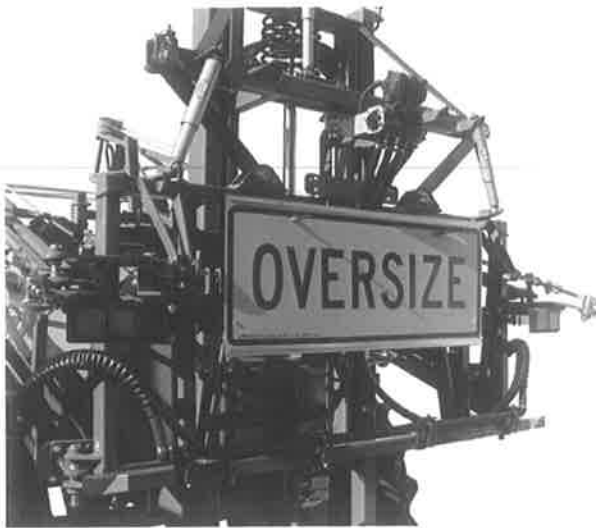


CHAPTER 13

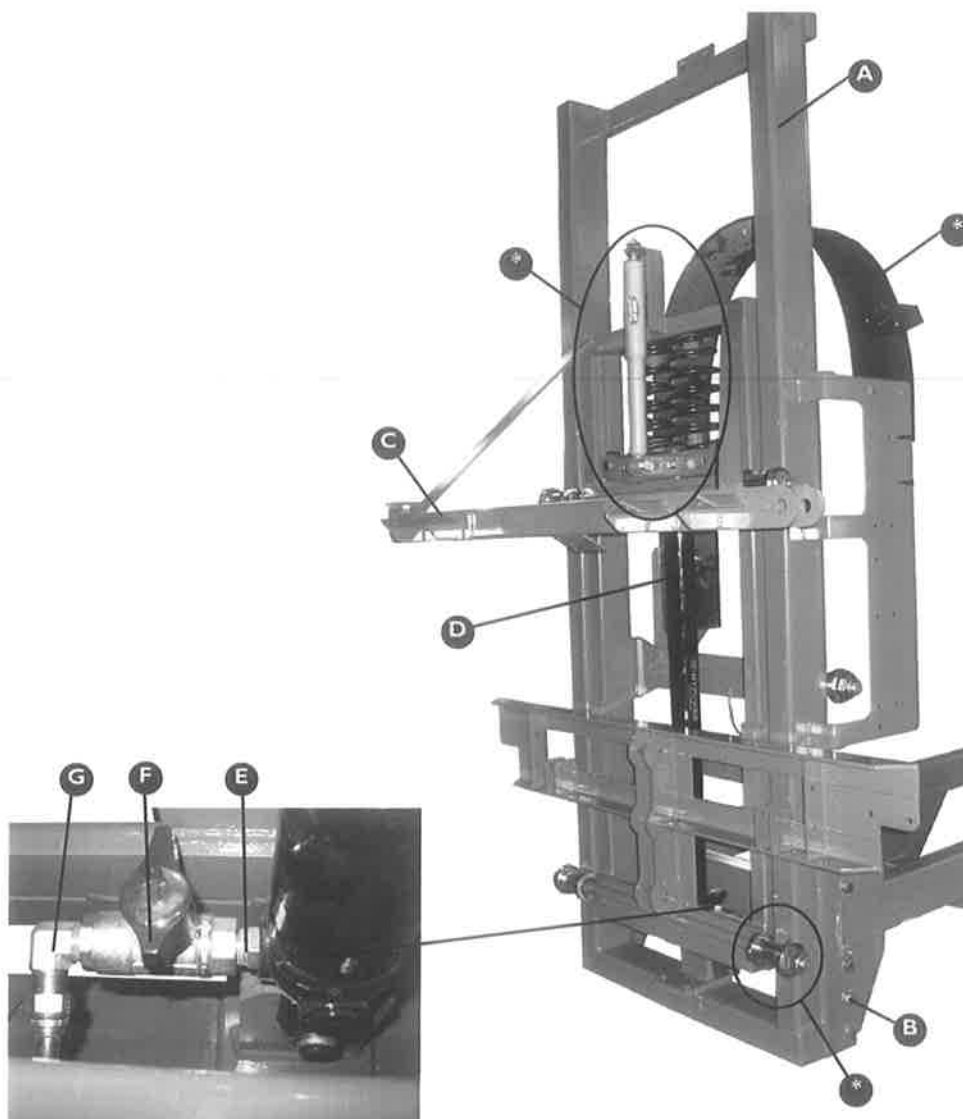
BOOM CENTRE & TOWER



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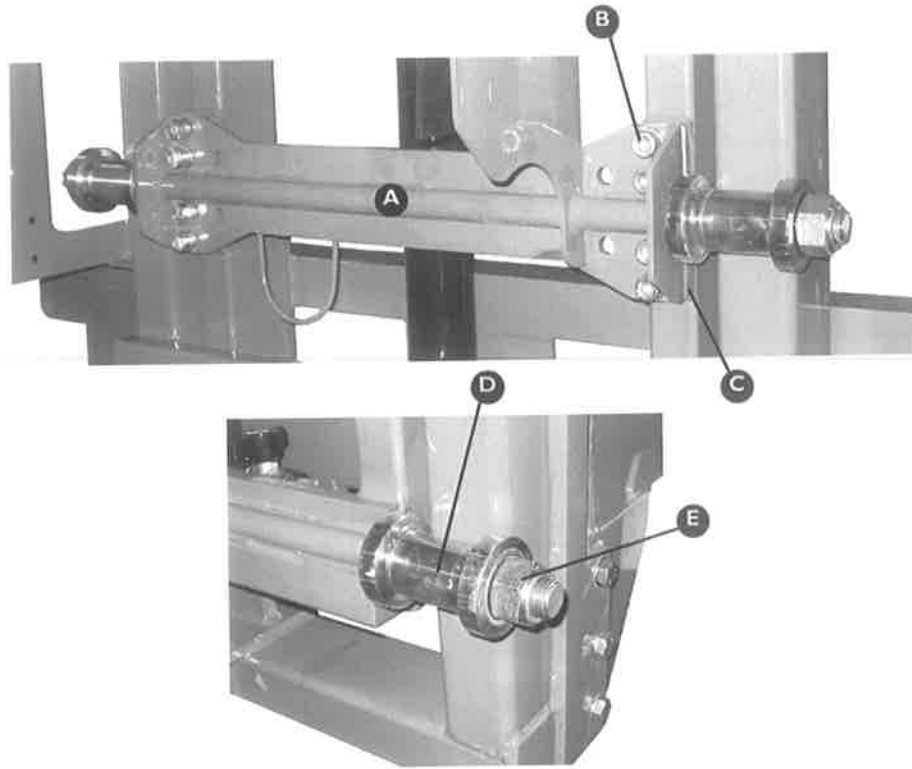
TOWER COMPONENTS



Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA4654025	Tower Frame (Outer, Base)	1	D	GA5018543	2 1/2" x 36" Cylinder	1
B-1	GA5000931	M16 x 50mm Bolt	12	E	S93-0814	Hydraulic Nipple	1
B-2	GA5001029	M16 Nyloc Nut	12	F	GA5000935	1/2" Hydraulic Ball Valve	1
B-3	GA5001009	16mm Washer	24	G	S49-0808	1/2" Hydraulic Elbow	1
C	GA4654035	Tower Inner	1				

* For Tower Rollers, Boom Suspension and Hose Guide refer to following pages

TOWER ROLLERS



Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA4653975	Bolt on Roller Axle	1	C	T165LAS	Roller Axle Shim	8*
B-1	GA5000915	M16 x 30mm Bolt	8	D	ROLLER3	Roller Assembly	6
B-2	GA5000961	16mm Washer	8	E	GA5002693	M30 Nyloc Nut (3.5 Pitch)	6
B-3	GA5001051	16mm Spring Washer	8				

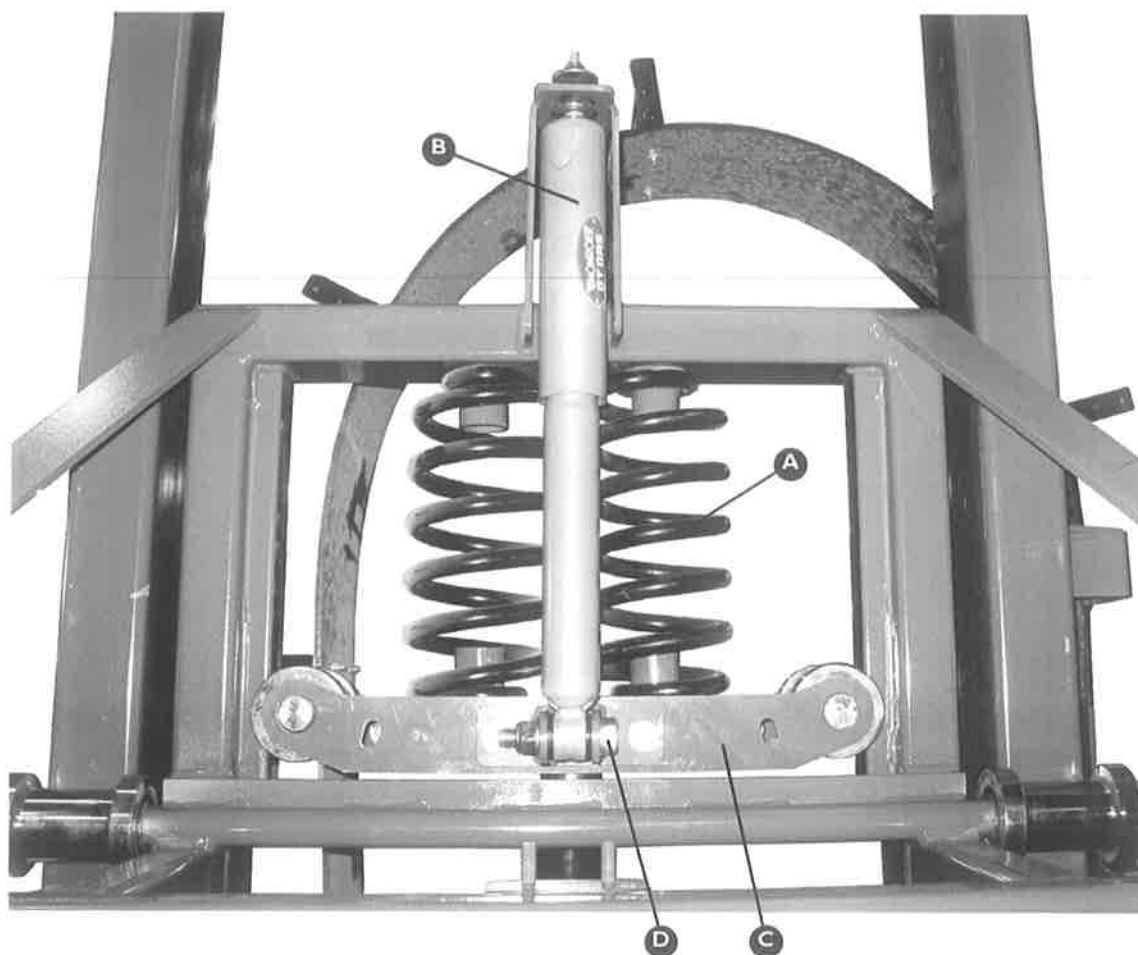
* Quantity may vary

ROLLER3 Assembly Breakdown

Item	Part No	Description	Quantity
1	L010M	Roller Body	1
2	GA5005665	Bearing (6006-2RS)	2



