

# BETA

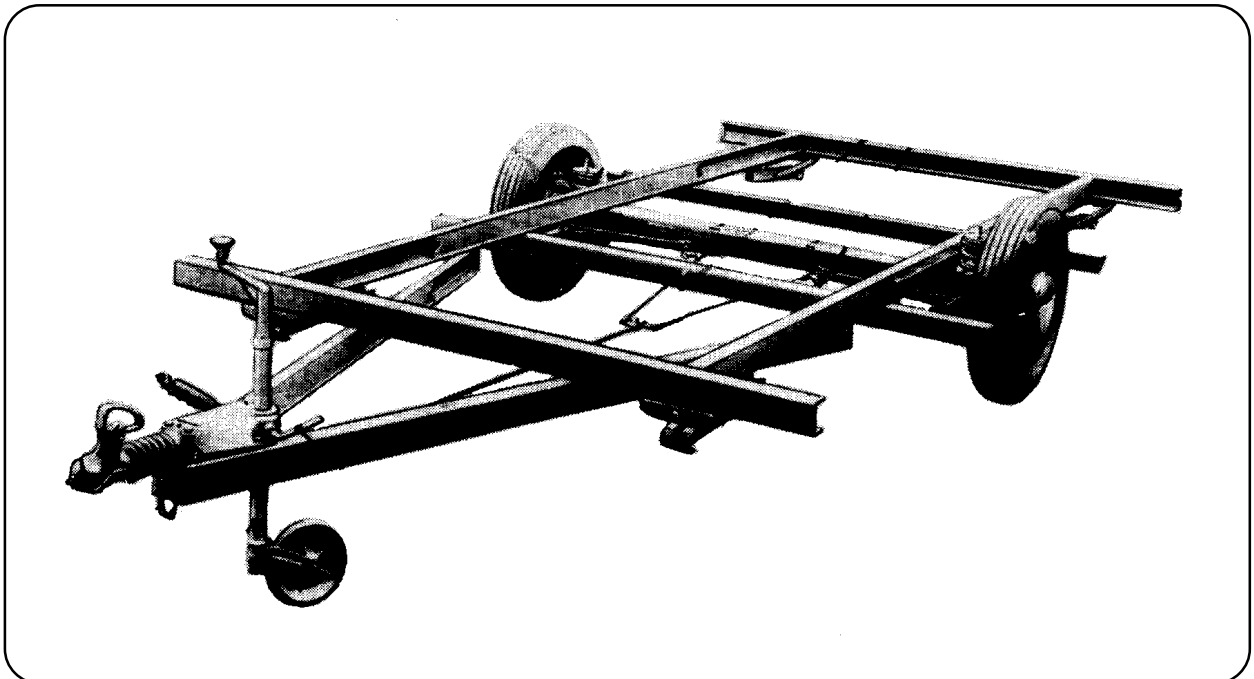
## SERVICE AND MAINTENANCE INSTRUCTIONS

FOR B & B CHASSIS

FITTED WITH

BETA MECHANICAL BRAKING SYSTEM

AND B & B SUSPENSION EQUIPMENT



Covering the period 1964 until 1973

## Axle Equipment

### **Adjustment - Lockheed 7" brakes**

- 1 Jack up axle raising wheel clear of ground.
- 2 Remove road wheel.
- 3 Revolve brake drum until adjustment hole is in line with toothed adjustment wheel. Insert a cranked lever or screwdriver not exceeding 6" in length, and turn the toothed wheel in a clockwise direction relative to it's fixing, until one side bears against the drum. Then continue turning until both shoes bear hard. Back off the adjustment the least possible amount until the wheel can be revolved. This brake is then correctly adjusted. Carry out same procedure on opposite wheel.
- 4 Replace road wheel, making sure to correctly tighten wheel nuts (Torque to 65lbs/ft in sequence - i.e. North, South, East, West - NEVER clockwise or anti-clockwise. With 5 stud wheels Torque to 65lbs/ft in opposites.
- 5 Carry out same procedure on opposite wheel.

### **Adjustment - Lockheed 8", 9" and 10" brakes**

- 1 Jack up axle, raising wheel clear of ground.
- 2 Remove road wheel.
- 3 Revolve brake drum until adjustment hole is in line with screwdriver slot-headed adjustment screw. Then with a screwdriver rotate the adjustment screw in a clockwise direction as far as it will go and then return it "two clicks" ensuring at the same time that brake drum revolves freely. This brake is then correctly adjusted.
- 4 Replace road wheel, making sure to correctly tighten wheel nuts (Torque to 65lbs/ft in sequence - i.e. North, South, East, West - NEVER clockwise or anti-clockwise. With 5 stud wheels Torque to 65lbs/ft in opposites.
- 5 Carry out same procedure on opposite wheel.

