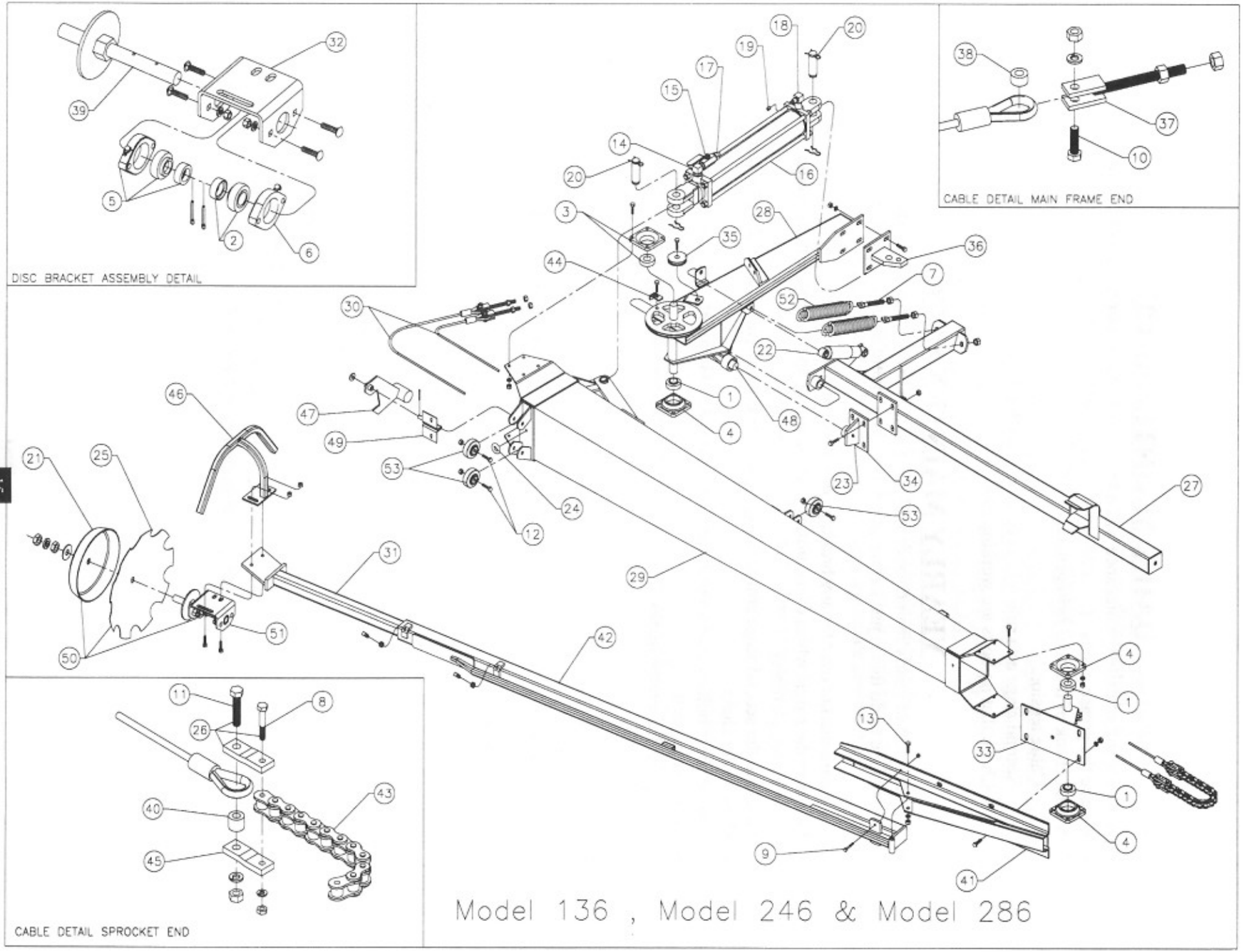

DISC BRACKET ASSEMBLY DETAIL
CABLE DETAIL MAIN FRAME END
CABLE DETAIL SPROCKET END
Model 136 , Model 246 & Model 286

HAUKAAS MANUFACTURING LTD.

