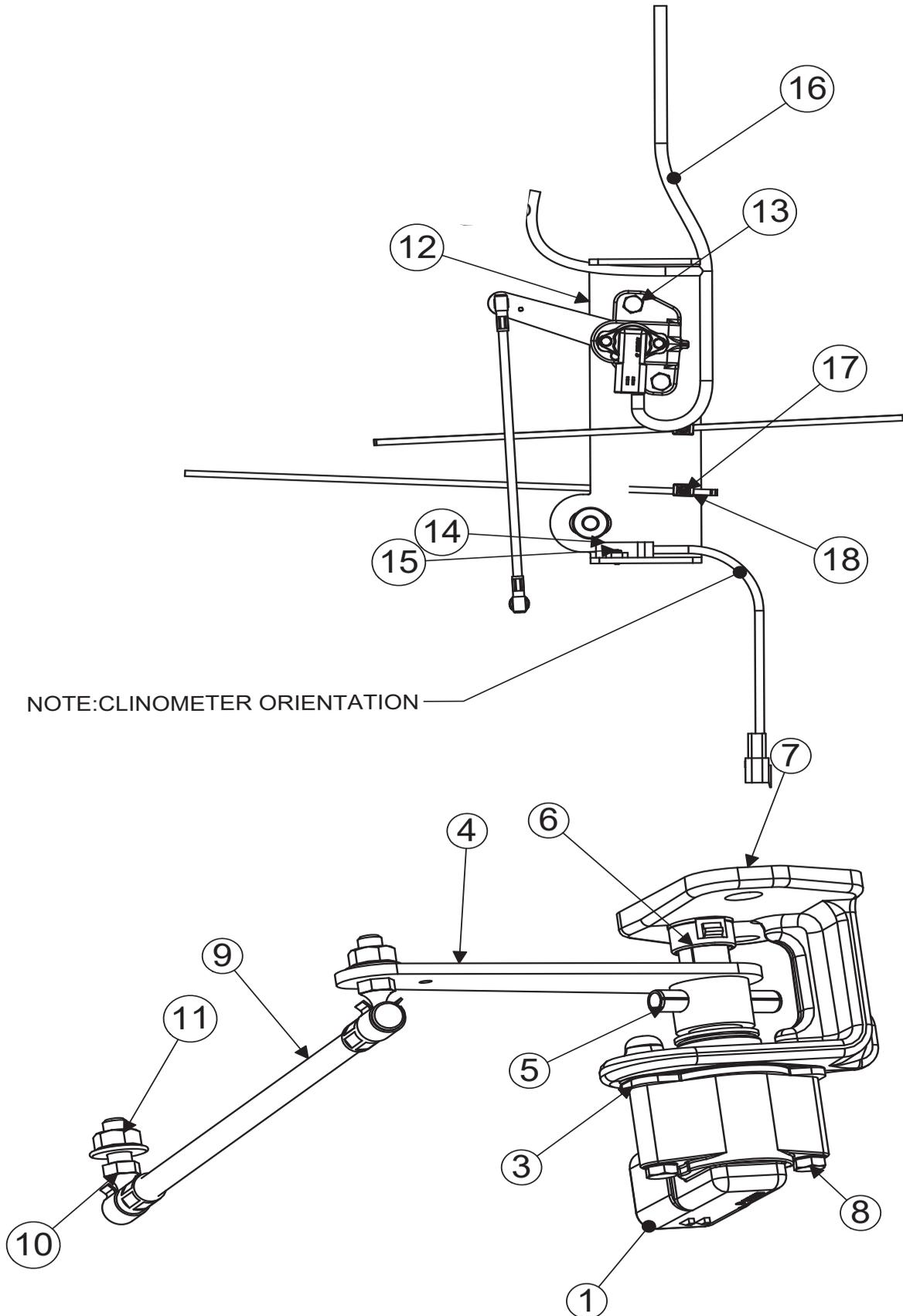


Model JS7020 Hillco Leveling System  
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<b>Overcarriage Misc.</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
1	121.006.035	1	HC-10.9 M6x1.0X35
2	1274252	1	HM PLT, TABLE HYDRO HOSE
3	1151781	1	CLAMP, P-STYLE (JD#AH77884)
4	155171	8	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
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	HM PLT, HYDRO HOSE SUPPORT
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 JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

**Carriage Position Sensor**

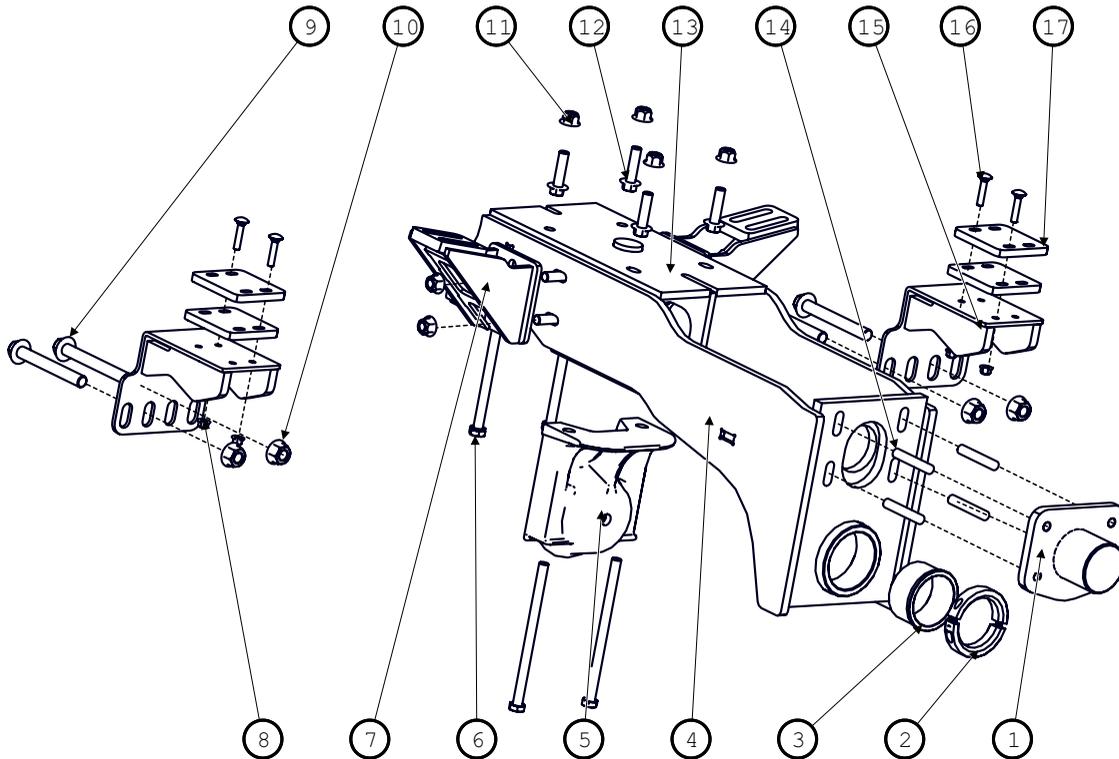


Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

Carriage Position Sensor				
BOM ID	Hillco Part No.	John Deere Part No.	Qty	Description
1	151381	AXE14246	1	SENSOR, ROTATION, HALL 2CH +/-120DEG
2	151391	P48347	1	O-RING, 11/16ID
3	151401	AXE14888	1	SENSOR SHAFT, ROUGH SERVICE DEVICE
4	151371	AXE17303	1	ARM, TILT SENSOR
5	201.006.036		1	PIN, ROLL M6X36
6	151361	R41076	1	BUSHING,
7	151321	HXE16001	1	BRACKET, SENSOR
8	170.004.035	19M9368	2	BOLT, HX, CL8.8 M4
9	151331	AH226146	1	LINKAGE, POSITION
10	151341	H168732	1	BALL STUD
11	123.006	14M7303	2	NUT HX,FL,CL10,M6 X 1.0
12	1347272		1	EM WLD SENSOR MNT
13	178.008.010		2	BOLT, HX,CL8.8, M8X10
14	1347142		STUD,DBL- END,CL10. 9 M16X90	CA HAR CLINOMETER
15	114.#06.006		2	SCREW,PHM,CH 6-32X1/4
16	1347161		1	PRT SENSOR PACKAGE
17	115.#06.004		2	SCREW,PHM,SH 6-32X1/4
18	153641		2	CABLE TIE MOUNT, WHITE
19	141341	H-77698	2	WIRE TIE, BLK, 3/16X15

