

Model CS7020 Hillco Leveling System  
For Serial Numbers CS7020-16001 thru CS7020-16999



# **Model CS7020 Sidehill Leveling System Parts Manual**

SN CS7020-16001 thru CS7020-17999

For Case IH 5150, 6150 and 7150 Combines  
And Case IH 5140, 6140, and 7140 Combines

Combine SN (YFG014001- )

D-161116CMA01A



# CS7020 Sidehill Leveling System

For 5150, 6150, 7150 Case IH Combines  
and 5140, 6140, and 7140 Combines

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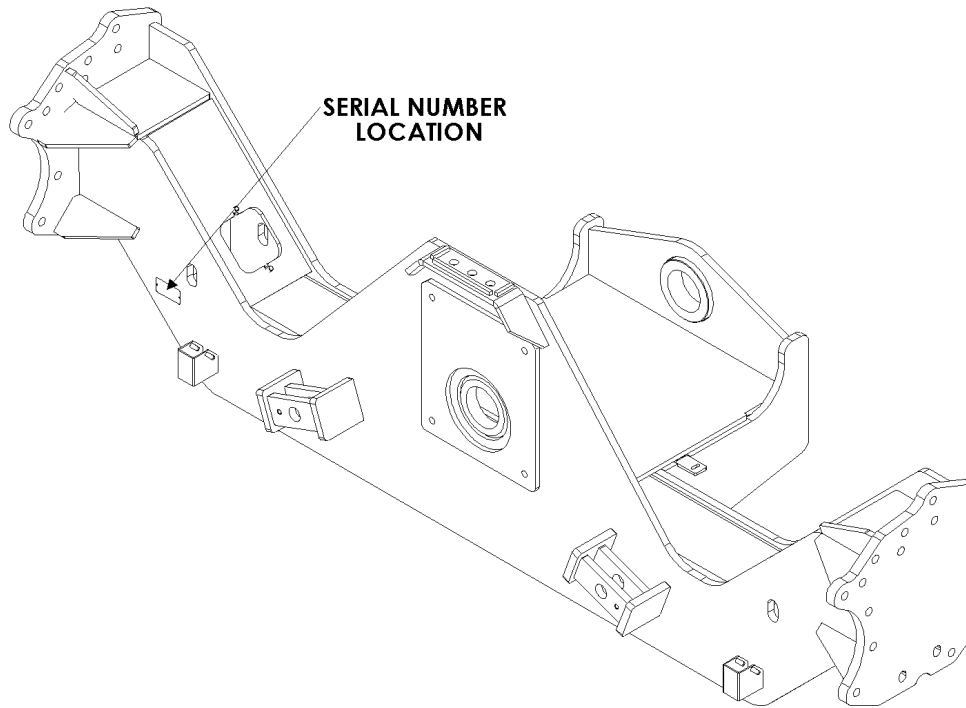
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## **General Information**

### **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 CS7020 Leveling System uses the following serial number format: CS7020-XXXX (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.

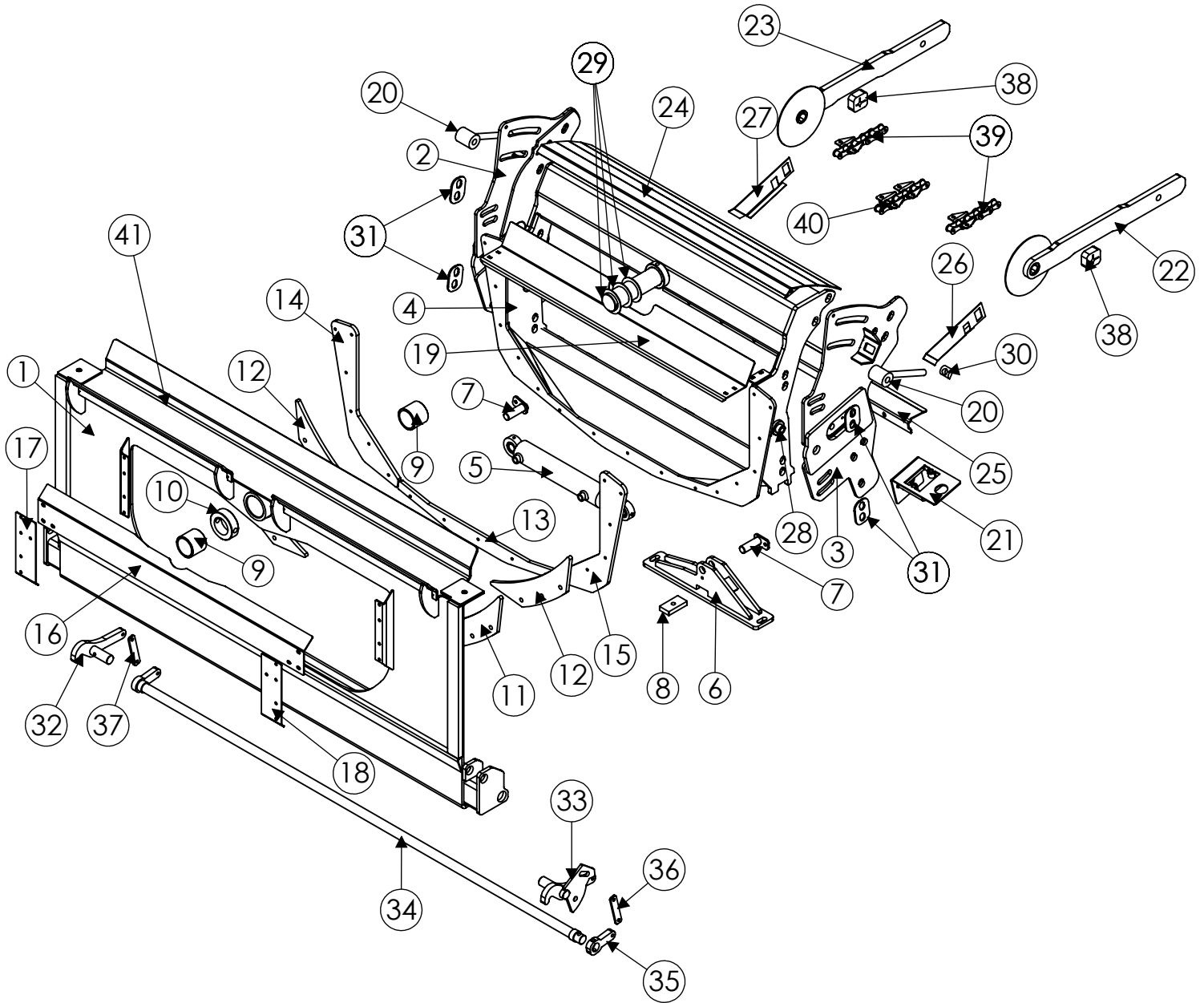
### **Right and left Identification**

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.

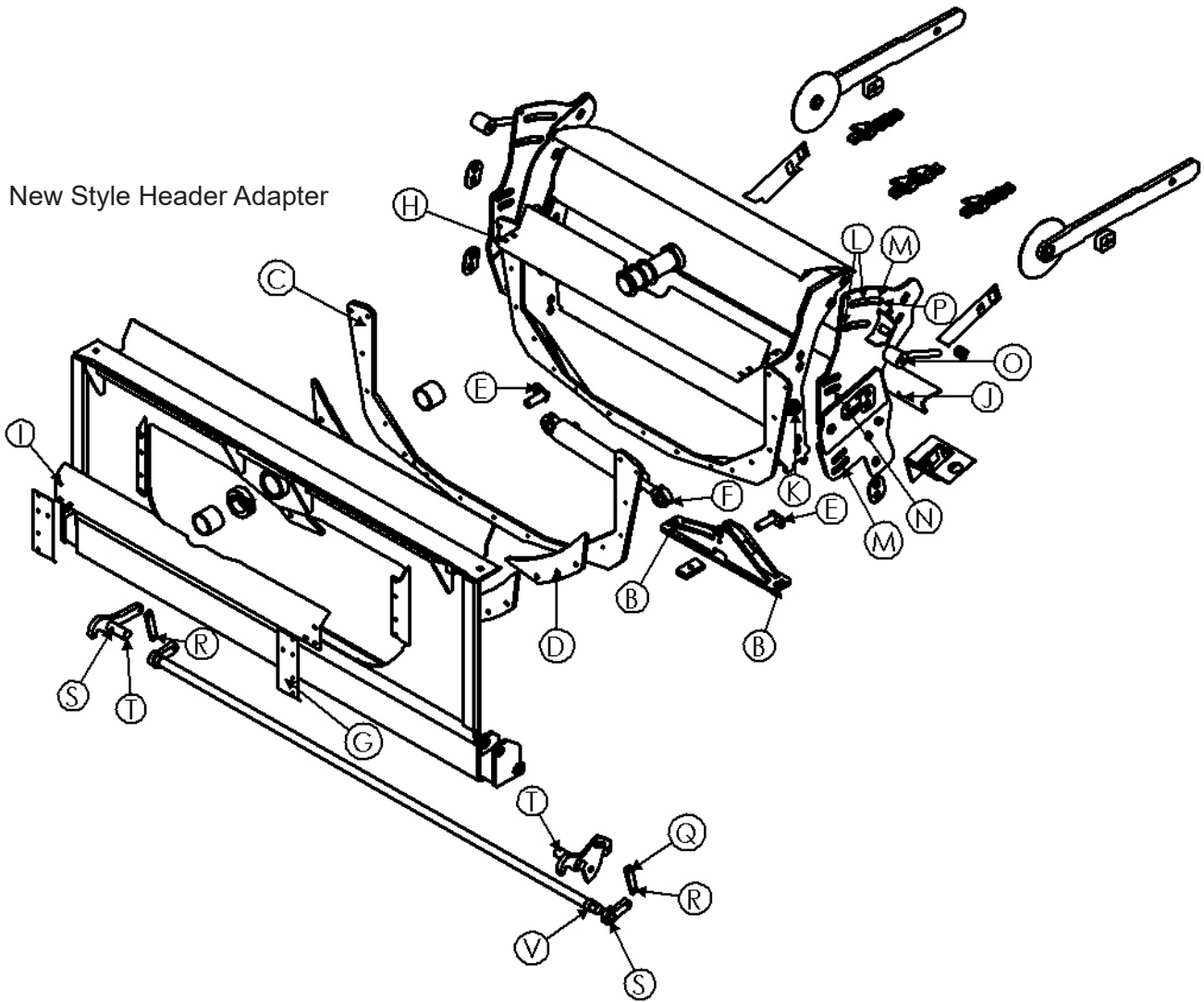
**Transition With Header Adapter For Newer Style Heads**



