

***For best performance...***

**USE ONLY McCONNEL SERVICE PARTS**

*To be assured of the latest design improvements purchase your 'Genuine Replacements' from the Original Equipment Manufacturer: McCONNEL LIMITED through your local Dealer or Stockist.*

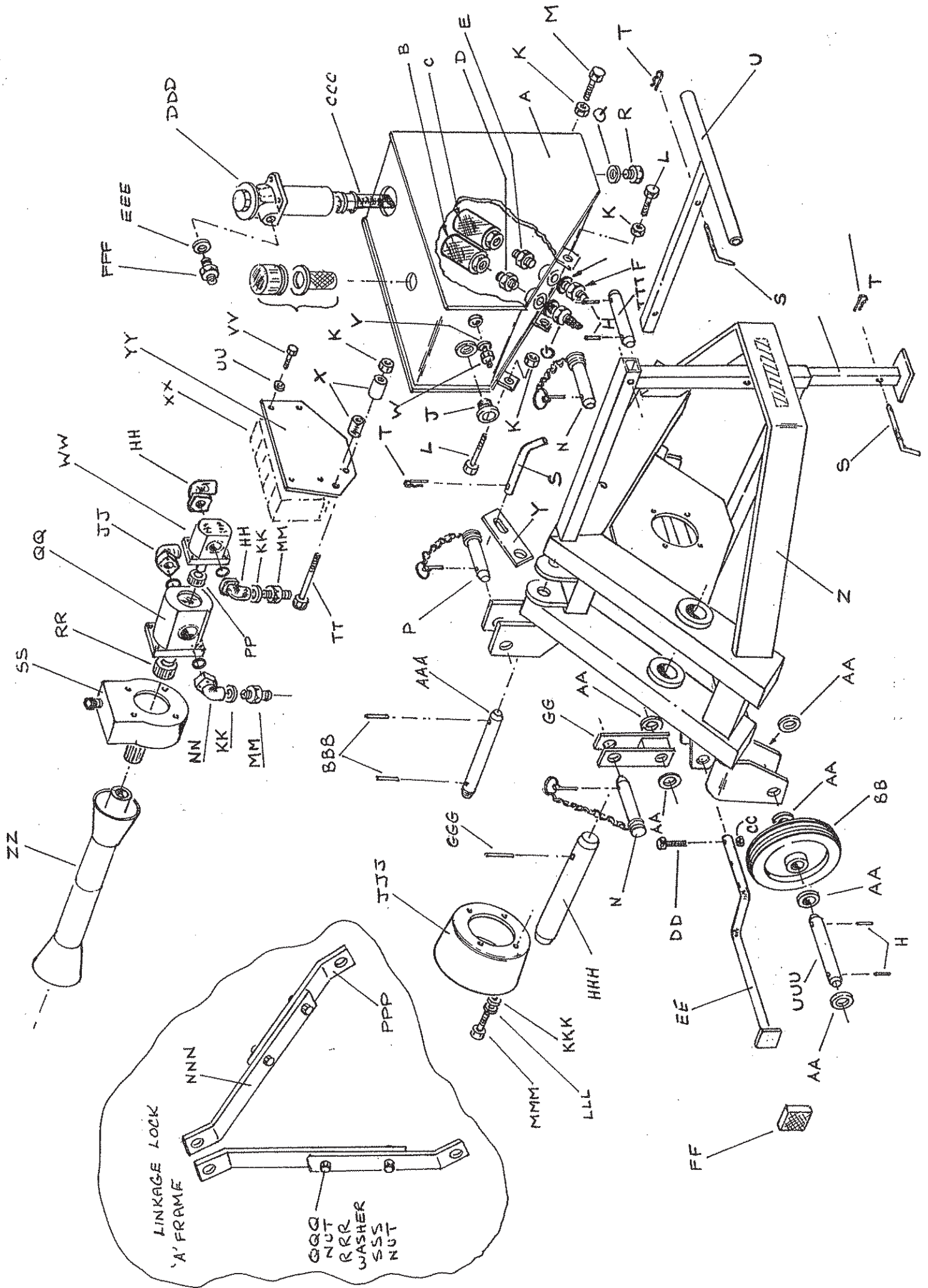
**Always quote:**

- Machine Type
- Serial Number
- Part Number

*Design Improvements may have altered some of the parts listed in this manual – The latest part will always be supplied when it is interchangeable with an earlier one.*