SMALL MARKER 98-99 PARTS LIST

The following is a list of parts and there corresponding drawing #'s for the small SIDE ARM markers (Model 136, 246, & 286) as shown on page 15.

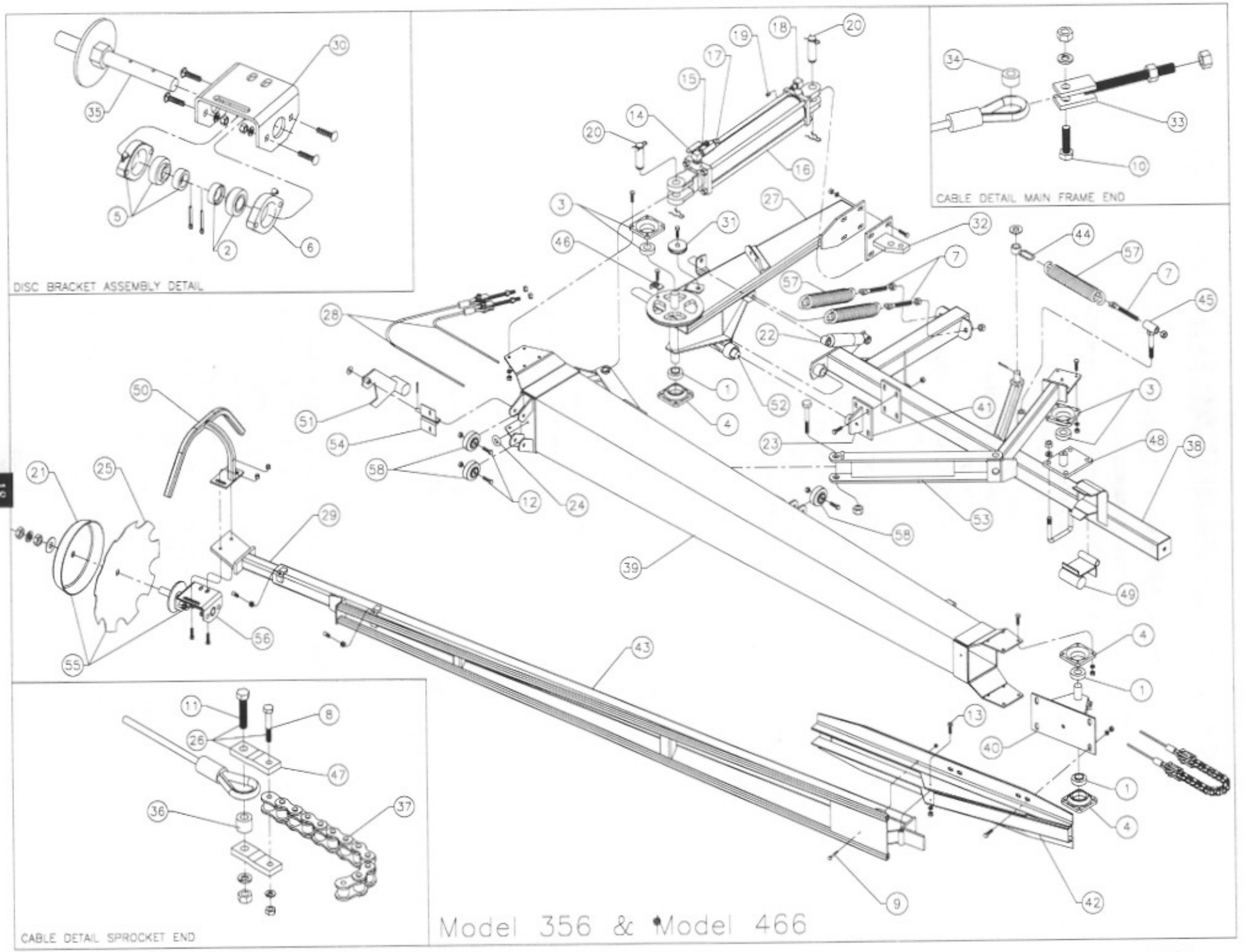
DRW#	PART #	DESCRIPTION
1	BRG-2207	1-1/4" BEARING C/W LOCKING COLLAR
2	BRG-2209	1" BEARING C/W LOCKING COLLAR
3	BRG-2450	1-1/4" BEARING/HOUSING ASSEMBLY COMPLETE
4	BRG-2463	1-1/4" HOUSING ONLY CJ06-BL
5	BRG-2476	1" BEARING/HOUSING ASSEMBLY COMPLETE
6	BRG-2486	1" CAST HOUSING
7	FNS-02392	5/8x6" I-BOLT (4" THREAD)
8	FNS-112-5PC	5/16x2" GR. 5 HEX BOLT
9	FNS-113B2PC	5/16x3-1/2" GR. 2 SHEAR BOLT
10	FNS-131B5PC	7/16x1-1/2" GR. 5 SHEAR BOLT
11	FNS-132-5PC	7/16x2" GR. 5 HEX BOLT
12	FNS-142C5PC	1/2x2-3/4" GR. 5 HEX BOLT
13	FNS-143C8PC	1/2x3-3/4" GR. 8 HEX BOLT
14	HYD-2179	1/2" NPT MALE TO MALE ELBOW
15	HYD-2180	1/2" BALL VALVE
16	HYD-2368	HYDRAULIC CYLINDER
17	HYD-2490	1/2"NPTx9/16"JIC MALE/MALE ADAPTOR
18	HYD-2494	9/16"JICx1/2"NPT MALE/MALE ELBOW
19	HYD-2511	5/16"x3/64" SET SCREW ORFICE
20	HYD-2528	CYLINDER PIN KIT
21	MIS-2192	NYLON DEPTH GUAGE
22	MIS-2195	SHOCK ABSORBER
23	MIS-2325	GF641 GREASE ZIRK
24	MIS-2362	RUBBER BUMPER
25	MIS-2526	18" NOTCHED DISC BLADE
26	SA-04HLP/246	3/8" HALF LINK ASSY (INCLUDES #11, 8, & 45)
27	SA-8051L	SMALL SUB-FRAME LEFT
27	SA-8051R	SMALL SUB-FRAME RIGHT
28	SA-8052L	MAIN FRAME LEFT
28	SA-8052R	MAIN FRAME RIGHT
29	SA-8053/136L	PRIMARY ARM 136 LEFT
29	SA-8053/136R	PRIMARY ARM 136 RIGHT
29	SA-8053/246L	PRIMARY ARM 246 LEFT
29	SA-8053/246R	PRIMARY ARM 246 RIGHT
29	SA-8053/286L	PRIMARY ARM 286 LEFT
29	SA-8053/286R	PRIMARY ARM 286 RIGHT