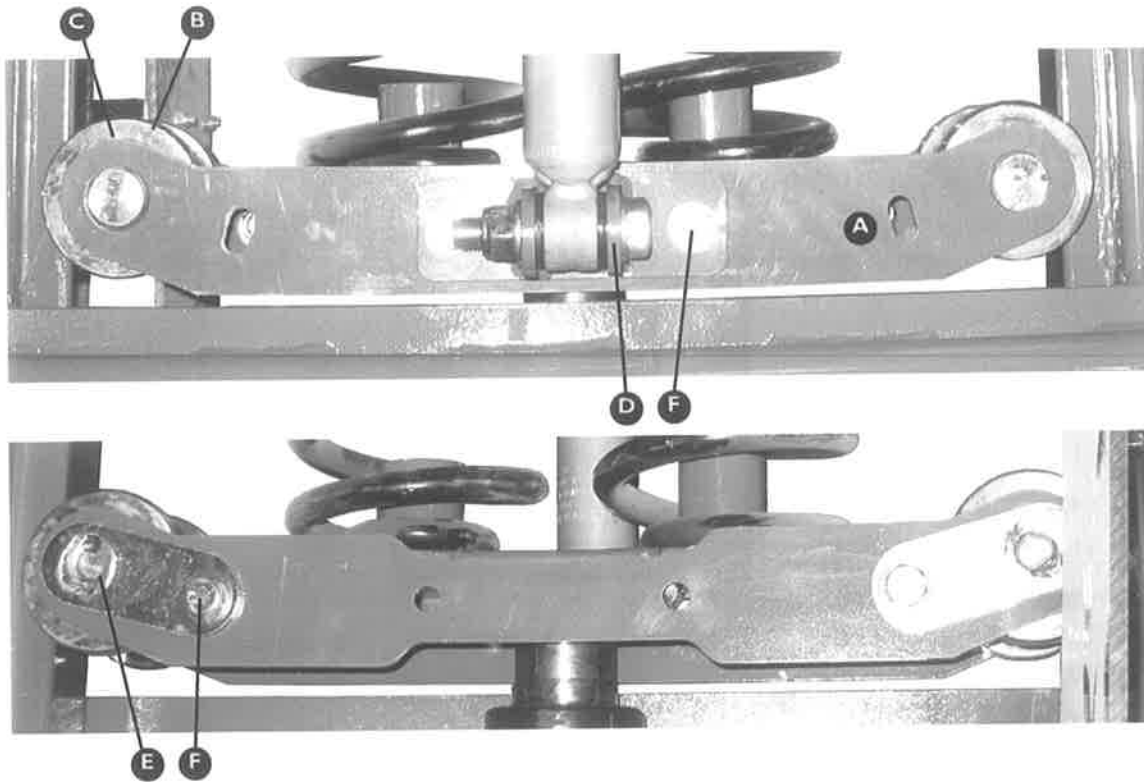
VERTICAL BOOM SUSPENSION



Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA5001039	Coil Spring	2	D-1	GA5011297	M16 x 90mm Bolt	1
B	GA5015145	Damper	1	D-2	GA5001029	M16 Nyloc Nut	1
C	GA5020448	Spring Roller Top Assembly*	1	D-3	GA5001009	16mm Washer	2

* Breakdown shown on next page

SPRING ROLLERTOP



Assembly Part No GA5020448

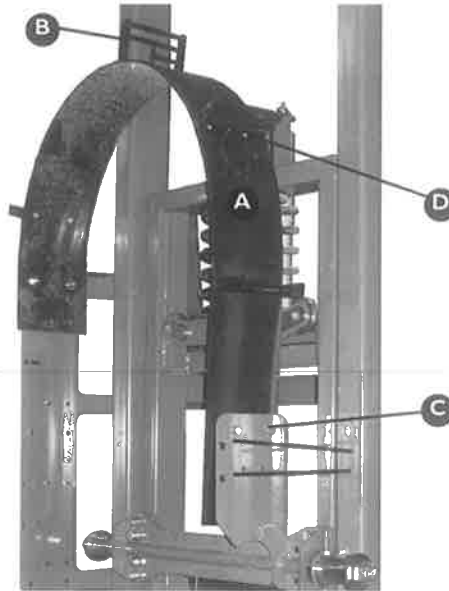
Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA4653985	Spring Roller Top Body	1	E	Pin-30mm-110	Roller Pin	2
B	ROLLER4	Roller and Bearings	2	F-1	GA5000311	M12 x 35mm Bolt	4
C	ST003LAS	Spacer Washer	4	F-2	GA5012461	M12 Nyloc Nut	4
D	GA4653995	Shock Absorber Mount	1	F-3	GA5000587	12mm Washer	8

ROLLER4 Assembly Breakdown

Item	Part No	Description	Quantity
1	L010M-EX	Roller Body	1
2	GA5005665	Bearing (6006-2RS)	2



TOWER HOSE GUIDE



Assembly Part No GA4903141

Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA5013207	Polystone 2000mx197x6	1	D-1	GA5004053	M6 x 20mm Button Head Cap Screw	8
B	GA4653965	Hose Guide	4	D-2	GA5048115	M6 Nyloc Nut	8
C-1	GA5050180	M10 x 25mm Bolt	4	D-3	GA5004437	6mm Washer	8
C-2	GA5000141	M10 Nyloc Nut	4	D-4	GA5003645	5/16" Washer	8
C-3	GA5000117	10mm Washer	4				
C-4	GA5002627	3/8" Washer	4				