SUB-FRAME - TANK - SUNDRIES

<u>REF</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
A	178.005	Tank	1
B	6967	Filter	1
C	6968	Filter	1
D	1826	Adaptor	1
E	1836	Adaptor	1
F	6978	Hose (Schrader) 3/4" BSP x 3/4"	1
		Hose	
G	6977	Hose (Schrader) 1/2" BSP x 1/2"	1
		Hose	
H	3939	Groverlock M6 x 40	4
J	6966	Level Indicator (Bullseye)	1
K	3082	M12 Nyloc Stiffnut	6
L	3726	M12 x 120 (8.8) Bolt	3
M	2953	M12 x 100 (8.8) Bolt	1
N	0853	7/8" Pin, Chain, Linch Pin and Ring Assembly	2
P	1657	3/4" Pin, Chain, Linch Pin and Ring Assembly	1
Q	0670	3/8" BSP Seal	1
R	0920	3/8" BSP Plug	1
S	178.032	Transport Stay Pin	3
T	2435	'R' Clip	3
U	178.004	Handle	1
V	1181	1/4" Seal	1
W	1823	1/4" x 1/4" BSP Adaptor	1
X	178.054	Spacer for Valve Plate	2
Y	178.031	Transport Stay	1
Z	178.001	Main Frame	1
AA	6979	Flat Washer (M24) Form 'B'	10
BB	6963	Wheel	2
CC	4776	Stiffnut M6 Nyloc	1
DD	6981	M6 x 50 (8.8) Bolt	1
EE	178.028	Head 'Stop' Bar	1
FF	6964	Pedal Rubber	1
GG	178.002	Break Back Link	1
HH	6974	Elbow IGQ12 c/w 'O' Ring	2
JJ	6975	Elbow 2G34 c/w 'O' Ring	1
KK	0909	Seal	2
LL	0934	Seal	1
MM	0914	Adaptor 1/2" BSP x 3/8" BSP	2
NN	6995	Elbow IG12	1
PP	6972	Coupling 2/1	1
QQ	6970	Pump CPL 16	1
RR	6976	Coupling M02/14	1
SS	6962	Gearbox MP2/M/3.8 (1:3.8)	1
UU	3001	M8 Spring Washer	4
VV	2793	M8 x 20 (8.8) Setscrew	4
WW	6971	Pump CPL 4.7	1
XX	6965	Valve Block	1
YY	178.053	Valve Block Plate	1
ZZ	4061	PTO Shaft complete	1
AAA	178.014	Pin (Main Boom, Anchor End)	1



<u>REF</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
BBB	3990	Groverlock Pin M6 x 30	2
CCC	178.010	Filter Drop Tube	1
DDD	4924	Filter (UCC)	1
EEE	3155	1 1/4" BSP Seal	1
FFF	5241	Adaptor 1 1/4" BSP x 1" BSP	1
GGG	6960	M8 x 55 Groverlock	1
HHH	178.011	Main Boom Pin	1
JJJ	6385	PTO Guard	1
KKK	3219	M10 Flat Washer	4
LLL	2728	M10 Spring Washer	4
MMM	2709	M10 x 20 (8.8) Flat Washer)	4
NNN	178.030	Stay for Lift Arms	2
PPP	178.029	Stay for Lift Arms	2
QQQ	2720	Nut	4
RRR	2716	Washer	4
SSS	2748	Setscrew	4
TTT	178.021	Axle Pin (Short)	1
UUU	178.020	Axle Pin (Long)	1

NOTE:

6969 Tandem Pump Complete

Comprising:-

6970	Pump (16)	1
6971	Pump (4.7)	1
6972	Coupling	1

NOTE:

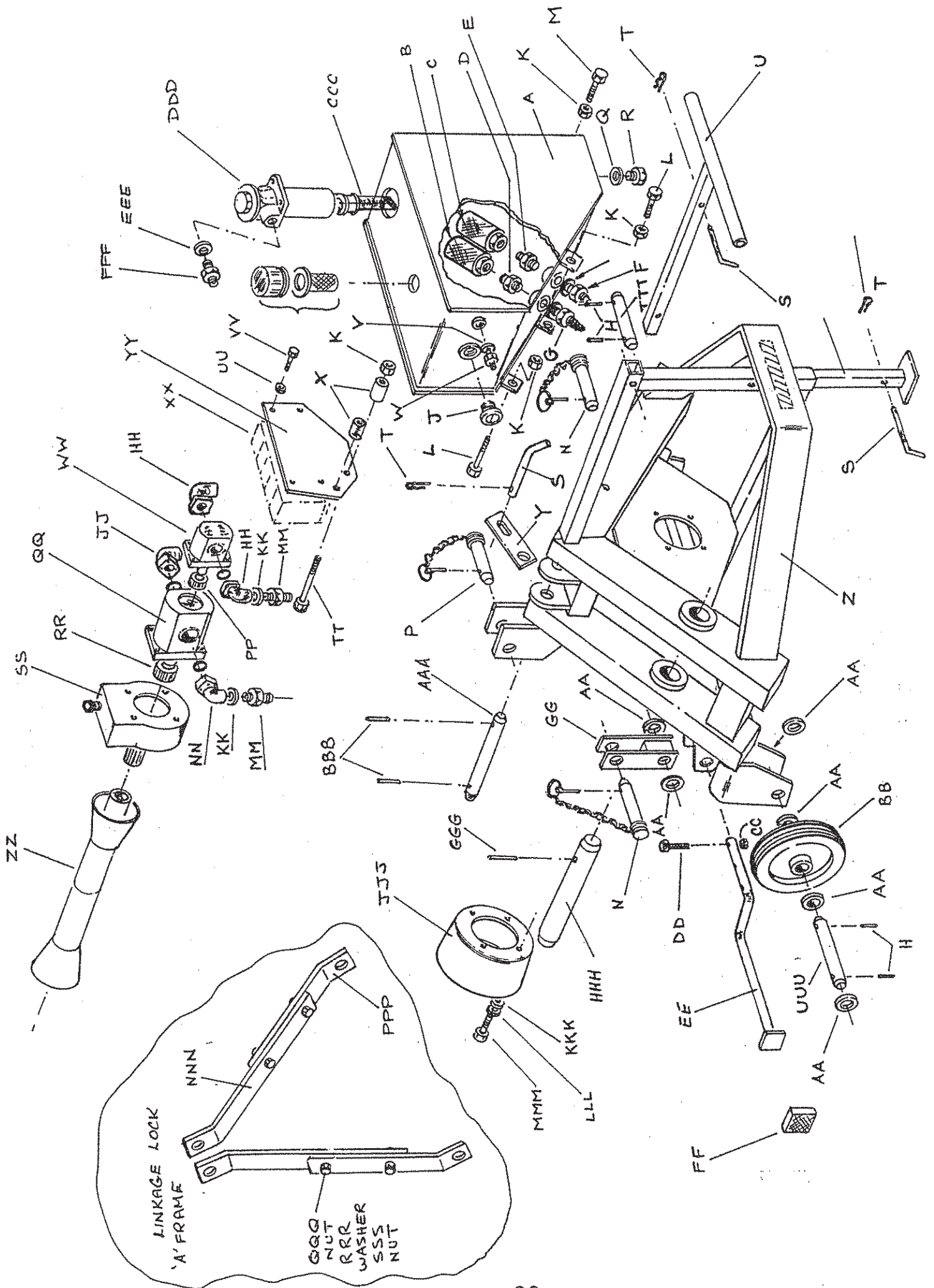
Bolts for Pump Elbow:-

For 6970 Pump CPL16:-

6994	M8 x 25 Caphead	4
3001	M8 Spring Washer	4

FOR 6971 Pump CPL4.7:-

6992	M6 X 30 (8.8) Caphead	4
6985	M6 x 45 (8.8) Caphead	4
2731	M6 Spring Washer	8



MAIN BOOMS (ETC.)

<u>REF</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
A	3939	M6 x 40 Groverlock	9
B	6351	M4 x 30 Groverlock	2
C	6960	M8 x 55 Groverlock	1
D	1180	Adaptor 3/8" BSP x 1/4" BSP	1
E	178.014	Pin	2
F	6979	M24 Washer (Form 'B')	9
G	6956	M6 Straight Grease Nipple	9
H	178.019	Pin	1
J	2716	Washer	1
K	178.008	Head Angling Link	1
L	178.009	Link Plate	2
M	178.017	Pin - Head Angling Ram (Rod)	1
N	178.018	Pin (Link Plate Pivot)	1
P	2716	Washer 12 O Bore	2
Q	178.013	Pin - Second Boom/Head Pin	1
R	6542	Bush 4050M	6
S	178.015	Pin - Main Boom Ram (Rod End)	2
T	178.026	Clamp Plate	2
U	178.027	Clamp Plate	2
V	2732	Stiffnut M10	4
W	178.012	Pin - Main Boom/Second Ram	1
X	1780035	Ram	1
Y	1780034	Ram	1
Z	1780033	Ram	1
AA	178.007	Outer Boom	1
BB	178.006	First Boom	1
CC	178.022	Hose Cover (First Boom)	1
DD	178.023	Hose Cover (Outer Boom)	1
EE	4063	Bolt M10 x 130	2
FF	3139	Bolt M10 x 140	2
GG	4894	Setscrew M6 x 12	8
HH	2731	Washer M6	8
JJ	149.049	Breather c/w 'o' ring	1
KK	6988	3/8" x 3/8" M/F Loosenut Short 90	1
LL	0670	3/8" Seal	2
MM	6986	Restrictor (One Way) (1.5)	1