Model JS7020 Hillco Leveling System  
 For Serial Numbers JS7020-22001 thru JS7020-22999

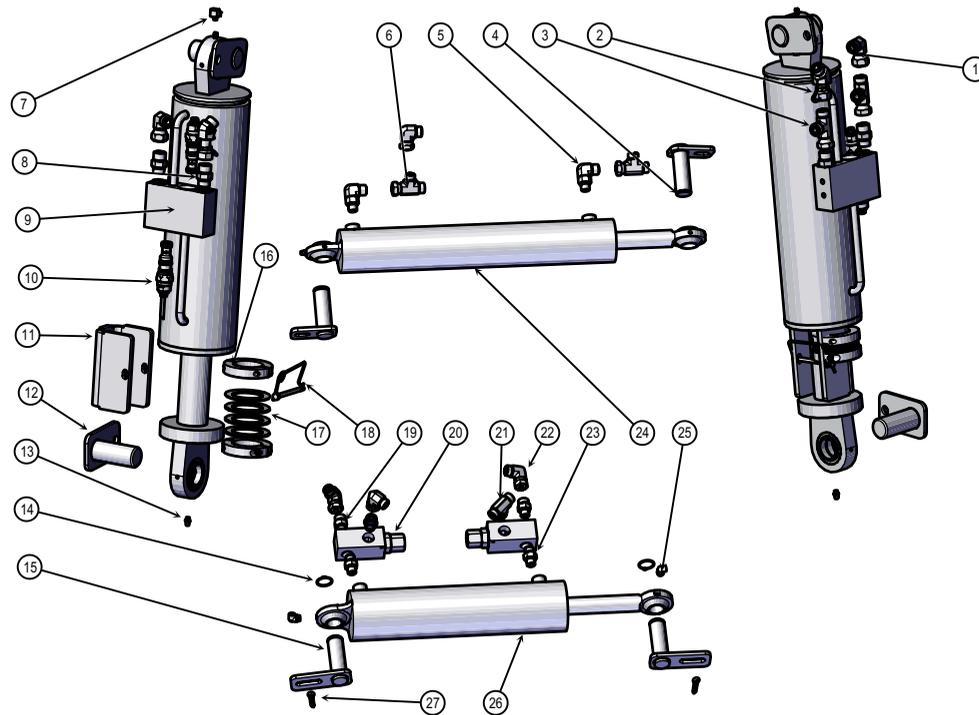
**DROP AXLE**



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 JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

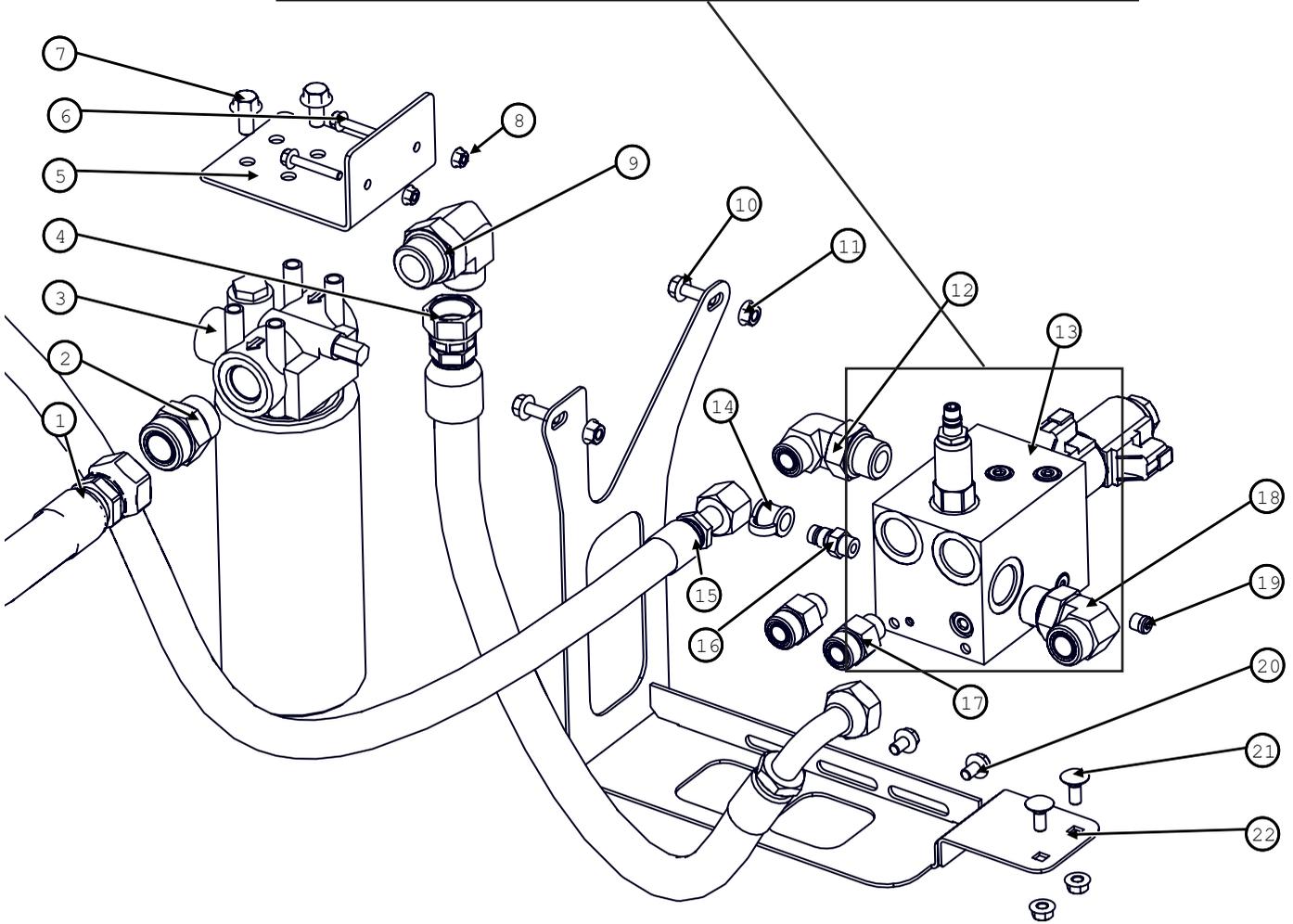
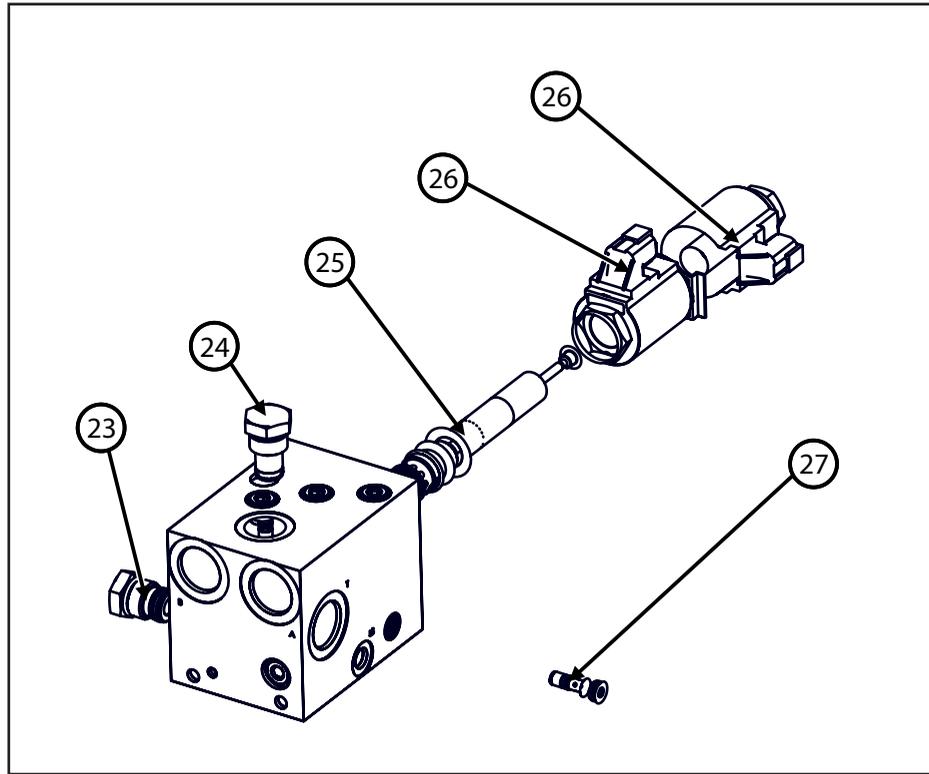
**Hydraulic Components**