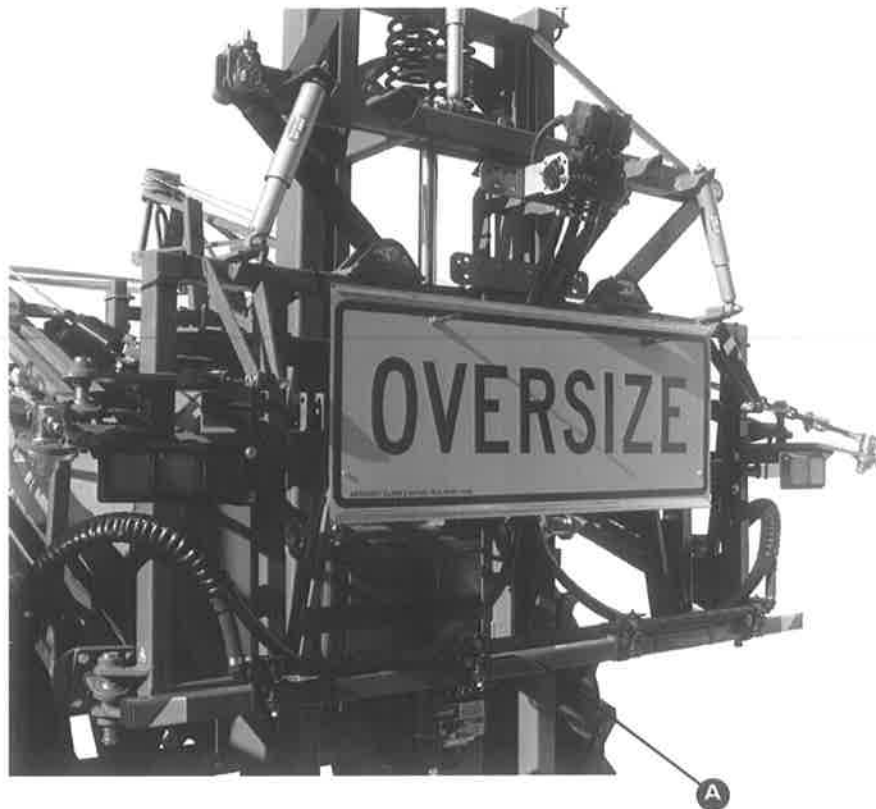
OVERSIZE SIGN



Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA5009613	Oversize Sign	1	B-2	GA5004917	M8 Nyloc Nut	2
B-1	GA5004711	M8 x 25mm Bolt	2	B-3	GA5003643	8mm Washer	4

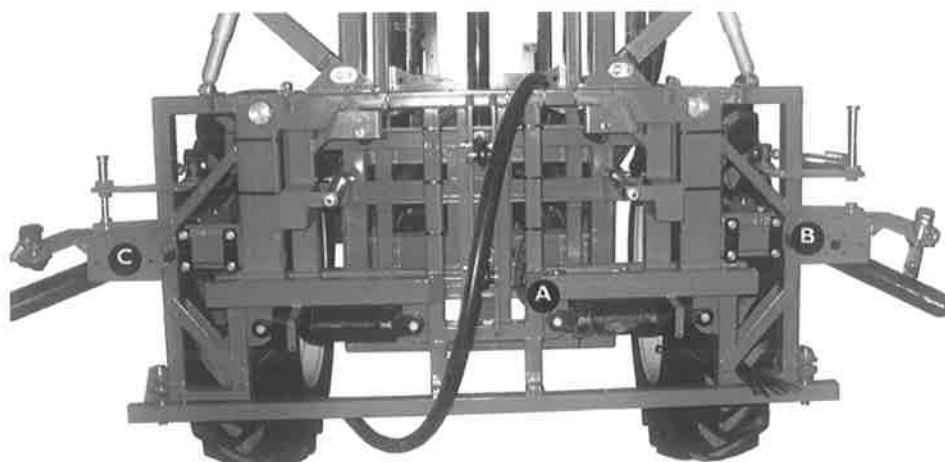
Note that the sign also uses the yaw spring eye bolts as mounting points

CENTRE SECTION WITHOUT TILTS



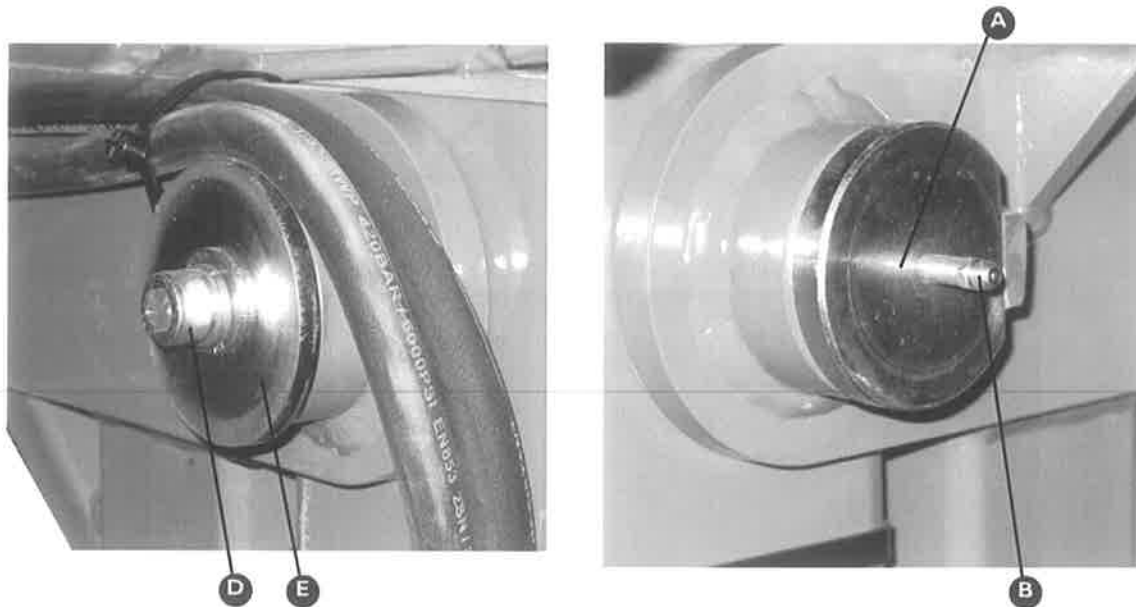
Item	Part No	Description
A	GA4653270	Bare Centre Section without Tilts

CENTRE SECTION WITH TILT



Item	Part No	Description	Item	Part No	Description
A	GA4653275	Bare Boom Centre with Tilt	C	GA4653295	Left Tilt Arm
B	GA4653290	Right Tilt Arm			