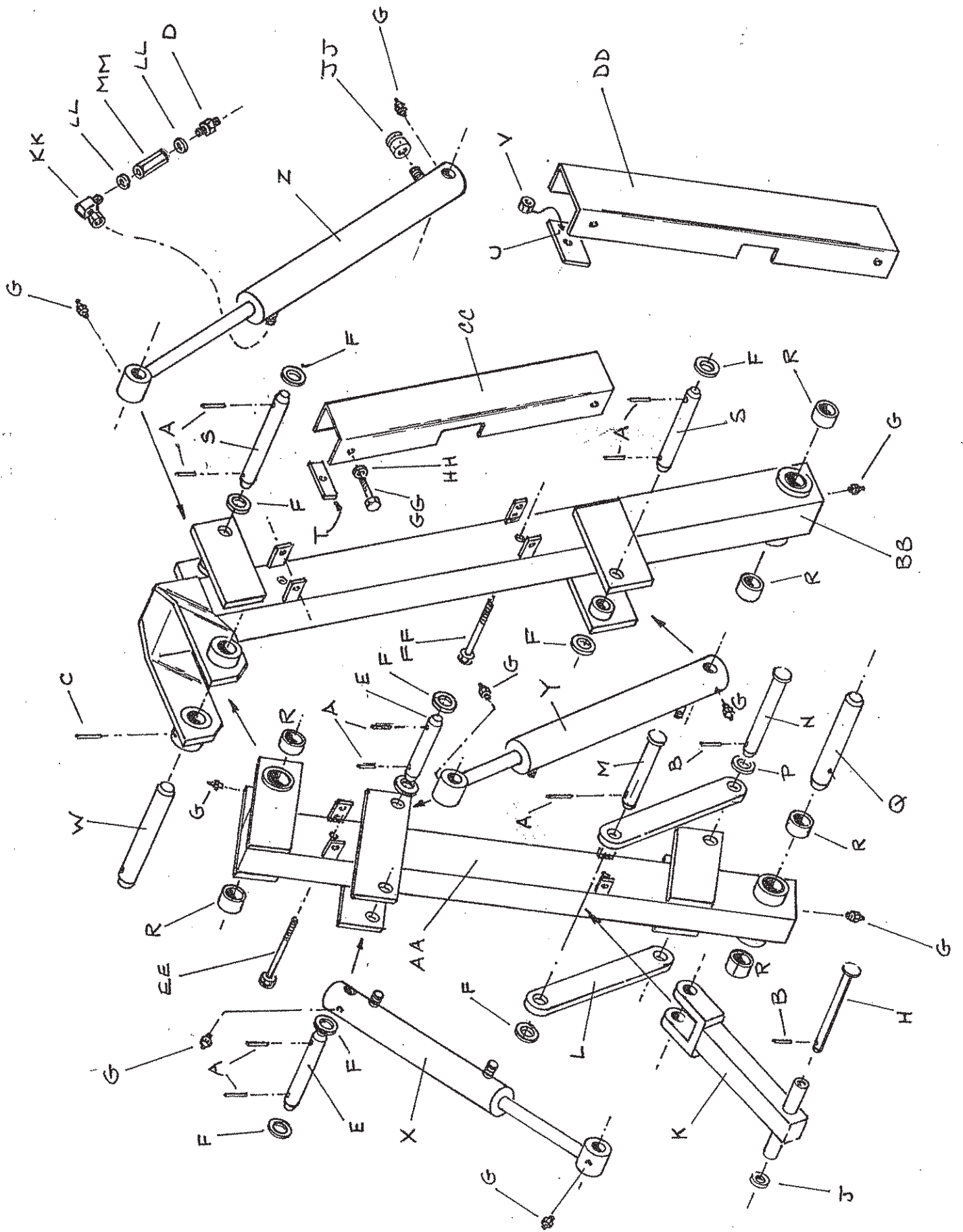
BOOMS FOR PA31

1st Boom

178.059

2nd Boom

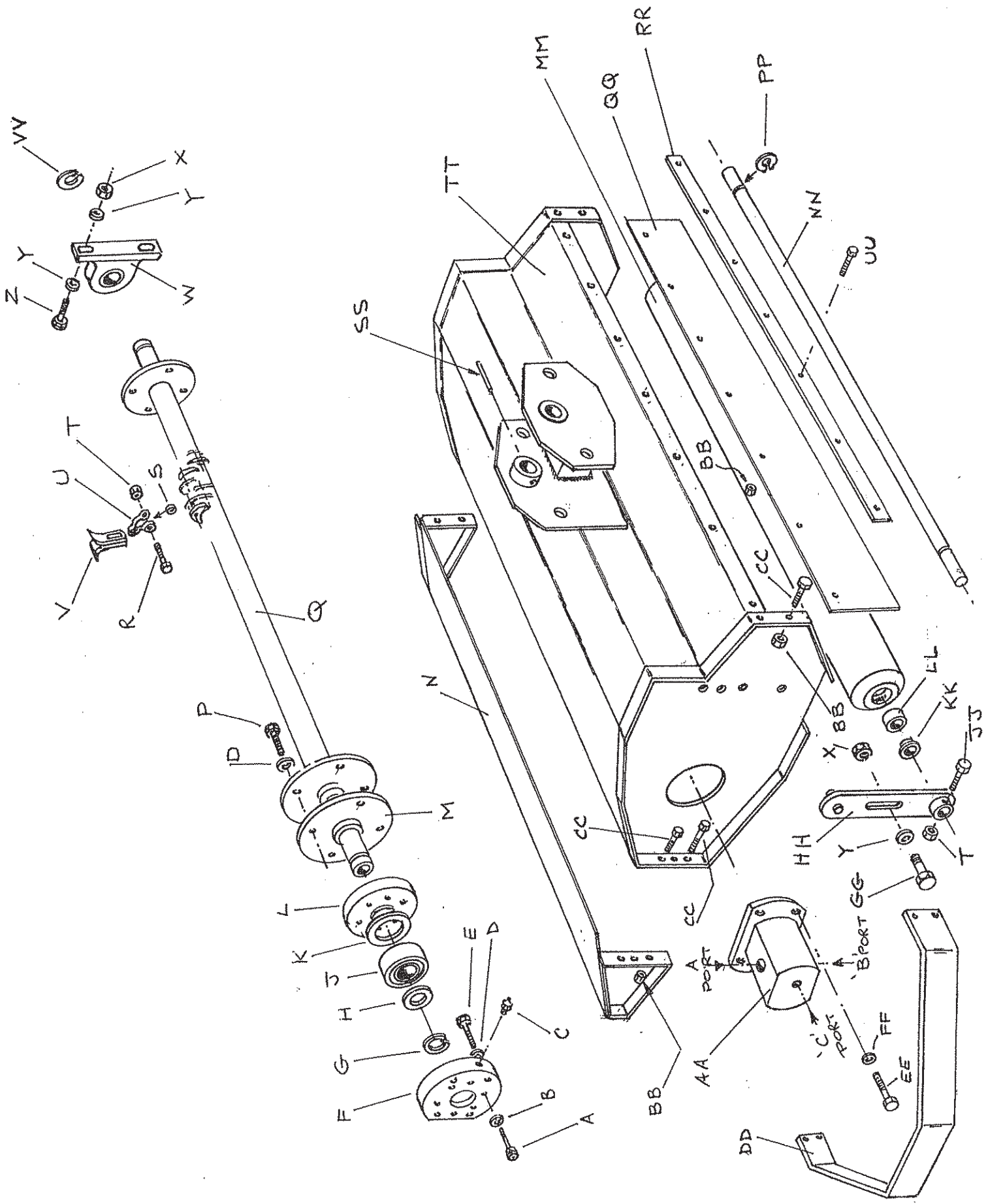
178.060



CUTTING HEAD AND ROTOR

REF	PART NO.	DESCRIPTION	QTY
A	6985	Caphead M6 x 45	4
B	2731	Spring washer M6	4
C	6956	M6 Grease Nipple	1
D	2728	Spring washer M6	4
E	2917	M10 x 25 (8.8) Setscrew	4
F	178.041	Motor Mounting Plate	1
G	6957	Circlip (Ext)	1
H	178.046	Special Washer	1
J	6959	Bearing	1
K	178.045	Spacer	1
L	178.044	Bearing End Cap	1
M	178.043	Drive Coupling	1
N	178.040	Head Extension	1
P	5573	Caphead Screw M10 x 20	4
Q	178.048	Rotor	1
R	3183	M8 x 48 (8.8) Bolt	36
S	178.061	Spacer for Shackle	36
T	7558	Stiffnut M8 Binx	36
U	1780037	Shackle	36
V	1780036	Blade	72
W	6958	Bearing	1
X	3082	M12 Stiffnut	4
Y	2716	Flat Washer M12	2
Z	2702	Bolt M12 x 60	2
AA	6961	Head Motor	1