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<b>TRANSITION COMPONENTS WITH HEADER ADAPTER FOR NEW STYLE HEADS</b>				
REF.	PART NO.	QTY.	PART NAME	NOTES
ASM	P500821	1	TRANSITION COMPLETE ASM	
1	LA-273521	1	TA ASM	FOR 2010/2020 PLATFORMS; 2400/3400 CORN HEADS; 2016 P/U HEADS
2	LW-273652	1	TT ASM, REAR RIGHT	
3	LW-273642	1	TT ASM, REAR LEFT	
4	LW-272442	1	TT ASM, FRONT	
5	138582	1	CYLINDER, SLAVE	
6	LM-273601	1	TA ASM, SLAVE CYL ROD MOUNT	
7	1523884	2	TRIM CYLINDER PIN	
8	LM-277281	1	TM PLATE, ROD MNT NUT	
9	1241721	2	BUSHING, PIVOT	
10	150742	1	COLLAR, CLAMPING 2-1/4 ID, 3-3/4 OD, 2-PIECE	
11	LP-273741	2	TM UHMW, BACKING WEAR PAD	
12	LP-272451	2	TM PLATE, BACKING	
13	LM-272461	1	TM PLATE, WEAR BOTTOM	
14	LM-272481	1	TM PLATE, WEAR RH	
15	LM-272471	1	TM PLATE, WEAR LH	
16	LP-273201	1	TM PLATE, TOP SHIELD	
17	LP-273211	1	TM PLATE, RIGHT SHIELD	
18	LP-273221	1	TM PLATE, LEFT SHIELD	
19	LP-273431	1	TM PLT, UPPER SHIELD	
20	LA-273731	2	TM ASM, ADJUSTER BOLT	
21	LA-272531	1	TM ASM, COUPLER MOUNT	
22	1331411	1	FEEDER DRUM, LEFT	
23	1331421	1	FEEDER DRUM, RIGHT	
24	LA-273381	1	TM ASM, TOP COVER	
25	LP-273411	1	TM PLATE, FLEX FLOOR	
26	LP-273491	1	TM SEAL, FLEX FLOOR LEFT	
27	LP-273501	1	TM SEAL, FLEX FLOOR RIGHT	
28	LM-260821	2	TM BUSHING, PIVOT OUTER	
29	162.014.040	6	BUSHING, MACH 14 GA, NR, 2-1/2 ID	
30	LM-273691	2	TM PIVOT, FORE-AFT ADJUSTER	
31	LP-273421	4	TM PLATE, LOWER WASHER	
NS	143591	6	SPRING, COMPRESSION	
32	270251	1	TM ASM, RH HDR LATCH	
33	270261	1	TM ASM, LH HDR LATCH	
34	270272	1	TM ASM, HDR LATCH CROSS SHAFT	
35	LM-270191	1	TM ARM, RH LOWER PIVOT	
36	LM-270201	1	TM LINKAGE, LH HDR LOCK	
37	LM-270211	1	TM LINKAGE, RH HDR LOCK	
38	LM-273511	2	TM STOP, FEEDER DRUM BOTTOM	
<b>FEEDER HOUSE BEATER DRIVE</b>				
39	LM-272951	2	FDR CHAIN EXTENTION, OUTER	557 FEEDER CHAIN EXTENSION
40	LM-272961	1	FDR CHAIN EXTENTION, INNER	557 FEEDER CHAIN EXTENSION
NS	155536	3	OFFSET LINK, FEEDR CHAIN	557 FEEDER CHAIN EXTENSION
NS	155537	3	CONNECTING LINK, FEEDR CHAIN	557 FEEDER CHAIN EXTENSION
NS	147721	1	CONVEYOR SLAT, RIGHT HANDED W/ HARDWARE	FEEDER CHAIN
NS	147731	1	CONVEYOR SLAT, LEFT HANDED W/ HARDWARE	FEEDER CHAIN

### Transition Fasteners



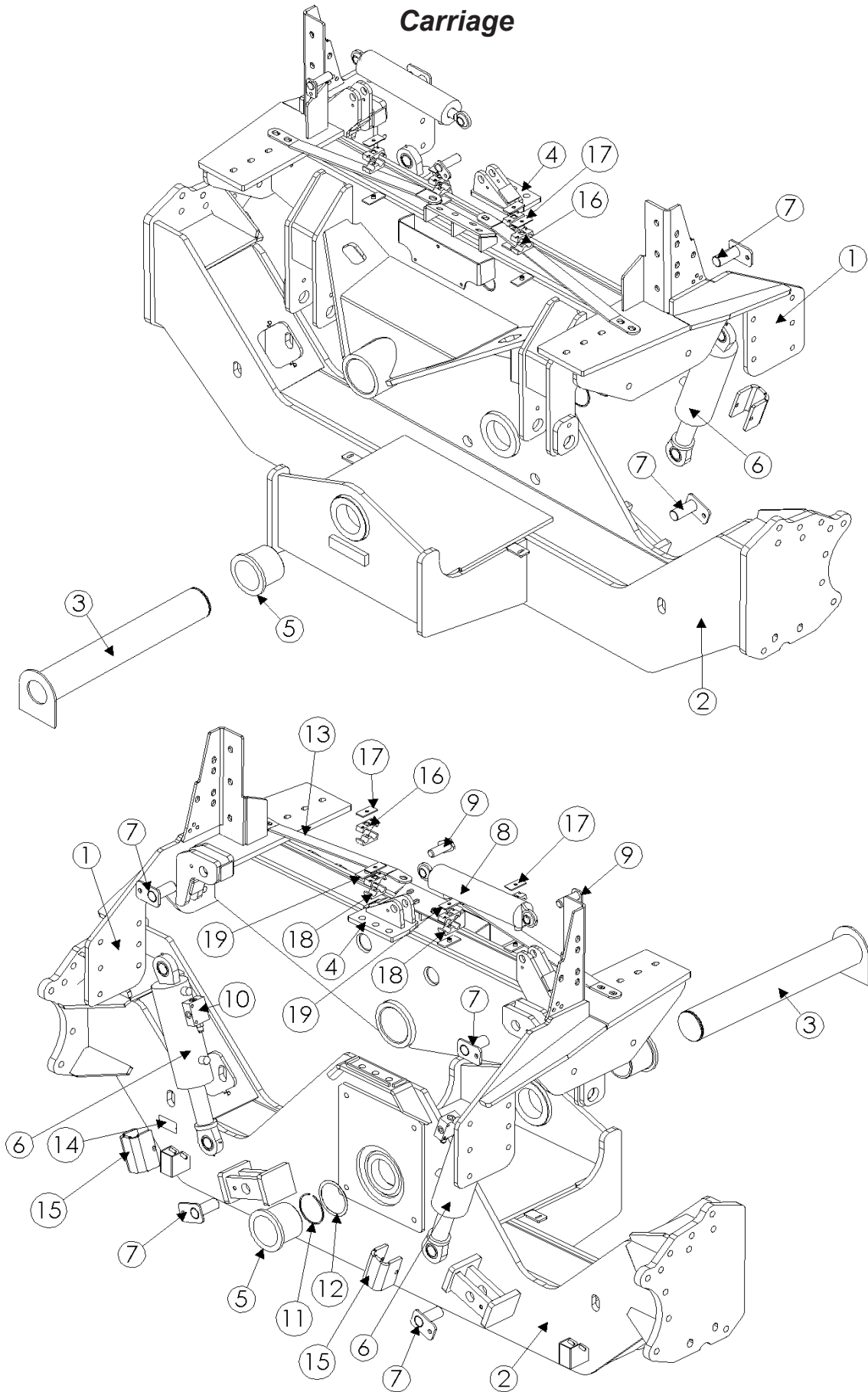
Model CS7020 Hillco Leveling System  
For Serial Numbers CS7020-16001 thru CS7020-16999

TRANSITION FASTENERS				
REF.	PART NO.	QTY.	PART NAME	WHERE USED
B	122.16.050	3	BOLT, HEX FLANGE, 10.9 M16X50	ROD MNT
B	126.016	3	NUT, HEX, STOVER, CL10 M16	ROD MNT
C	164.008.030	17	FHSC-10.9 M8 X 1.25 X 30 PLT	UHMW FACE PLT
C	126.008	17	HN-10.9 M8 X 1.25 STV PLT	UHMW FACE PLT
D	122.012.040	6	FLHC-10.9 M12 X 1.75 X 40 PLT	BACKING PLATES
E	122.010.020	2	MM FLHC-10.9 M10 X 1.50 X 20 PLT	SLAVE CYLINDER MOUNT PIN
F	166.004.004	2	SET SCREW, 1/4-28 X 1/4	SLAVE CYLINDER SPHERICAL BEARINGS
G	122.008.020	6	FLHC- 10.9 M8 X 1.25 X 20 PLT	FRONT SHIELDS
G	122.008.025	4	FLHC- 10.9 M8 X 1.25 X 25 Plated	TOP (4) FRONT SHIELD BOLTS
G	128.008	12	FLHN-10.9 M8 X 1.25 STOVER	FRONT SHIELDS
H	163.008.020	4	CARR-8.8 M8 X 1.25 X 20	INNER THROAT SHIELD
H	128.008	4	FLHN-10.9 M8 X 1.25 STV	INNER THROAT SHIELD
I	122.008.030	2	FLHC-10.9 M8 X 1.25 X 30 PLT	TOP COVER SHIELD
I	128.008	2	FLHN-10.9 M8 X 1.25 STOVER	TOP COVER SHIELD
J	163.010.050	6	CARR-8.8 M10 X 1.50 X 50	FLEX FLOOR HINGE
J	191.01	6	HN-8.8 M10 X 1.50 NYLOCK	FLEX FLOOR HINGE
K	122.016.040	2	FLHC-10.9 M16 X 2.00 X 40	FORE/AFT PIVOT BUSHING
K	143641	2	FW 17.5 X 56 X 5MM	FORE/AFT PIVOT BUSHING
L	119.012	12	FLHN-8 3/4-10	ALL FORE/AFT PIVOT NUTS
M	107.012.040	6	CARR 3/4-10 X 2-1/2 GR8	2 UPPER AND 4 LOWER FORE/AFT PIVOT BOLTS
N	107.012.048	4	CARR 3/4-10 X 3 GR8	4 MIDDLE FORE/AFT PIVOT BOLTS
O	165.02	2	HN-8.8 M20 X 2.50 JAM	FORE/AFT ADJUSTER BOLT
P	133.012	4	FW 3/4 HD PLT	4 UPPER FORE/AFT PIVOT BOLTS
NS	126.008	2	HN-10.9 M8 X 1.25 STV PLT	TOP COVER ASM
NA	122.008.025	2	HC-8.8 M8 X 1.25 X 25	TOP COVER ASM
Q	122.010.040	3	FLHC-10.0 M10 X 1.50 X 40	LINKAGE TO LOWER PIVOT AND LOCK ARM
Q	122.010.050	1	FLHC-10.0 M10 X 1.50 X 50	LINKAGE TO LOWER PIVOT AND LOCK ARM
Q	105.006	2	FW 3/8	LINKAGE TO LOWER PIVOT AND LOCK ARM
R	128.01	4	FLHN-10.9 M10 X 1.50 STOVER	LINKAGE TO LOWER PIVOT AND LOCK ARM
S	140.006.032	2	PIN, ROLL, 3/8 X 2 Plated	HEADER LOCK LINKAGE
S	122.010.060	1	FLHC-10.9 M10 X 1.50 X 60 PLT	HEADER LOCK LINKAGE
S	128.01	1	HN-10.9 M10 X 1.50 STOVER PLT (DIN 980V)	HEADER LOCK LINKAGE
T	162.018.020	6	BUSHING, MACH 18 GA NR, 1-1/4 ID	HEADER LOCK LINKAGE
U	162.018.024	4	BUSHING, MACH 18 GA NR 1-1/2 ID	HEADER LOCK LINKAGE