TILT ARM PINS

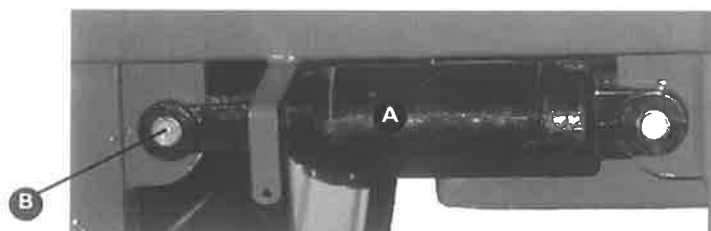


Item	Part No	Description	Quantity*	Item	Part No	Description	Quantity*
A	MACH0115	Tilt Arm Pin	1	D-3	GA5000577	12mm Washer	1
B	GA5012203	Grease Nipple	1	D-4	GA5000575	12mm Spring Washer	1
C	GA5009473	Glazier Bush 40IDx30mm#	2	E	F70111A	Tin Pin Washer	1
D-1	GA5000307	M12 x 30mm Cap Screw	1				

* Quantity based on per tilt arm

Not shown, pressed into arm

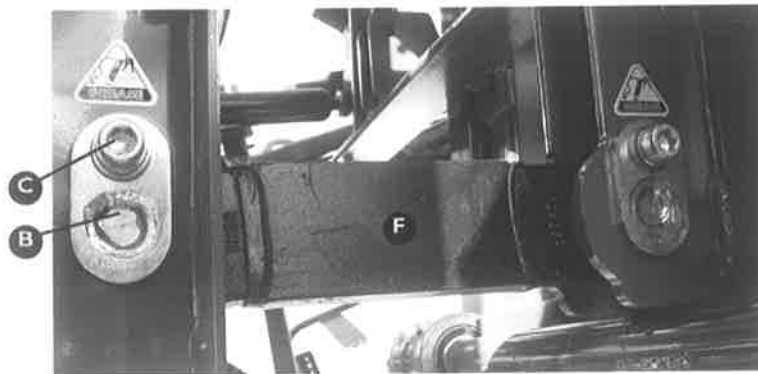
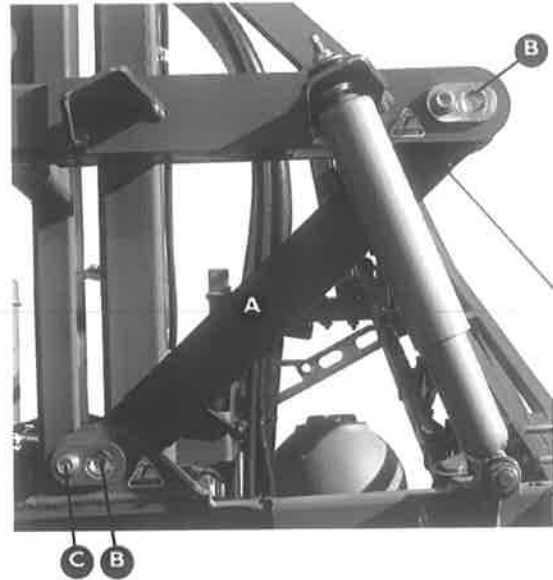
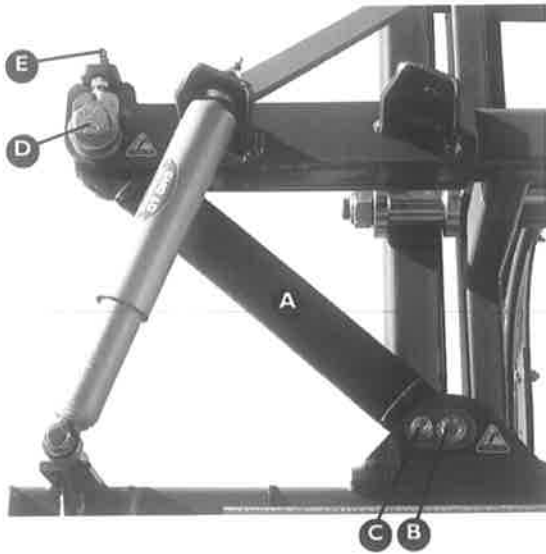
TILT CYLINDERS



Item	Part No	Description	Quantity*
A	GA5018551	Tilt Cylinder (3 1/2" x 5")	1
B-1	L068	Ram Pin	2
B-2	GA5001223	19mm E-Type Circlip	2

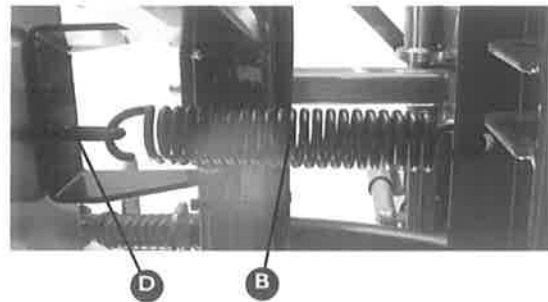
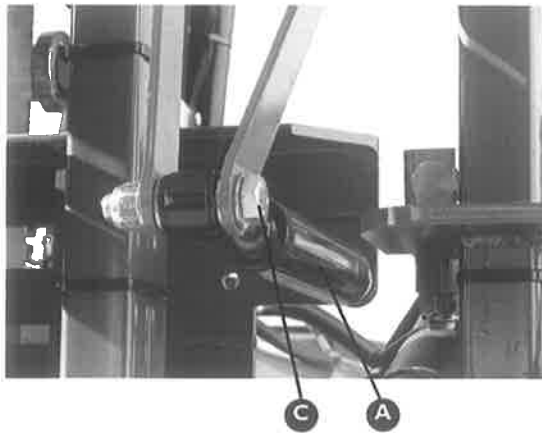
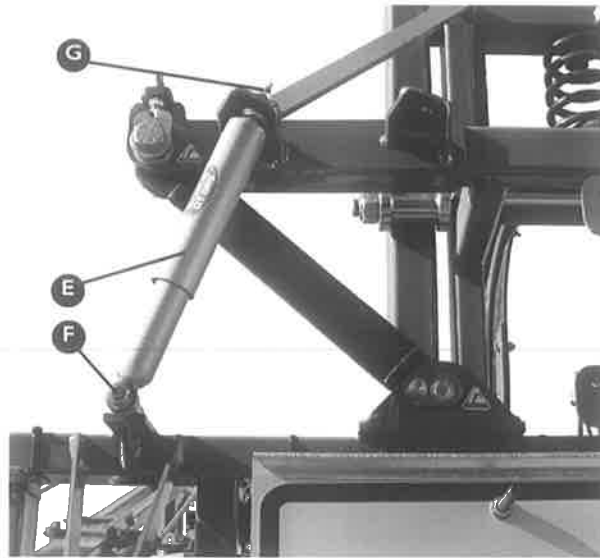
* Quantity based on per tilt arm