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"

Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

**Leveling Manifold**

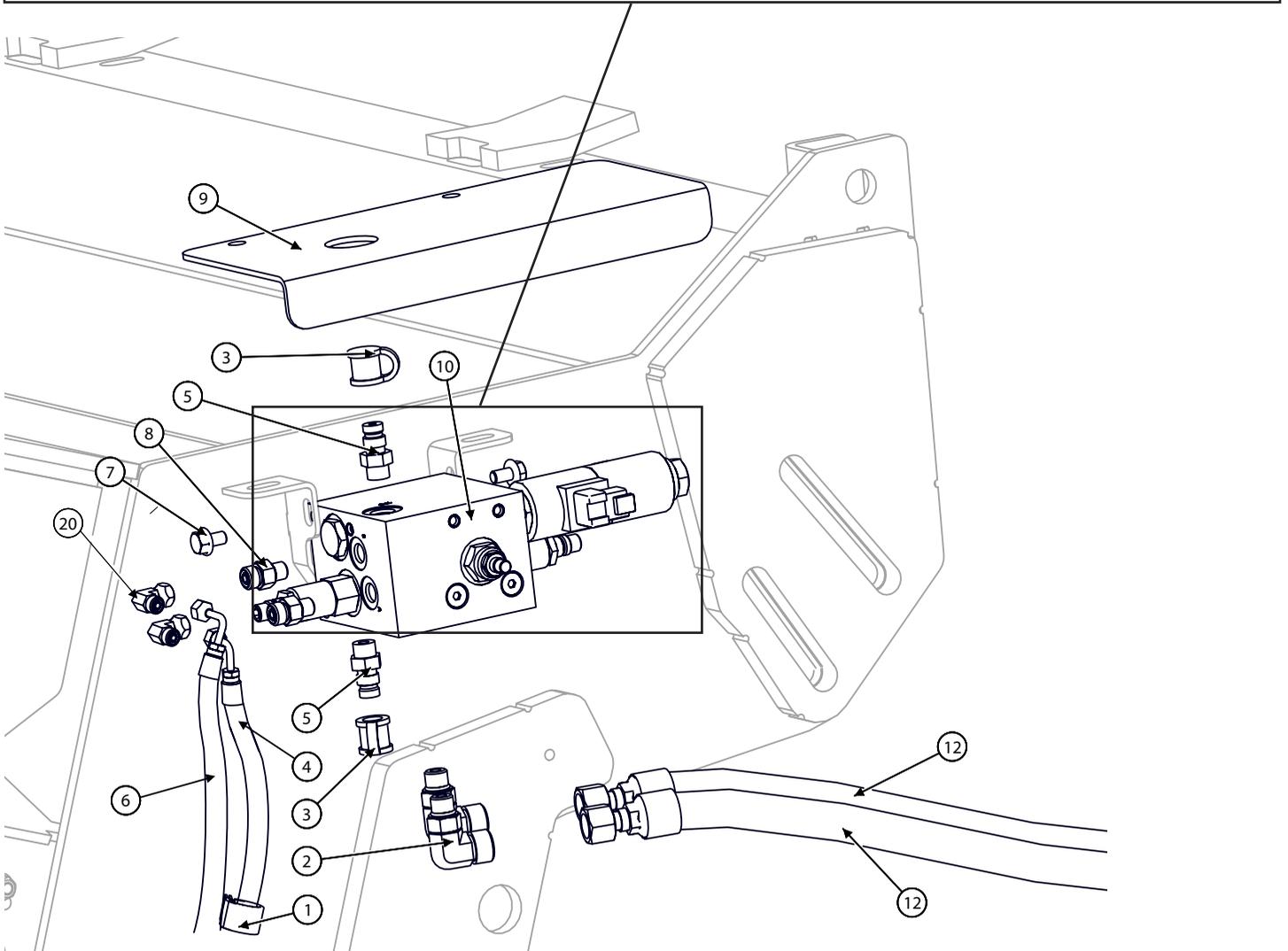
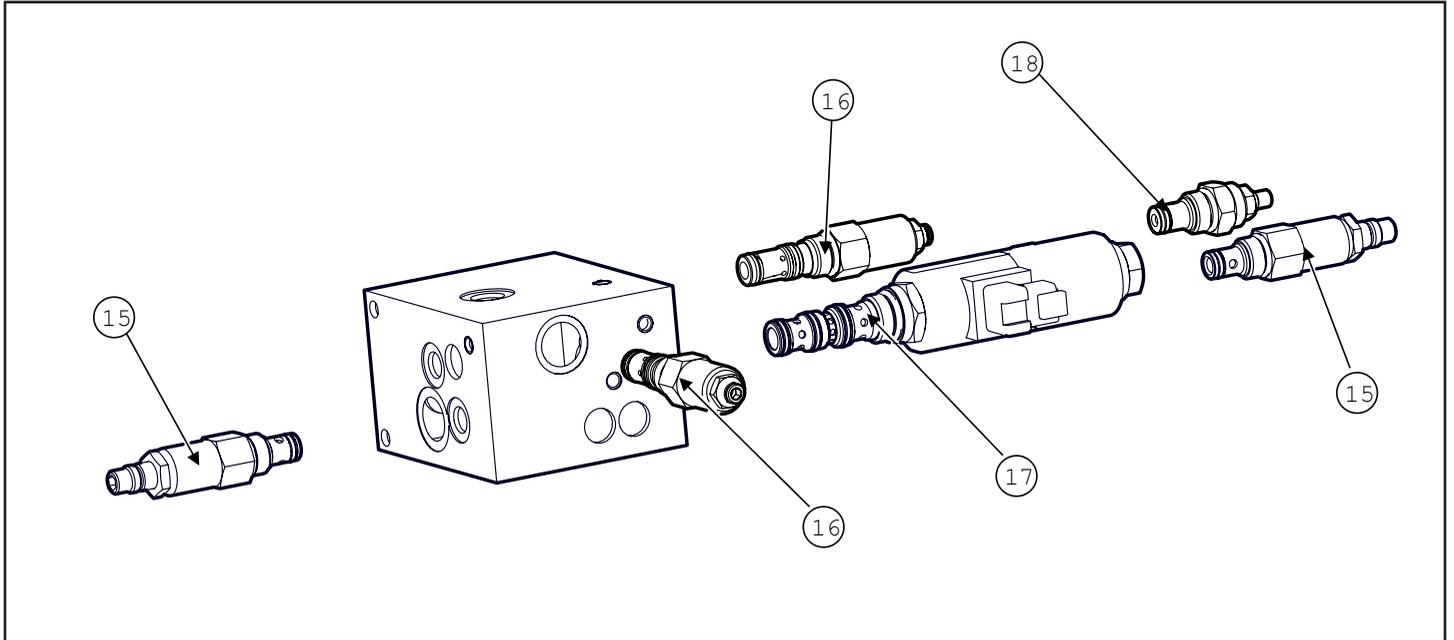


Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

Leveling Manifold			
BOM ID	Part No.	Qty	Description
1	1295781	1	100R17-12X252"
2	1001.16.16	1	HA,STR
3	143441	1	OIL (AH125733)
4	1295771	1	100R17AR-12X23",
5	1296121	1	MOUNT, RETURN FILTER
6	122.006.040	2	BOLT,HX,FL,CL10.9 M6X40
7	122.010.020	2	BOLT,HX,FL,CL10.9 M10X20
8	123.006	2	M6 X 1.0
9	155860	1	CYLINDER,LEVELING,DUAL CB
10	122.008.025	2	BOLT,HX,FL,CL10.9 M8X25
11	123.008	4	M8x1.25
12	1003.12.10	1	HA,90°
13	1346221	1	MANIFOLD, LEVELING, HIGH-FLOW,
14	144001	1	DUST COVER
15	1295741	1	100R17AR-10X252"
16	143991	1	COUPLER,
17	1001.12.10	2	-12MORB X -10MORFS
18	1003.12.12	1	HA,90°
19	1019.04	1	SKT,HD PLUG
20	111.005.008	2	BOLT,HX,FL,GR5 5/16-18X1/2
21	163.008.020	2	BOLT,CARR,CL8.8 M8X20
22	1313601	1	MANIFOLD MOUNT
23	155234	1	CAVITY PLUG, 3 WAY, 10 SERIES
24	155238	1	CAVITY PLUG, 2 WAY, 10 SERIES
25	155855	1	CARTRIDGE VALVE,3 POS,4 WAY, PROPORTIONAL, 16GPM
26	155854	2	SOLENOID COIL,M19,PROP,DEUTSCH
27	155236	1	CHECK VALVE, REVERSE DIRECTION

Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

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

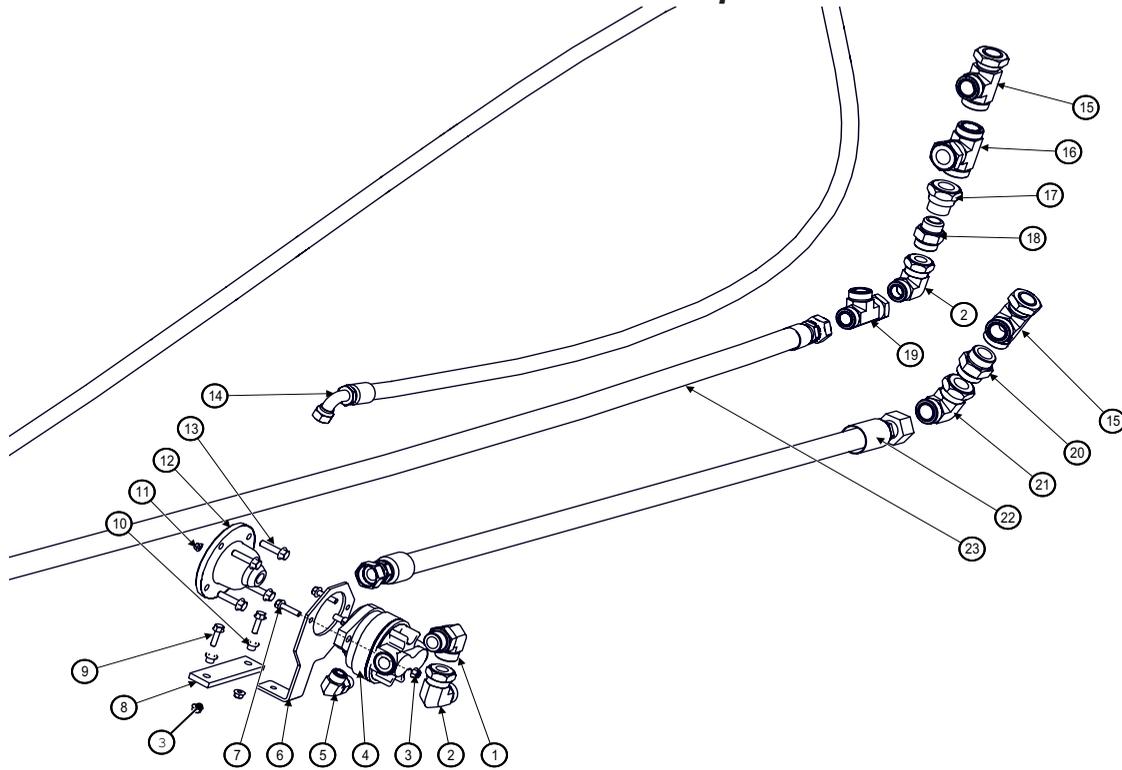


Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

<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	155860	1	CYLINDER,LEVELING,DUAL CB
10	1331781	1	MANIFOLD, CUSTOM, TRIM
12	1322781	2	100R17AR-04x72",
13	1008.06	2	SWIVEL NUT, RUN, -6ORFS
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°

Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

**Gear Pump**



Gear Pump			
BOM ID	Part No.	Qty	Description
1	1003.16.16	1	HA, 90° -16MORB X -16MORFS
2	1006.16.16	2	HA, 90° -16FORFS X -16MORFS
3	128.008	4	NUT,HX,FL,STV,CL10 M8 X 1.25
4	148181	1	HYDRAULIC PUMP ASM, REEL DRIVE
5	1003.10.10	1	HA, 90° -10MORB X -10MORFS
6	1314191	1	TORQUE ARM
7	122.008.035	2	BOLT, HX, FL, CL10.9 M8 X 35
8	HXE28413	1	SHT UHMW, BLK 1/2
9	122.008.030	2	BOLT, HX, FL, CL10.9 M8 X 35
10	A44913	1	BUSHING
11	192.006	1	NUT,HX,FL,STV,GR8, 3/8-16
12	155990	1	HUB, PUMP SUPPORT, (JD# HXE18218)
13	122.010.040	4	BOLT,HX,FL,CL10.9 M10X40
14	1295741	1	100R17-12X252"
15	1008.20	2	HA,TEE,SWV,NUT,RUN-20ORFS
16	1010.20	1	HA,TEE,SWV,NUT,BRA -20 ORFS
17	1004.20.16	1	HA,STR,
18	1023.33.16	1	M33MMSTx-16MORFS
19	1008.16	1	HA, TEE, SWV, NUT, RUN-16ORFS
20	1023.42.20	2	HA, STR, M42MMST X -20MORS
21	1006.20.20	1	HA, 90° -20FORFS X -20MORFS
22	1295791	1	HH ASM, 100R17AR -16 X 55"
23	1295782	1	HH ASM, 100R17 -12 X 232"