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**Carriage**

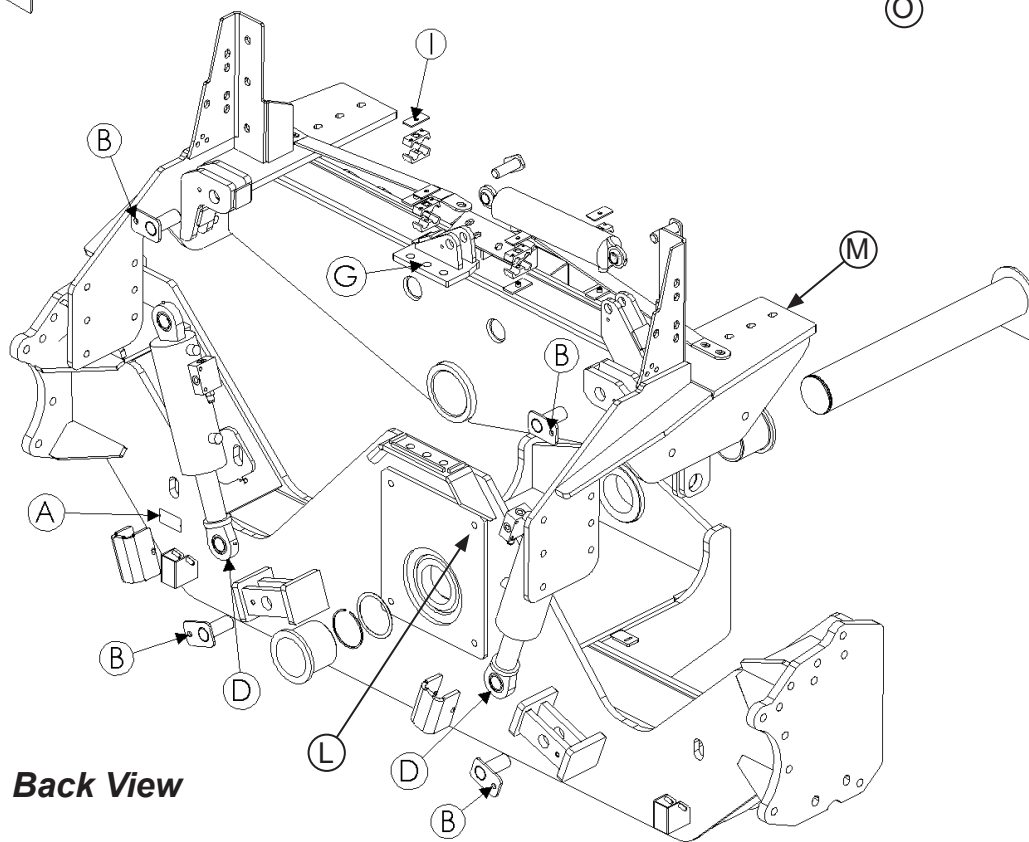
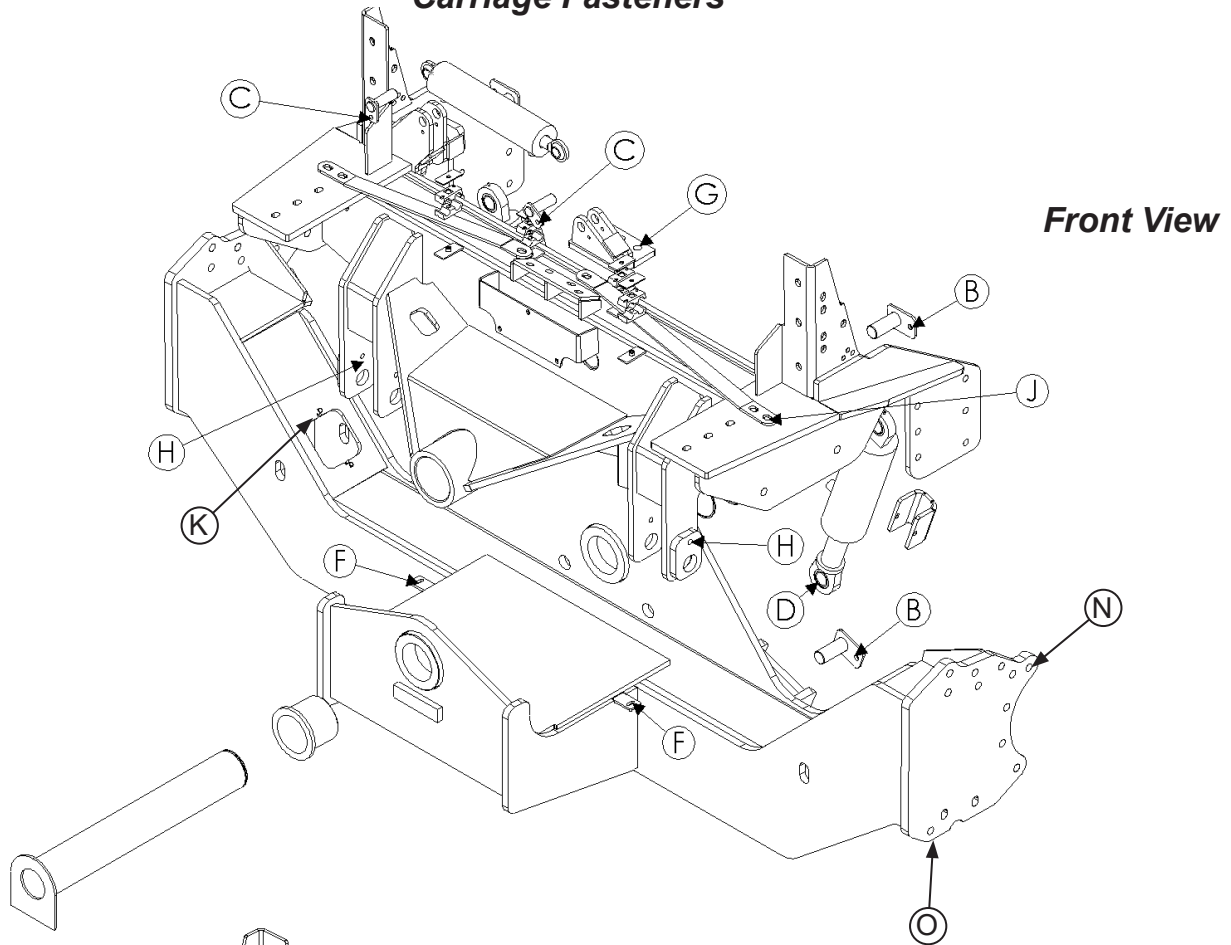


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<b>CARRIAGE COMPONENTS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
1	1330111	1	OC ASM	
2	1329961	1	UNDERCARRIAGE - NARROW	
3	1267021	1	CM ASM, MAIN PVT PIN	
4	1272591	1	CM ASM, MASTR CYL ROD MOUNT	
5	1247961	2	CM BUSHING, PIVOT	
6	140313	2	CYLINDER, MAIN	
7	1230551	4	CM PIN ASM, MAIN CYLINDER	
8	140342	1	CYLINDER, MASTER	
9	1253884	2	TM PIN ASM, TRIM CYLINDER	
10	HC-138901	2	VALVE, 3-PORT COUNTERBALANCE	MAIN LEVELING CYLINDERS BASE END
11	138651	1	SNAP RING 4"	
12	138641	4	WASHER	
13	LP-267041	2	CM STRAP, X-BRACE	
14	1331141	1	TAG, SERIAL NUMBER CS7020	
15	LB-290141	2	LM PLATE, CYLINDER STOP	
16	1251461	2	CA PRT, BOLT COVER, FINAL	
<b>OPTIONAL-SAFETY STOPS</b>				
NS	MC-137251	AR	COLLAR, 2-PIECE CLAMPING W/ 2" BORE	AS REQUESTED
NS	MC-137501	AR	WASHER, QUICK REPAIR 2"	AS REQUESTED
<b>MISCELLANEOUS CARRIAGE COMPONENTS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
NS	LA-272861	1	CU MOUNT, EXTENSION TRUSS LEFT	
NS	LA-272871	1	CU MOUNT, EXTENSION TRUSS RIGHT	
NS	EC-142101	1	CLMAP, HOSE R/C, 3/8	

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**Carriage Fasteners**

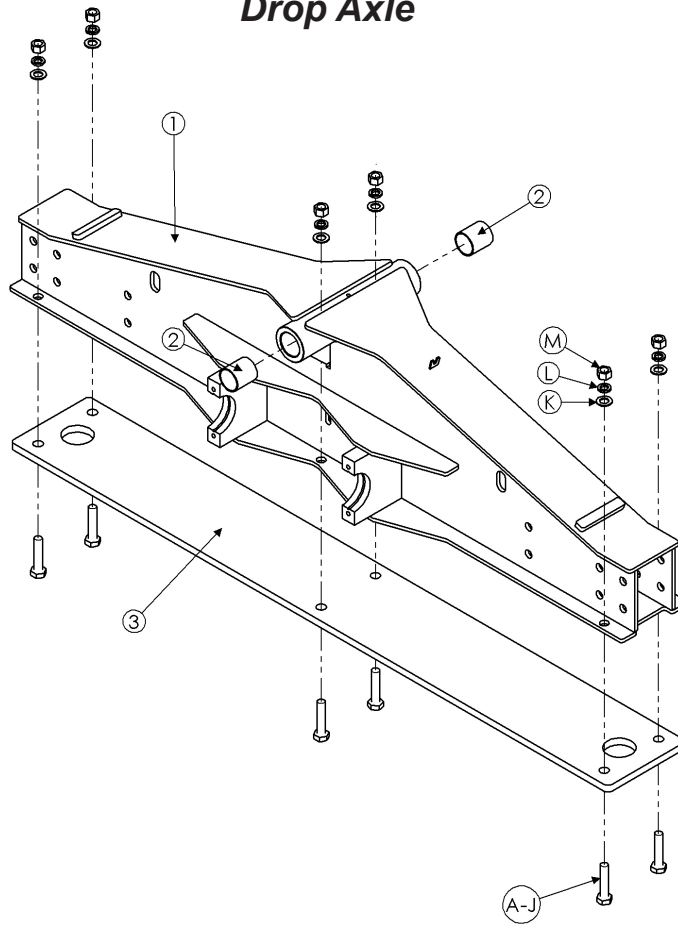


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<b>CARRIAGE FASTENERS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>WHERE USED</b>
A	118.#07.006	2	#7 X 3/8 U-DRIVE SCREW	SERIAL NUMBER PLATE
B	122.012.025	4	MM FLHC-8.8 M12 X 1.75 X 25 PLT	LEVELING CYL MNT PIN
C	122.012.020	2	MM FLHC-10.9 M10 X 1.50 X 20 PLT	MASTER CYL MNT PIN
D	166.004.004	6	SET SCREW, 1/4-28 X 1/4	CYLINDERS
E	146.004.048	2	SNAP LOCK PIN 1/4 X 3	SAFETY STOPS ON CYLINDERS
F	157.004.032	2	BOLT, ELEVATOR 1/4-20 X 2 PLT	LIMIT SWITCH STOPS
F	119.004	4	HN 1/4-20 FLNG, SERR	LIMIT SWITCH STOPS
G	121.020.060	3	FLHC-10.9 M20X2.2 X 60 PLT	MASTER CYL MNT
G	128.02	3	FLHN-10.9 M20 X 2.5 PLT	MASTER CYL MNT
H	121.012.065	2	HC-8.8 M12 X 1.75 X 65	HEADER LIFT CYLINDER PINS
I	HC-139461	4	BEHRINGER TWIN BOLT (FOR .750)	BERRINGER CLAMPS
J	122.016	6	FLHC-10.9 M16 X 2.00 X 40	X-BRACES & OC TO C-CHANNEL
J	123.016	4	FLHN-10.9 M16 X 2.00	X-BRACES & OC TO C-CHANNEL
K	123.008	4	FLHN-10.9 M8 X 2.00	UC FINAL BOLT COVER PLATES
L	121.016.060	4	FLHC-10.9 M16 X 2.00 X 50	TRANSMISSION & FRONT OC BASE PLATE
M	122.016.050	6	FLHC-10.9 M16 X 2.00 X 45	OC BASE PLATE
N	121.020.090	16	FLHC-10.9 M20 X 2.00 X 90	FINAL PLATE
O	133.012	2	WASHER,L9,HD 3/4	FINAL PLATE

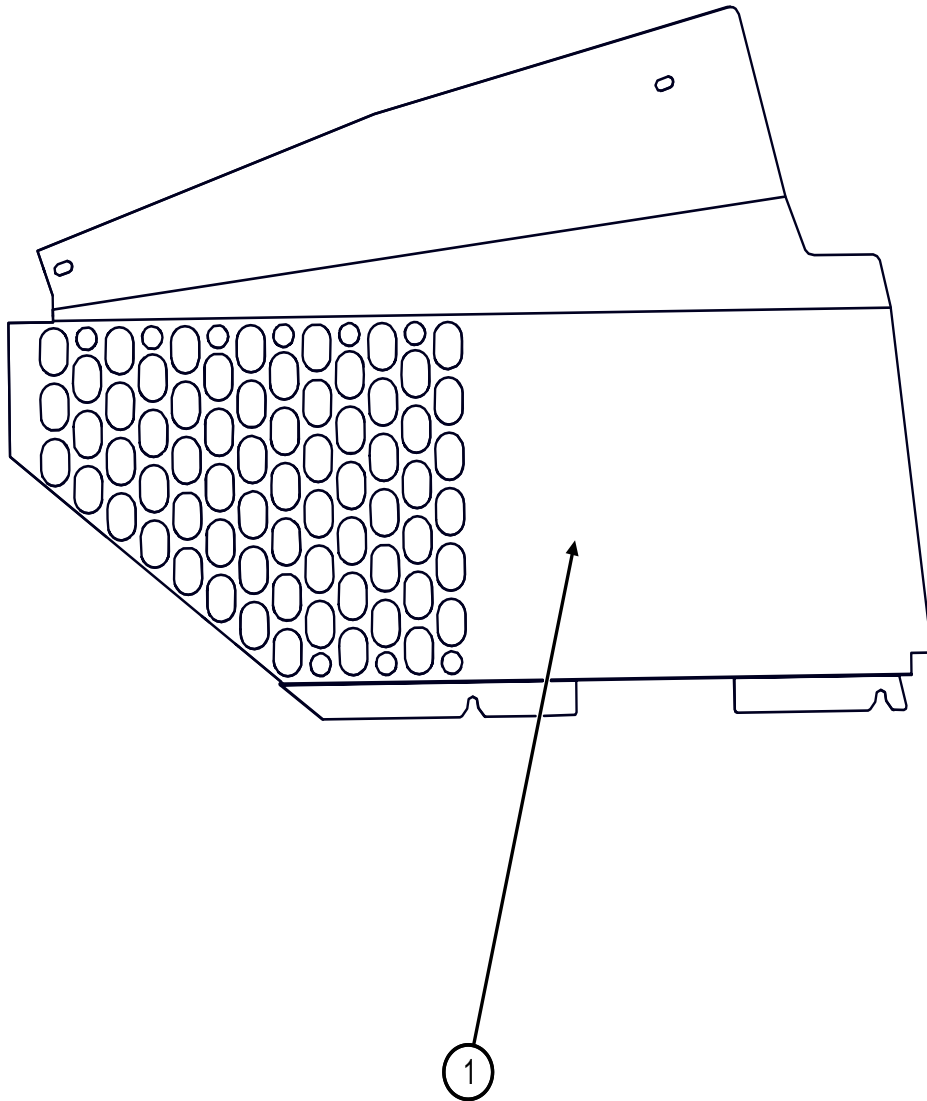
Model CS7020 Hillco Leveling System  
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**Drop Axle**