HAUKAAS MANUFACTURING LTD.

SMALL MARKER 98-99 PARTS LIST

The following is a list of parts and there corresponding drawing #'s for the small SIDE ARM markers (Model 136, 246, & 286) as shown on page 15.

DRW#	PART #	DESCRIPTION
30	SA-8054/136	136 CABLE 88" OVERALL (2 PER MARKER)
30	SA-8054/246	246 CABLE 112" OVERALL (2 PER MARKER)
30	SA-8054/286	286 CABLE 136" OVERALL (2 PER MARKER)
31	SA-8055	THIRD STAGE ARM
32	SA-8056	DISC ASSEMBLY BRACKET
33	SA-8057	SMALL SPROCKET ASSEMBLY (4 HOLE)
34	SA-8065	END BUSHING BRACKET ASSEMBLY
35	SA-8066	3" CABLE PULLEY
36	SA-8067	HYDRAULIC CYLINDER ANCHOR BRACKET
37	SA-8069	CABLE CLEVIS BOLTS
38	SA-8082	CABLE/CLEVIS BUSHING (1/2")
39	SA-8084	DISC AXLE
40	SA-8085	1/2 LINK BUSHING 11/16"
41	SA-8086	SMALL ANGLE IRON ASSEMBLY (4 HOLE)
42	SA-8087/136	136 2ND STAGE ARM TUBE ASSEMBLY
42	SA-8087/246	246 2ND STAGE ARM TUBE ASSEMBLY
42	SA-8087/286	286 2ND STAGE ARM TUBE ASSEMBLY
43	SA-8088	#80 ROLLER CHAIN (18 PINS-20" LONG)
44	SA-8184	CABLE CLIP
45	SA-8219	3/8" CABLE/CHAIN HALF LINK
46	SA-8223	1" SQUARE TUBE DISC GUARD
47	SA-8224	AUTO-LOCK LATCH
41	SA-8335	SMALL ANGLE IRON ASSEMBLY (8 HOLE)
33	SA-8336	SMALL SPROCKET ASSEMBLY (8 HOLE)
48	SA-8339	MAIN FRAME SHAFT (1-1/4" COLD ROLLED 14" LONG)
49	SA-8346	AUTO-LOCK BASE
50	SA-9034	COMPLETE 18" DISC ASSEMBLY
51	SA-9041	COMPLETE DISC ASSEMBLY WITHOUT DISC & DG
52	SPR-2173	LARGE CB SPRING (2 PER 246)
52	SPR-2315	SMALL CB SPRING (1 PER 136)
52	SPR-2395	MEDIUM CB SPRING (1 PER 136)
53	WHL-2172	3" NYLON WHEEL