BB	4776	Stiffnut M6 (Nyloc)	17
CC	2707	Setscrew M6 x 20	10
DD	178.047	Motor Guard	1
EE	3122	Setcrew	1
FF	3001	Washer	4
GG	2950	Bolt	4
HH	178.039	Roller Bracket	2
JJ	3730	M8 x 40 (8.8) Setcrew	2
KK	178.051	Bearing Retaining Washer	2
LL	6939	Bearing (6004)	2
MM	178.049	Roller	1
NN	178.050	Roller Axle	1
PP	6398	Circlip (1400/20)	2
QQ	1780055	Curtain	1
RR	178.056	Clamp Strip	1
SS	6960	M8 x 55 Groverlock	1
TT	178.038	Head Assembly	1
UU	2913	Setscrew M6 x 16	7
VV	6980	Circlip 30	1
*	178.066	Rotor End Guard	2





HEAD MOTOR 'PORTS'

(the following items are not illustrated)

<u>REF</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
<u>PORT A</u>			
*	6995	Elbow	1
*	0909	Seal 1/2" BSP	1
*	1826	Adaptor 1/2" BSP x 1/2" BSP	1

PORT B

*	6975	Elbow	1
*	0934	Seal 3/4" BSP	1
*	1834	Adaptor 3/4" x 1/2" BSP	1

PORT C (BLEED LINE)