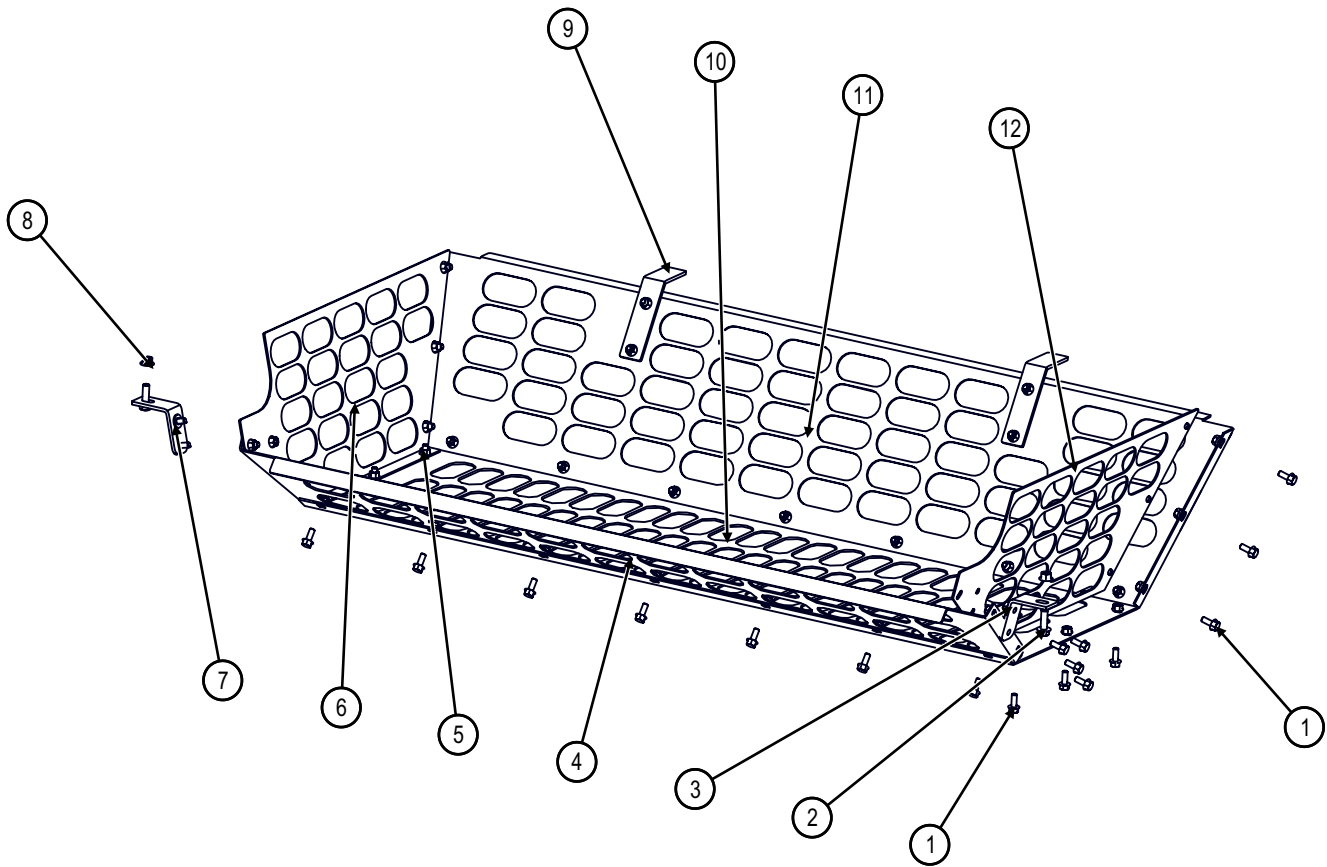
DROP AXLE COMPONENTS				
REF.	PART NO.	QTY.	PART NAME	NOTES
ASM	P500831	1	DA COMPLETE ASM, CS7020	
1	1270882	1	DROP AXLE	
2	140791	2	REAR AXLE PIVOT SLEEVE	CNH Part # 84334438
3	1330891	1	DA PRT, JACKING PLATE	
NS	1274462	6	DA PRT, WEIGHT, 151 LBS	
DROP AXLE FASTENERS				
A	126.02	6	NUT, HX, STU, CL10 M20	JACK PLATE/WEIGHTS
B	133.012	6	WASHER, FLT, LP, HD 3/4	JACK PLATE/WEIGHTS
C	121.020.060	6	BOLT, HX, CL 10.9 M20 X 60	JACK PLATE ONLY
D	121.020.170	6	BOLT, HX, CL 10.9 M20 X 170	6 WEIGHT OPTION

**Fan Shield**



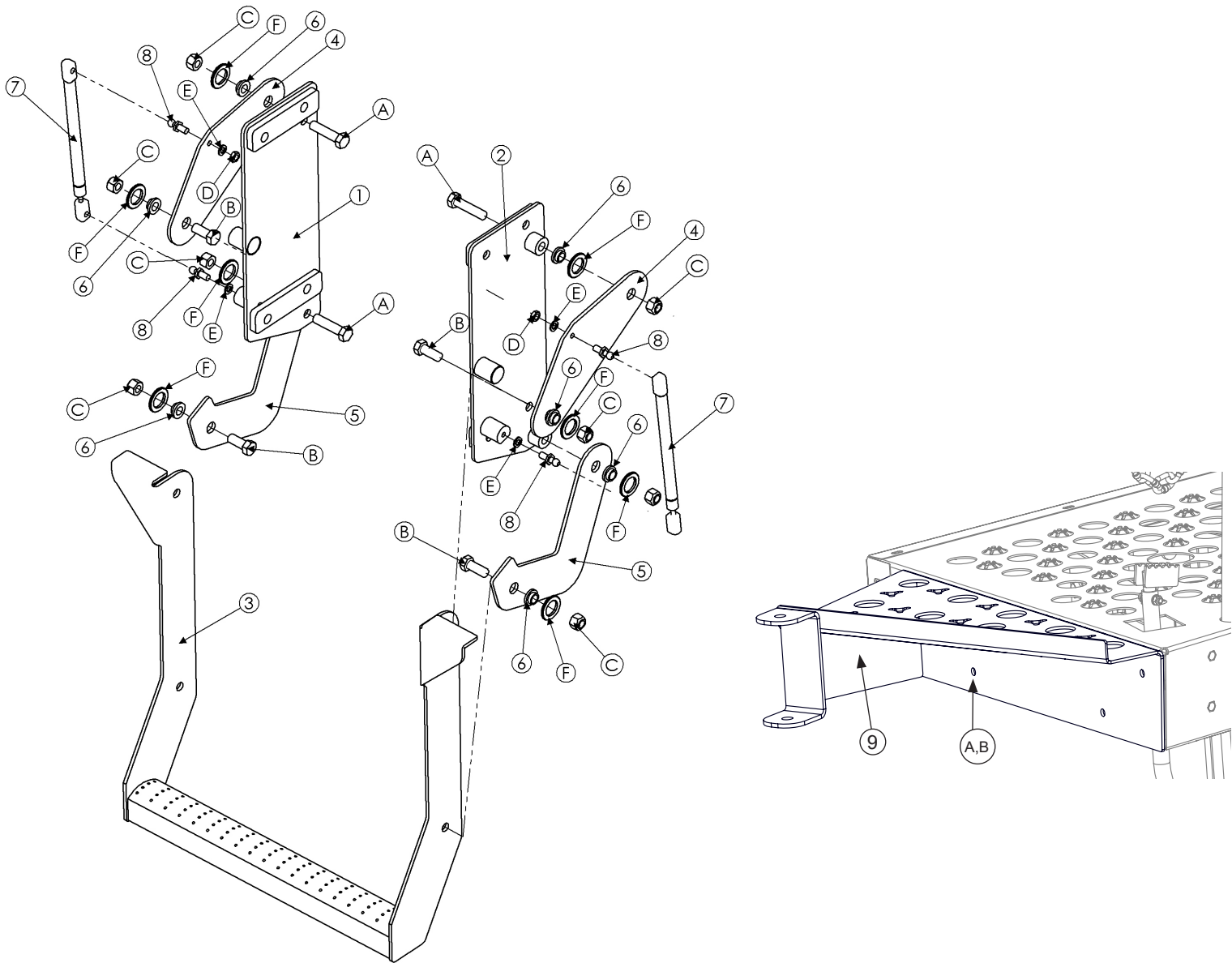
Fan Shield			
BOM ID	Part No.	Qty	Description
1332551	1	1	FAN SHIELD, LEFT SIDE

**Leaf Screen**



REF.	PART NO.	QTY.	PART NAME
1	1289431	2	REAR MOUNT, SCREEN
2	123.008	38	M8x1.25
3	122.008.020	38	BOLT,HX,FL,CL10.9 M8X20
4	133.006	2	WASHER,FLT,HARD 3/8
5	1331111	1	BOTTOM SCREEN
6	1331101	1	REAR SCREEN
7	1331171	1	FRONT SCREEN
8	1331091	1	LEFT SCREEN
9	1331181	1	RIGHT SCREEN
10	1331121	2	FRONT MOUNT, SCREEN
11	123.010	2	M10 x 1.5
12	122.010.030	2	BOLT,HX,FL,CL10.9 M10X30