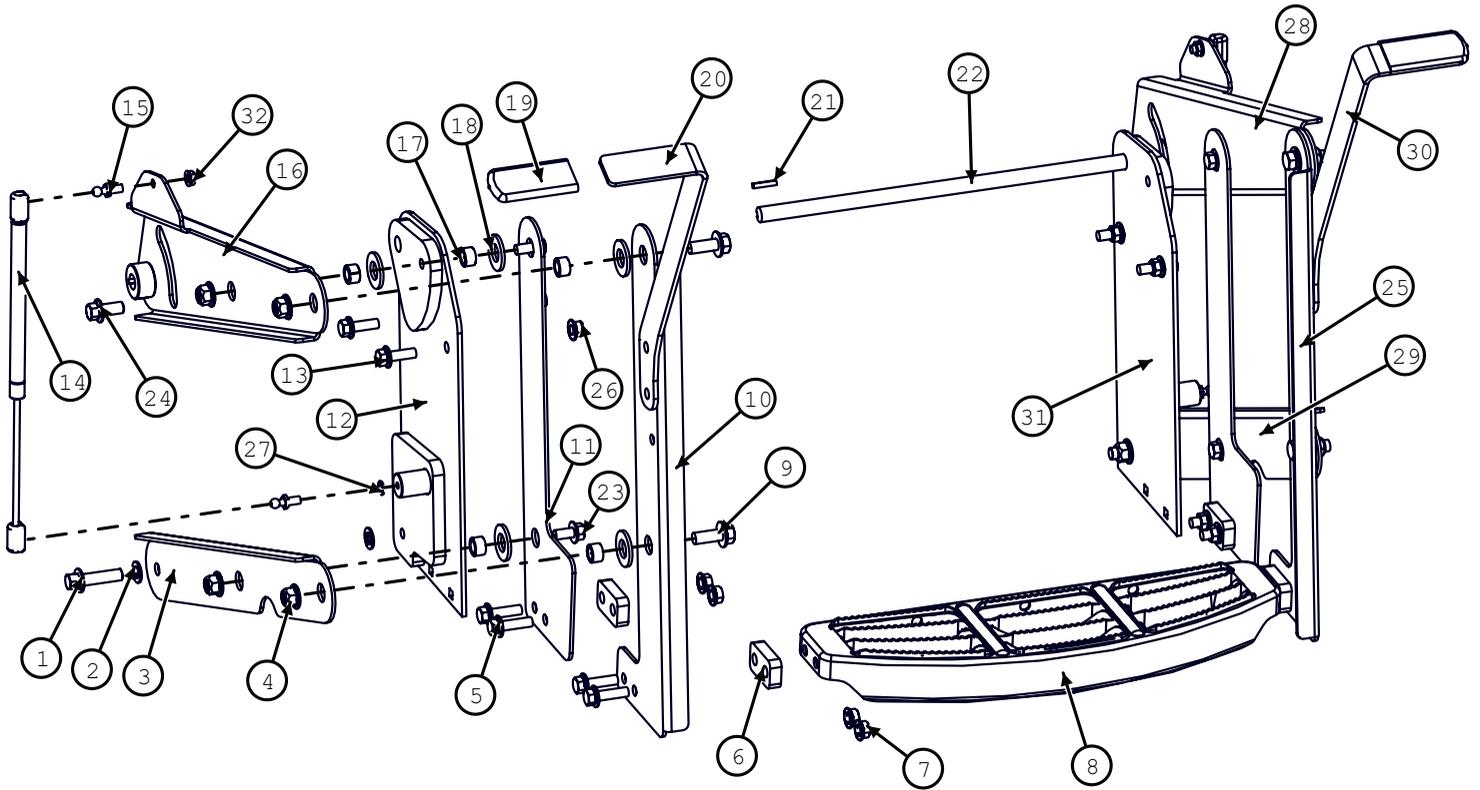
Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

### Hydraulic Hoses

Part No	Qty	Description	Hose Specs
1138944	1	Grease Hose	HLB-02X33-1/2", -02MPSWVL STR X 1/8-27NPSM STR
1138953	1	Grease Hose	HLB -02X40" -02MP SWVL STR X 1/8-27NPSM STR
1138964	1	Grease Hose	HLB -02X54", -02MP STR SWVL X 1/8 -27NPSM STR
1138975	2	Grease Hose	HLB -02X68" -02MP STR SWVL X 1/8-27NPSM STR
1140383	1	Extends Reverse Hydro Line	HOSE ASM, EFG6K, 79" -16SPFL 90° X -16SPFL ST
1140403	1	Extends Case Drain	HOSE ASM, 100R17AR -12 X 74" -12MORS;-12FORS STR
1273301	1	Extends Forward Hydro Line	HOSE ASM,100R15-16X89", 16SPFL STR X -16SPFL 90° D70MM
1273461	2	Extends Steer Hoses	HOSE ASM, 100R17AR -06 X 15" -8FORS STR X -8MORS STR
1273462	2	Filter head; Front & Side Port to Valve Block Ports	HOSE ASM, 100R17AR -08 X 62" -10FORS STR X -8FORS 90° D41MM
1274111	1	Extends Case Drain	HOSE ASM, 100R17AR -12 X 24" -16MORS STR X -16FORS STR
1276631	1	Extends Rear Hydrostat Line (Pro Drive)	HOSE, 100R15-16, 128", -16CD62STRX16CD62 90°,D120MM
1276642	1	Extends Forward Hydro Line (Pro Drive)	HOSE, 100R15-16X122",-16SPFL STRx-16SPFL 90° D70MM
1595602	2	Connects CB Ports V1 & V2 to Manifold Ports "A" & "B"	HOSE, 100R17AR-10X103", -08FORS;-10FORS
1295741	1	Pressure, Pump Outlet to "P" Port	HOSE ASM, 100R17AR-10X252" -10FORS STR;-10FORS 90° D32MM
1295771	1	Return, "T" Port to Filter	HOSE ASM, 100R17AR-12X23",-12FORS STR;-12FORS 90° D48MM
1295782	1	Connects Filter Outlet to Reservoir	HOSE ASM, 100R17-12x232"-16FORS STR;-16FORS STR
1295791	1	Suction	HOSE ASM, 100R17AR-16X55", -16FORS STR;-20FORS STR
1295802	1	Replaces JD Header Lift Hose	HOSE ASM, 100R17AR-12X86",-16FORS STR;-10FORS 90° D32MM
1295882	1	Connects Master Cyl to Slave Cyl	HOSE ASM, 100R17AR-06X195",-06FORS STR;-06FORS STR
1296021	1	Replaces JD Header Lift Hose	100R17AR-08X49", -8MORS STR; -8FORS 90° D41MM
1296901	1	Extends Parking Brake Hose	HOSE ASM, 100R17AR-08x36", -8FORS STR; -8MORS STR
1297421	1	Extends AH226084 to Proportionator Motor Supply	HOSE ASM, 100R17AR-10X66",-10MF STR; -10FF 90°D23MM
1297441	1	Extends AH226085 to Proportionator Pump Supply	HOSE ASM, 100R17AR-12X66",-12MORS STR;-12FORS 90°
1297452	1	Replaces AH219243; Connects Rear Filter Port to Proportionator Motor Return	HOSE ASM, 100R17AR-10X127",-10FORS STR;-10FORS 90° D23MM
1297481	1	Extends AH226119 to The Trans Lube	HOSE ASM, 100R17AR-06 X 31",-6MORS STR X -6FORS 90° D23MM
1297641	1	Extends Right Brake Hose	HOSE ASM, 100R17AR-06X78", -06MORS STR x -06FORS 90° D23MM
1297651	2	Extends Lube and Left Brake Line	HOSE ASM, 100R17AR-06 X 60", -06MF STR; -06FF STR
1299191	1	Extends JH Hose to Shift Block	HOSE ASM, 100R17AR-04X15", -6MORS STR; -6FORS 90° D23MM
1313913	1	Connects HIC "P" & "T" Ports to Trim Hoses	HOSE ASM, 100R17-04x182",-4FF STR X -6FF STR
1316861	1	Extends Rear Hydrostat Line	HOSE ASM, 100R15-16, 71"-16SPFL 90°x -16SPFL STR
1322102	1	Connects Base Port of Cylinder to "B" Port of Trim Manifold	HH ASM, 100R17AR-04x77", -6FF STRx-4FF 90°D32MM
1322113	1	Connects Rod Port of Cylinder to "A" Port of Trim Manifold	HH ASM, 100R17-04 64",-6FF STR x -4FF 90° D21MM
1322781	2	Connects "P" & "T" Trim Manifold Ports to 1322791 Hoses	HH ASM, 451TC-04, 137", -4FF 45° X -6FF STR
1331391	1	Connects Master Base Port to Slave Base Port	HH ASM, 100R17AR-06X175",-06FORS STR;-06FORS STR
1353021	1	Connects Left Leveling Cyl to Right Leveling Cyl	HOSE, 100R17AR-06x65",-8FORS STRx-8FORS 90°D29MM
1353031	1	Connects Left Leveling Cyl to Right Leveling Cyl	HH ASM, 100R17AR-06x56", -8FORS STR x-8FORS 90°D29MM
1356341	1	Right Hand Lift Cylinder Rod Port to Tee	HH ASM, 100R17AR-10x42"; -10FORS STR x -10FORS STR

Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

**DOUBLE STEP RETRACTABLE LADDER**



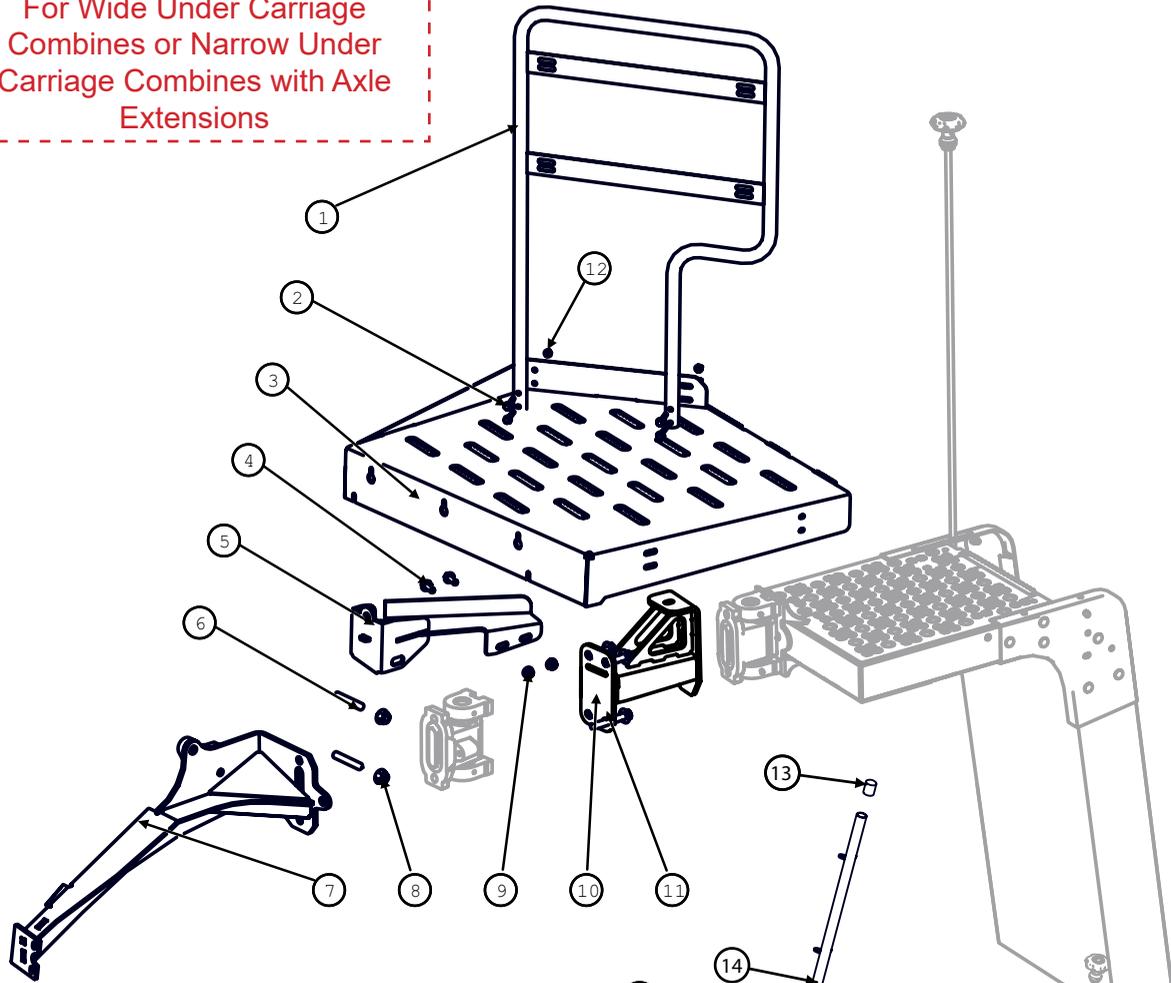
Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

**Retractable Ladder**

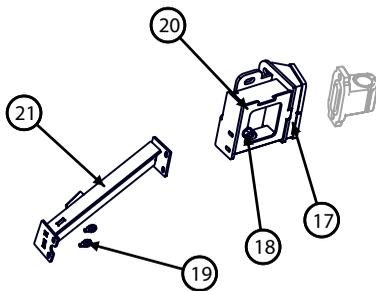
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
ASM	P297171	1	LM ASM, MOVING STEP (SIDEHILL)
1	122.010.050	4	SCREW, FLANGED HEX CAP
2	153.014.008	4	MACHINE BUSHING 14GA NR 1/2ID
3	122.012.045	2	FLHC-10.9M12X1.75X45
4	1298225	1	LM PLT, LADDER HANDLE, RIGHT
5	151921	2	GRIP, JD#W25634
6	122.012.025	2	FLHC-10.9M12X1.75X25
7	1299181	6	LM BUSHING, LADDER PIVOT
8	153.014.012	6	BUSHING,MACH,WR
9	134931	2	LIFT SUPPORT BRACKETS (PAIR)
10	298272	1	LM ASM, UPPER CONTROL LINK, RIGHT
11	119.005	2	FLHN 5/16-18
12	10049.03.00016	2	KEY, STR, 3/16 X 3/16 X 1
13	298191	1	LM RND, ROCK SHAFT
14	298252	1	LM WLD, UPPER CONTROL LINK
15	1298185	1	LM PLT, LADDER HANDLE, LEFT
16	1298132	1	LM WLD, LFT LADDER MNT
17	152601	1	STEP, PLATFORM, STEP (HXE19816)
18	128.01	8	FLHN-10.9M10X1.5 STVR
19	1299071	2	LM SPACER, LADDER STEP
20	128.012	6	FLHN-10.9M12X1.75 STVR
21	1298212	1	LM WLD, RHT LADDER MNT
22	122.010.020	4	FLHC-10.9 M10X1.75X20
23	122.012.030	4	FLHC-10.9 M12X1.75X30
24	136.005	2	LOCK WASHER 5/16"
25	134921	2	GAS CHARGED LIFT SUPPORT
26	1298171	2	LM PLT, LOWER CONTROL LINK