*	1181	Seal 1/4" BSP	1
*	1823	Adaptor 1/4" x 1/4" BSP	1

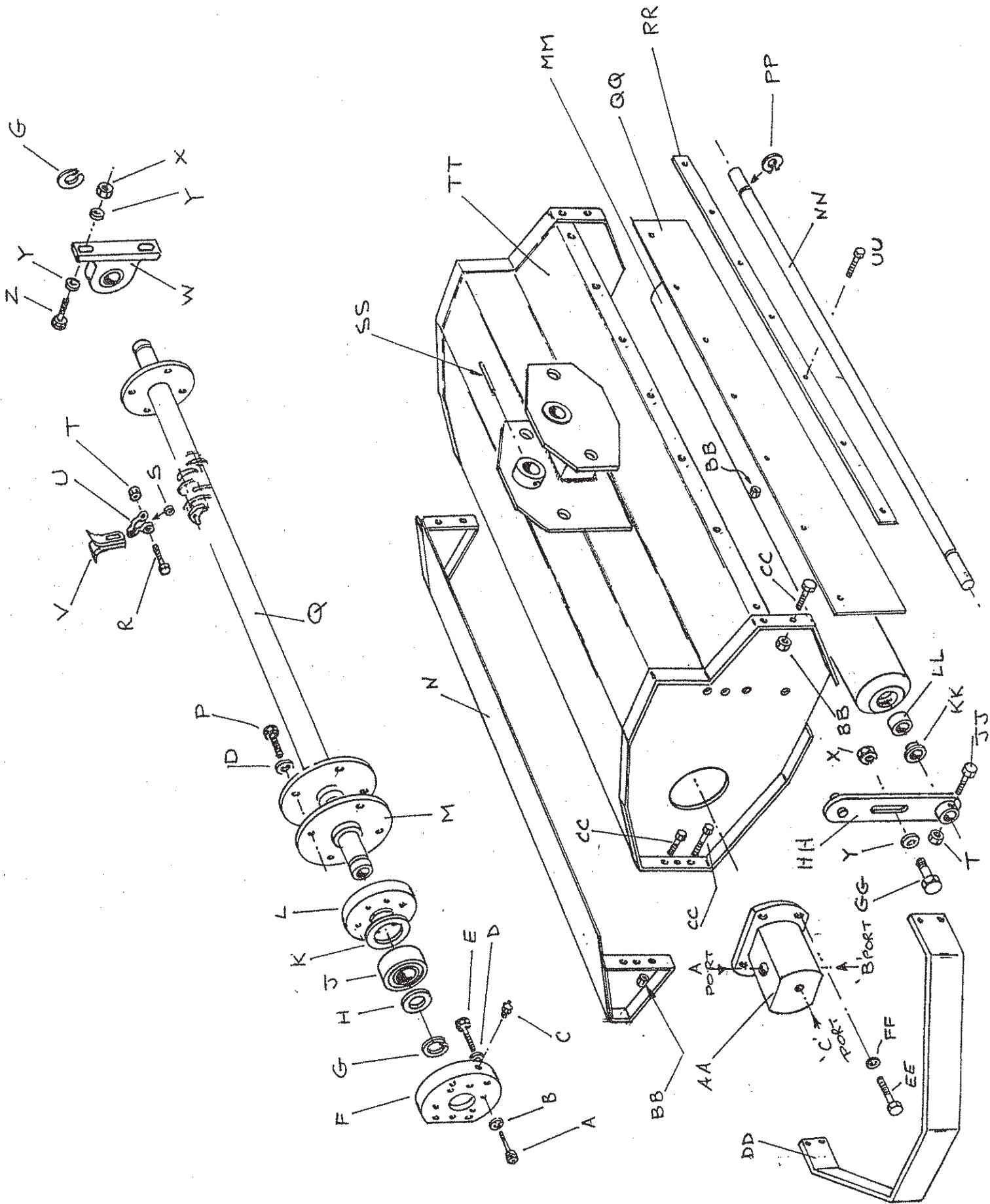
Screws for Motor Elbow:-

Port 'A'

4415	M6 x 20 (8.8) Caphead	2
2731	M6 Spring Washer	2

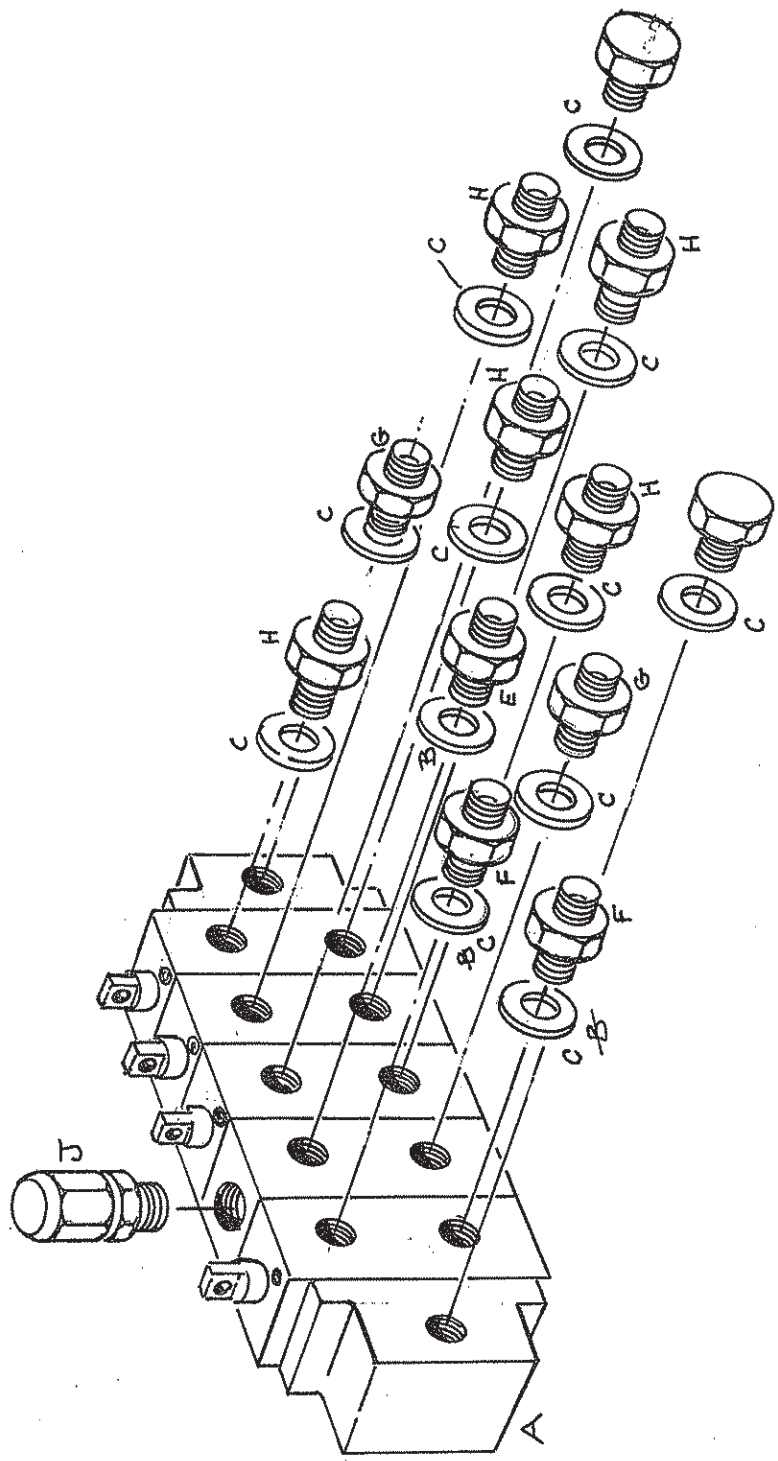
Port 'B'

