

RJ MOBILITY LTD.

BARRETT 7H & 10H

TECHNICAL MANUAL



THE WHEELCHAIR THAT MAKES LIFE EASIER

This Technical Manual will ensure that the wheelchair is maintained to the required standard and is for use by trained personnel only.

This Technical Manual contains important information regarding maintenance of the Barrett Foldaway Wheelchair thus ensuring its safe operation. Please make sure that you understand all instructions thoroughly.

It is recommended that maintenance is undertaken at six monthly intervals for a wheelchair that is in constant daily use.

The safety of the wheelchair user is paramount. If there is any doubt as to the suitability of re-using existing parts they should be discarded and replaced with manufacturer approved parts.

User Manuals should be stamped at correct intervals following completion of maintenance work.

If you fail to understand anything or have any questions concerning maintenance and operating instructions please contact:

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SECTION 1: USER CATEGORIES

1.1 USER CATEGORIES FOR THE BARRETT FOLDAWAY MODEL 7H SELF-PROPELLING WHEELCHAIR

- A1. Occupant with all limbs intact and having the ability to co-ordinate both arms and hands with sufficient strength to self-propel and control the wheelchair safely and maintain an upright seating position.
- A1/2. Lower limb, single or double amputees or users of greater than average upper body mass or unusual weight distribution will require an increased wheel base to maintain stability (this is a factory made option and cannot be retrofitted).

1.2 USER CATEGORIES FOR THE BARRETT FOLDAWAY MODEL 10H ATTENDANT-CONTROLLED WHEELCHAIR

- A3. Occupant with sufficient upper body control who can maintain an upright seating position.
- A3/2. Lower limb, single or double amputees or users of greater than average upper body mass or unusual weight distribution will require an increased wheel base to maintain stability (this is a factory made option and cannot be retrofitted).

SECTION 2: SPECIFICATIONS

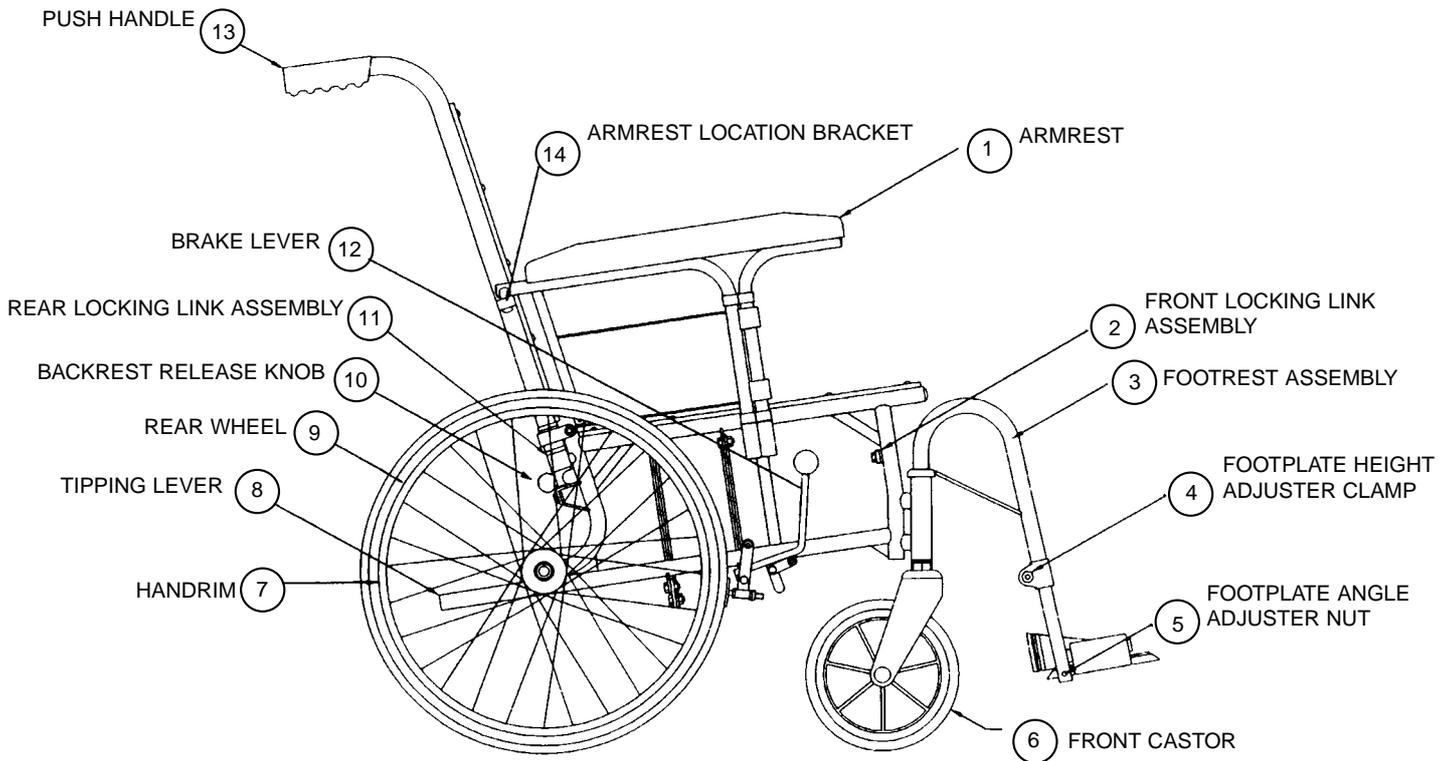
	Model 7H	Model 10H
1. Overall length	109cm (43")	109cm (43")
2. Overall width	64cm (25")	57cm (23")
3. Folded length	84.5cm (33")	75cm (29½")
4. Folded width	28.5cm (11½")	28.5cm (11½")
5. Folded height	50cm (19½")	50cm (19½")
6. Maximum weight	18kg (40 lb)	17kg (37 lb)
7. Weight less armrest and footrests	14.5kg (32 lb)	13.5kg (30 lb)
8. Seat plane angle	10 degrees	10 degrees
9. Seat widths available	38cm (15") 43cm (17")	38cm (15") 43cm (17")
10. Seat depths available	43cm (17")	43cm (17")
11. Seat height at front	46cm (18")	46cm (18")
12. Backrest angle	20 degrees from vertical	20 degrees from vertical
13. Backrest height	46cm (18")	46cm (18")
14. Footrest to seat	30-40cm (12"-16")	30-40cm (12"-16")
15. Leg to seat angle	100 degrees	100 degrees
16. Armrest to seat	23cm (9")	23cm (9")
17. Front armrest to backrest	45cm (17½")	42cm (16½")
18. Rear wheel diameter	46cm (18")	31.5cm (12½")
19. Tyre pressures (Barrett 7H only)	40psi/280 kilopascals (KPA)	-
20. Maximum user weight	114kg (18 stone/252 lbs)	114kg (18 stone/252 lbs)
21. Minimum turning radius	80cm (31½")	75.5cm (30")

For 43cm (17") models. 38cm (15") models are proportionally narrower.

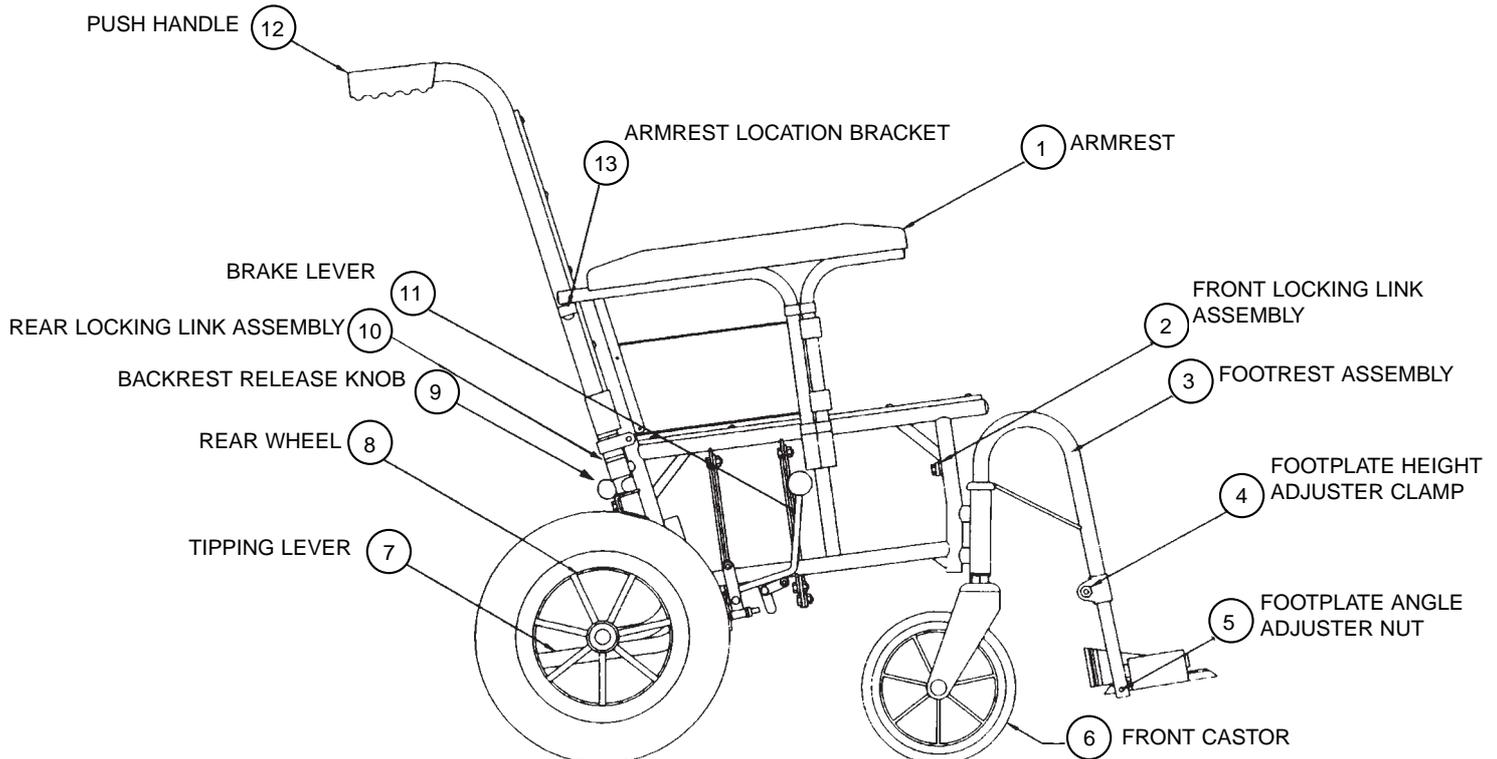
The **Barrett 7H and 10H** models are designed for a maximum user weight of 114 kilos (18 stone). The frame has been reinforced and components such as push handles, crossbraces and locking link assemblies, along with their associated fixtures, have been upgraded to suit. **It is therefore essential** that the correct replacement parts are used. Components from previous specification Model 7 and 10 **are not compatible** and if used would compromise the safety of the wheelchair.