### Ladder Wedges & Service Ladder Extension

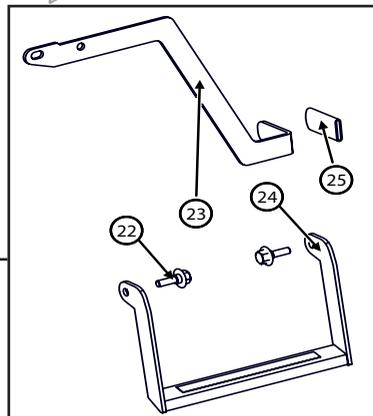
For Wide Under Carriage Combines or Narrow Under Carriage Combines with Axle Extensions



For Narrow Under Carriage Combines



Engine Deck Service Step

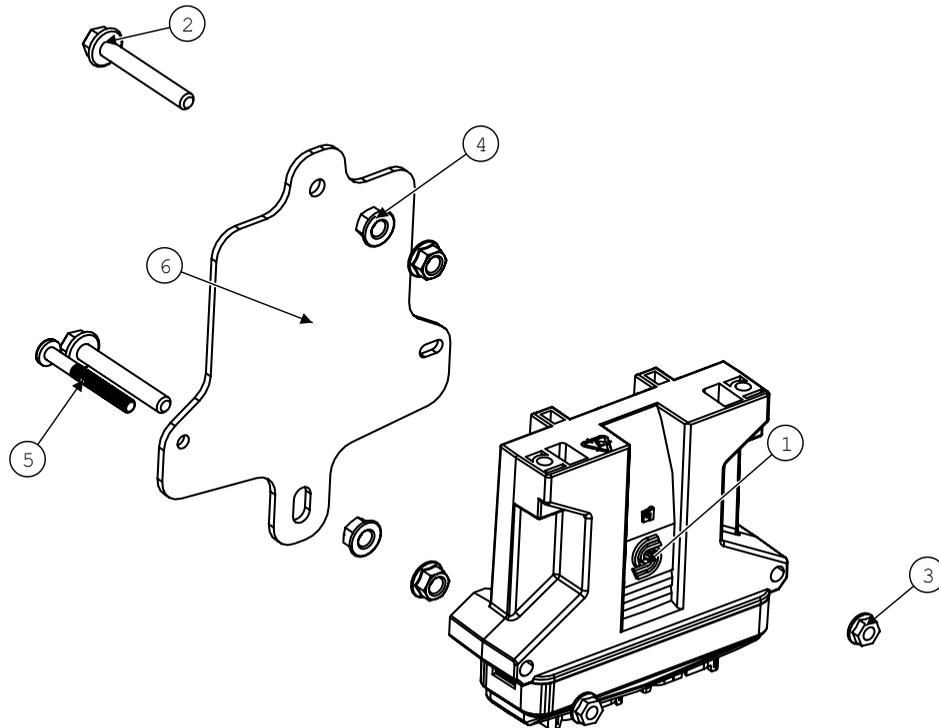


Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

<b>Ladder Wedge</b>			
<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	155860	2	CYLINDER,LEVELING,DUAL CB
10	1343091	1	10" PIVOT EXTENSION
11	122.016.060	3	M16X60
12	123.008	4	M8x1.25
13-21	1314181	1	Narrow Undercarriage Ladder
14	151681	1	SHORT CAP, BLK, 1-1/4ID X 1-1/2L
15	1296681	1	HANDRAIL CORNER
16	122.010.020	4	BOLT,HX,FL,CL10.9 M10X20
17	1301803	1	PLATFORM, 17"
18	122.016.050	2	BOLT,HX,FL,CL10.9 M16X50
19	123.016	1	NUT,HX,FL,CL10 M16
20	123.01	12	NUT,HX,FL,CL10 M10
21	1300681	1	PIVOT EXTENSION
<b>Engine Deck Service Step</b>			
22-25	1340581	1	SERVICE LADDER EXTENSION
22	1348281	2	SERVICE LADDER HINGE
23	1340591	1	HANDLE, SERVICE LADDER EXTENSION
24	1340571	1	SERVICE LADDER EXTENSION
25	151921	1	GRIP

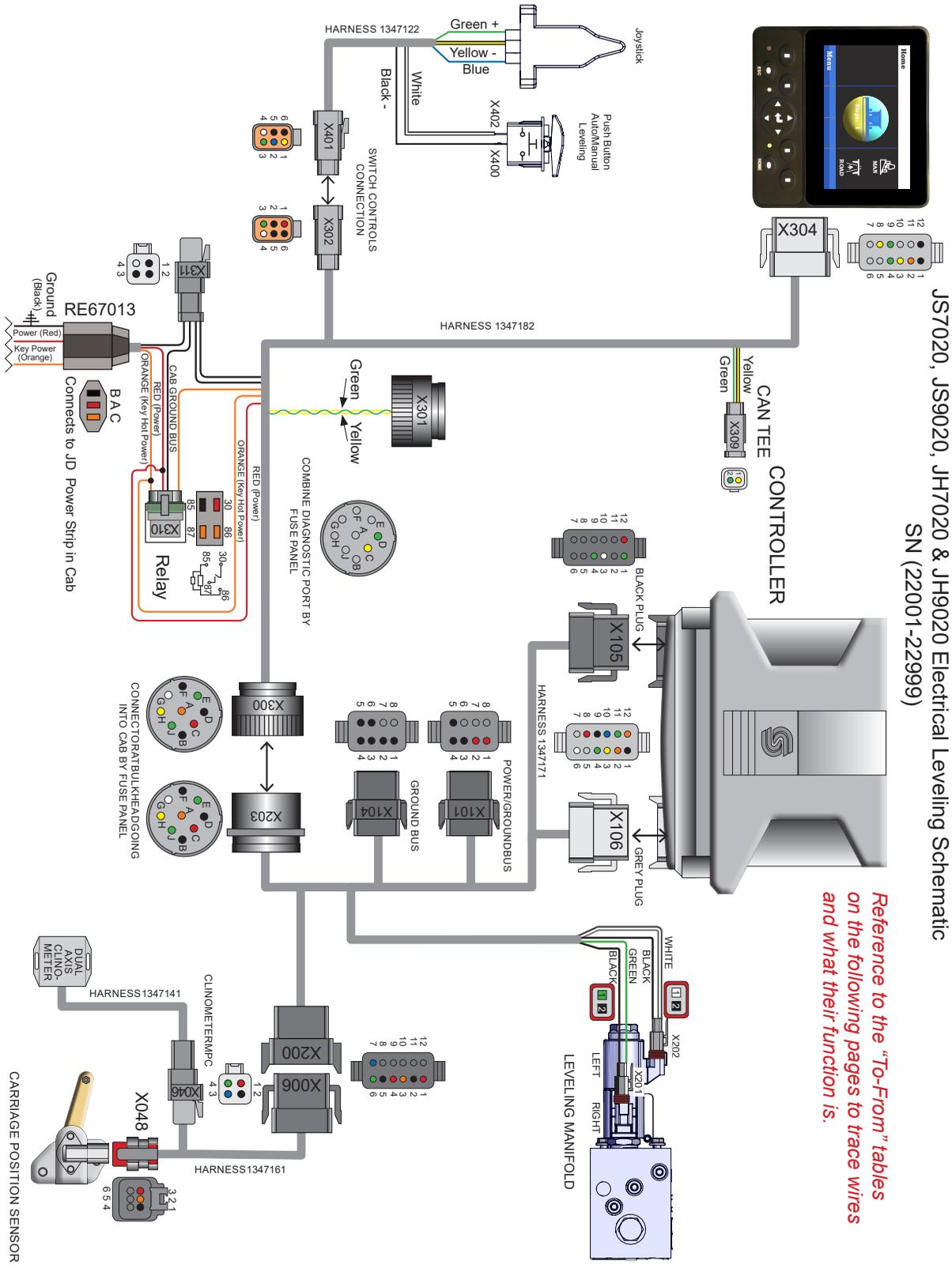
Model JS7020 Hillco Leveling System  
For Serial Numbers JS7020-22001 thru JS7020-22999

