Plinth | 2000

Model 503M 3-section Couch

Models: 503ME & 503MH

SERVICE MANUAL

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Plinth 2000 Ltd is an ISO Audited company to ISO9001:2008

Our products are CE marked in conformity with the EC Directive MDD 93/42/EEC

1. Introduction

Thank you for purchasing a product from Plinth 2000 Ltd. We use the highest quality components and manufacturing techniques to ensure that our products are simple to use and will last a long time. It is recommended that all our products are serviced annually whilst electrically operated products or those in high use should be serviced every 6 months.

Throughout this manual notice is made of a Warning and Caution system to highlight to the user practices, procedures or conditions that should either not be allowed to happen or happen with caution.

Warnings are in a box with bold type and identify potential hazards, procedures or conditions which could result in death, injury or serious damage.

Cautions are in a box with plain type and identify conditions or procedures where if caution is not taken it may result in damage or failure of equipment.

General Warnings

WARNING

Maximum Load (SWL) is 250kg distributed evenly.

Do not use flammable gasses in proximity to an electrically operated couch.

Do not concentrate weight on either side or either end of the couch.

Use only accessories approved for use with this couch.

Disconnect power supply before moving couch.

Children must be adequately supervised in the presence of the couch.

Do not allow children to play with the couch at any time.

2. Cleaning & Decontamination

WARNING

If contamination is suspected then decontaminate the couch before servicing.

Torn or damaged upholstery should be replaced immediately.

CAUTION

Do not use Alkalis or other organic solvents for routine cleaning.

Always cover the vinyl with paper towelling or couch covers if it can come into contact with bare skin.

Cleaning

Always wear suitable protective clothing before carrying out this procedure. Disconnect the mains supply to the couch and move it to a suitable cleaning area and lock the castors.

Step 1. Using warm water and soap on a damp cloth, carefully wipe the couch over from top to bottom. Take great care around electrical components.

Step 2. Wipe the couch carefully from top to bottom using a clean damp cloth and soap free water.

Step 3. Carefully dry the couch from top to bottom with clean lint free paper towels.

Decontamination

To decontaminate the couch repeat the above steps but using a dilute solution of Hypochlorite and warm water (10,000ppm) instead of warm water and soap. At the end of the procedure discard all cleaning materials in a safe manner and wash hands thoroughly.

3. Maintenance

Plinth 2000 Ltd products are designed to be maintenance free. However keeping your Plinth products clean and regularly checked will assist in prolonging their working life. The following is a guide of simple checks that the user can carry out on a six monthly basis. We would also recommend an annual service visit by a Plinth 2000 trained engineer.

WARNING

Disconnect couch from electrical supply before commencing any of the following checks.

Examine the couch for any signs of damage. Pay particular attention to all nuts, bolts and fasteners to check they are present and tight but not over tight.

Upholstery bolts should all be checked (each section has between 2 and 6 No. M6 bolts), they should all be present and tight.

Check gas struts (if fitted) and ensure that they operate through the full range of movement and lock fully.

Check hinge pins are lubricated.

Check main couch pivot pins are lubricated sufficiently.

Examine mains and switch cables for any damage, cuts, kinks, abrasions etc. These must be replaced if necessary.

Check mains lead, switch cables and slave motor leads are all correctly and securely attached.

Check correct plug fuse is fitted (5A).

REFER TO SERVICE CHECK SHEET ON PAGE 6 FOR FURTHER DETAILS

WARNING

Any electrical checks or work other than the visual inspection above must be performed by a qualified electrician.

Do not connect BLUE or BROWN wires to the earth

Plinth | 2000

Service Check Sheet

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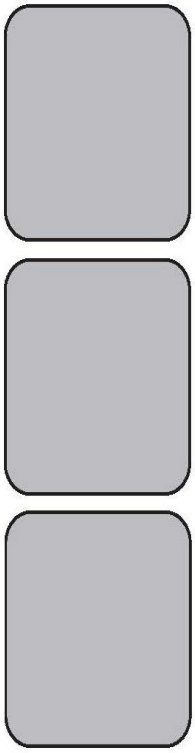
- ☐ CORRECT COUCH TO BE SERVICED
- ☐ IDENTIFY SERIAL NUMBER
- ☐ IDENTIFY PUMP/MOTOR TYPE
- ☐ ANY SPECIFIC FAULTS ADVISED BY CUSTOMER
- ☐ CAPS & FERRULES ETC
- ☐ ADJUSTABLE FOOT & FOOTCAPS
- ☐ UPHOLSTERY CONDITION
- ☐ NUTS, BOLTS & FASTENINGS TIGHT & GOOD CONDITION
- ☐ GAS STRUTS (if applicable)
- ☐ BACKREST & FOOTREST SPRINGS (if applicable)
- ☐ BACKREST & FOOTREST OPERATION (sections hold with no slip)
- ☐ PEDAL RUBBERS
- ☐ STARLOCKS TIGHT & GOOD CONDITION
- ☐ NYLON BUSHES (Y/N)
- ☐ IF NO CHECK FRAME FREE AND NOT AT RISK OF SEIZING
- ☐ OIL WHEEL PEDAL SYSTEM
- ☐ OIL HINGES
- ☐ OIL FRAME BEARING POINTS
- ☐ OIL PUMP/MOTOR FITTING POINTS
- ☐ FRAME CHECK (welds & overall condition)
- ☐ MAINS CABLE & PLUG CONDITION (if applicable)
- ☐ HAND/FOOT SWITCH CONDITION (if applicable)
- ☐ FUNCTION TEST OF PUMP/MOTOR
- ☐ AGE AND LIFE OF MOTOR IF KNOWN (use manufacturers guideline chart)
- ☐ WEIGHT TEST
- ☐ SERVICE STICKER FITTED