SECTION 3: WHEELCHAIR DIAGRAM

3.1 BARRETT FOLDAWAY MODEL 7H WHEELCHAIR



3.2 BARRETT FOLDAWAY MODEL 10H WHEELCHAIR



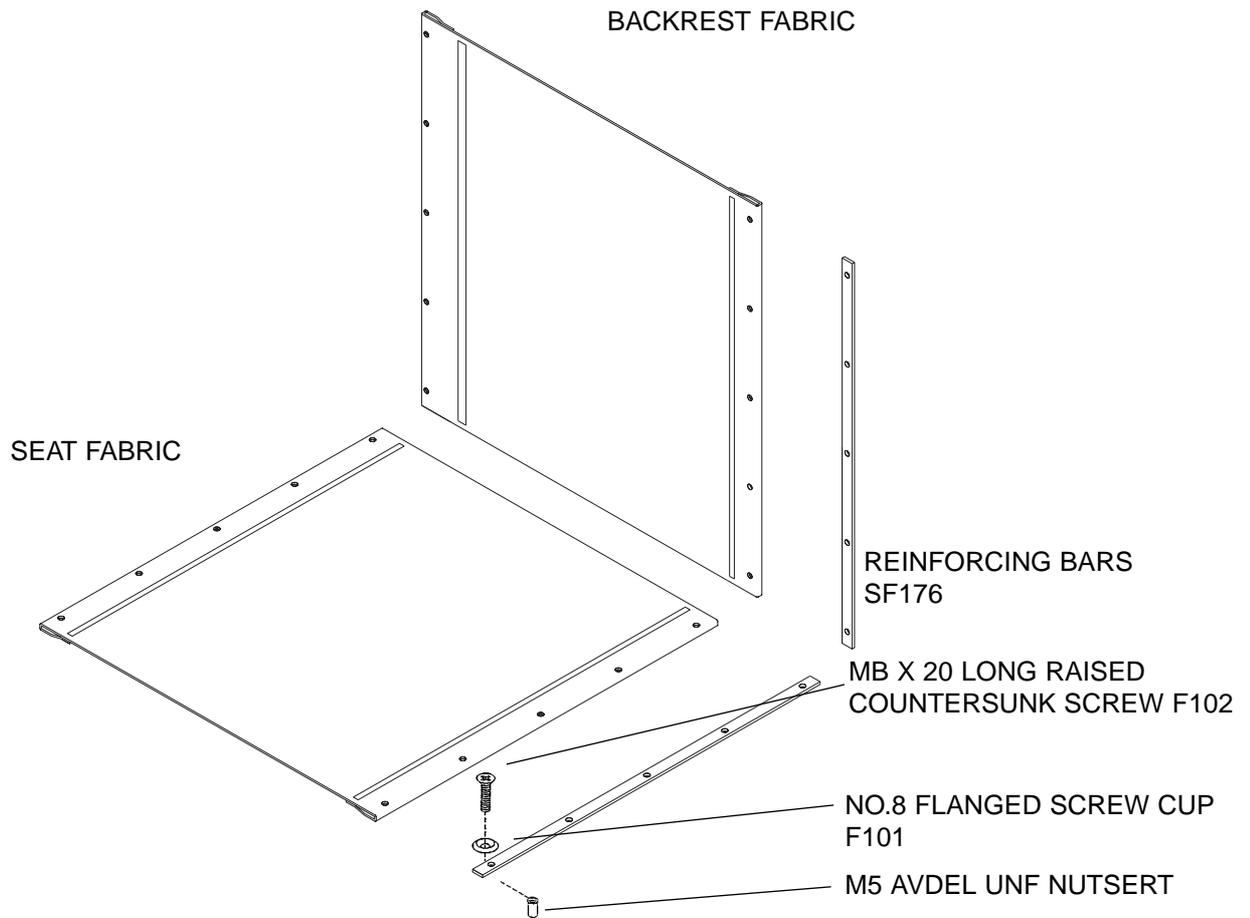
SECTION 4: MAINTENANCE CHECKS

- 4.1 Open the wheelchair, all movements should be free throughout the folding range.
- 4.1.1 Examine the seat and backrest fabrics for wear, damage or staining.
Examine retaining screws for tightness and general condition. (See Section 6)
- 4.1.2 Examine armrest pads for wear or damage and tightness of attachment screws.
(See Section 7)
- 4.1.3 Examine armrest panels for damage. (See Section 7)
- 4.1.4 Examine footrest hanger for effective locking when fully forward and back.
Examine clamp assembly for secure location of footplate assembly stem tube.
Check that footplates remain vertical when raised.
Examine heel loops for damage or excessive wear and security of attachment.
(See Section 8)
- 4.1.5 Examine brake assemblies for wear, damage or misalignment. (See Section 9)
- 4.1.6 Check operation of folding push handle assembly and that it is free to move and locks into place positively. (See Section 10)
Check that the hand grips are not damaged and are securely fitted to the push handle.
- 4.1.7 Ensure that tube plugs and ends are fitted to:
 - Front of seat tubes.
 - Armrests front and rear.
 - Tipping levers.
 - Top and bottom of castor mounts.
- 4.2 Lift the front of the wheelchair and rest the push handles on the floor.
- 4.2.1 Examine the structure of the frame for damage.
- 4.2.2 Check the pivot points for undue slackness, caused by loose nuts and bolts, or worn parts.
Check that front and rear locking links fully lock. (See Section 11)
- 4.2.3 Check castors for free rotation of the wheel and the complete assembly.
Examine castors for wear in the bearings.
Examine locating spindle for signs of bending, at the point where it is attached to the frame.
(See Section 12)
- 4.2.4 Check rear wheels for free rotation.
Examine wheels for wear in the bearings.
Examine wheels for loose spokes, buckled or damaged rims and handrims (BARRETT 7H).
(See Section 13 and 14)

SECTION 5: TOOL REQUIREMENTS

Spanners:	15/16 inch or 24mm AF	Castors	(See Section 12)
	5/16 inch Whitworth	Legrest clamp	(See Section 8)
	10mm AF	Heel Loop	(See Section 8)
	19mm AF	Wheel nuts	(See Section 13)
	19mm AF Socket and Driver	Wheel nuts	(See Section 13)
	7/16 inch AF	General	
Allen key:	3/16" AF	Locking Links	(See Section 11)
Pozidrive Screwdriver		Upholstery	(See Section 6)
Avdel Nutsert rivet tool		Upholstery	(See Section 6)
Loctite thread locking compound - Grade 241		Castors & Wheels	(SeeSection 12/13)
Torque Wrench (minimum operating range: 10 lbs/ft - 13Nm)		General	
Small Pliers		General	
Light/Soft Head Hammer		General	
Light oil - e.g. 3 in 1		General	

6.1 Diagram



6.2 Parts List

				RJ No
Seat Fabric	Ninian Ambla	15 x 17 inch	38cm x 43cm	SF61
	Ninian Ambla	17 x 17 inch	43cm x 43cm	SF63
Backrest Fabric	Ninian Ambla	15 x 17 inch	38cm x 43cm	SF62
	Ninian Ambla	17 x 17 inch	43cm x 43cm	SF64
M5 x 20 long, raised countersunk screw				F102
No. 8 flanged screw cup				F101
M5 Avdel UNF Nutsert				09657/01014
Reinforcing Bars Seat and Backrest				SF176

Fabric:

Check for staining, wear, tear and stitching.

Check nut inserts in frame for security and stripped threads.

Check securing screws for bending and stripped threads and burrs.

Cushions (if fitted):

Check cushions for staining, wear, tear and stitching.

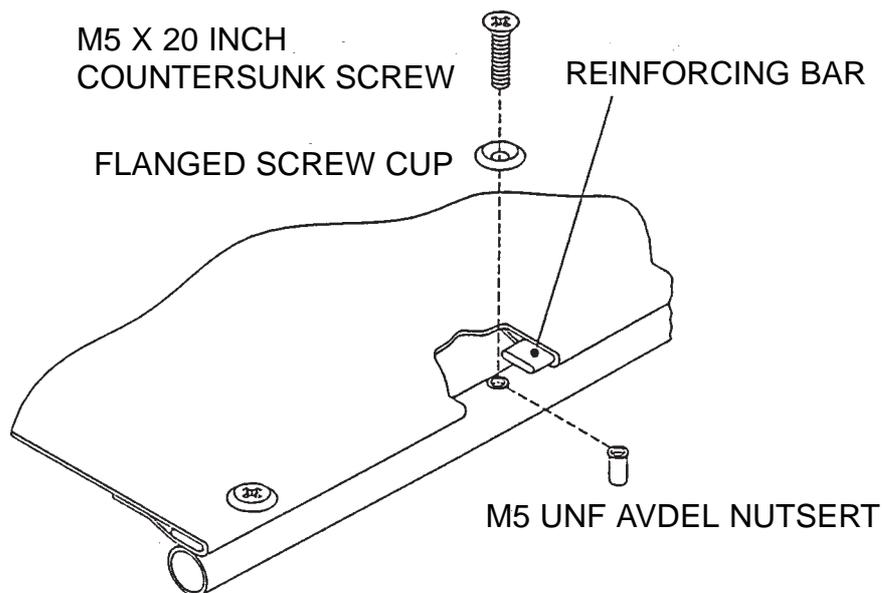
Check Velcro attachment tabs are present and secure.

Check Velcro on frame is present and secure.

6.4 Fabric Removal

If the Nutserts need replacement, use Avdel recommended tooling.