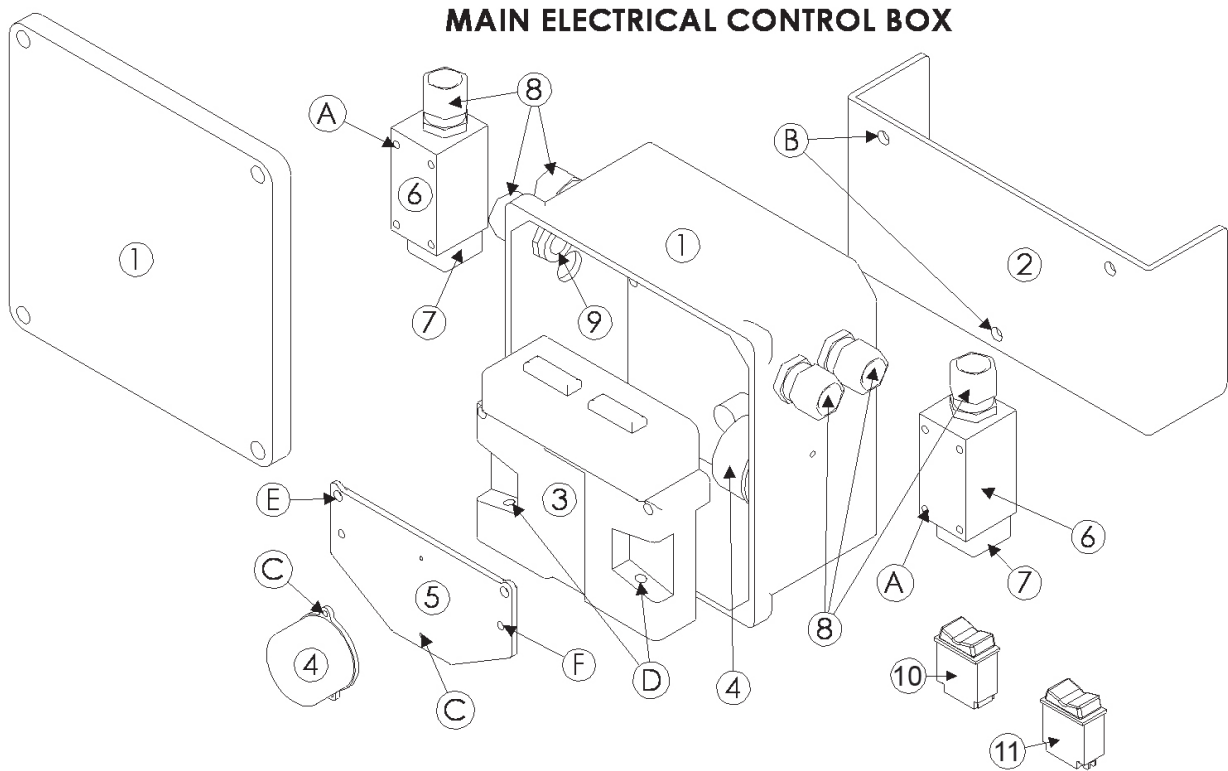
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LADDER WEDGE				
REF.	PART NO.	QTY.	PART NAME	NOTES
ASM	LA-282021	1	LM ASM, CS7010 RETRACTABLE LADDER	
1	LA-282001	1	LM ASM, LEFT LADDER MNT	
2	LA-281991	1	LM ASM, RIGHT LADDER MNT	
3	LA-282011	1	LM STEP ASM, PARALLEL	
4	LM-281951	2	LM PLATE, PARALLEL TOP	
5	LM-281961	2	LM LATE, PARALLEL BOTTOM	
6	LM-267981	8	LM BUSHING, LADDER PIVOT	
7	MC-150461	2	GAS CHARGED LIFT SUPPORT (40 LB)	
8	MC-134931	4	LIFT SUPPORT BRACKETS	
9	LA-268831	1	LM ASM, LADDER WEDGE	
10	LP-268791	1	LM MOUNT, FRONT HANDRAIL	
11	LP-268781	1	LM CLAMP, FRONT HANDRAIL	
FASTENERS				
A	F-HC-12M050F	4	HC-8.8 M12 X 1.75 X 50 Plated [DIN 931]	LADDER SIDE PLATE PIVOTS
B	F-HC-12M030F	4	HC-8.8 M12 X 1.75 X 30 Plated [DIN 931]	LADDER STEP PIVOTS
C	F-HNS-12ME	8	HN-10.9 M12 X 1.75 Stover Plated [DIN 980 V]	LADDER PIVOTS AND STOP BOLTS
D	F-HNJ-05C	2	HN5 5/16-18 JAM NUT Plated	UPPER BALL STUDS
E	F-LW-05	4	LW 5/16	LADDER BALL STUDS
F	F-MB-10NR14	8	BUSHING, MACH 10 GA NR, 7/8 ID	LADDER PIVOTS



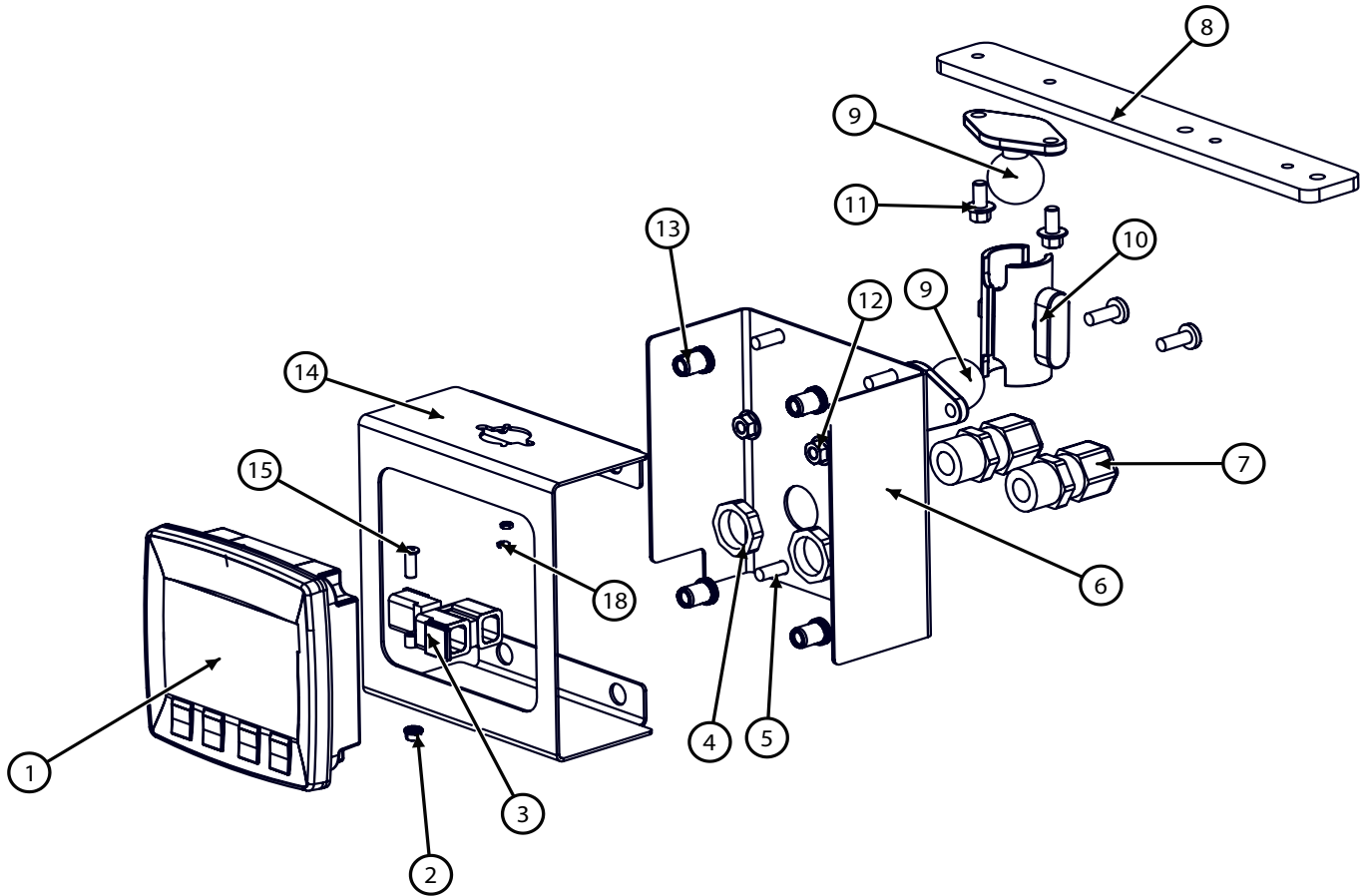
**Electrical**



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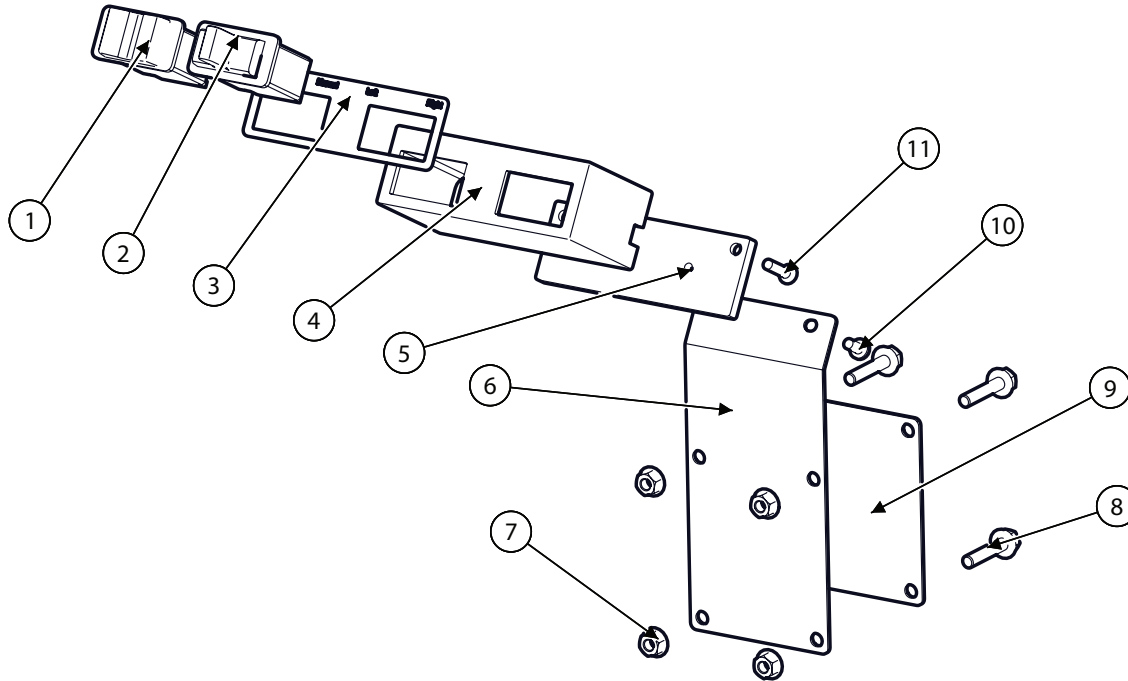
<b>MAIN ELECTRICAL BOX COMPONENTS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
ASM	LA-268271	1	EM ASM, CONTROLLER	
1	1260301	1	EM BOX, CONTROLLER MOUNT	
2	LP-266511	1	EM MOUNT, LEVELING BOX	WELDED TO CARRIAGE
3	1346181	1	CONTROLLER	
4	1337171	1	EM ASM, CLINOMETER	SEE NOTE BELOW DIAGRAM
5	1255331	1	EM SHT, CLINOMETER MOUNT	
6	100557	2	BODY, LIMIT SWITCH	
7	100692	2	HEAD, LIMIT SWITCH STRAIGHT PLUNGER	
8	138781	6	STRAIN RELIEF, NYLON, BLK, 1/2 NPT	
9	142121	4	STRAIN RELIEF NUT, 1/2" NYLON, BLK	
<b>REMOTE SWITCH CONTROLS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
ASM	LA-281881	1	EM PACKAGE, REMOTE SWITCH	
10	EC-143401	1	SWITCH, LEFT/RIGHT LEVELING	
11	1336701	1	SWITCH, AUTO/MANUAL	
<b>FASTENERS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>WHERE USED</b>
A	F-PHM-#10C28	4	PHMS 10-24 X 1-3/4	LIMIT SWITCH MNT
A	F-HNF-#10C	4	HN 10-24, FLNG SERR	LIMIT SWITCH MNT
B	F-HC5-04C12	3	HC5 1/4-20 X 3/4	PVC BOX TO BRACKET
D	F-PHM-04C24	2	PHMS 1/4-20 X 1-1/2	CONTROLLER TO PVC BOX
D	F-HNF-04C	2	FLHN 1/4-20 SERR.	CONTROLLER TO PVC BOX
E	F-PHM-04C36	2	PHMS 1/4-20 X 2-1/4	GROUNDING PLATE MOUNTING
E	F-HNF-04C	2	FLHN 1/4-20 SERR.	GROUNDING PLATE MOUNTING
F	F-PHM-#10C12	2	PHMS 10-24 X 3/4	GROUNDING PLATE GROUND
F	F-HNF-#10C	2	HN5 10-24, FLNG SERR	GROUNDING PLATE GROUND
F	F-HN-#10C	2	HN 10-24	GROUNDING PLATE GROUND

**MONITOR DISPLAY S/N (YDG009296- )**



MONITOR			
BOM ID	Part No.	Qty	Description
1-18	LA-265183B	1	EM ASM, CAB CONTROL MONITOR
1	EC-146461	1	GRAPHICAL TERMINAL, SD DP200
2	F-HNF-#10C	1	FLHN #10-24 SERR.
3	EC-146531	1	Y-CONNECTOR, BLACK
4	EC-142121	2	STRAIN RELIEF NUT, 1/2" BLACK
5	F-PHM-06M016F	6	PHMS M6 X 1.0 X 16
6	LB-307001X	1	EM SHT, BOX COVER
7	EC-138781	2	STRAIN RELIEF, NYLON, BLK,
8	LM-306981X	1	EM BAR, MONITOR BASE
9	LM-307011	2	EM BASE, MONITOR MNT
10	MC-153871	1	RAM, DBL SOCKET ARM FOR 1" BALL, 2" SOCKET TO SOCKET LENGTH
11	F-HCF-06M012E	2	FLHC 10.9 M6 X 1.0 X 16
12	F-HNF-06ME	2	FLHN-10.9M6X1.00
13	F-RN-06MF	4	RIVET NUT, M6 X 1.00
14	LB-306991X	1	EM SHT, DISPLAY MNT
15	F-PHM-#10C08	1	PHMS 10-24 X 1/2