4. Troubleshooting

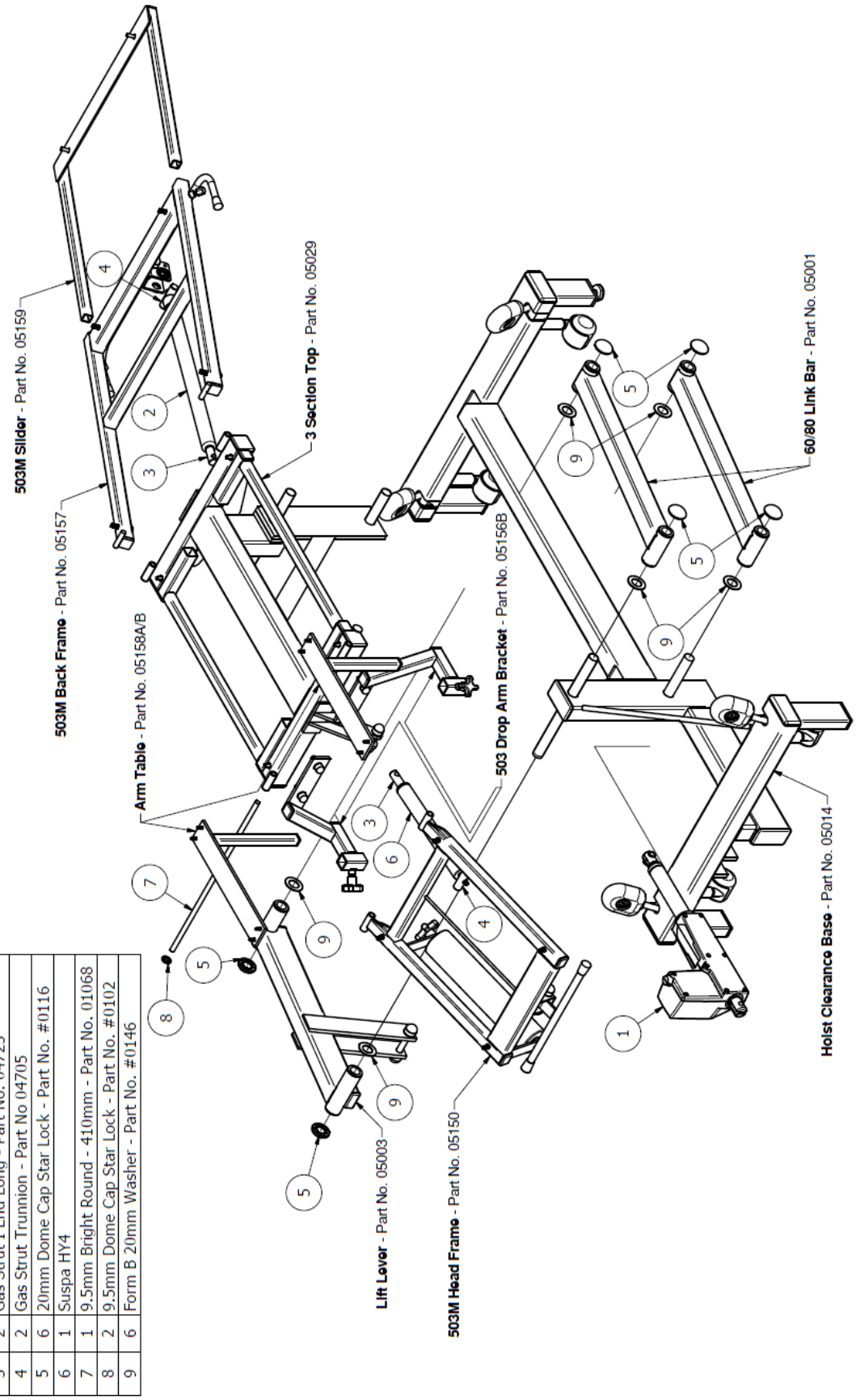
In the unlikely event of the couch failing to operate and having carried out the normal practical fault finding steps below then please contact our Customer Service Team on +44 (0)1449 767887 or email customerservice@plinth2000.com. **Please have the serial number to hand before making contact so we can help you more efficiently.**

Fault	Possible Cause	Remedy
Couch is unstable	Uneven floor	Move couch to flat floor
	Adjustable foot	Check presence, condition and adjustment of foot
All motors will not work (503ME only fitted with optional motor back or foot)	Power disconnected	Connect power supply
	Fuse Blown	Replace fuse in plug
	Hand/ Footswitch disconnected	Check the switch is fully connected to the motor
One motor will not work but others working (503ME only fitted with optional motor back or foot)	Lead from height motor/control box not connected to slave motor	Check and connect all leads
	Fault with switch	Replace switch
	Fault with control box	Replace control box
	Fault with motor	Replace motor
Motor sinks (503ME only)	Switch permanently operated	Unplug and re-connect switch
	Motor fault	Replace motor
Hydraulic pump will not work (503MH only)	Pump fault	Replace pump
Hydraulic pump sinks (503MH only)	Valve stuck	With couch at max height pump pedal for a further 20-25 strokes to clear valve
Back-rest will not work (manual versions)	Gas spring incorrectly adjusted (not being triggered)	Rotate gas spring until the pin is just in contact with the lever (2-3mm play required)
	Gas spring faulty	Replace gas spring
Back-rest sinks under load (manual versions)	Gas spring incorrectly adjusted (permanently triggered)	Rotate gas spring until the pin is just in contact with the lever (2-3mm play required)