6.5 Fabric Fitting



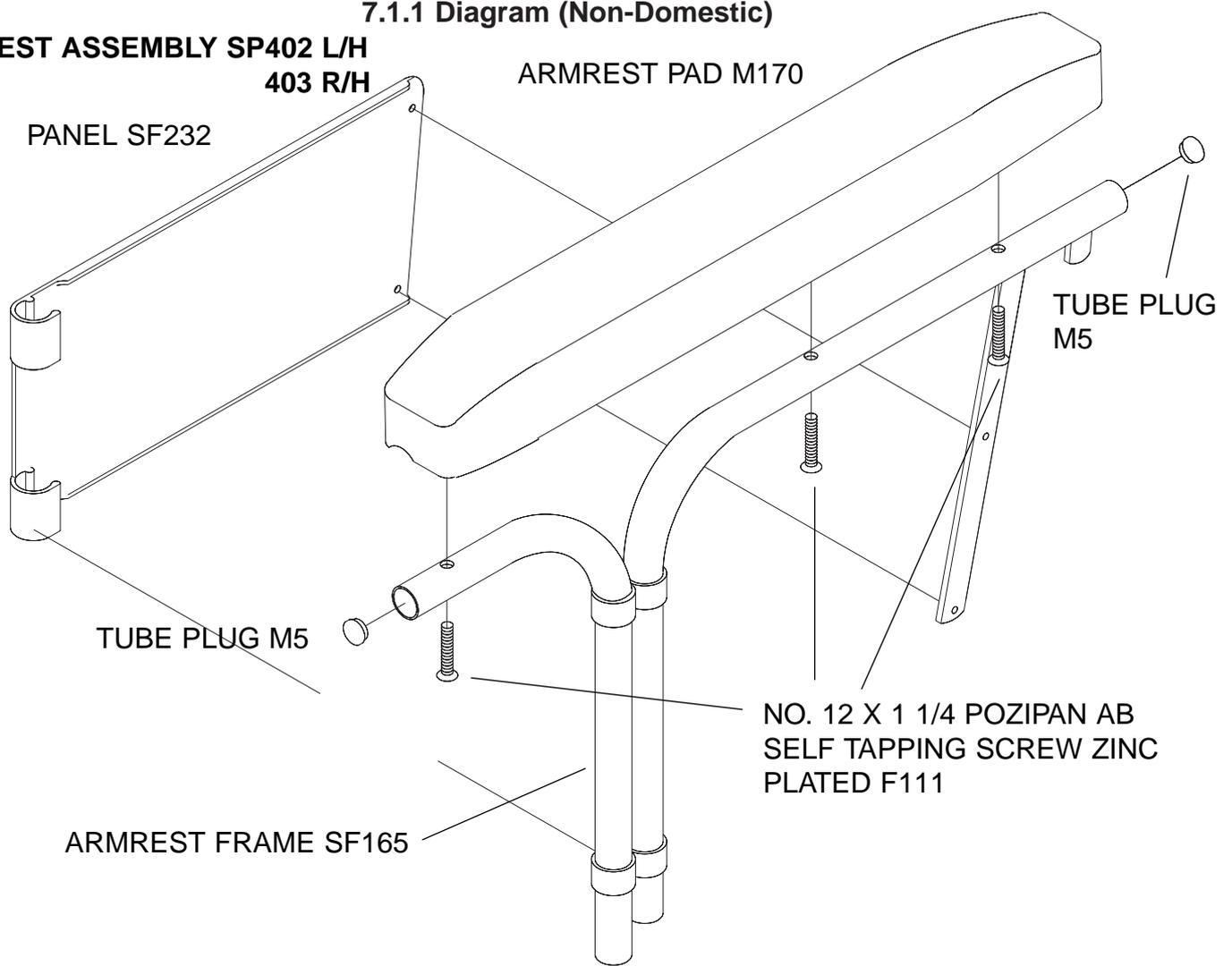
Slide reinforcing bar into stitched section on each side of the fabric.

Fit countersunk screws through flanged cups and fit through holes in fabric and reinforcing bars.

Place fabric on seat and backrest tubes and tighten screws taking care not to exert excessive force to flatten the flange cup or cut into the fabric.

7.1.1 Diagram (Non-Domestic)

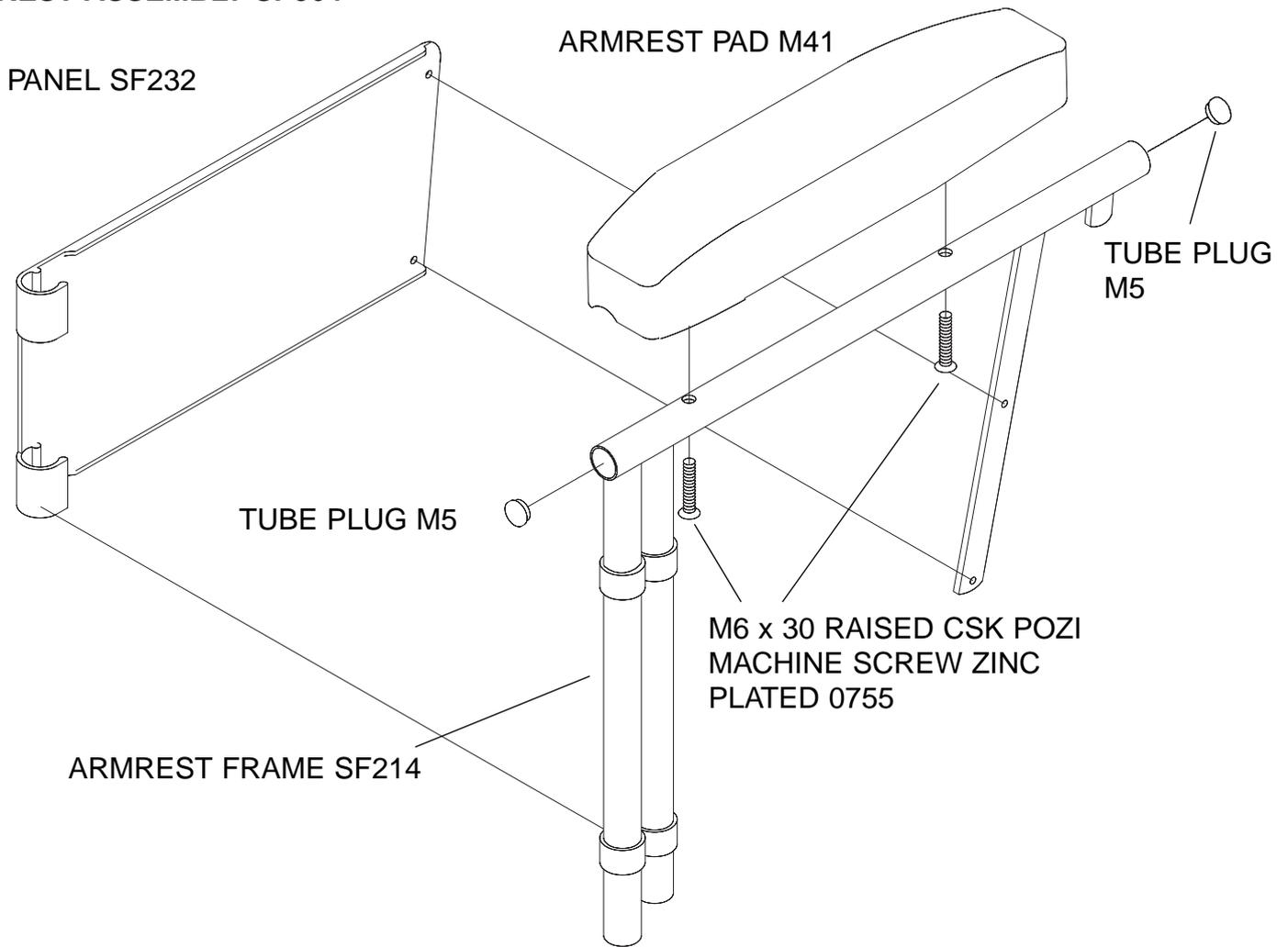
**ARMREST ASSEMBLY SP402 L/H
403 R/H**



7.1.2 Parts List (Non-Domestic)

		RJ No
Armrest Assembly complete	- Left - Right	SP402 SP403
Armrest Pad Black		M170
No. 12 x 1 1/4 Pozipan AB self tapping screw zinc plated		F111
Armrest Panel	- Left - Right	SF232L SF232R
AVEX 1/8" pop rivet (not shown)		F46
Armrest frame	- Left - Right	SF165L SF165R
Tube plug		M5

ARMREST ASSEMBLY SP364



7.2.2 Parts List (Domestic)

		RJ No
Armrest Assembly complete	- Left	SP364L
	- Right	SP364R
Armrest Pad Black		M41
M6 x 30 Raised CSK Pozi Machine screw zinc plated		0755
Armrest Panel	- Left	SF232L
	- Right	SF232R
Avex 1/8 Pop Rivet (not shown)		F46
Armrest Frame	- Left	SF214L
	- Right	SF214R
Tube Plug		M5

Check armpad for excess wear or damage.

Check armpad is secured to frame.

Check side panel is not damaged.

Ensure armrest locates in rear bracket on push handle when fitted to wheelchair.

7.4 Armrest Pad

The armrest pad is secured to the armrest frame with three screws whilst the domestic armrest pad is secured to the armrest frame with two screws. Removal of the screws releases the pad. Secure the pad with the attachment screws to refit.