**REMOTE SWITCHES S/N (YDG009296- )**

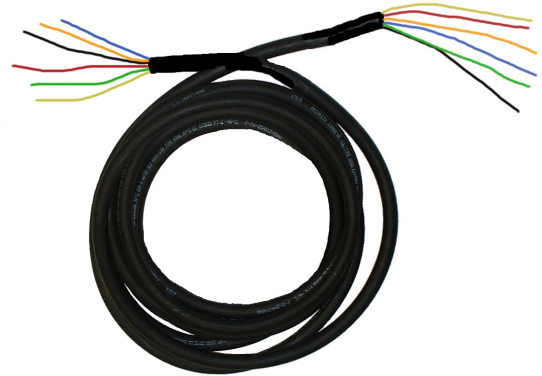


Remote Switches			
BOM ID	Part No.	Qty	Description
1	150121	1	SWITCH, ON-NONE-ON,
2	150031	1	SWITCH, (ON)-OFF-(ON),
3	150131	1	LABEL, SWITCH BOX
4	1286371	1	SWITCH BOX, REMOTE
5	1286381	1	BOX COVER,
6	1307141	1	SWITCH MOUNT
7	123.006	6	NUT,HX,FL,CL10 M6
8	122.006.030	4	BOLT,HX,FL,CL10.9 M6X30
9	1307151	1	CLAMP, SWITCH MOUNT
10	171.005.010	2	SCREW,PHM,CH M5X10
11	172.005.020	2	SCREW,FHM,CH M5X20

**Electrical Connectors and Cables**



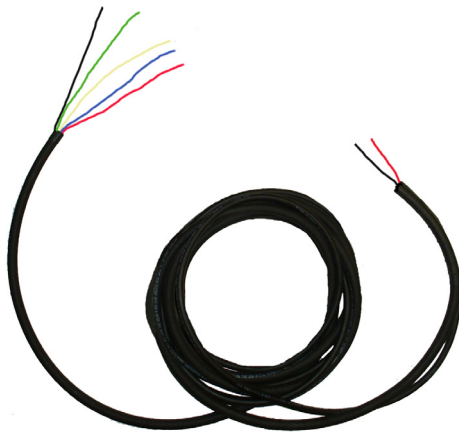
#1 LA-268261  
EM CABLE ASM, LIMIT SWITCH



#2 LA-268311  
EM CABLE ASM, BOX TO VALVE



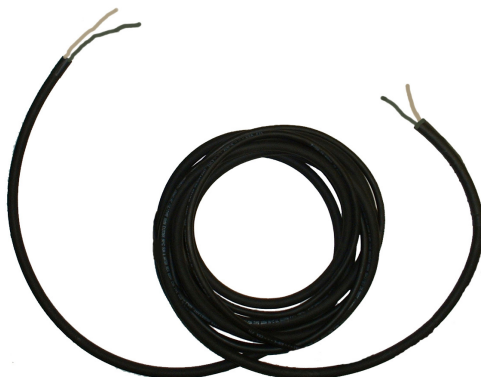
#3 1337171  
EM ASM, CLINOMETER



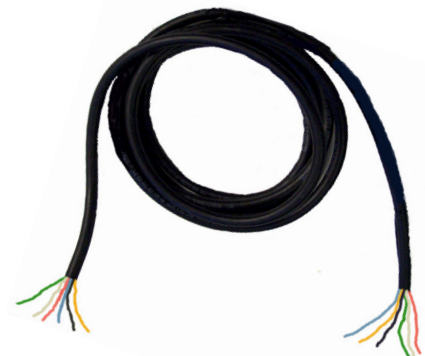
#4 LA-276661  
EM CABLE ASM, MANIFOLD



#5 1307051  
EM CABLE ASM, CAB TO BOX



#6 1307061  
EM CABLE ASM, POWER & GROUND

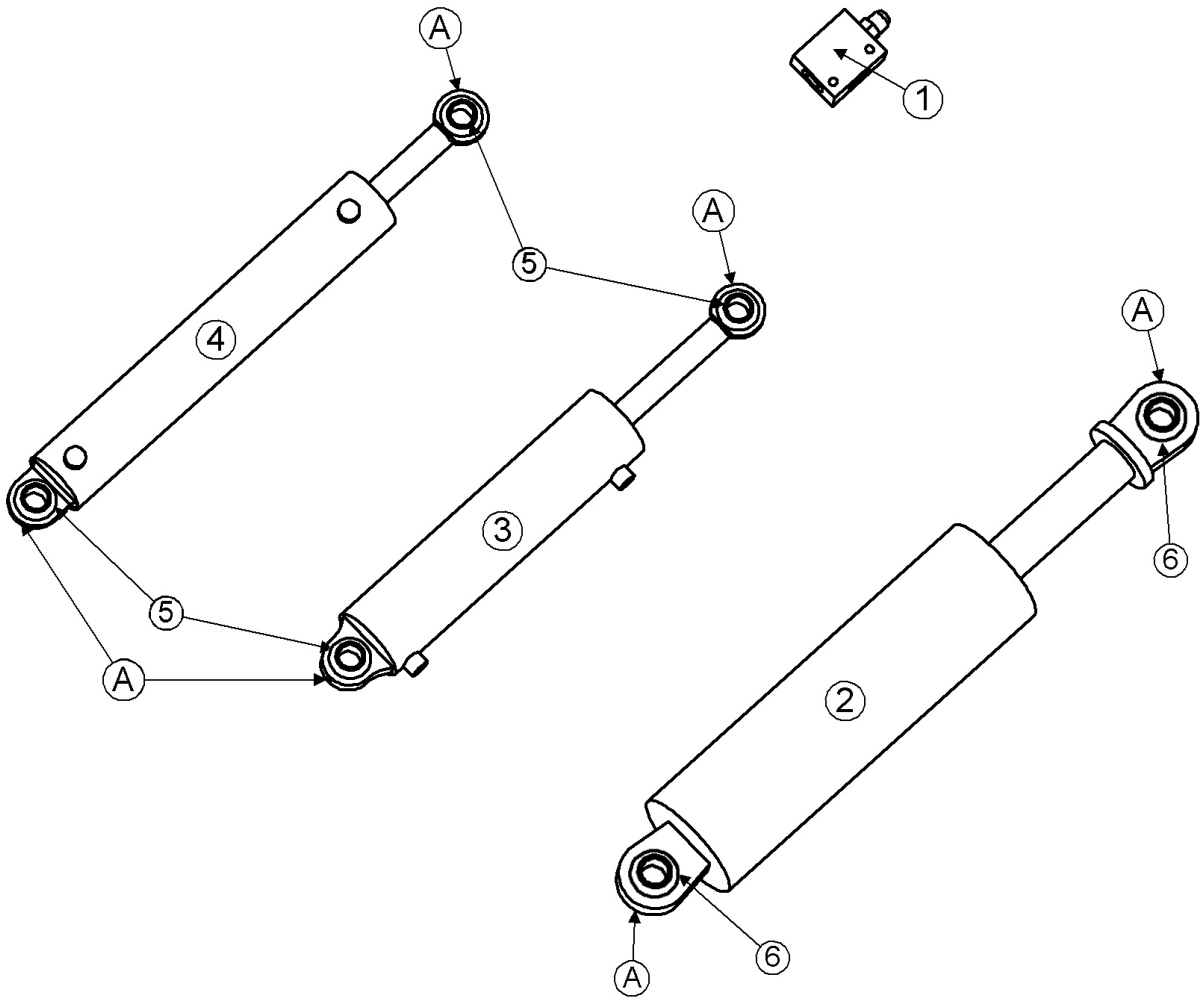


#7 1307041  
EM CABLE ASM, REMOTE SWITCH

Model CS7020 Hillco Leveling System  
For Serial Numbers CS7020-16001 thru CS7020-16999

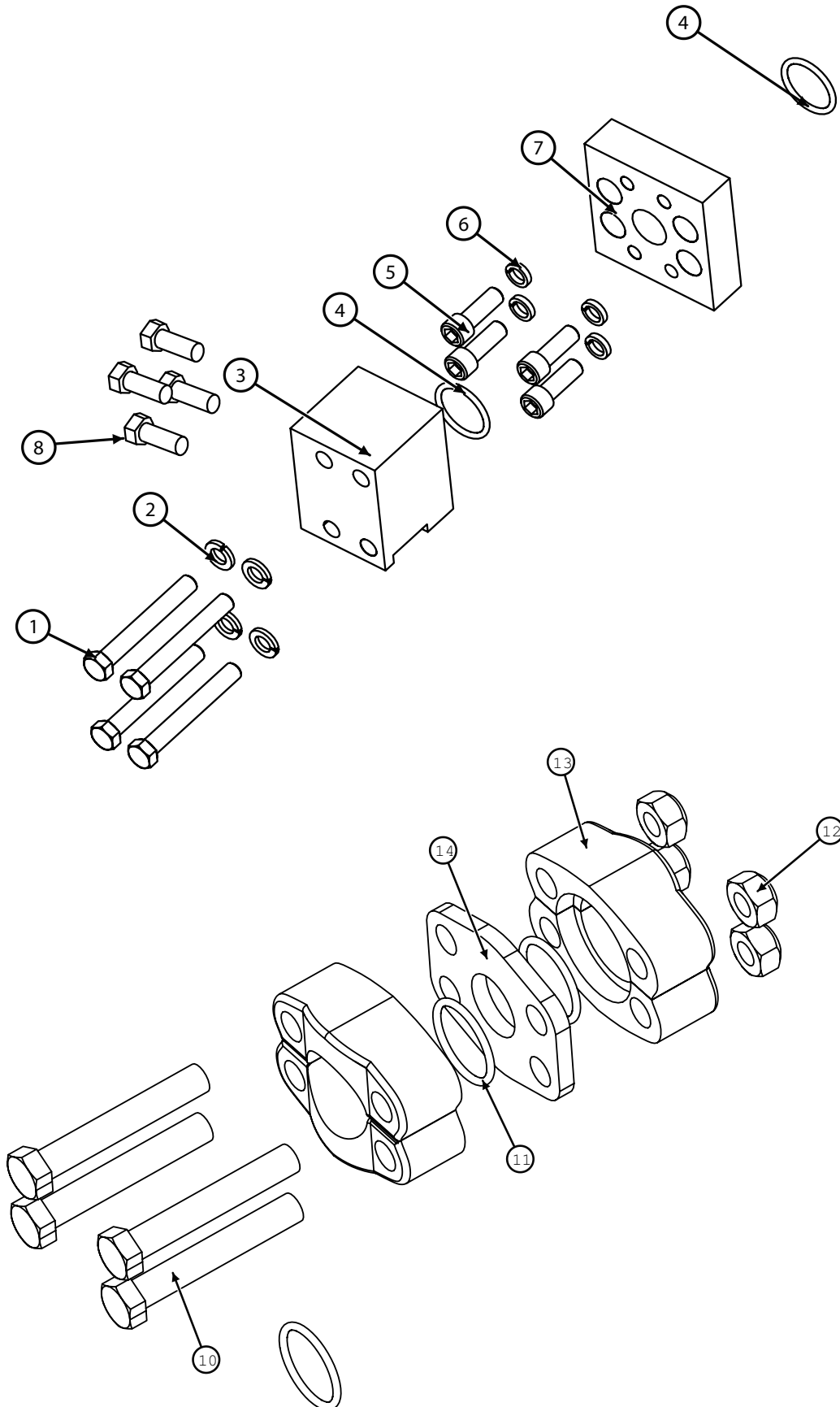
<b>CABLE ASSEMBLIES</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
1	LA-268261	2	EM CABLE ASM, LIMIT SWITCH	26" 2W
2	LA-268311	1	EM CABLE ASM, BOX TO VALVE	106" 6W
3	1337171	1	EM ASM, CLINOMETER	
4	LA-276661	1	EM CABLE ASM, LEVELING MANIFOLD	
5	1307051	1	HARNESS, CAB TO BOX	
6	1307061	1	HARNESS, POWER & GROUND	
7	307041	1	HARNESS, REMOTE SWITCH	
<b>ELECTRICAL CONNECTORS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
NS	EC-141741	4	DTM SERIES, 12-SOCKET WEDGE	
NS	EC-141751	3	DTM SERIES, 12-SOCKET PLUG W/ A-KEY	
NS	EC-141761	1	DTM SERIES, 12-SOCKET PLUG W/ B-KEY	
NS	EC-143261	1	DTM SERIES, 12- PIN RECEPTACLE	
NS	EC-143271	1	DTM SERIES, 12-SOCKET WEDGE	
NS	EC-145671	18	DTM SERIES, PLUG, SEALING	
NS	EC-146521	2	DTM SERIES, 2-SOCKET WEDGE W/B KEY, BLACK	
NS	EC-146581	31	DTM SERIES, SOCKET CONTACT, STAMPED	
NS	EC-141781	4	DTM SERIES, PIN CONTACT, STAMPED	
NS	EC-139641	2	CONNECTOR, PARALLEL, 16-14 GA	
NS	ET-ST-20#10	6	TERMINAL, TERMINAL, #10, 20 GA., NON-INSULATED	
NS	EC-146511	2	PLUG, GRAY, 2-SOCKET	
NS	EC-146881	1	MINI FUSE HOLDER, ATM	
NS	EC-146891	1	MINI BLADE FUSE, ATM, 5AMP	