5. Parts Lists and Diagrams

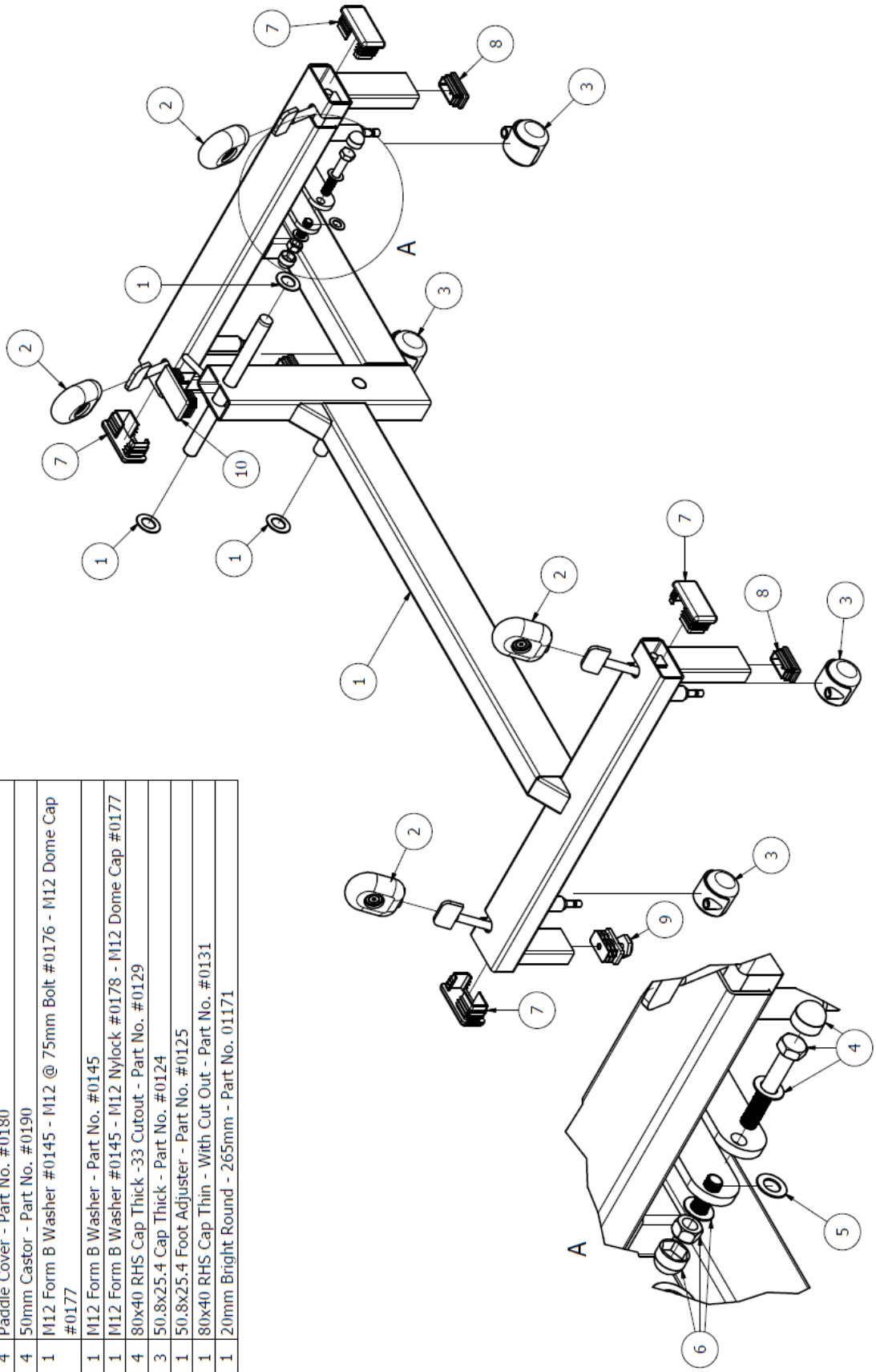
503 M - Manipulation Couch

PARTS LIST		
ITEM	QTY	PART NUMBER
1	1	Linak LA31 - 200mm Stroke
2	1	Stabilus Bloc-O-Lift - GH 40
3	2	Gas Strut I End Long - Part No. 04723
4	2	Gas Strut Trunnion - Part No 04705
5	6	20mm Dome Cap Star Lock - Part No. #0116
6	1	Suspa HY4
7	1	9.5mm Bright Round - 410mm - Part No. 01068
8	2	9.5mm Dome Cap Star Lock - Part No. #0102
9	6	Form B 20mm Washer - Part No. #0146

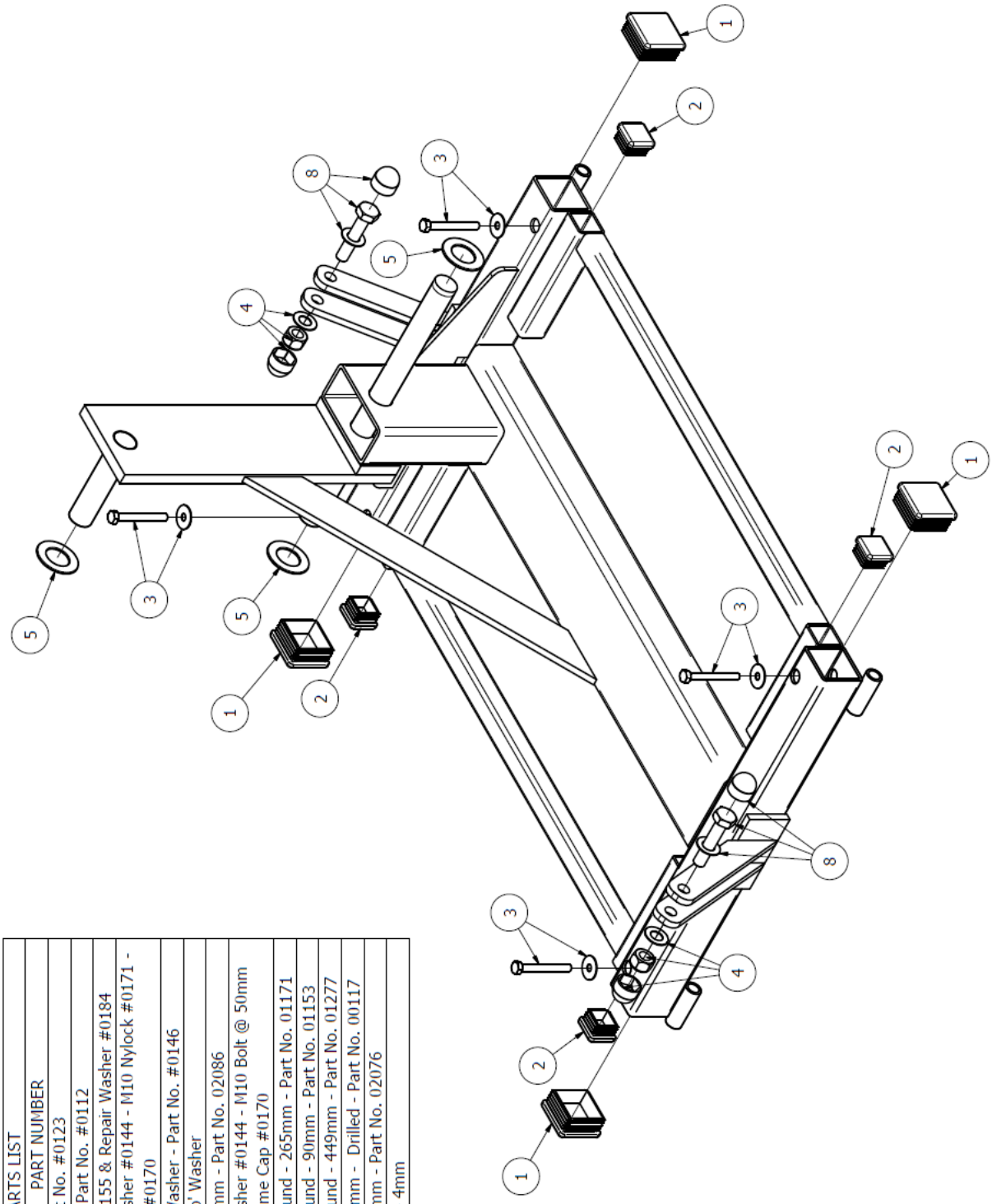


Hoist Clearance Base - Part No. 05014

PARTS LIST		
ITEM	QTY	PART NUMBER
1	3	Form B 20mm Washer - Part No. #0146
2	4	Paddle Cover - Part No. #0180
3	4	50mm Castor - Part No. #0190
4	1	M12 Form B Washer #0145 - M12 @ 75mm Bolt #0176 - M12 Dome Cap #0177
5	1	M12 Form B Washer - Part No. #0145
6	1	M12 Form B Washer #0145 - M12 Nylock #0178 - M12 Dome Cap #0177
7	4	80x40 RHS Cap Thick -33 Cutout - Part No. #0129
8	3	50.8x25.4 Cap Thick - Part No. #0124
9	1	50.8x25.4 Foot Adjuster - Part No. #0125
10	1	80x40 RHS Cap Thin - With Cut Out - Part No. #0131
11	1	20mm Bright Round - 265mm - Part No. 01171