7.5 Armrest Panel

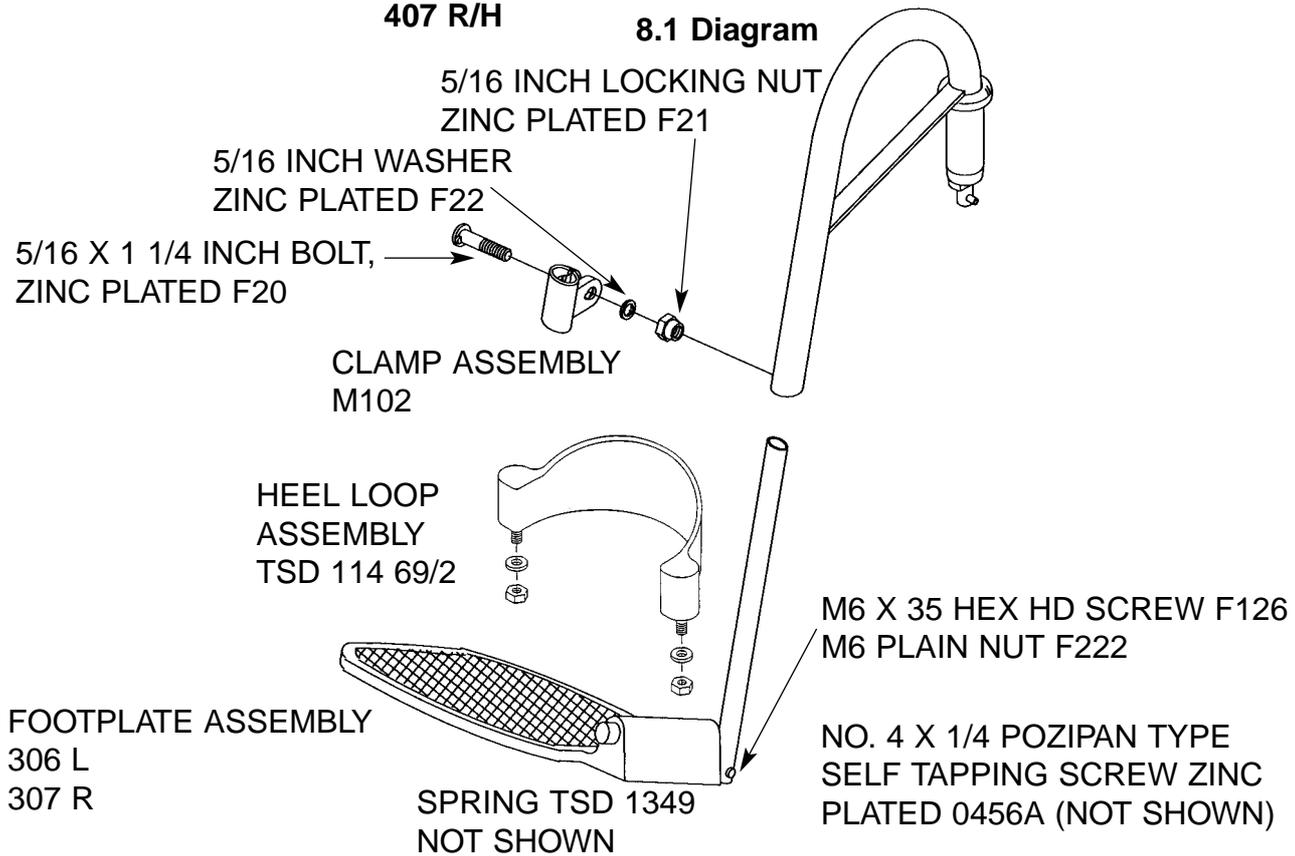
The plastic panel is removed by carefully drilling off the heads of the two pop rivets using a 1/4" (or equivalent) drill bit. Slide the panel forwards on the armrest frame until the moulded hooks release from the tube.

The plastic panel is fitted by placing the moulded hooks against the armrest frame tubes and pushing the panel backwards on the frame. Fit 2 new pop rivets using the correct tool.

SECTION 8: FOOTREST

HANGER ASSEMBLY SP406 L/H 407 R/H

8.1 Diagram



8.2 Parts List

		RJ No
Footrest Hanger with retaining clamp assembly M102	- Right - Left	SP406 SP407
Retaining Clamp Assembly		M102
5/16 x 1 1/4 Inch Bolt, zinc plated		F20
5/16 inch Locking Nut, zinc plated		F21
5/16 inch Washer, zinc plated		F22
Footplate Assembly 8 1/2 inch, complete with Stem and Heel Loop	- Left - Right	SP306L SP306R
Footplate Assembly 7 1/2 inch, complete with Stem and Heel Loop	- Left - Right	SP211L SP211R
Footplate Spring		TSD1349
Heel Loop complete with nuts and washers		TSD 114 69/2
No. 4 x 1/4 Pozipan Type Self Tapping Screw, zinc plated		0456A
M6 x 35 Hex Hd Screw		F126
M6 Plain Nut		F222

Check that footrest assembly locks into position forward and backward.

Apply light grease to swivelling end.

Ensure that stem clamp holds footplate in position.

Ensure that footplate will remain in vertical position when required.

Ensure no sharp edges/burrs which could injure user.

8.4 Footrest Removal

Remove the footrest assembly from the wheelchair by lifting and rotating the hanger section. Loosen the clamp with a 1/4 inch Whitworth spanner and slide the stem assembly out.

8.5 Footrest Fitting

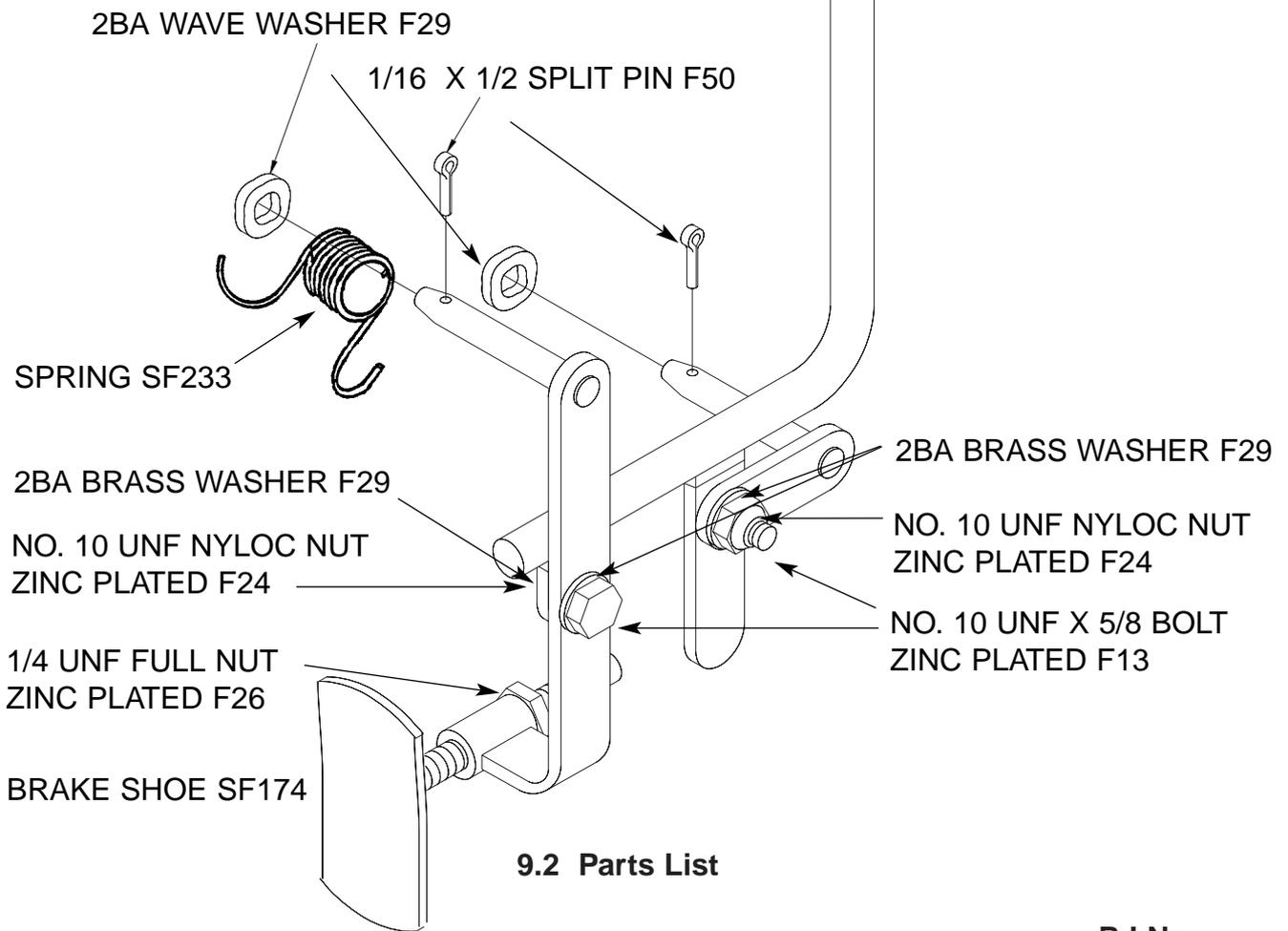
Re-assemble heel loop to footplate and tighten nuts to 10 lbs/ft (13 Nm). Insert footplate stem into hanger tube and tighten clamp to 35 lbs/ft (47 Nm).

The footplate should remain in a vertical position when required. This is maintained by semi-elliptic spring acting between footplate and pivot tube. This does not normally require maintenance.

9.1 Diagram

BRAKE ASSEMBLY SP203

BALL KNOB KB5/125



9.2 Parts List

		RJ No
Brake Assembly complete	- Left	SP203L
	- Right	SP203R
Spring	- Left	SF233L
	- Right	SF233R
Brake Shoe		SF174
1/16 x 1/2 inch Split Pin		F50
No. 10 UNF x 5/8 Bolt zinc plated		F13
No. 10 UNF Nyloc Nut zinc plated		F24
2BA Brass Washer		F29
1/4 UNF Full Nut zinc plated		F26
Brake Knob		KB5/125

Check ball knob for security.
Check levers for distortion.
Check brazed joints for cracks.
Check pivot shafts for distortion.
Replace pivot bolts if necessary due to excessive wear.
Ensure no oil/grease on brake pad.

9.4 Brake Assembly Removal

Remove the two 1/16 inch Split Pins on the Brake Pivot Shafts to remove the Brake Assembly and 2BA Wave Washers.

9.5 Brake Assembly Fitting

Fit Brake Pivot Shafts through the bushes on the frame. Fit 2BA Wave Washers on each shaft and fit 2 new Split Pins. Retain the Split Pins in the holes by bending the ends apart using small pliers. Replace with a new return spring if necessary.