6994	M8 x 25 (8.8) Caphead	2
3001	M8 Spring Washer	2



VALVE BLOCK AND FITTINGS

<u>REF</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
A	6965	Valve Block	1
B	0909	Seal 1/2" BSP	1
C	0670	Seal 3/8" BSP	11
D	0920	Plug 3/8" BSP	2
E	1826	Adaptor 1/2" x 1/2" BSP	1
F	0914	Adaptor 1/2" x 3/8" BSP	2
G	0665	Adaptor 3/8" x 3/8" BSP	2
H	1180	Adaptor 3/8" x 1/4" BSP	5
J	6996	Relief Valve (2000 PSI)	1



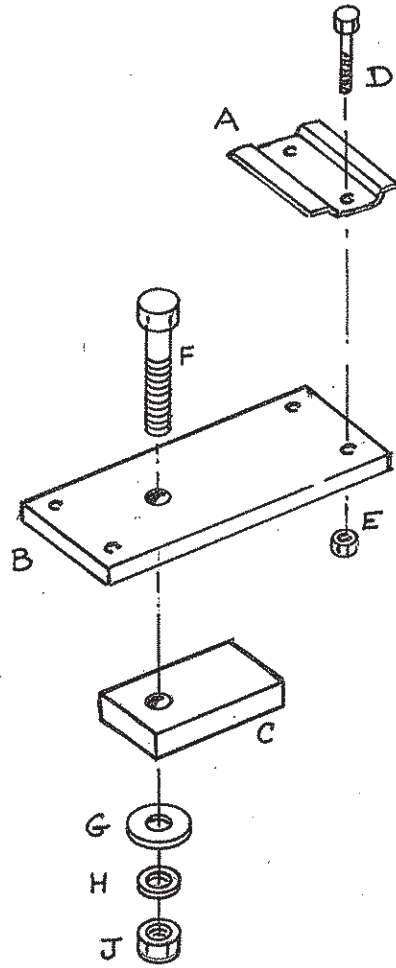
CABLE CONTROL AND MOUNTING BRACKET

<u>REF</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
A	6990	Bulk Head Mounting Plate	2
B	178.062	Mounting Plate for Control Handle	1
C	178.063	Rubber Mounting Block	1
D	2913	M6 x 16 (8.8) Setscrew	4
E	4776	M6 Stiffnut	4
F	2765	M8 x 70 (8.8) Bolt	1
G	3770	Washer	1
H	3111	M8 Flat Washer	1
J	2719	M8 Stiffnut	1
*	6945	Control Head	3
*	178.064	Control Head (Short) 'Motor Drive'	1
*	6989	Cables	4
*	6946	Cable Fitting kit complete	4
*	4695	M6 x 15 Caphead Setscrew (Trumpet Valve)	8
*	2731	M6 Spring Washer	8
*	178.065	Tie Bolts for Handles	2
*	4776	M6 Stiffnut	4

SAFETY SCREEN

*	178.067	Mesh Screen	1
*	3770	Penny Washer	8
*	3110	M8 x 30 Setscrew	4
*	3111	M8 Spring Washer	4
*	2766	M8 Nut	4