DELTA LINKS



Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA4656240	Long Delta Link	2	D-2	GA5012439	1" UNC Nyloc Nut	1
B	Pin-I-87	Delta Link Pin	7	D-3	GA5017659	1" Washer	4
C-1	GA5000299	M12 x 25mm Bolt	7	E-1	GA4656260	Adjuster	2
C-2	GA5000577	12mm Washer	7	E-2	GA5012461	M12 Nyloc Nut	2
C-3	GA5000575	12mm Spring Washer	7	E-3	GA5000559	M12 Nut	2
D-1	GA4683145	1" x 6" UNC Bolt	1	F	GA5067855	Short Delta Link	2

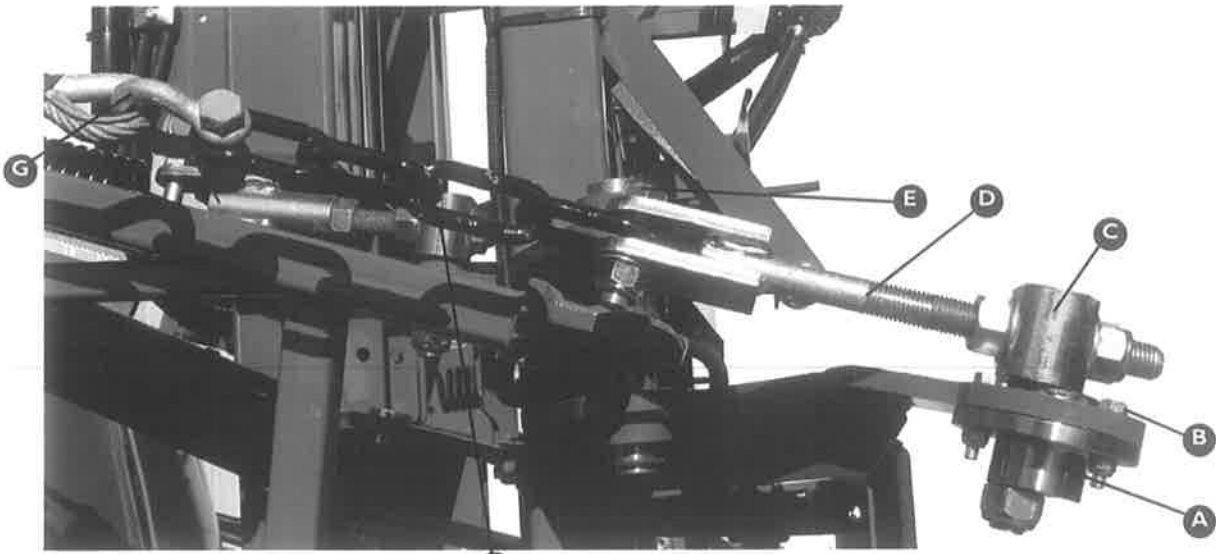
CENTRE SECTION SPRING & DAMPERS



Item	Part No	Description	Quantity*	Item	Part No	Description	Quantity*
A	GA5015899	Steering Damper	2	D-2	GA5012461	M12 Nyloc Nut	2
B	GA5016605	Yaw Spring	2	D-3	GA5000577	12mm Washer	2
C-1	GA5011307	M16 x 80mm Bolt	2	E	GA5015145	Damper	2
C-2	GA5001029	M16 Nyloc Nut	2	F-1	GA5001029	M16 Nyloc Nut	2
C-3	GA5001043	16mm Washer	8	F-2	GA5001043	16mm Washer	2
D-1	GA5008545	M12 x 150mm Eye Bolt	2	G	GA5004917	M8 Nyloc Nut	2

* Quantities based on required amount for entire centre section

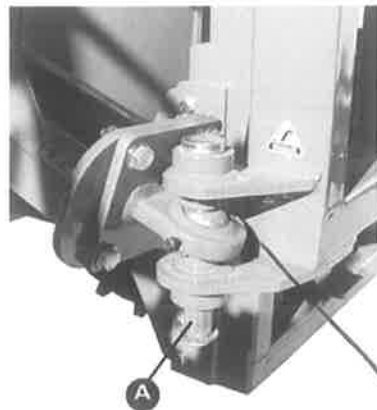
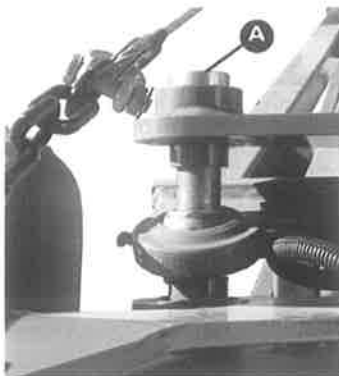
BOOM CABLE ADJUSTERS