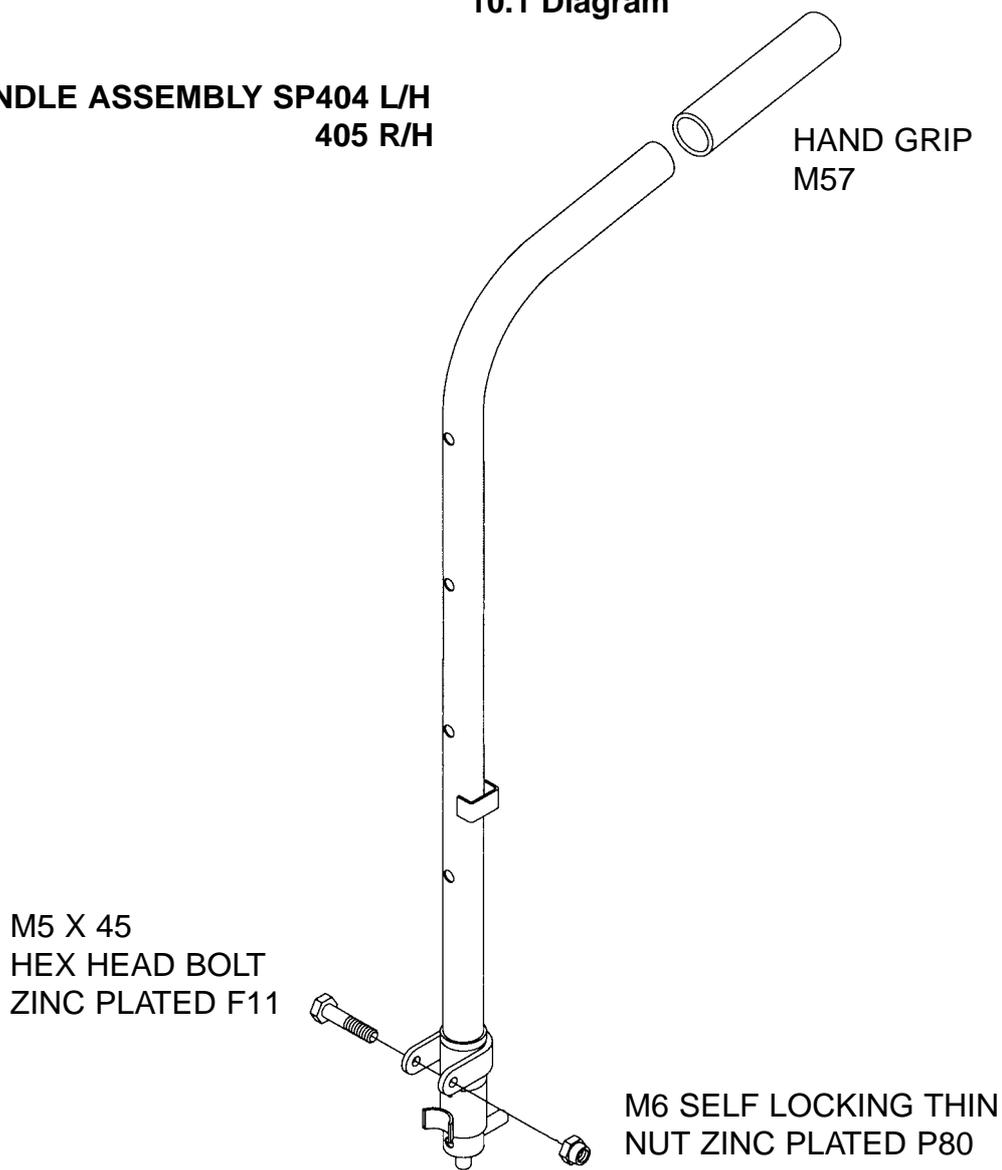
Ensure pivot bolts are not over-tightened as this will lead to fracture of brazed tabs to handle. Lubricate with light oil.

9.6 Brake Adjustment

The Brake Shoe position can be adjusted by loosening the lock nut and repositioning the shoe. The nuts should be adjusted to allow an operating force at the Brake Knob to be between 10 lbf to 13 lbf (22 to 58 N) with tyres inflated to correct pressure (50psi/340 Kilopascals).

10.1 Diagram

**PUSH HANDLE ASSEMBLY SP404 L/H
405 R/H**



10.2 Parts List

		RJ No
Push Handle Assembly complete with handgrip, pivot bolt	- Left - Right	SP404 SP405
M6 x 45 hex head bolt zinc plated		F11
M6 self locking thin nut zinc plated,		P80
Hand grip		M57

Check each push handle for evidence of bending.
Check each push handle for evidence of cracking through nutsert holes.
Check handgrip is secure.
Check for free movement of plunger. Lubricate with light oil.
Check that plunger locates in the hole at rear of the side frame.
Ensure nyloc nut still grips thread.

10.4 Push Handle Removal

Unscrew 4 off 2BA countersunk screws holding the seatback upholstery to the Push Handle Assembly.
Unscrew M6 nut and withdraw the bolt.

10.5 Push Handle Fitting

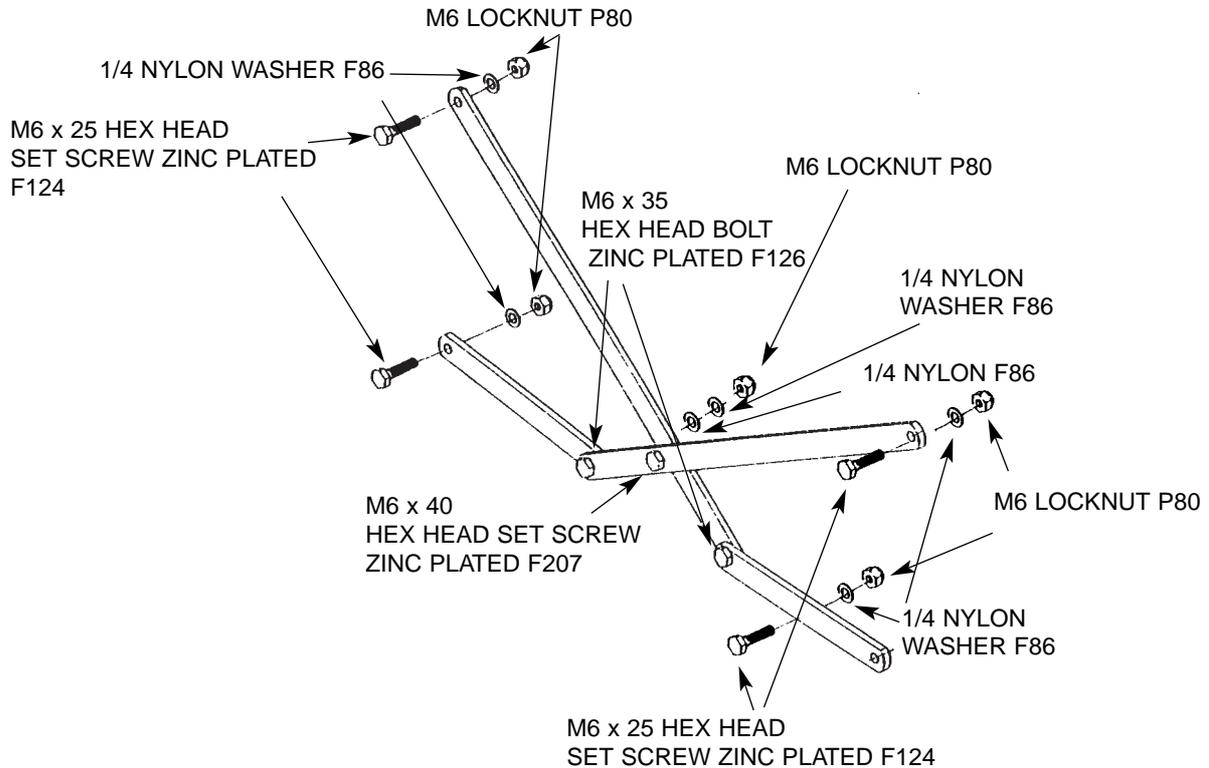
Insert 1/4 UNF bolt through Push Handle and hinge bush. Tighten the nyloc nut until Push Handle pivots freely without excessive free-play.

Fit 4 off No 10 UNF countersunk screws to hold the seatback upholstery to the Push Handle Assembly.

Wrap the 50mm wide Velcro strap around the lower end of the Push Handle and secure to the rear.

11.1 Diagram

CROSS BRACE ASSEMBLY SP205 17"
SP206 15"



There are two Cross Brace Assemblies in this wheelchair which have identical parts.

11.2 Parts List

	RJ No
Cross Brace Assembly 17" complete with fasteners	SP205
Cross Brace Assembly 15" complete with fasteners	SP206
M6 x 35 long, HT hexagon head bolt, zinc plated	F126
M6 self-locking nut, zinc plated	P80
1/4 Diameter Nylon plain washer	F86
M6 x 40 HT hexagon head set screw, zinc plated	F207
M6 x 25 HT hexagon head set screw, zinc plated	F124
Nylon spacer	F65

11.3 Inspection

Check Cross Braces for bending and evidence of cracks around pivot holes.

Check each tab on the sideframes for evidence of bending, elongation or worn holes, and cracks in brazing or tubing.

11.4 Cross Brace Assembly Removal

Remove the two 1/4 UNF set screws securing the Cross Brace Assembly to each sideframe.

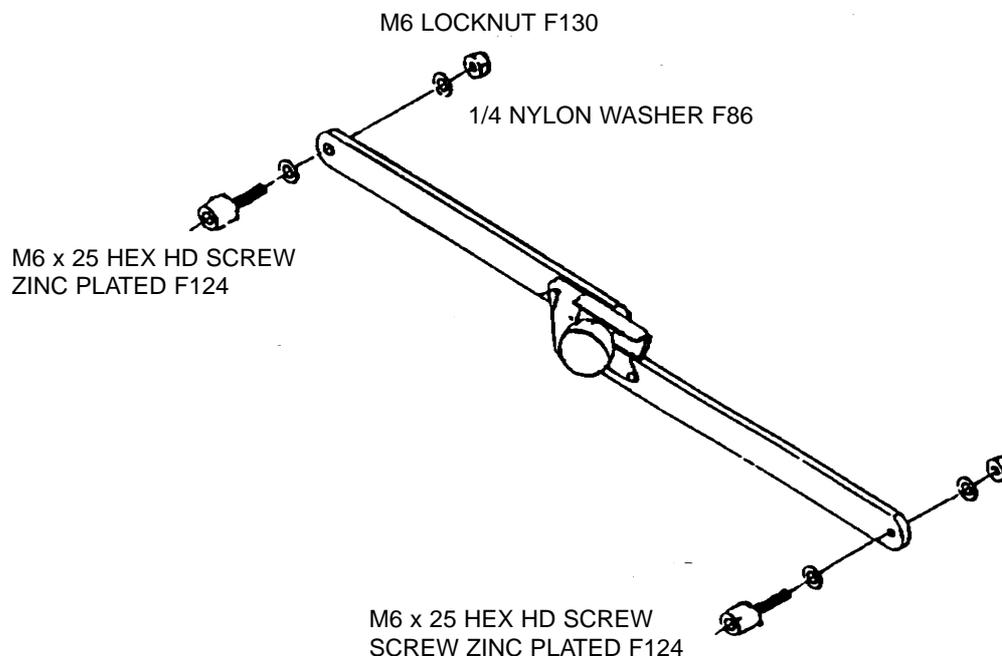
11.5 Cross Brace and Locking Link Assembly Fitting

Fit two 1/4 UNF set screws to secure the Cross Brace Assembly to each sideframe. Tighten until the Cross Brace is just securely held, then loosen the nut half a turn.

The Cross Brace Assembly must be free to move without binding, but show no signs of excessive free play. Lubricate with light oil, eg 3 in 1. Overtightening of Cross Brace Assembly screws will prevent pivoting action and will lead to fracture of tab to side frame.