DISC BRACKET ASSEMBLY DETAIL
CABLE DETAIL MAIN FRAME END
CABLE DETAIL SPROCKET END
Model 356 & Model 466

HAUKAAS MANUFACTURING LTD.

LARGE MARKER 98-99 PARTS LIST

The following is a list of parts and there corresponding drawing #'s for the small SIDE ARM markers (Model 356 & 466) as shown on page 18.

DRW#	PART #	DESCRIPTION
1	BRG-2207	1-1/4" BEARING C/W LOCKING COLLAR
2	BRG-2209	1" BEARING C/W LOCKING COLLAR
3	BRG-2450	1-1/4" BEARING/HOUSING ASSEMBLY COMPLETE
4	BRG-2463	1-1/4" HOUSING ONLY CJ06-BL
5	BRG-2476	1" BEARING/HOUSING ASSEMBLY COMPLETE
6	BRG-2486	1" CAST HOUSING
7	FNS-02392	5/8x6" I-BOLT (4" THREAD)
8	FNS-112-5PC	5/16x2" GR. 5 HEX BOLT (356)
8	FNS-112-8PC	5/16x2" GR. 8 HEX BOLT (466)
9	FNS-113B5PC	5/16x3-1/2" GR. 5 SHEAR BOLT
10	FNS-131B5PC	7/16x1-1/2" GR. 5 SHEAR BOLT
11	FNS-132A5PC	7/16x2-1/4" GR. 5 SHEAR BOLT
12	FNS-142C5PC	1/2x2-3/4" GR. 5 HEX BOLT
13	FNS-143C8PC	1/2x3-3/4" GR. 8 HEX BOLT
14	HYD-2179	1/2" NPT MALE TO MALE ELBOW
15	HYD-2180	1/2" BALL VALVE
16	HYD-2368	HYDRAULIC CYLINDER
17	HYD-2490	1/2"NPTx9/16"JIC MALE/MALE ADAPTOR
18	HYD-2494	9/16"JICx1/2"NPT MALE/MALE ELBOW
19	HYD-2511	5/16"x3/64" SET SCREW ORFICE
20	HYD-2528	CYLINDER PIN KIT
21	MIS-2192	NYLON DEPTH GUAGE
22	MIS-2195	SHOCK ABSORBER
23	MIS-2325	GF641 GREASE ZIRK
24	MIS-2362	RUBBER BUMPER
25	MIS-2526	18" NOTCHED DISC BLADE
26	SA-04HLP/356	3/8" HALF LINK ASSY (356 PAIR) (INCLUDES 8, 11, 47)
26	SA-04HLP/466	3/8" HALF LINK ASSY (466 PAIR) (INCLUDES 8, 11, 47)
27	SA-8052L	MAIN FRAME LEFT (356)
27	SA-8052R	MAIN FRAME RIGHT (356)
28	SA-8054/356	356 CABLE 133" OVERALL (RUN #57 & UP)
28	SA-8054/466	466 CABLE 157" OVERALL (RUN #57 & UP)
29	SA-8055	THIRD STAGE ARM
30	SA-8056	DISC ASSEMBLY BRACKET
31	SA-8066	3" CABLE PULLEY
32	SA-8067	HYDRAULIC CYLINDER ANCHOR BRACKET
33	SA-8069	CABLE CLEVIS BOLTS
34	SA-8082	CABLE/CLEVIS BUSHING (1/2")

HAUKAAS MANUFACTURING LTD.