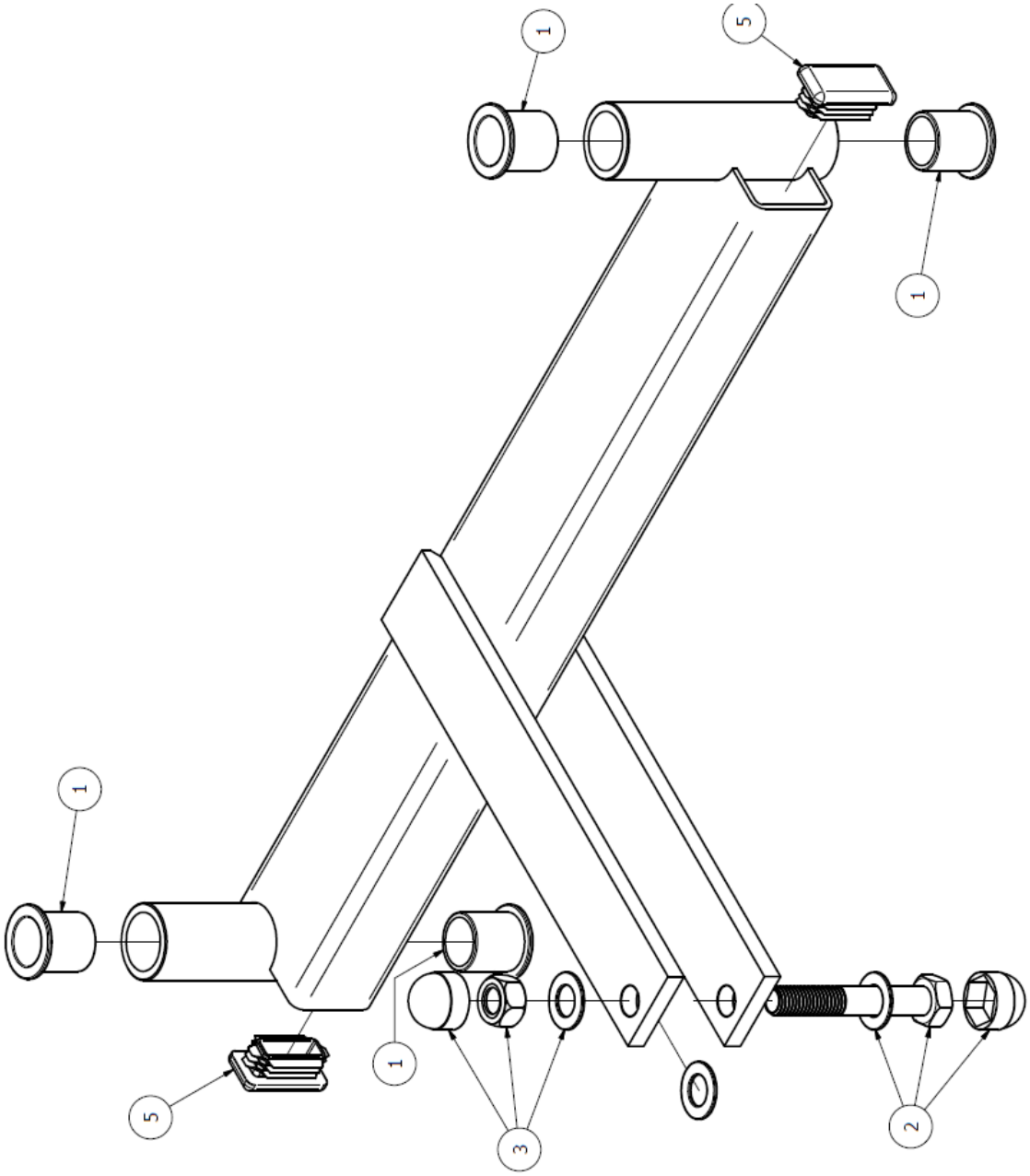


3 Section Top - Part No. 05029

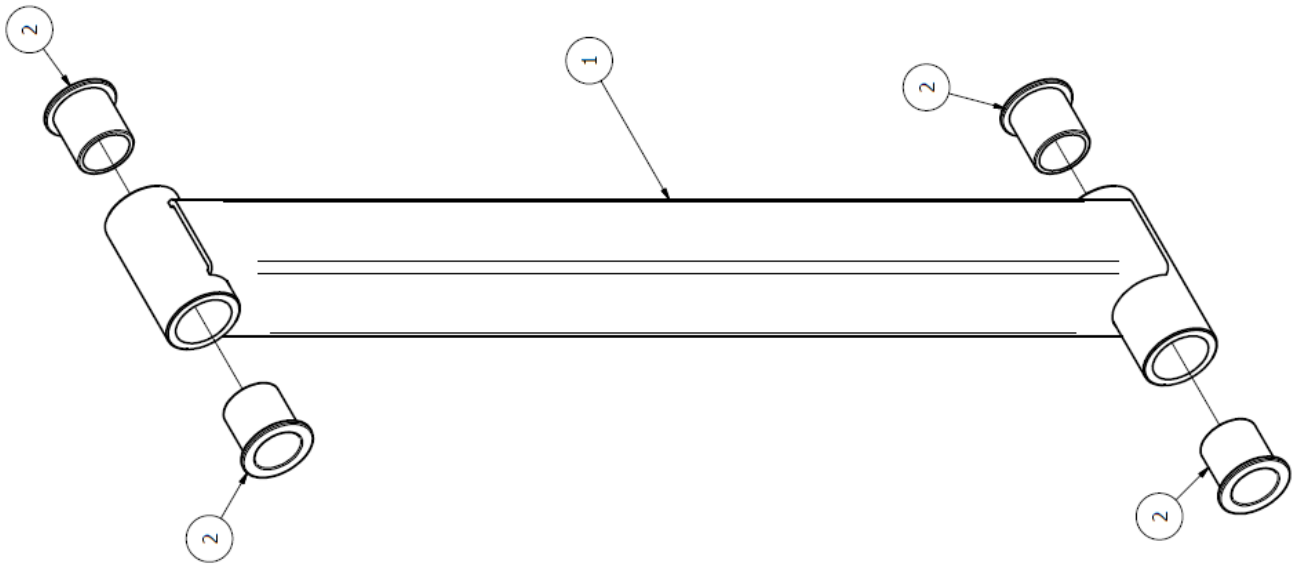


PARTS LIST		
ITEM	QTY	PART NUMBER
1	4	40x40 Cap - Part No. #0123
2	4	25.4x25.4 Cap - Part No. #0112
3	4	M6 @ 50mm #0155 & Repair Washer #0184
4	3	M10 Form B Washer #0144 - M10 Nylock #0171 - M10 Dome Cap #0170
5	3	Form B 20mm Washer - Part No. #0146
6	1	M10 @ 75 + Cap' Washer
7	1	14x2 - CDS - 27mm - Part No. 02086
8	2	M10 Form B Washer #0144 - M10 Bolt @ 50mm #0168 - M10 Dome Cap #0170
9	1	20mm Bright Round - 265mm - Part No. 01171
10	1	20mm Bright Round - 90mm - Part No. 01153
11	2	9.5mm Black Round - 449mm - Part No. 01277
12	2	40x40x2.5 - 386mm - Drilled - Part No. 00117
13	4	14x2 - CDS - 40mm - Part No. 02076
14	1	Part No. 04248 - 4mm