Item	Part No	Description	Quantity*	Item	Part No	Description	Quantity*
A	MACH0029	Eccentric Bush	1	D-3	GA5001709	M20x2.5 Nut	1
B-1	GA5048655	M8 x 40mm Bolt	3	D-4	GA5001741	20mm Washer	1
B-2	GA5004917	M8 Nyloc Nut	3	E-1	GA5000941	M16 x 60mm Bolt	1
B-3	GA5004913	8mm Washer	3	E-2	GA5001029	M16 Nyloc Nut	1
C-1	L006A	Boom Cable Swivel	1	E-3	GA5001043	16mm Washer	2
C-2	GA5048125	M20 x 2.5 Nyloc Nut	1	F	GA5065020	Chain	4 Links
D-1	GA5020320	Threaded cable adjuster	1	G	GA5000669	D Shackle	1
D-2	GA5048125	M20 x 2.5 Nyloc Nut	1				

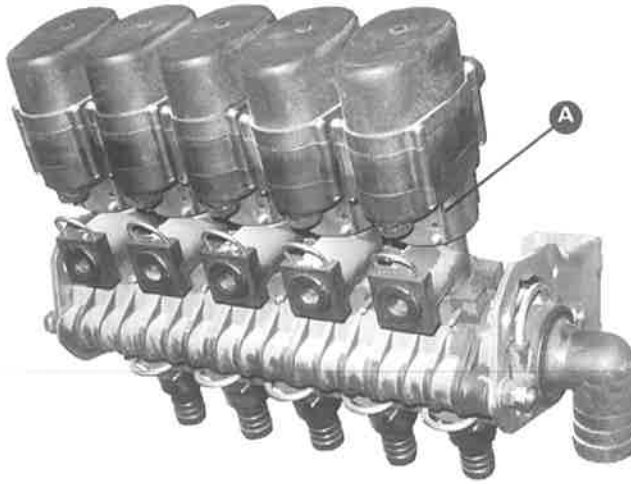
* Quantity based on per side

BOOM PIVOT PINS



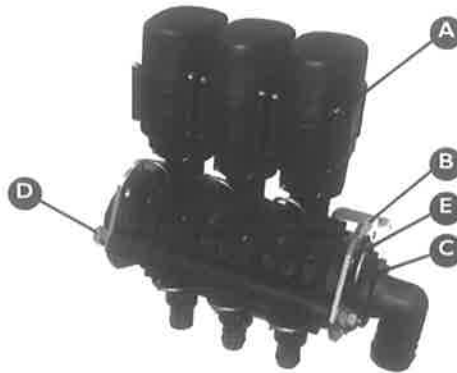
Item	Part No	Description	Quantity
A-1	L002A	Pivot Pin	4
A-2	GA5001223	19mm E-Clip	4

BOOM VALVES ASSEMBLIES



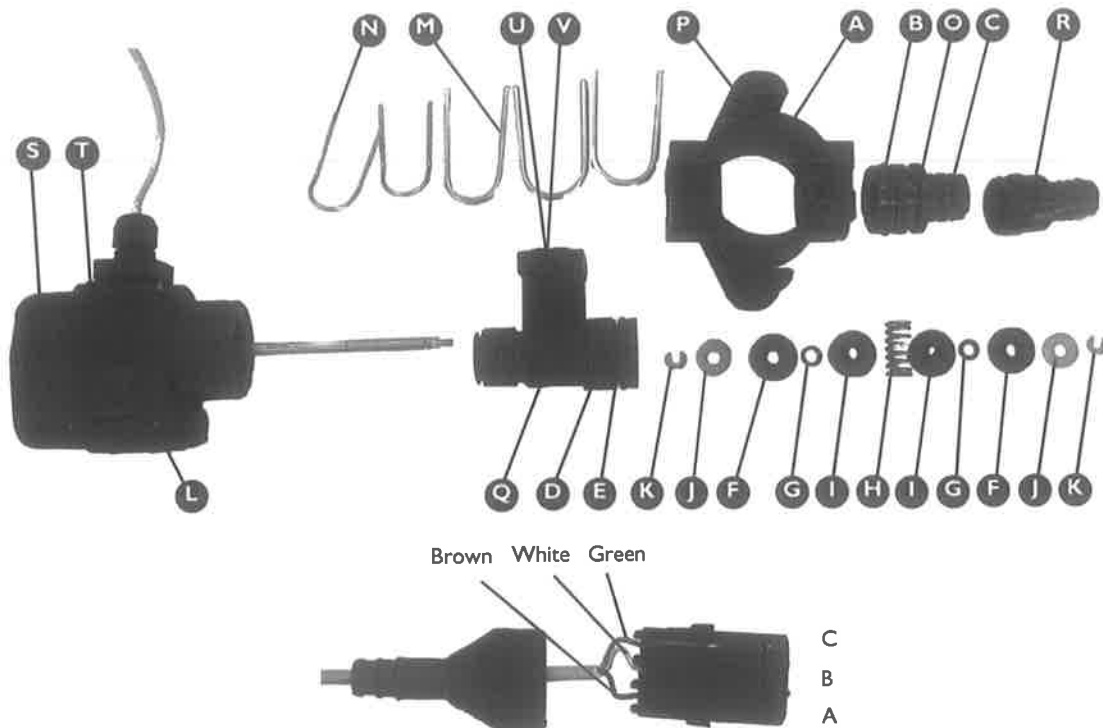
Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA5065740	3 Section Boom Valves	1	B-1	GA5004711	M8 x 25mm Bolt	4
	GA5065741	4 Section Boom Valves	1	B-2	GA5004917	M8 Nyloc Nut	4
	GA5065704	5 Section Boom Valves	1	B-3	GA5003643	8mm Washer	8
	GA5065705	6 Section Boom Valves	1				
	GA5065706	7 Section Boom Valves	1				
	GA5065710	8 Section Boom Valves	1				