LARGE MARKER 98-99 PARTS LIST

The following is a list of parts and there corresponding drawing #'s for the small SIDE ARM markers (Model 356 & 466) as shown on page 18.

DRW#	PART #	DESCRIPTION
35	SA-8084	DISC AXLE
36	SA-8085	1/2 LINK BUSHING 11/16"
37	SA-8088	#80 ROLLER CHAIN (18 PINS-20" LONG)
38	SA-8102L	LARGE SUB-FRAME LEFT (PRIOR TO RUN 028)
38	SA-8102R	LARGE SUB-FRAME RIGHT (PRIOR TO RUN 028)
39	SA-8104/356L	PRIMARY ARM 356 LEFT
39	SA-8104/356R	PRIMARY ARM 356 RIGHT
39	SA-8104/466L	PRIMARY ARM 466 LEFT
39	SA-8104/466R	PRIMARY ARM 466 RIGHT
40	SA-8106	LARGE SPROCKET ASSEMBLY (4 HOLE) (RUN # 30-53)
41	SA-8109L	END BUSHING BRACKET ASSEMBLY LEFT
41	SA-8109R	END BUSHING BRACKET ASSEMBLY RIGHT
42	SA-8117	ANGLE IRON ASSEMBLY (4 HOLE) (RUN # 30-53)
43	SA-8118/356	356 2ND STAGE ARM TUBE ASSEMBLY
43	SA-8118/466	466 2ND STAGE ARM TUBE ASSEMBLY
44	SA-8182	STABILIZER SPRING ANCHOR RING
45	SA-8183	STABILIZER SPRING LIFT BOLT/BUSHING
46	SA-8184	CABLE CLIP
42	SA-8195	ANGLE IRON ASSY (8 HOLE) (RUN #57 & UP)
40	SA-8196	LG SPROCKET ASSY (8 HOLE) (RUN # 57 & UP)
47	SA-8218	3/8" EXTENDED HALF LINK
48	SA-8221	STABILZER ARM PIVOT ASSY (RUN #028 AND UP)
49	SA-8222	TUBE TRANSPORT LOCK
50	SA-8223	1" SQUARE TUBE DISC GUARD
51	SA-8224	AUTO-LOCK LATCH
38	SA-8337L	LARGE SUB-FRAME LEFT (RUN #028 AND UP)
38	SA-8337R	LARGE SUB-FRAME RIGHT (RUN #028 AND UP)
27	SA-8338L	MAIN FRAME LEFT (466)
27	SA-8338R	MAIN FRAME RIGHT (466)
52	SA-8339	MAIN FRAME SHAFT (1-1/4" COLD ROLLED 14" LONG)
53	SA-8340	STABILZER ARM ASSY (RUN #028 AND UP)
54	SA-8346	AUTO-LOCK BASE
55	SA-9034	DISC ASSEMBLY (18") COMPLETE
56	SA-9041	COMPLETE DISC ASSEMBLY W/O DISC & DG
57	SPR-2173	LARGE CB SPRING (2 PER 356 - 2 PER 466)
57	SPR-2395	MEDIUM CB SPRING (1 PER 356)
57	SPR-2498	X-LARGE CB SPRING (1 PER 466)
58	WHL-2172	3" NYLON WHEEL

2173 should be
3 per 356 & 1 per 466

2498 should be 2 per 466

SA-16ASK SEQUENCE VALVE

4130

IMPORTANT! ORIFICE INSIDE FITTING AT BASE END PORT OF CYLINDER SHOULD BE REMOVED ON MODELS 136, 246, 286 AND 356 MARKERS.
DO NOT REMOVE ORIFICE ON MODEL 466 MARKERS!!