11.6 Diagram

LOCKING LINK ASSEMBLY SP207



11.7 Parts List

	RJ No
Locking Link Assembly 17" complete with fasteners	SP207
Locking Link Assembly 15" complete with fasteners	SP208
M6 X 25 hex head set screw, zinc plated	F125
M6 self-locking thin nut, zinc plated	F130
1/4 Diameter Nylon plain washer	F86

11.8 Inspection

Check Locking Link for security of thumb catch and correct operation. The Locking Link should open/close easily and the thumb catch must hold securely in the open position so that the wheelchair will not fold under load.

Check each tab on the side frames for evidence of bending, elongation or worn holes, and cracks in brazing or tubing.

11.9 Locking Link Assembly Removal

Remove the M6 x 25 Screw securing the Locking Link Assembly to each sideframe.

11.10 Locking Link Assembly Fitting

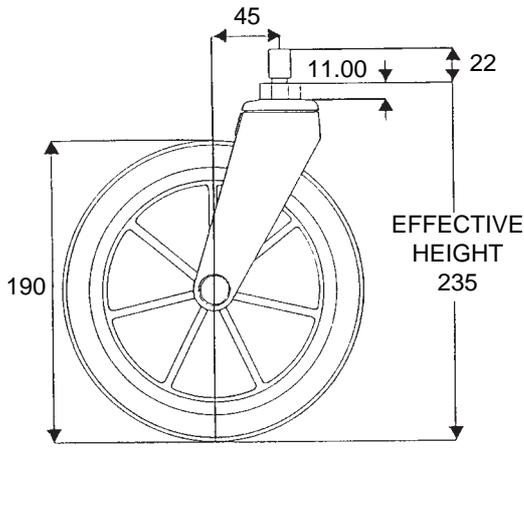
Fit two 1/4 UNF High Tensile Cap Screws to secure the Locking Link Assembly to each sideframe. Tighten until the Locking Link is just securely held, then loosen the nut half a turn.

The Locking Link Assembly must be free to move without binding, but show no signs of excessive free play. Lubricate with light oil, eg 3 in 1. Overtightening of Locking Link screws will prevent pivoting action and will lead to fracture of tab to side frame.

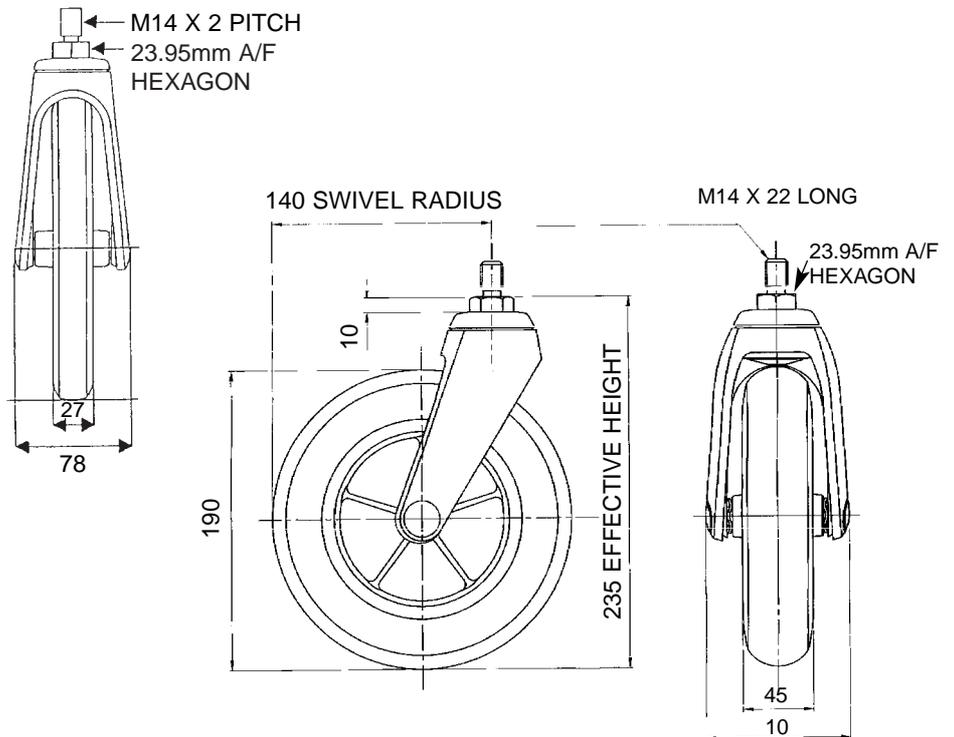
SECTION 12: CASTORS

12.1 Diagram

190mm NARROW PROFILE M19B



190mm WIDE PROFILE M171



12.2 Parts List

190mm narrow profile MCP

RJ No

M19B

190mm wide profile MCP

M171

12.3 Inspection

Check for excessive wear in crown bearings and wheel spindle. Replace castor if necessary.

Check condition of stud which screws into frame.

View frame and check both castor mounting tubes are at the same angle, checking for frame distortion due to impact damage, replace if necessary.

Check tyre security to rim and for splits, cracking or damage.

Check security of castor.

12.4 Castor Removal

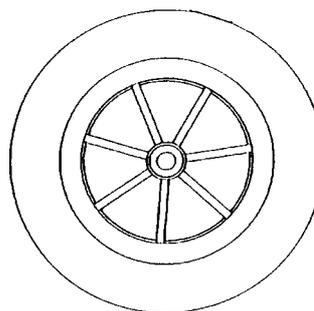
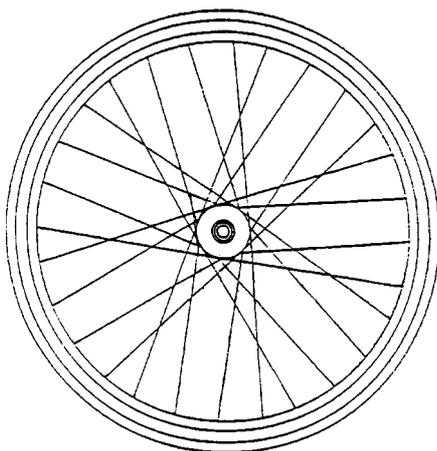
Unscrew the hexagon at the top of the Castor Swivel, using a 24mm (15/16") AF spanner, until the castor is removed.

12.5 Castor Fitting

Apply LOCTITE Thread Locking Compound Grade 241, or equivalent, to the thread and tighten to 30-35 lbs/ft (40-47 Nm).

13.1 Diagram

**46cm (18")
WHEEL
AND AXLE
ASSEMBLY
M17-B**



**315mm
(12 1/2")
PLASTIC
WHEEL AND
AXLE
ASSEMBLY
M194**

13.2 Parts List

	RJ No
315mm (12 1/2") plastic spoked wheel with axle and puncture proof tyre	M194
46cm (18") diameter spoked wheel with axle, pneumatic tyre and handrim	M17-B
46cm (18") diameter pneumatic tyre	18TYR
46cm (18") diameter pneumatic tube	18TUB
46cm (18") diameter rim band tape	18TAP
Handrim suitable for 46cm (18") diameter wheel	WAWW563B

13.3 Inspection

Check tyre for excess wear, splits, cracking and punctures.

(Puncture proof is available as an option).

Check for loose spokes and wheel to be true.

Check handrim for security and damage. **ANY SHARP EDGES ARE DANGEROUS TO THE USER.**

Check axle for distortion.

13.4 Wheel Removal

For both models, hold the hexagon section of the axle between the wheel and the wheelchair frame, with a 19mm open ended spanner.

Unscrew the M12 nut securing the wheel to the wheelchair, with a 19mm ring spanner or socket.

Any damage sustained to axles or spokes requires replacement wheel fitment.

Hold the hexagon section of the axle between the wheel and the wheelchair frame.

Apply LOCTITE Thread Locking Compound Grade 241 to the M12 Thread and tighten the M12 nut to a torque of 30 to 35 lbs/ft (40 to 47 Nm) to secure the wheel to the wheelchair.

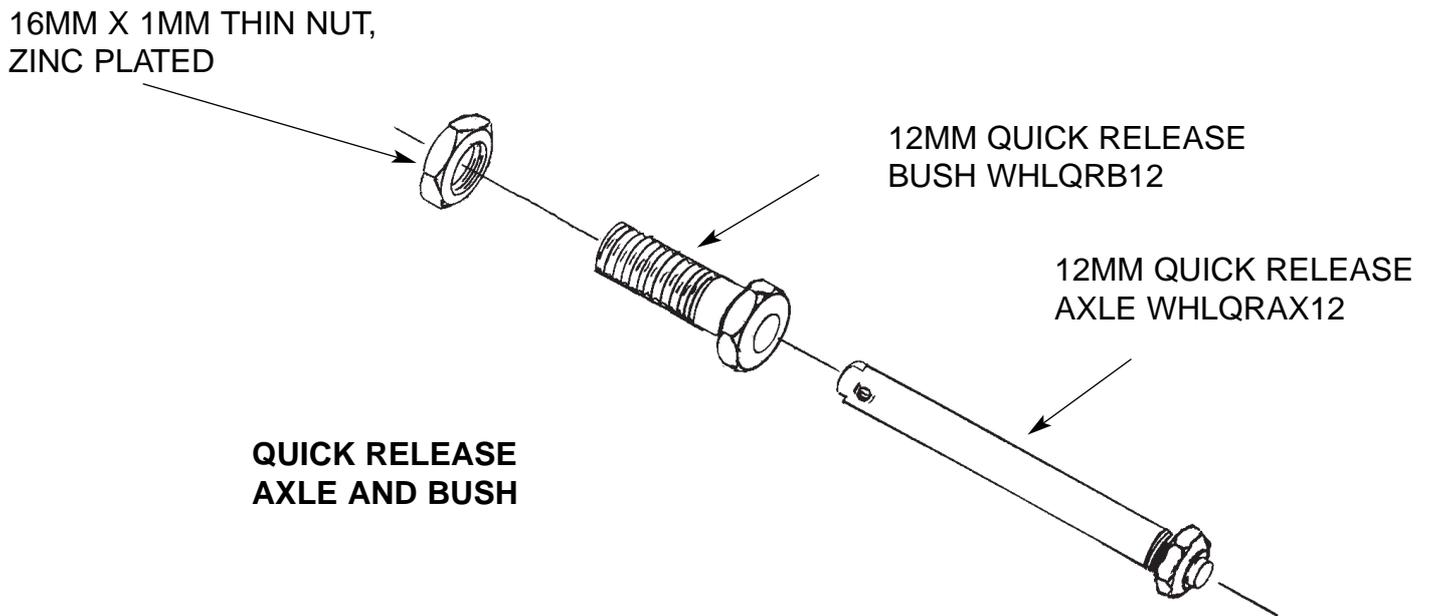
13.6 Tyre Fitting

Fit a strong rim tape and check that the inside of the tyre and the rim well are clean. Put one side of tyre onto rim, pass the valve of the tube through the rim and partially inflate the tube until round in shape. Fit the remainder of the tube into the tyre.