Lift Lever - Part No. 05003



PARTS LIST		
ITEM	QTY	PART NUMBER
1	4	20mm Nylon Bush - Part No. #0182
2	1	M12 Form B Washer #0145 - M12 @ 75mm Bolt #0176 - M12 Dome Cap #0177
3	1	M12 Form B Washer #0145 - M12 Nylock #0178 - M12 Dome Cap #0177
4	1	M12 Form B Washer - Part No. #0145
5	2	40x20 Cap - Part No. #0122

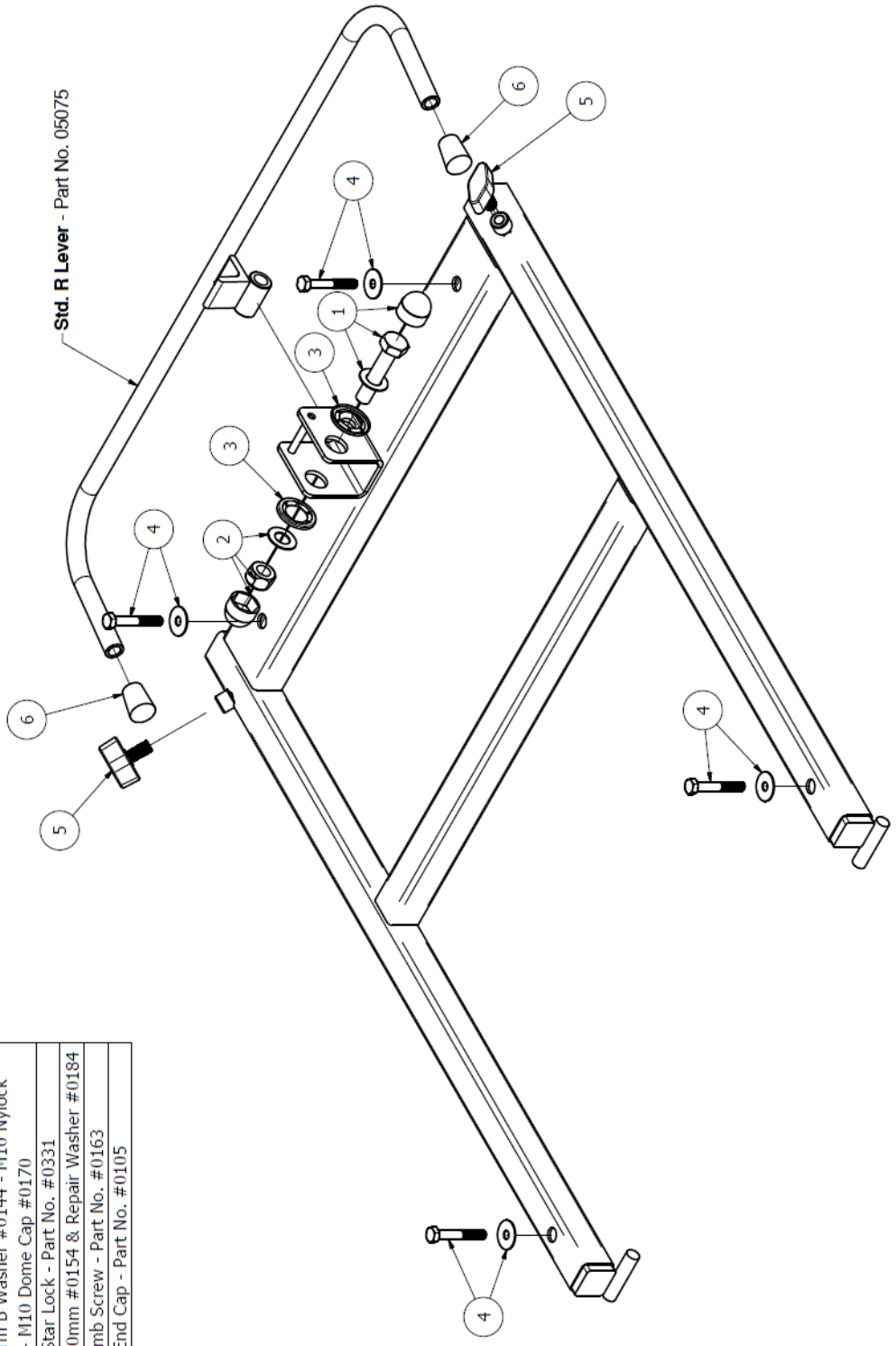


60/80 Link Bar - Part No. 05001

PARTS LIST		
ITEM	QTY	PART NUMBER
1	1	Std. 60-80 Link Bar - Part No. 05002
2	4	20mm Nylon Bush - Part No. #0182