**Controller Harnesses**



Electrical Components			
BOM ID	Part No.	Qty	Description
1-6	1347261	1	EM ASM, CONTROLLER W/MNT
1	1346643	1	SAUER-DANFOSS PLUS 1 CONTROLLER
2	122.008.060	2	FLHC-M08X1.25X60
3	119.004	2	FLHN-GR5 1/4-20
4	123.008	4	FLHN 10.9 M8 X 1.25
5	114.004.036	2	PHMS-GR5-1/4-20 X 2-1/4"
6	1295201	1	EM PLT, CONTROLLER MNT
Wiring Harnesses			
BOM ID	Part No.	Description	Purpose
NS	1295342	EM HARNESS, TA SENSOR	TRANSITION TILT SENSOR
NS	1320731	HEADER TRIM	CONNECTS TRIM MANIFOLD TO DEERE CONTOUR MASTER
NS	1322771	TRIM SIGNAL EXTENSION	CONNECTS TRIM MANIFOLD TO DEERE CONTOUR MASTER
NS	1347122	SWITCH BOX	JOYSTICK AND AUTO/MANUAL
NS	1347161	EM HARNESS, SENSOR PACKAGE	SENSOR PACKAGE WIRING
NS	1347171	PRIMARY HARNESS	CONNECTS CONTROLLER AND MANIFOLD
NS	1347182	CAB, 700 SERIES	MAIN CAB HARNESS

# Model JS7020 Hillco Leveling System For Serial Numbers JS7020-22001 thru JS7020-22999

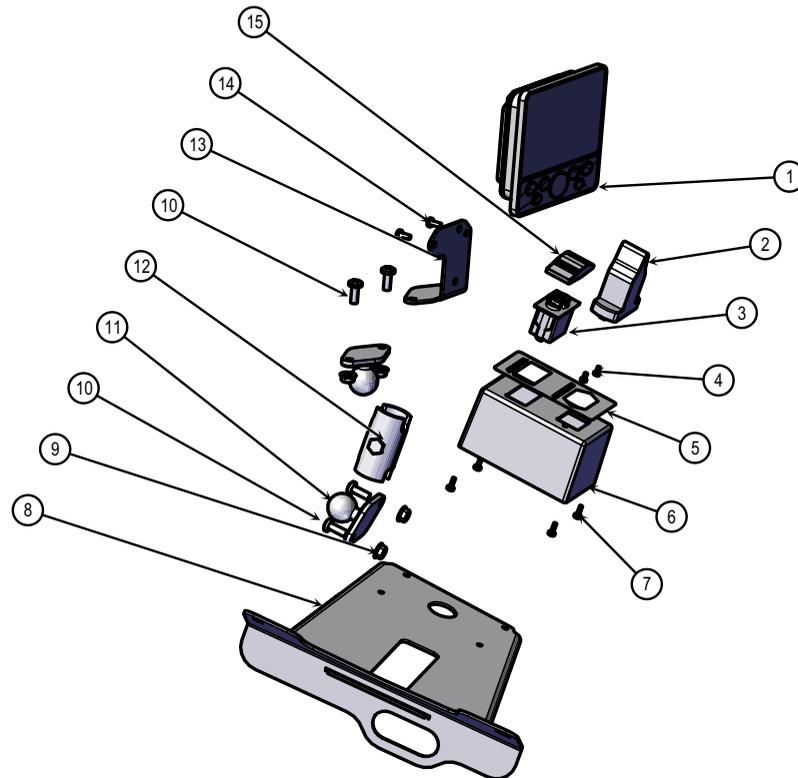


JS7020, JS9020, JH7020 & JH9020 Electrical Leveling Schematic  
SN (22001-22999)

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

Model JS7020 Hillco Leveling System  
 For Serial Numbers JS7020-22001 thru JS7020-22999

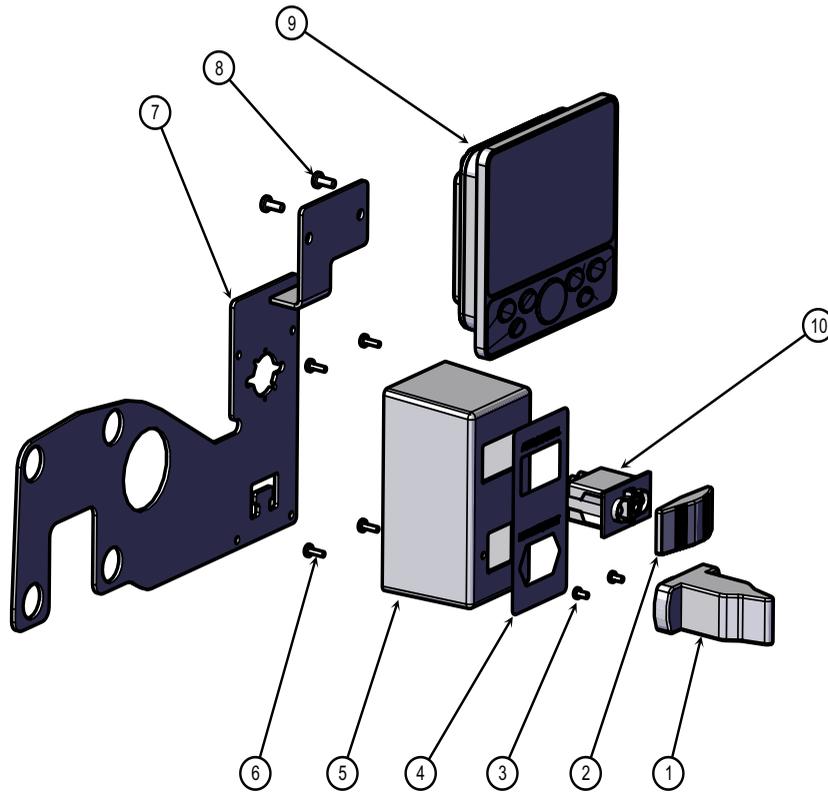
**600 Series Monitor**



600 Series Monitor			
BOM ID	Part No.	Qty	Description
1	1358372	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

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**700 Series Monitor**



<b>700 Series Monitor</b>			
<b>BOM ID</b>	<b>Part No.</b>	<b>Qty</b>	<b>Description</b>
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	1358372	1	PROGRAM, LEVELER DISPLAY
10	155785	1	SWITCH, SPST MOMENTARY

Model JS7020 Hillco Leveling System  
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**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 JS7020 Hillco Leveling System  
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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 JS7020 Hillco Leveling System  
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***Notes***

Model JS7020 Hillco Leveling System  
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