Starting at the valve fit the other bead of the tyre into the rim working outwards with the thumbs ensuring the tube is not pinched between the tyre and the rim.

Before inflating to the correct pressure, centre the tyre on the rim by lining up the bead line on the tyre sidewalls with the edge of the rim. Spin the wheel and check that the tyre rides evenly. If not then adjust the tyre again and recheck. When running centrally, inflate the tyre to the correct pressure.

14.1 Diagram



14.2 Parts Lists

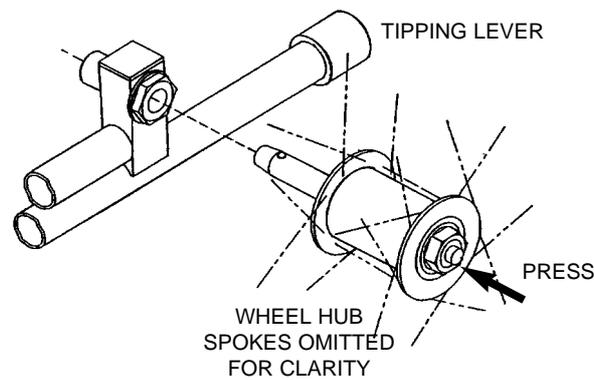
	RJ No
50cm (20") diameter detachable wheel with spindle	WH20BKALTTT
50cm (20") diameter pneumatic tyre	20TYR
50cm (20") diameter pneumatic tube	20TUB
50cm (20") diameter rim band tape	20TAP
Handrim suitable for 50cm (20") diameter wheel	M190
12mm Quick Release Axle	WHLQRAX12
12mm Quick Release Bush with 16mm x 1mm Thin Nut, zinc plated	WHLQRB12

14.3 Inspection

Check that spindle plunger ends are screwed securely by gripping ends lightly with pliers and twisting in opposite directions.

Check that spindle bush is secure in wheelchair frame by gripping ends lightly with pliers and twisting in opposite directions, if replacing apply Loctite thread locking compound grade 241 or equivalent to the spindle bush thread.

Check for ease of wheel removal and replacement.



Ensure the brake is not applied. With one hand hold the frame of the wheelchair and with the other hand hold the spokes surrounding the hub and fully depress the centre button pulling the wheel away from the wheelchair axle bush and releasing the centre button.

14.5 Wheel Fitment

Lift the frame with one hand and the wheel in the other hand. Hold the spokes surrounding the hub and fully depress the centre button. Insert the axle fully into the axle bush and release the centre button. Ensure that the wheel is fully locked. Pull wheel outwards without depressing the centre button. If located correctly, the wheel will not come off. If a new axle has been fitted, length adjustment may be necessary.

14.6 Adjustment

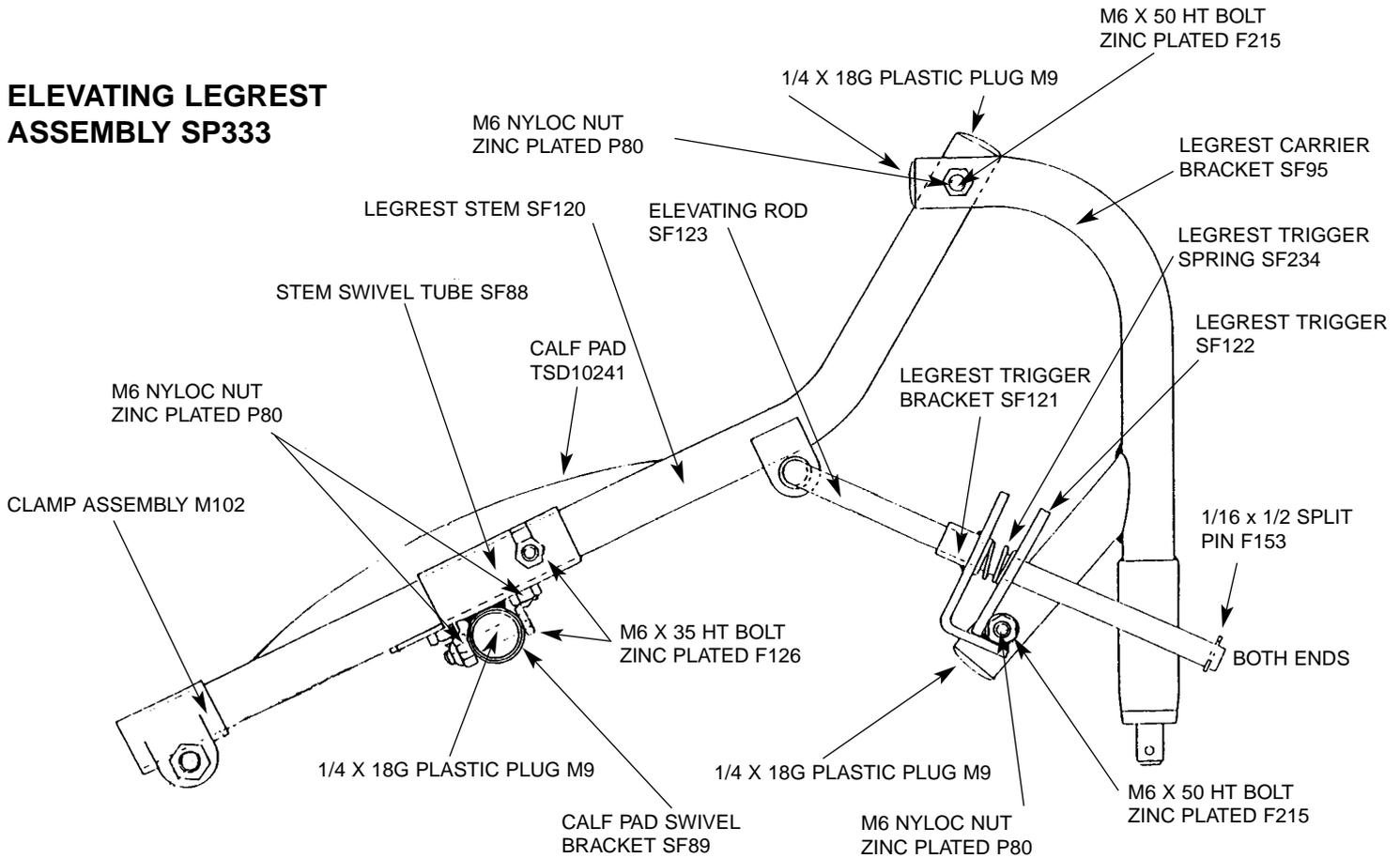
Assemble the wheel and spindle to the wheelchair. Opposing ball bearings on the spindle must fully protrude past the inner face of the wheel bush. If they do not, slacken the nyloc nut on the outer end of the spindle until this is achieved. Adjust the nyloc nut until 1mm end float (maximum). Excessive end float will cause the quick release spindle to bend. Lack of float may cause incorrect fitting of the wheel to the wheelchair.

MAINTENANCE

It is essential that the quick release axle and bush are kept lightly lubricated at all times to ensure ease of action and it is recommended that a graphite-based lubricant is used for this application.

15.1 Diagram

ELEVATING LEGREST ASSEMBLY SP333



15.2 Parts List

		RJ No
Legrest Assembly Complete	- Left	SP333L
	- Right	SP333R
Legrest Trigger Spring		SF234
Elevating Rod		SF123
Legrest Trigger		SF122
Legrest Trigger Bracket		SF121
Legrest Stem, Left or Right		SF120
Legrest Carrier Bracket, Left or Right		SF95
Calf Pad Swivel Bracket		SF89
Stem Swivel Tube, Left or Right		SF88
Calf Pad MCP		TSD10241
Clamp Assembly		M102
M6 Nyloc Nut, zinc plated		P80
M6 x 50 HT Bolt, zinc plated		F215
M6 x 35 HT Bolt, zinc plated		F126
1/16 x 1/2 Split Pin		F153
1/4 x 18G Plastic Plug		M9

Check heel loop for security. Nuts should be tightened to 10 lbs/ft (13 Nm).
Check pivot bolt for wear.
Check calf pad for wear/damage.
Check adjustment rod for bending.
Check footplate maintains set position.

15.4 Elevating Legrest Removal

Remove the footrest assembly from the wheelchair by lifting and rotating the hanger section.
Release stem clamp and withdraw footplate and stem.
Release nuts securing calf pad and remove.
Release pivot bolt and separate elevating section from swivelling section.
Remove rubber end cap from adjustment rod, and holding trigger withdraw rod.

15.5 Elevating Legrest Fitting

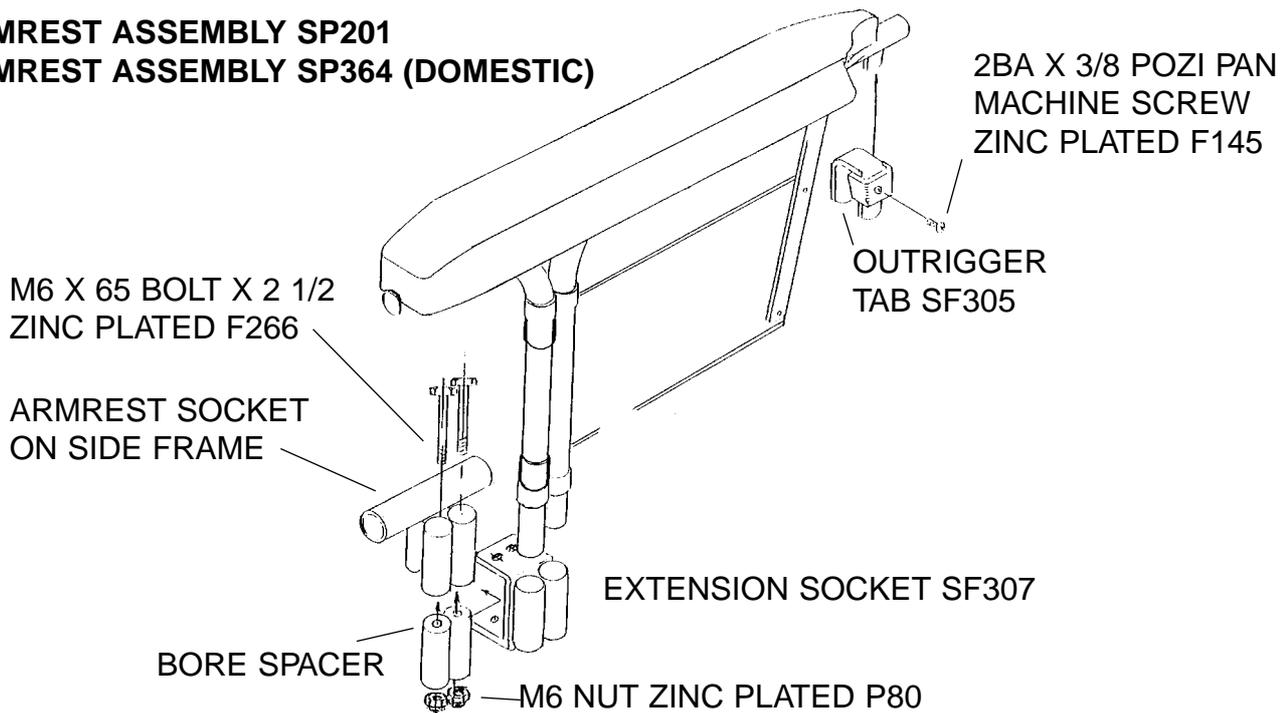
Assemble elevating section to swivelling section. Use new pivot bolt, if necessary.
Slide adjustment rod through bracket and trigger ensuring spring is positioned to force trigger forward. Replace rubber end cap.
Assemble calf pad to bracket. Tighten nuts to 10 lbs/ft (13 Nm).
Insert footplate stem into tube and tighten clamp to 35 lbs/ft (47 Nm).
Apply light grease to swivelling end and insert into castor tube.
Ensure no grease/oil on adjustment rod or it will cause slippage.