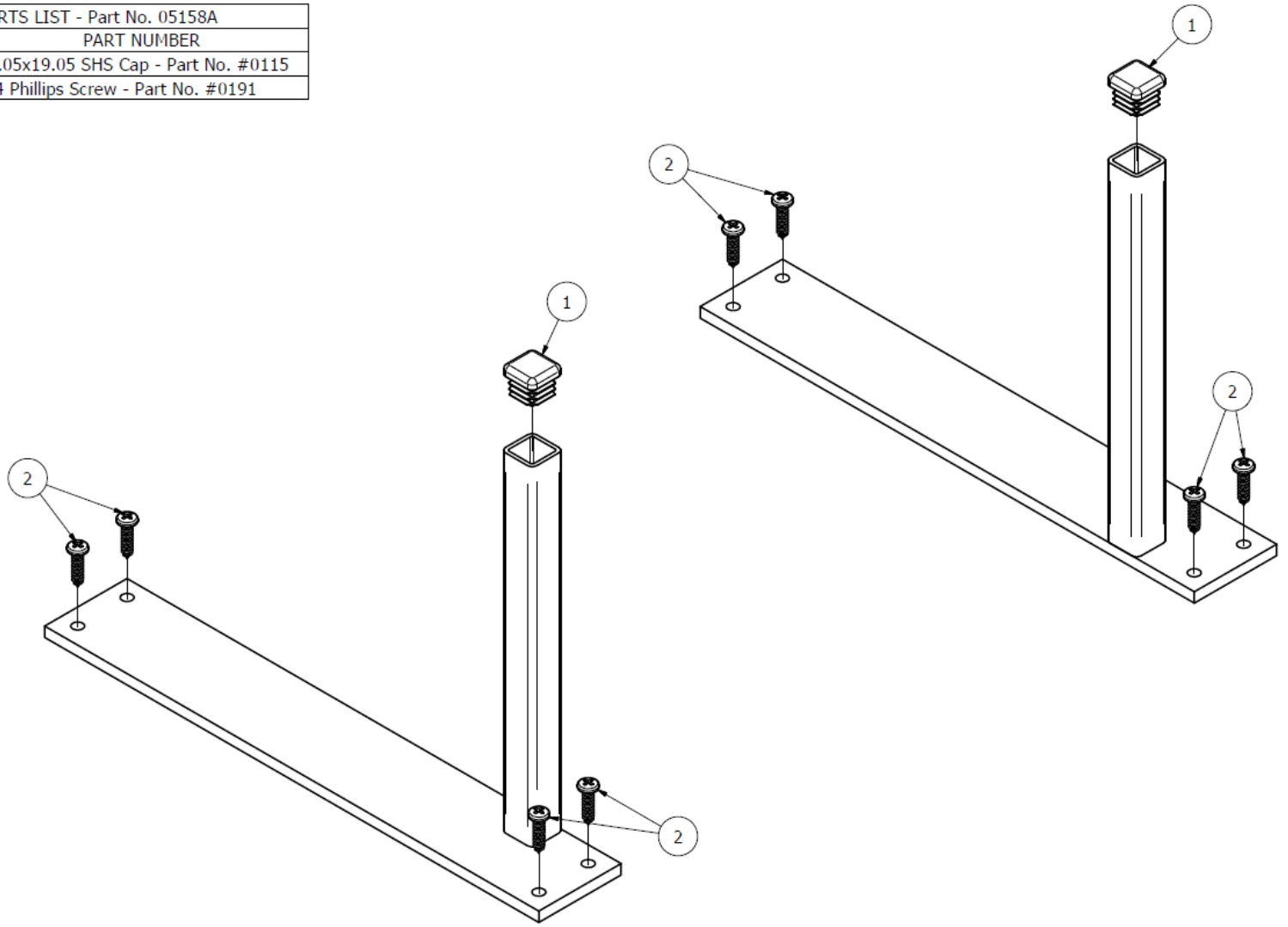
503M Back Frame - Part No. 05157

PARTS LIST		
ITEM	QTY	PART NUMBER
1	1	M10 Form B Washer #0144 - M10 Bolt @ 50mm #0168 - M10 Dome Cap #0170
2	1	M10 Form B Washer #0144 - M10 Nylock #0171 - M10 Dome Cap #0170
3	2	16mm Star Lock - Part No. #0331
4	4	M6 @ 40mm #0154 & Repair Washer #0184
5	2	M8 Thumb Screw - Part No. #0163
6	2	12mm End Cap - Part No. #0105



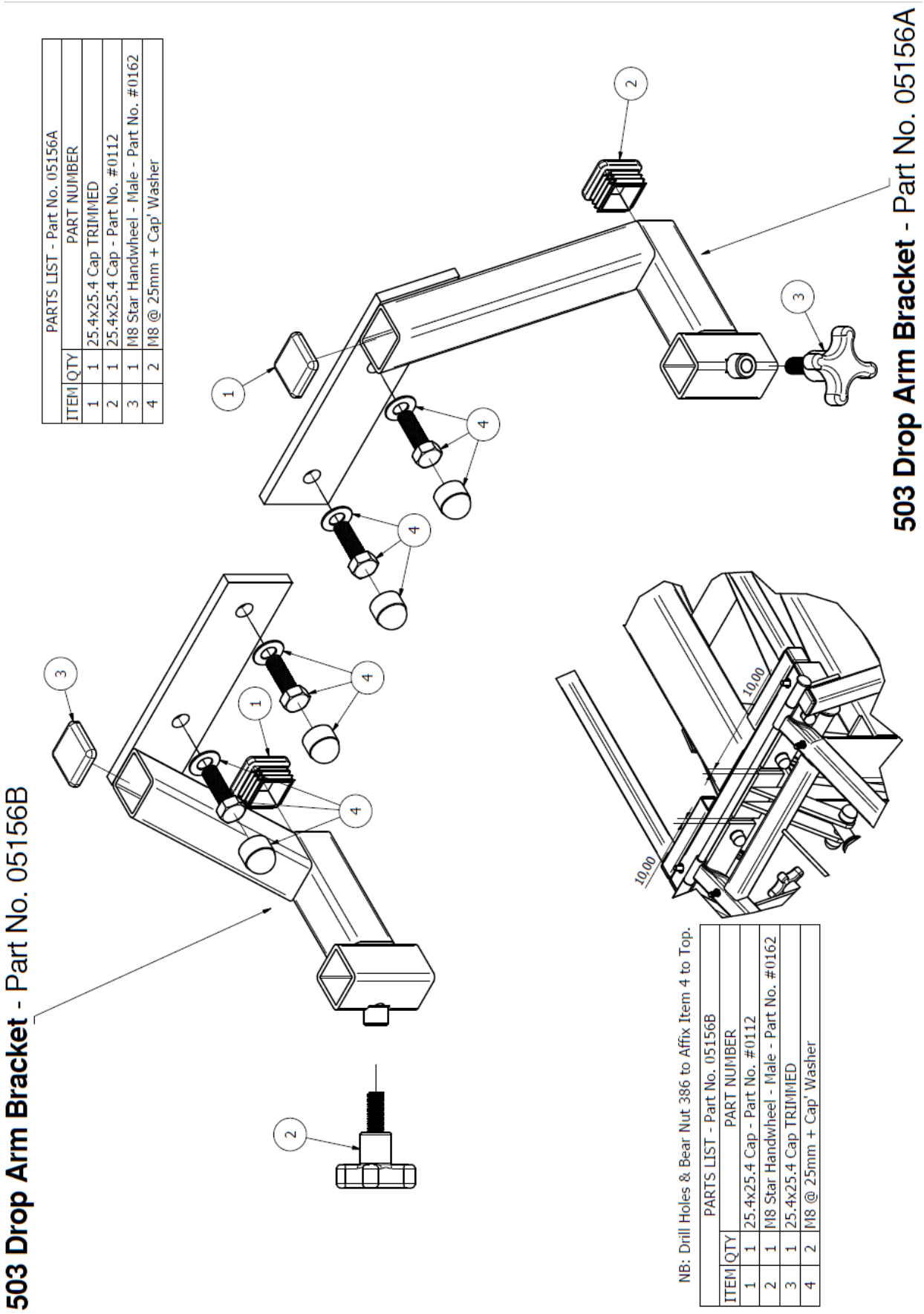
Arm Table - Part No. 05158A

PARTS LIST - Part No. 05158A		
ITEM	QTY	PART NUMBER
1	1	19.05x19.05 SHS Cap - Part No. #0115
2	4	3/4 Phillips Screw - Part No. #0191