BOOM VALVE COMPONENTS



Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA5065510	Section Valve with Pressure Relief	1		GA4562055	4 Section Connecting Rod	2
	GA5065515	Section Valve	1		GA4562125	5 Section Connecting Rod	2
B	GA5065800	Boom Valve Bracket	2		GA4562050	6 Section Connecting Rod	2
C	GA5065810	Boom Valve End Cap	2		GA4562045	7 Section Connecting Rod	2
D	GA5065805	3 Section Connecting Rod	2		GA4562040	8 Section Connecting Rod	2
				E	GA5065690	Safety Pin AS40	2

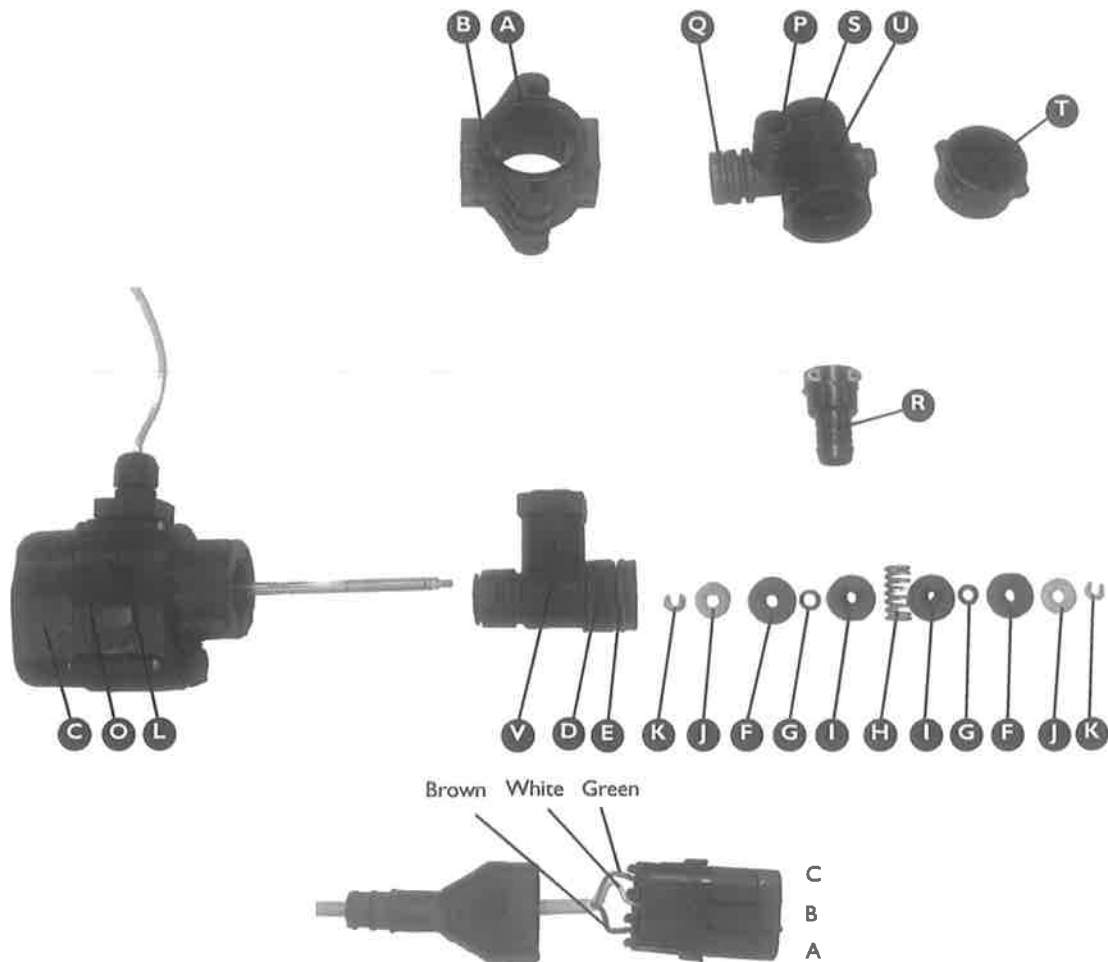
BOOM SECTION VALVE COMPONENTS



Assembly Part No GA5065515

Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	47512	O-ring	1	L	80364	Valve Body	1
B	02633	O-ring 25 x 4 fpm 75	1	M	GA5065690	Safety Pin AS40	3
C	37628	O-ring 18 x 2.5 fpm 75	1	N	GA5065695	Safety Pin AS24	2
D	80404	O-ring 25 x 4 fpm 75	1	O	GA5065605	Hose Tail	1
E	02633	O-ring 25 x 4 fpm 75	1	P	47800	Manifold	1
F	80004	Disc Seal fpm 90	2	Q		Tee	1
G	80414	O-ring 4.34 x 3.53 fpm 75	2	R	GA5065640	Female Hose Tail	1
H	80322	Spring	1	S	81350	Valve Cap	1
I	80005	Disc	2	T	81300	Valve Cap O-ring	1
J	80323	Washer	2	U	80376	Plug	1
K	80014	C-Clip	2	V	37621	O-ring 18 x 2.5 fpm 75	1

BOOM SECTION VALVE WITH PRESSURE RELIEF



Assembly Part No GA5065515

Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	47512	O-ring	1	M	GA5065690	Safety Pin AS40	3
B	47800	Manifold	1	N	GA5065695	Safety Pin AS24	2
C	81350	Valve Cap	1	O	81300	Cap O-ring	1
D	80404	O-ring 25 x 4 fpm 75	1	P	37628	O-ring 18 x 2.5 fpm 75	1
E	02633	O-ring 25 x 4 fpm 75	1	Q	02633	O-ring 25 x 4 fpm 75	1
F	80004	Disc Seal fpm 90	2	R	GA5065640	Female Hose Tail	1
G	80414	O-ring 4.34 x 3.53 fpm 75	2	S	05243	O-ring 35 x 4 fpm 75	1
H	80322	Spring	1	T		Cap	1
I	80005	Disc	2	U		Fitting	1
J	80323	Washer	2	V		Tee	1
K	80014	C-Clip	2	W	80376	Plug	1
L	80364	Valve Body	1	X	37621	O-ring 18 x 2.5 fpm 75	1