**Hydraulics**



COUNTERBALANCE VALVE AND CYLINDERS				
REF.	PART NO.	QTY.	PART NAME	NOTES
1	138901	2	VALVE, 3-PORT COUNTERBALANCE	MAIN LEVELING CYLINDERS BASE END
..	HC-139171	2	BODY, COUNTERBALANCE VALVE	
..	HC-139161	2	CARTRIDGE, COUNTERBALANCE VALVE	Set @ 4000 psi
NS	HC-140361	2	SEAL KIT, COUNTERBALANCE VALVE	
2	140313	2	CYLINDER, MAIN LEVELING	
3	140342	1	CYLINDER, MASTER LEVELING	
4	138582	1	CYLINDER, SLAVE	
5	150871	4	1" BEARING, SEALED SPHERICAL	
6	150881	4	1 3/8" BEARING, SEALED SPHERICAL	
HYDRAULIC FASTENERS				
REF.	PART NO.	QTY.	PART NAME	WHERE USED
A	158.004.004	6	SET SCREW, 1/4-28 X 1/4	CYLINDERS

### Code 62 Adapters

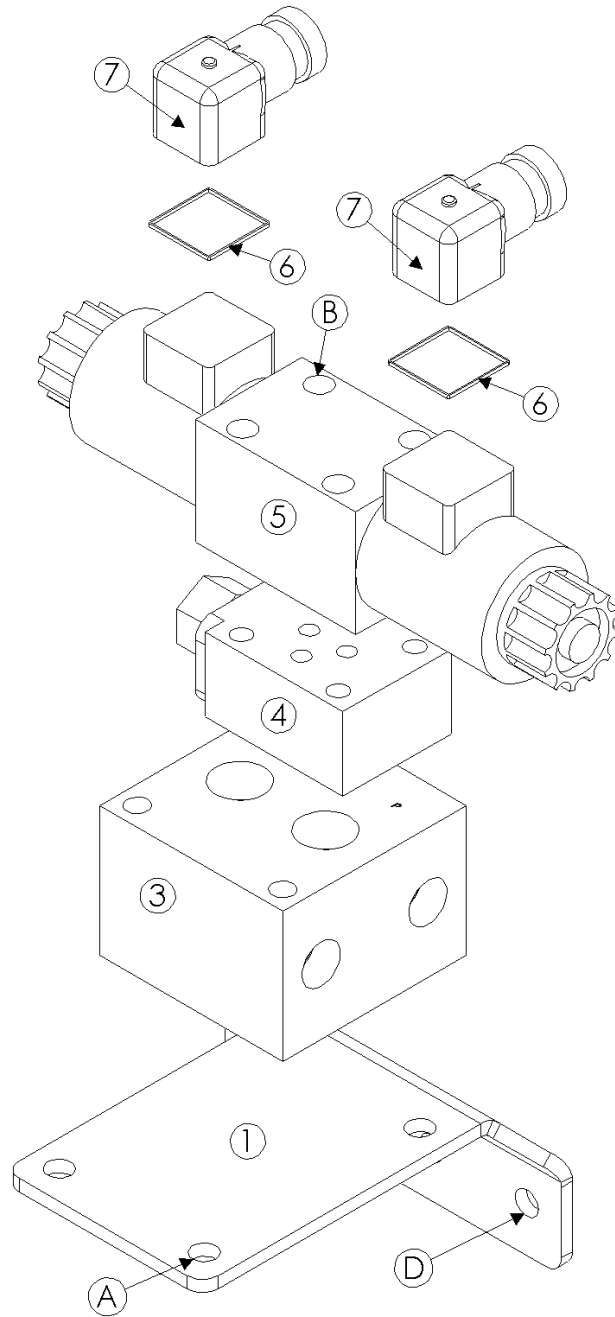




Model CS7020 Hillco Leveling System  
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<b>CODE 62 ADAPTERS</b>			
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>
1	121.012.080	4	BOLT,HX,CL10.M12X80
2	139.008	8	WASHER,LCK,HVY-SPLIT 1/2
3	1261081	1	HM BLOCK, CODE 62 90°
4	147551	3	O-RING, CODE 62, 1"
5	159.012.030	4	SCREW,SHC,CL12.9 M12
6	135.008	4	WASHER,LCK,HIGH COLLAR 1/2
7	1143372	1	CODE 62 90° ROTATIONAL ADAPTER
8	121.012.040	4	BOLT,HX,CL10.9 M12
10-14	LA-254951	2	KIT, HOSE COUPLER, 1-1/4 CODE 62
10	121.014.090	8	BOLT,HX,CL10.9 M14X90
11	147621	6	O-RING, CODE 62, -20
12	126.014	8	NUT,HX,STV,CL10 M14
13	147611	8	FLANGE, CODE 62, -20
14	1272161	2	OT PRT, UNION, 1-1/4", CODE 62

**Hydraulic Manifold**



Model CS7020 Hillco Leveling System  
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<b>MANIFOLD COMPONENTS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
ASM	LA-276671	1	LEVELING MANIFOLD ASM	
1	LP-268121	1	HM PLATE, MANIFOLD MOUNT	
NS	HC-141361	2	SEAL KIT, RELIEF VALVE	
3	HC-138861	1	MANIFOLD, SINGLE STATION	
4	HC-101264	1	LOAD SENSE SHUTTLE ASM	
..	HC-101021	1	CARTRIDGE, LOAD SENSE VALVE	
..	HC-101022	1	BODY, LOAD SENSE VALVE	
NS	HC-102082	1	SEAL KIT, LOAD SENSE SHUTTLE ASM	
5	HC-140411	1	DIRECTIONAL CONTROL VALVE	
NS	LM-250111	1	ORIFICE, .128	DIRECTIONAL CONTROL VALVE
NS	HC-142731	1	SEAL KIT, DIRECTIONAL CONTROL VALVE	
6	HC-142971	2	GASKET, DIN CONNECTOR	COILS ON DIR CONTROL VALVES
7	HC-140291	2	PLUG, DIN, LIGHTED	COILS ON DIRECTIONAL CONTROL VALVES
<b>MANIFOLD FASTENERS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>WHERE USED</b>
A	F-HCF-08M020E	4	FLHC-10.9 M8 X 1.25 X 20 PLT	SECURES MANIFOLD TO MOUNTING PLATE
A	F-HNF-08ME	4	FLHN-10.9 M8 X 1.25 PLT	SECURES MANIFOLD TO MOUNTING PLATE
B	F-SHC-#10C52	4	SHCS 10-24 X 3-1/4	MANIFOLD ASM
B	F-LW-#10	4	LW #10	MANIFOLD ASM
D	F-HCF-08M020E	2	FLHC-10.9 M8 X 1.25 X 20 PLT	MANIFOLD ASM TO COMBINE
D	F-HNF-08ME	2	FLHN-10.9 M8 X 1.25 PLT	MANIFOLD ASM TO COMBINE

Model CS7020 Hillco Leveling System  
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### Hydraulic Hoses

LOW SPEED HYDRO MOTOR OPTION HYDRAULIC HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	1	1334601	HH ASM, 100R17AR-06 39"; -06FF 90° x -08FF STR	PARK BRAKE VALVE TEE ON "P" PORT TO HYDRO MOTOR
	2	1334611	HH ASM, 100R15-20 15"; -20 62 STR x -20 62 STR	EXTENDS HYDRO HOSES AT JUNCTION BLOCK

HIGH SPEED HYDRO MOTOR OPTION HYDRAULIC HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	1	1331861	HH ASM, 100R15-20 125"; -20 62 STR x -20 62 90°, D64MM	TOP PORT ON HYDRO MOTOR TO "A" PORT AT JUNCTION BLOCK
	1	1331871	HH ASM, 100R15-20 133"; -20 62 STR x -20 62 90°, D64MM	BOTTOM PORT ON HYDRO MOTOR TO "B" PORT AT JUNCTION BLOCK

LEVELING & TRIM HYDRAULIC HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	1	1146852	HH ASM, 100R17AR-04 39"; -04FF STR x -04FF STR	LEVELING MANIFOLD LOAD SENSE LINE
	1	1146862	HH ASM, 100R17AR-10 17"; -10FF STR x -10FF 45°	LEVELING MANIFOLD PRESSURE HOSE
	1	1146872	HH ASM, 100R17AR-10 34"; -10FF STR x -10FF 45°	LEVELING MANIFOLD RETURN HOSE
	1	1272641	HH ASM, 100R17AR-06 45"; -06FF STR x -06FF 90°	CB VALVE PORT #3 RIGHT TO CB VALVE PORT #2 LEFT
	1	1272651	HH ASM, 100R17AR-06 49"; -06FF STR x -06FF 90°	CB VALVE PORT #2 RIGHT TO CB VALVE PORT #3 LEFT
	2	1272661	HH ASM, 100R17AR-06 5-5/8"; -06FF STR x -06FF 90°	MAIN ROD TO CB VALVE PORT #3 (LEFT & RIGHT)
	2	1146991	HH ASM, 100R17AR-06 86"; -06FF STR x -06FF 90°	1 - LEV PORT "B" TO CB VALVE PORT #2 LEFT; 1 - LEV PORT "A" TO CB VALVE PORT #3 LEFT
	1	1147271	HH ASM, 100R17AR-04 98"; -06FF STR x -06FF 90°	MASTER CYLINDER BASE TO SLAVE CYLINDER BASE
	1	1139801	HH ASM, 100R17AR-04 102"; -06FF STR x -06FF STR	MASTER CYL ROD TO SLAVE CYL ROD
	1	1147022	HH ASM, 100R17AR-04 82"; -06FF STR x -06FF STR	FT "ROD" PORT TO MASTER ROD
	1	1140592	HH ASM, 100R17AR-04 88"; -06FF STR x -08FF STR	FT "HEAD" PORT TO MASTER BASE
	2	10072.00384	SLEEVE, ABRASION, NYLON 1.22"IDX24"	HOSES TO SLAVE CYLINDER

FEEDERHOUSE ENGAGE HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	1	1331811	HH ASM, 100R17AR-06 84"; -06FF STR x -06FF 90°	C2 PORT ON PARK BRAKE VALVE TO ROD END OF FEEDER ENGAGE CYLINDER
	1	1331821	HH ASM, 100R17AR-06 76"; -06FF STR x -06FF STR	C1 PORT ON PARK BRAKE VALVE TO BASE END OF FEEDER ENGAGE CYLINDER
	1	HC-142151	SLEEVE, ABRASION, NYLON 1.66"IDX12"	FEEDER ENGAGE HOSES

PARK BRAKE VALVE HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	1	1331831	HH ASM, 100R17AR-06 12"; -08FF STR x -08MF STR	EXTENDS HOSE THAT CONNECTS TO THE "P" PORT ON THE PARK BRAKE VALVE
	1	1331841	HH ASM, 100R17AR-06 12"; -06FF STR x -06MF STR	EXTENDS HOSE THAT CONNECTS TO THE "T" PORT ON THE PARK BRAKE VALVE