Arm Table - Part No. 05158B

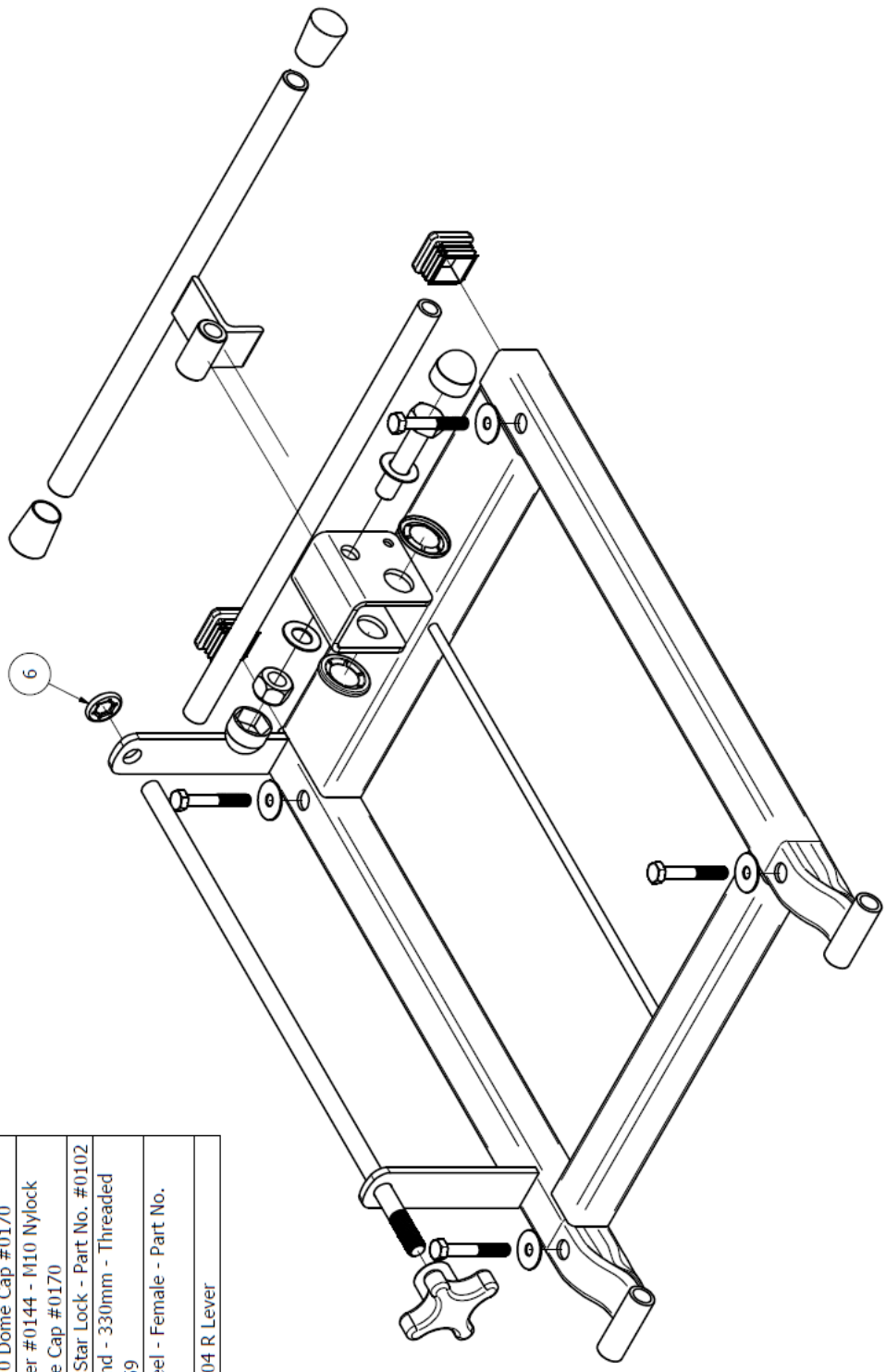
PARTS LIST - Part No. 05158B		
ITEM	QTY	PART NUMBER
1	1	19.05x19.05 SHS Cap - Part No. #0115
2	4	3/4 Phillips Screw - Part No. #0191



PARTS LIST - Part No. 05156A		
ITEM	QTY	PART NUMBER
1	1	25.4x25.4 Cap TRIMMED
2	1	25.4x25.4 Cap - Part No. #0112
3	1	M8 Star Handwheel - Male - Part No. #0162
4	2	M8 @ 25mm + Cap' Washer

PARTS LIST - Part No. 05156B		
ITEM	QTY	PART NUMBER
1	1	25.4x25.4 Cap - Part No. #0112
2	1	M8 Star Handwheel - Male - Part No. #0162
3	1	25.4x25.4 Cap TRIMMED
4	2	M8 @ 25mm + Cap' Washer