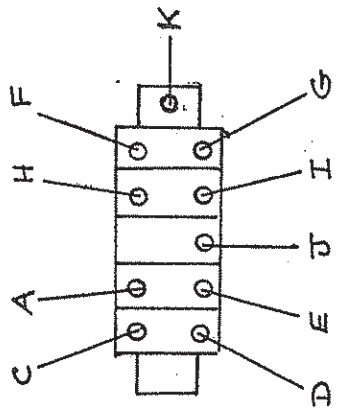
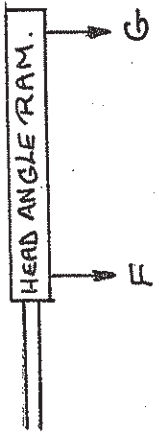
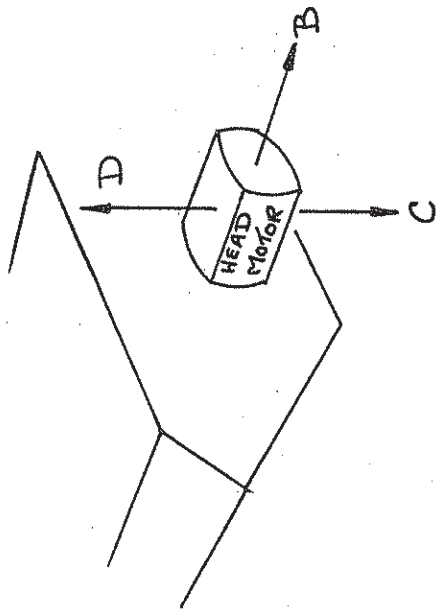
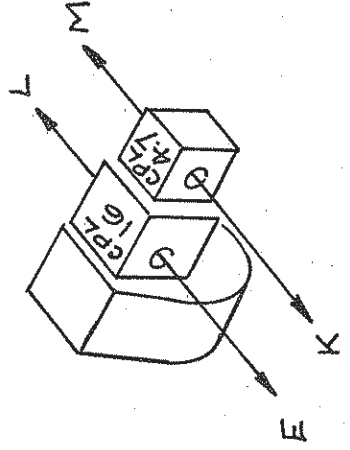
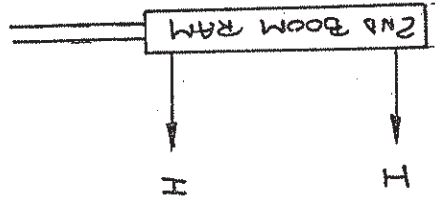
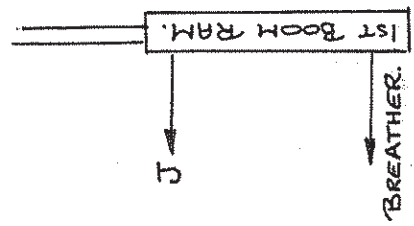
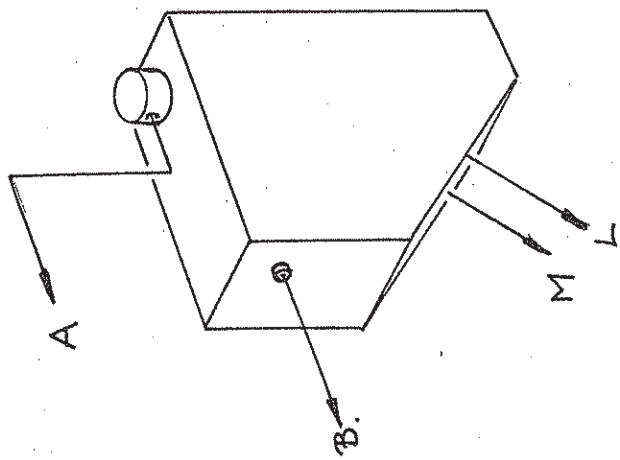
\* Denotes parts not illustrated.

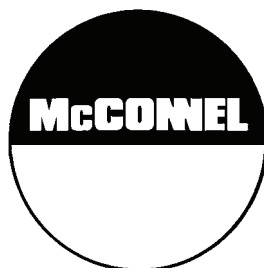


HYDRAULIC PIPING DIAGRAM

<u>REF</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>FT25</u>	<u>FT30</u>
A-A	4/205	1/2" Hose 90 x 90 @ 110 x 365	1		
B-B	4/213	1/4" Hose 91 x 91 x 4280	1		
B-B	4/220	1/4" Hose 91 x 91 x 5020	1		
C-C	4/211	1/2" Hose 90 x 90 @ 90 x 4280	1		
C-C	4/218	1/2" Hose 90 x 90 @ 90 x 5020	1		
D-D	4/211	1/2" Hose 90 x 90 @ 90 x 4280	1		
D-D	4/218	1/2" Hose 90 x 90 @ 90 x 5020	1		
E-E	4/203	3/8" Hose 91 x 19 x 850	1		
F-F	4/224	1/4" Hose ST x 90 x 3850	1		
F-F	4/228	1/4" Hose ST x 91 x 3060	1		
G-G	4/225	1/4" Hose ST x 91 x 3800	1		
G-G	4/227	1/4" Hose ST x 90 x 3100	1		
H-H	4/223	1/4" Hose ST x 90 x 2360	1		
H-H	4/226	1/4" Hose ST x 90 x 2080	1		
I-I	4/208	1/4" Hose 90 x St. x 2030	1		
I-I	4/215	1/4" Hose 91 x St. x 2310	1		
J-J	4/206	1/4" Hose 90 x St. x 1520	1		
K-K	4/204	3/8" Hose 91 x 91 x 940	1		
L-L	4/202	3/4" Return Hose x 535	1		
M-M	4/201	1/2" Return Hose x 770	1		







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