DROP AXLE HYDRAULIC HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	1	1133641	HH ASM, 100R1-03 15"; -02MP STR x -02MP STR	REAR AXLE ZERK
	1	1331881	HH ASM, 100R17AR-08 48"; -08FF STR x -08FF STR	RIGHT STEER CYLINDER PORT TO FRONT STEER HOSE ON LEFT SIDE OF COMBINE
	1	1331891	HH ASM, 100R17AR-08 45"; -08FF STR x -10FF STR	LEFT STEER CYLINDER PORT TO REAR STEER HOSE ON LEFT SIDE OF COMBINE
	2	10072.00384	SLEEVE, ABRASION, NYLON 1.22"IDX24"	ON THE CYLINDER END OF THE HOSES

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MISC HYDRAULIC HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	3	10115.00512	SLEEVE, ABRASION, NYLON 2.19"IDx32"	HYDRO HOSES NEAR C-CHANNEL FRAME
	1	155535	HOSE PROTECTOR, 3.5" X 8"	CASE DRAIN HOSE BY JUNCTION BLOCK

HEADER LIFT CYLINDER HYDRAULIC HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	2	1147031	HH ASM, 100R17AR-08 46"; -08FF STR X -08FF 45°	HEADER LIFT HOSES
	2	10072.00384	SLEEVE, ABRASION 1.22"IDx24"	HEADER LIFT HOSES

CARRIAGE GREASE HOSES				
REF.	QTY.	PART NO.	PART NAME	WHERE USED
	3	1133331	HH ASM, 100R1-03 12"; -02MP STR x -02MP STR	L & R MAIN LEVELING CYLINDER BASE TO L & R BULKHEADS & MSTR BASE TO RH BULKHEAD
	2	1140101	HH ASM, 100R1-03 48"; -02MP STR x -02MP STR	MASTER ROD TO RH BULKHEAD & MAIN PIVOT PIN TO LH BULKHEAD

Model CS7020 Hillco Leveling System  
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### Hydraulic Adapters

REF.	PART NO.	QTY.	PART NAME	WHERE USED
NS	HA-L-8FF8MF	2	#8 FORS X #8 MORS 90°	STEERING CYLINDER PORTS
NS	HA-L-6FF6MF	1	#6 FORS X #6 MORS 90°	LEFT BRAKE PORT ON TRANSMISSION
NS	HA-L-6FF6MF	1	#6 FORS X #6 MORS 90°	FEEDER ENGAGE PORT ON BRAKE VALVE
NS	HA-L-16FF16MF	1	#16 FORS X #16 MORS 90°	CASE DRAIN ON HYDRO PUMP
<b>LEVELING MANIFOLD</b>				
NS	HA-L-6MF4MO	4	#4 MORB X #6 MORS 90°	#1 & #2 PORTS IN RELIEF VALVE
NS	HA-E-10MO	2	#10 MORB SOCKET HEAD PLUG (ZERO-LEAK)	"P" & "T" PORTS
NS	HA-S-10MF10MO	2	#10 MORS X #10 MORB STR.	"P" & "T" PORTS
NS	HA-L-6MF8MO	2	#6 MORS X #8 MORB 90°	"A" & "B" PORTS
NS	HA-L-4MF4MO	1	#4 MORS X #4 MORB 90°	LOAD SENSE SHUTTLE
NS	HA-L-10FF10MF	2	#10 FORS X #10 MORS 90°	"P" & "T" PORTS
NS	HA-M-4FF4MF	1	#4 ORS SWIVEL NUT RUN TEE	"LS" PORT AT FEEDER VALVE
NS	HA-M-12FF12MF	1	#12 ORS SWIVEL NUT RUN TEE	PRESSURE HOSE AT FEEDER VALVE
NS	HA-S-12FF10MF	1	#12 FORS X #10 MORS STR.	#12 TEE AT FEEDER VALVE
NS	HA-M-16FF16MF	1	#16 ORS SWIVEL NUT RUN TEE	RETURN HOSE AT FEEDER VALVE
NS	HA-S-16FF10MF	1	#16 FORS X #10 MORS STR.	#16 TEE @ FEEDER VALVE
NS	HA-L-8FF8MF	1	#8 FORS X #8 MORS 90 DEG	"HEAD" PORT ON FT VALVE
NS	HA-L-6FF6MF	1	#6 FORS X #6 MORS 90 DEG	"ROD" PORT ON FT VALVE
<b>MAIN CYLINDER AND COUNTERBALANCE VALVE</b>				
NS	HA-S-6FO8MO	2	#8 MORB X #6 FORB STR	LEFT & RIGHT MAIN CYLINDER BASE
NS	HA-L-6MO6MO	2	#6 MORB X #6 MORB 90°	LEFT AND RIGHT COUNTERBALANCE VALVE PORT #1 TO MAIN CYLINDER BASE
NS	HA-L-6MF6MO	2	#6 MORS X #6 MORB 90°	LEFT & RIGHT MAIN CYLINDER ROD
NS	HA-M-6FF6MF	1	#6 MORS X #6 FORS SWIVEL NUT RUN TEE	LEFT COUNTERBALANCE VALVE PORT #3
NS	HA-L-6MF6MO	1	#6 MORS X # 6 MORB 90°	RIGHT COUNTERBALANCE VALVE PORT #2
<b>MASTER AND SLAVE CYLINDERS</b>				
NS	HA-Q-6MF6MO	2	#6 MORS STRAIGHT THREAD BRANCH TEE	MASTER BASE & ROD PORTS
NS	HA-F-6MF6MO	2	#6 MORS X #6 MORB 45°	SLAVE BASE & ROD PORTS
<b>GREASE</b>				
NS	HC-141231	1	ZERK, GREASE 1/8 MPT 45°	
NS	HA-L-2FP2MP	1	1/8 MPT 90 STREET EL	MAIN PIVOT PIN
NS	HC-135771	4	1/4-28 MALE X 1/8 FPT 90°	MASTER & LEVLEING CYLINDER BASE
NS	HA-S-2MN2FP	5	1/8 NPSM X 1/8 FPT BULKHEAD CONNECTOR	GREASE BULKHEAD CONNECTORS
NS	HA-NJ-2FN	5	1/8 NPSM BULKHEAD LOCKNUT	GREASE BULKHEAD CONNECTORS
NS	HC-138011	5	ZERK, GREASE 1/4-28 STRAIGHT	ALL GREASE HOSES
<b>GREASE DROP AXLE</b>				
NS	HA-L-2FP2MP	1	1/8 MPT 90 STREET EL	DROP AXLE MAIN PIVOT PIN
NS	HA-S-2MN2FP	1	1/8 NPSM X 1/8 FPT BULKHEAD CONNECTOR	GREASE BULKHEAD CONNECTORS
NS	HA-NJ-2FN	1	1/8 NPSM BULKHEAD LOCKNUT	GREASE BULKHEAD CONNECTORS
NS	HC-138011	1	ZERK, GREASE 1/4-28 STRAIGHT	ALL GREASE HOSES

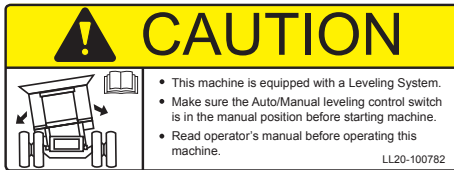
Miscellaneous



2 - 151051



1 - 133741



3 - 100782



5 - 100784



4 - 100783



6 - 100787



7 - 100787

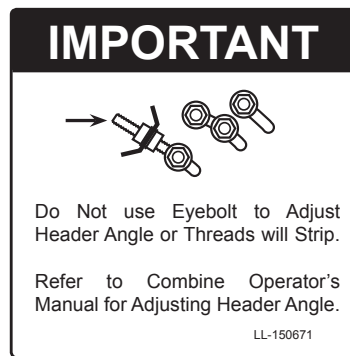


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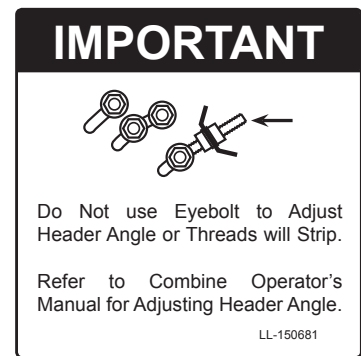


9 - 150511

10 - 150521



11 - 150671



12 - 150681

Model CS7020 Hillco Leveling System  
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<b>DOCUMENTS AND LABELS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
NS	D-050611SLR01	1	WARRANTY REG CARD	SENT WITH OPERATOR'S MANUAL
NS	D-060302CMA01C	1	CS7020 OPERATOR'S MANUAL	
NS	D-030320DMC01A	1	CS7020 PARTS BOOK	
NS	270031	1	TAG, SERIAL NUMBER 3700S	LEFT REAR OF UNDERCARRIAGE
NS	133741	1	LABEL, GREASE 50 HRS	BY BASE END OF SLAVE CYLINDER
NS	133741	2	LABEL, GREASE 50 HRS	
1	133741	2	LABEL, GREASE 50 HRS	MAIN LEV CYL BOTTOM LEFT & RIGHT
1	133741	2	LABEL, GREASE 50 HRS	BULKHEAD MOUNT LEFT & RIGHT
NS	143621	2	DANGER, AVOID CRUSHING INJURY	REAR OF UNDERCARRIAGE NEAR THE SAFETY STOP MOUNTS
2	151051	2	DECAL, CASE SIDEHILL LEVELING SYSTEM	SIDE PANELS ON COMBINE
3	100782	1	CAUTION LEVELING SYSTEM CAB	WINDOW IN CAB
4	100783	2	DANGER, CRUSHING HAZARD	FRONT OF UNDERCARRIAGE LEFT & RIGHT
4	100783	2	DANGER CRUSHING HAZARD	SIDE OF COMBINE ABOVE REAR TIRES
5	100784	2	DANGER PINCH POINT	UPPER TRANS FACE PLATE LEFT & RIGHT
6	100786	1	WARNING ELECTRONIC CRUSHING HAZARD	FRONT OF CONTROL BOX
7	100787	1	CAUTION LEVELING SYSTEM HAZARD	CLEAN GRAIN ELEVATOR-RIGHT; SCREEN- LEFT
8	100788	1	HYDRAULIC HAZARD DECAL	ABOVE HYDRAULIC MANIFOLD
8	100788	2	DANGER HYDRAULIC HAZARD	1- EA MAIN CYLINDERS
NS	239412	1	LABEL, STEERING WHEEL	TIED TO STEERING WHEEL DURING INSTALLATION
NS	274401	1	LIMIT SWITCH WARNING LABEL	INSTALLED ON 1 LIMIT SWITCH
11	150671	1	LABEL, EYEBOLT LEFT	
12	150681	1	LABEL, EYEBOLT RIGHT	

<b>MISCELLANEOUS COMPONENTS</b>				
<b>REF.</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>PART NAME</b>	<b>NOTES</b>
NS	139431	2	BEHRINGER TWIN CLAMP .750 DIAMETER	BRAKE & HEADER LIFT HOSES ON TOP OF OVERCARRIAGE
NS	139451	2	BEHRINGER TWIN COVER PLATE (FOR .750)	HEADER LIFT HOSES ON TOP OF OC
NS	101.005.028	1	BOLT,HX,GR5 5/16-18X1-3/4	HDR LIFT HOSES ON TOP OF OC
NS	101.005.032	1	BOLT,HX,GR5 5/16-18X2	LEFT HDR LIFT HOSE CLAMP ON TOP OF OC
NS	139471	1	BEHRINGER STACK BOLT (FOR .750)	BRAKE HOSES ON TOP OF OVERCARRIAGE
NS	139481	1	BEHRINGER TWIN CLAMP .620 DIAMETER	FRONT LH WELD-PLATE ON OC FOR BRAKE HOSES
NS	135631	2	CLAMP, HOSE 1-1/2 R/C W/ 3/8" HOLE	CLAMPS FOR TRIM HOSES
NS	123.008	2	NUT,HX,FL,CL10 M8	CLAMPS FOR TRIM HOSES
NS	122.008.020	2	BOLT,HX,FL,CL10.9 M8X20	CLAMPS FOR TRIM HOSES



Model CS7020 Hillco Leveling System  
For Serial Numbers CS7020-16001 thru CS7020-16999

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