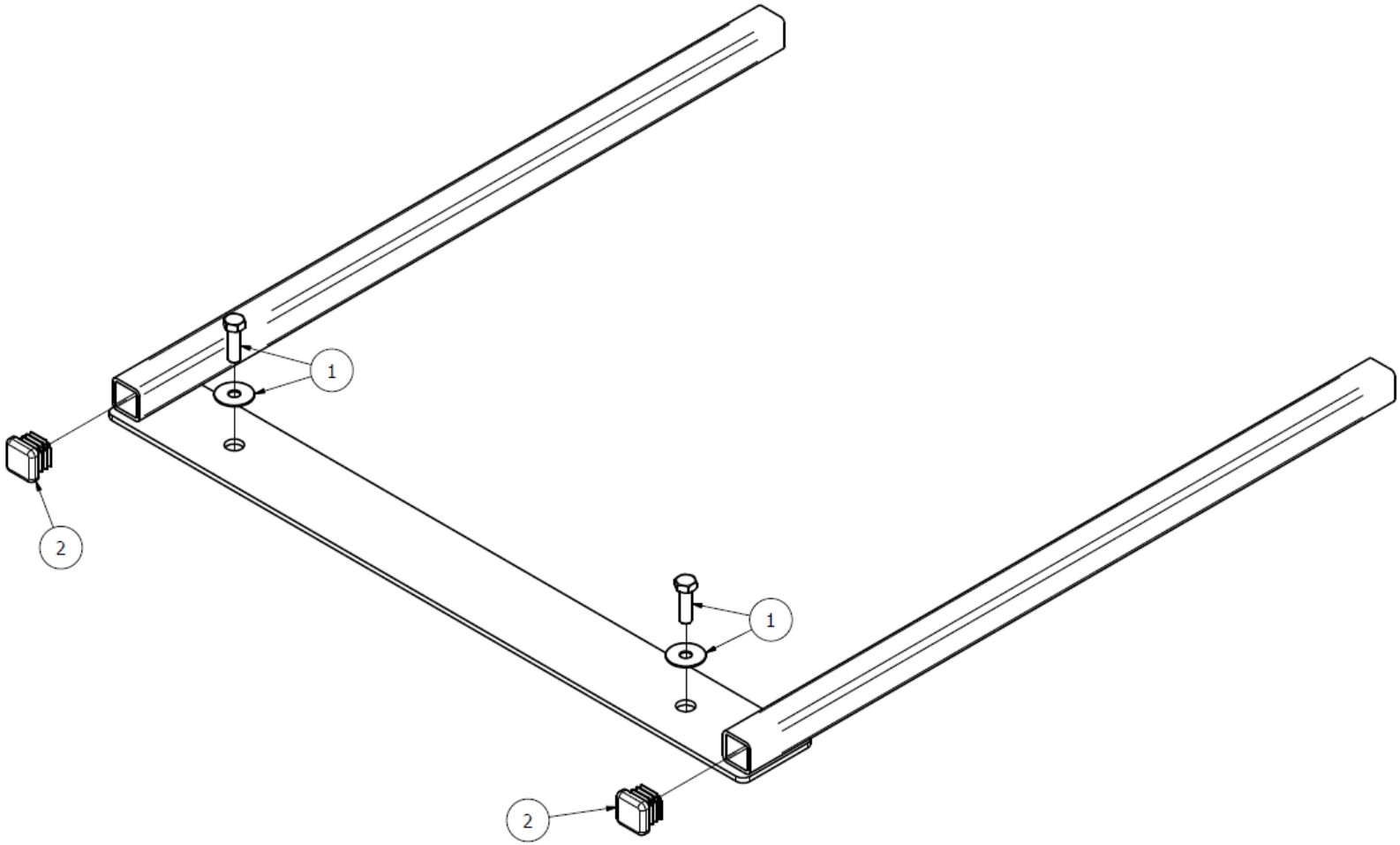
503M Head Frame - Part No. 05150



PARTS LIST		
ITEM	QTY	PART NUMBER
1	2	16mm Star Lock - Part No. #0331
2	2	25.4x25.4 Cap - Part No. #0112
3	4	M6 @ 40mm #0154 & Repair Washer #0184
4	1	M10 Form B Washer #0144 - M10 Bolt @ 50mm #0168 - M10 Dome Cap #0170
5	1	M10 Form B Washer #0144 - M10 Nylock #0171 - M10 Dome Cap #0170
6	1	9.5mm Dome Cap Star Lock - Part No. #0102
7	1	9.5mm Bright Round - 330mm - Threaded OE - Part No. 01059
8	1	M10 Star Handwheel - Female - Part No. #0172
9	1	Part No. 05059 - 504 R Lever

503M Slider - Part No. 05159

PARTS LIST		
ITEM	QTY	PART NUMBER
1	2	M6 @ 20mm #0153 & Repair Washer #0184
2	2	19.05x19.05 SHS Cap - Part No. #0115



6. Guarantee and Service (UK only)

Plinth 2000 Ltd offer a 5 year parts guarantee on all 500 Range products delivered from January 2013. The only exclusion to this guarantee is for negligent damage or damage to upholstery coverings. This guarantee does not require registration of the product as we can trace it from its serial number, however in the event of the serial number being removed, missing or unreadable then this may void the guarantee. These terms do not affect your statutory rights.

In addition to the above Plinth 2000 Ltd can offer both extended warranties and service contracts. For further information about either of these please contact:

Customer Service
Plinth 2000 Ltd
Wetheringsett Manor
Wetheringsett
Stowmarket
Suffolk
IP14 5PP
Tel: 01449 767887
Mail: customerservice@plinth2000.com

In the event of returning a product or part to us then please follow the instructions for cleaning under section 2 before enclosing it in suitable packaging and returning it to the above address. In addition please ensure there is a statement confirming that it has been decontaminated and what the fault is along with relevant contact details.

Worldwide

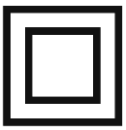
Please contact the distributor you purchased the chair from for service and support in your country. If you are unable to do so then please contact us in the UK and we will refer you to our local representative.

7. Technical Specifications

	503MH	503ME (1 motor)	503ME (2 motor)	503ME (3 motor)
Head Length (cm)	42	42	42	42
Seat Length (cm)	56	56	56	56
Foot Length (cm)	63	63	63	63
Arm Pad Length (cm)	34	34	34	34
Foot Pad Length (cm)	14	14	14	14
Width (cm)	63	63	63	63
Overall Length (cm)	184	184	184	184
Height Range (cm)	47-98	47-98	47-98	47-98
Max Working Load	250kg	250kg	250kg	250kg
Control	Pedal	Hand switch	Hand switch	Hand switch
Hydraulic Pump	Roemheld	N/A	N/A	N/A
Electrical Data 220/240v				
Motor(s)	N/A	Linak LA31 x 1	Linak LA31 x 2	Linak LA31 x 3
Control Box	N/A	Linak CB09	Linak CB09	Linak CB09
Current	N/A	1.5A	1.5A	1.5A
Power	N/A	360W	360W	360W
Mains Plug Fuse	N/A	5.0A x 1	5.0A x 1	5.0A x 1
Internal Fuse	N/A	1.5A x 1	1.5A x 1	1.5A x 1
System Voltage	N/A	24v	24v	24v
IP Rating	N/A	IPX4	IPX4	IPX4
Electrical Data 110/120v				
Motor(s)	N/A	Linak LA31 x 1	Linak LA31 x 2	Linak LA31 x 3
Control Box	N/A	Linak CB09	Linak CB09	Linak CB09
Current	N/A	2.7A	2.7A	2.7A
Power	N/A	360W	360W	360W
Mains Plug Fuse	N/A	5.0A x 1	5.0A x 1	5.0A x 1
Internal Fuse	N/A	3.0A x 1	3.0A x 1	3.0A x 1
System Voltage	N/A	24v	24v	24v
IP Rating	N/A	IPX4	IPX4	IPX4

IEC 601-1 Electrical Safety Classification

All models are double insulated Type B equipment and marked as such.

 Double Insulated Type B Equipment

8. Revisions to Manual

Pages	Issue No	Name	Date
All	Manual - 01	Niall Dyer	07.10.13
All	Manual - 02	Niall Dyer	10.01.14
9, 10, 15	Manual – 03	Martin Lankester	12.08.16
8-18	Manual – 04	Martin Lankester	16.01.16

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Plinth 2000 Ltd is an ISO Audited company to ISO9001:2008

Our products are CE marked in conformity with the EC Directive MDD 93/42/EEC