SECTION 16: ARMREST OUTRIGGERS

16.1 Diagram

ARMREST ASSEMBLY SP201

ARMREST ASSEMBLY SP364 (DOMESTIC)



16.2 Parts List

	RJ No
Armrest Socket Extension Assembly	SF307
Armrest Outrigger Tab	SF305
M6 x 65 Bolt zinc plated	F144
M6 Nut zinc plated	P80
2BA x 3/8 Pozi Pan Machine Screw zinc plated	F145

16.3 Inspection

Check for damage to sockets.

Ensure spacers are fitted.

Check screw threads are not stripped particularly on push handle bracket.

Ensure armrests locate in push handle bracket when fitted to wheelchair. Check for bending of armrest tube at insertion point.

16.4 Dismantling

Release nuts securing sockets to side frame and remove.

Slide sockets away from frame and remove spacers.

Release extension bracket from push handle.

16.5 Fitting

Replace spacers in side frame sockets.

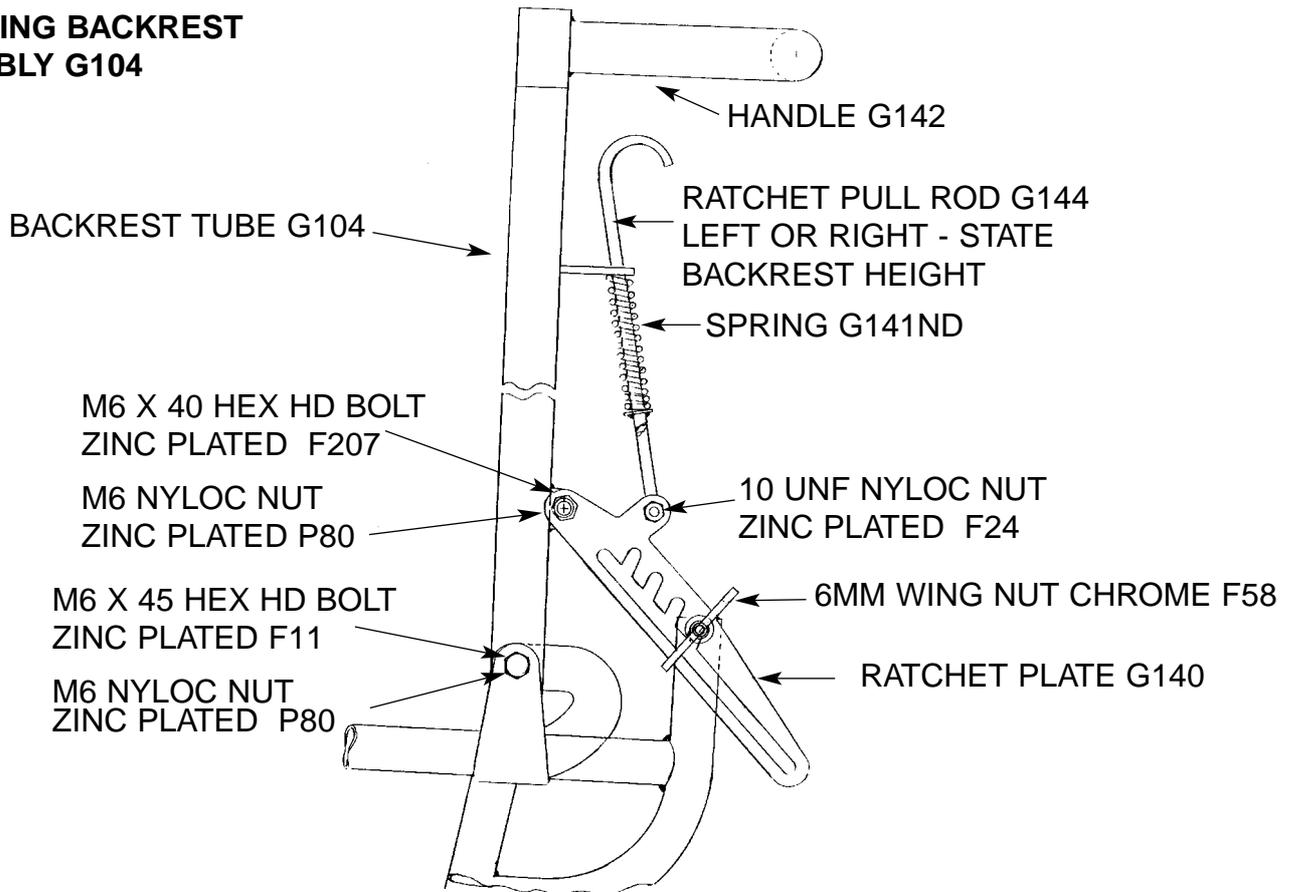
Slide outrigger sockets into position and insert bolts.

Tighten nuts to 10 lbs/ft (13 Nm).

Hook rear bracket over push handle loop and tighten screw to 3 lbs/ft (4 Nm).

17.1 Diagram

RECLINING BACKREST ASSEMBLY G104



17.2 Parts List

	RJ No
Backrest Tube Assembly complete	G104
Handle	G142
Ratchet pull rod	- Left G144L - Right G144R
Spring	G141ND
Ratchet Plate	G140
Wing Nut 6mm chrome	F58
No. 10 UNF Nyloc Nut zinc plated	F24
M6 x 40 hex head bolt zinc plated	F207
M6 Nyloc Nut zinc plated	P80
M6 x 45 hex head bolt zinc plated	F11

Check quadrant for distortion wear and cracks.
Check quadrant peg for bending and worn threads.
Check pull release bars for bending.

17.4 Reclining Backrest Dismantling

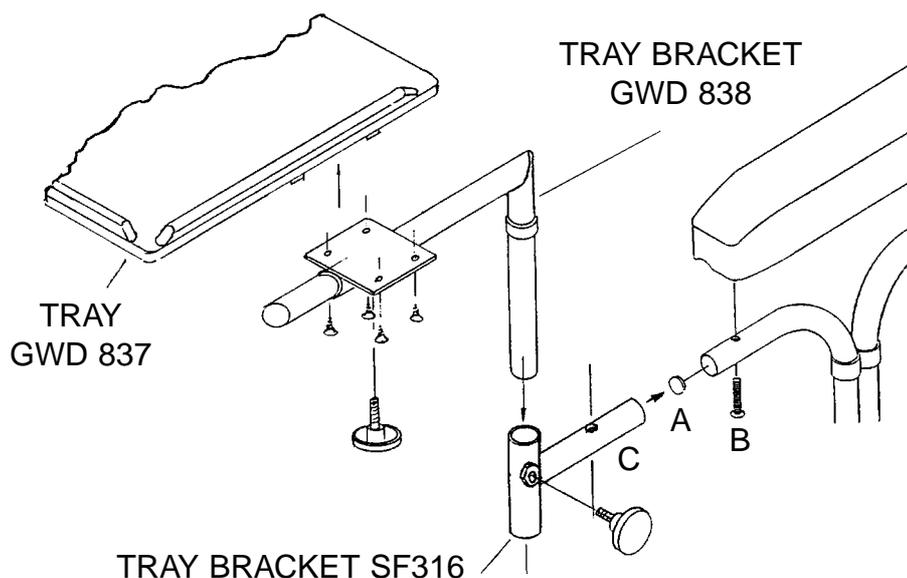
Release wingnuts on quadrant brackets.
Release bolts securing backrest tubes to wheelchair side frames.

17.5 Reclining Backrest Re-assembly

Fit backrest to side frames. Tighten Nyloc nuts so that backrest moves freely without excessive play.
Slide quadrant over peg and fit wingnuts.
Lightly oil moving parts and check that the complete assembly functions correctly.

SECTION 18: DETACHABLE TRAY

18.1 Diagram



18.2 Parts List

		GWD No	RJ No
Tray Bracket	- left - right		SF316L SF316R
Tray		837	
Tray Bracket		838	

18.3 Inspection

Check for damage to the tray, particularly for wooden splinters.

Check security of attachment screw 'B' and check tray attachment screws for security.

Check all adjustment knobs are present, undamaged and hold tray at the required position.

18.4 Assembly

Remove plastic bung 'A'. Remove screw 'B'.

Insert 3/4" dia. tube item 'C' over end of armrest tube. Line up holes in item 'C' with screw hole in armrest tube. Insert screw 'B' and retighten.

Insert the tubular mounting stems complete with stem brackets supplied with the tray, into the armrest stem assembly with the horizontal extensions of the mounting stems projecting forward.

Place the tray symmetrically on the stem brackets, ensuring that the flat plates are located between two guide strips on the under-side of the tray.

Mark through the screw holes in the stem brackets.

Remove the tray and brackets from the wheelchair and secure brackets to tray with screws supplied.

Refit tray assembly to wheelchair. Screw the two loose knurled knobs supplied with tray assembly, into nuts welded to armrest stem assembly item 'C'.

Adjust tray position and tighten the four knobs.