### **Adjustment - Girling 12" brake**

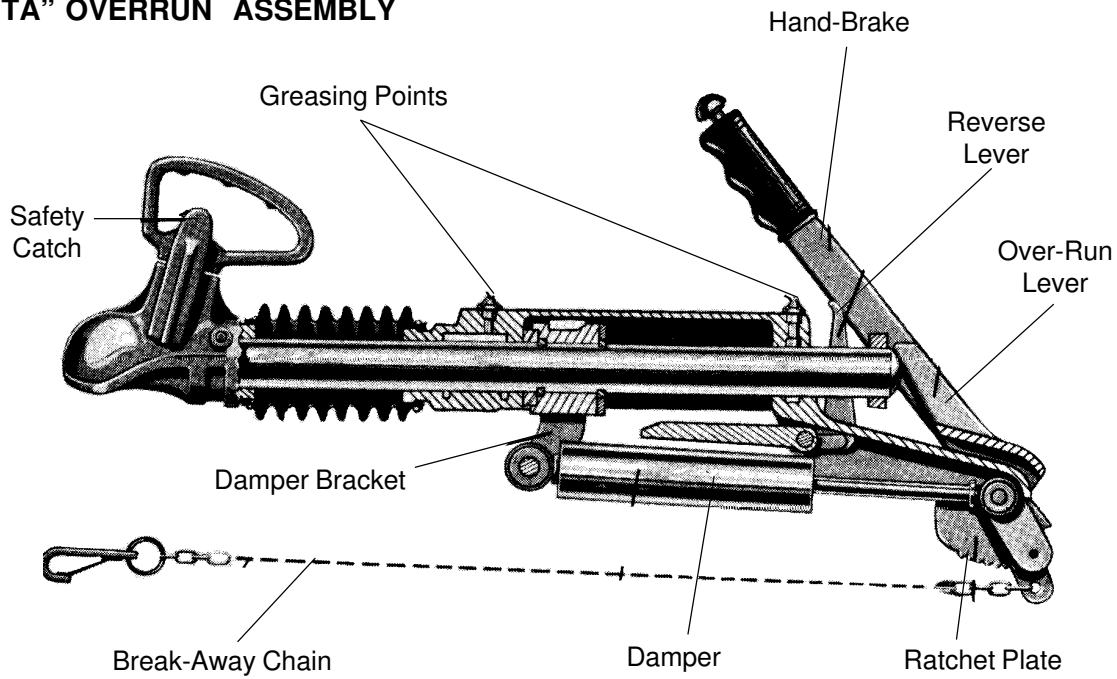
- 1 Jack up axle raising wheel clear of ground.
- 2 The square headed adjustment screw is located on the back of the brake back plate. This must be turned in a clockwise direction as far as it will go and then returning only sufficient to allow wheels to revolve freely. This brake is then correctly adjusted.
- 3 Replace road wheel, making sure to correctly tighten wheel nuts (Torque to 65lbs/ft in sequence - i.e. North, South, East, West - NEVER clockwise or anti-clockwise. With 5 stud wheels Torque to 65lbs/ft in opposites.
- 4 Carry out same procedure on opposite wheel.

SYMPTOM	POSSIBLE CAUSE	REMEDY
<p>Brake drag with overheating (Note: Heat is always generated under normal braking. These possible causes and actions are for overheating when not actually braking)</p>	<ol style="list-style-type: none"> <li>1 Handbrake incorrectly adjusted.</li> <li>2 Pull rod not returning freely to the "OFF" position.</li> <li>3 Weak or broken pull off springs.</li> <li>4 Expander assembly binding or seized.</li> <li>5 Shoes incorrectly adjusted.</li> </ol>	<p>Adjust handbrake according to recommendations.</p> <p>Check tension of pull rod, pull off springs. Check expander operation. See "possible cause" number 4.</p> <p>Examine condition of pull off spring over stretching or heat affected. Replace as necessary.</p> <p>Dismantle expander, lubricate and rebuild ensure expander is free to slide in the backplate slot.</p> <p>Carry out correct adjustment procedure.</p>
<p>Brake Inefficient</p>	<ol style="list-style-type: none"> <li>1 Glazed brake lining surfaces.</li> <li>2 Scored or rusty drum surface.</li> <li>3 Overrun assembly pull rod out of adjustment.</li> <li>4 Shoes incorrectly adjusted.</li> </ol>	<p>Clean glaze from shoe lining surface with dampened smooth emery paper and produce matt finish.</p> <p>Examine condition of brake drum surface light rusting may be removed with smooth emery paper. Otherwise if rusting or scoring is severe, renew drum.</p> <p>Carry out adjustment as recommended.</p> <p>Carry out correct brake adjustment procedure.</p>

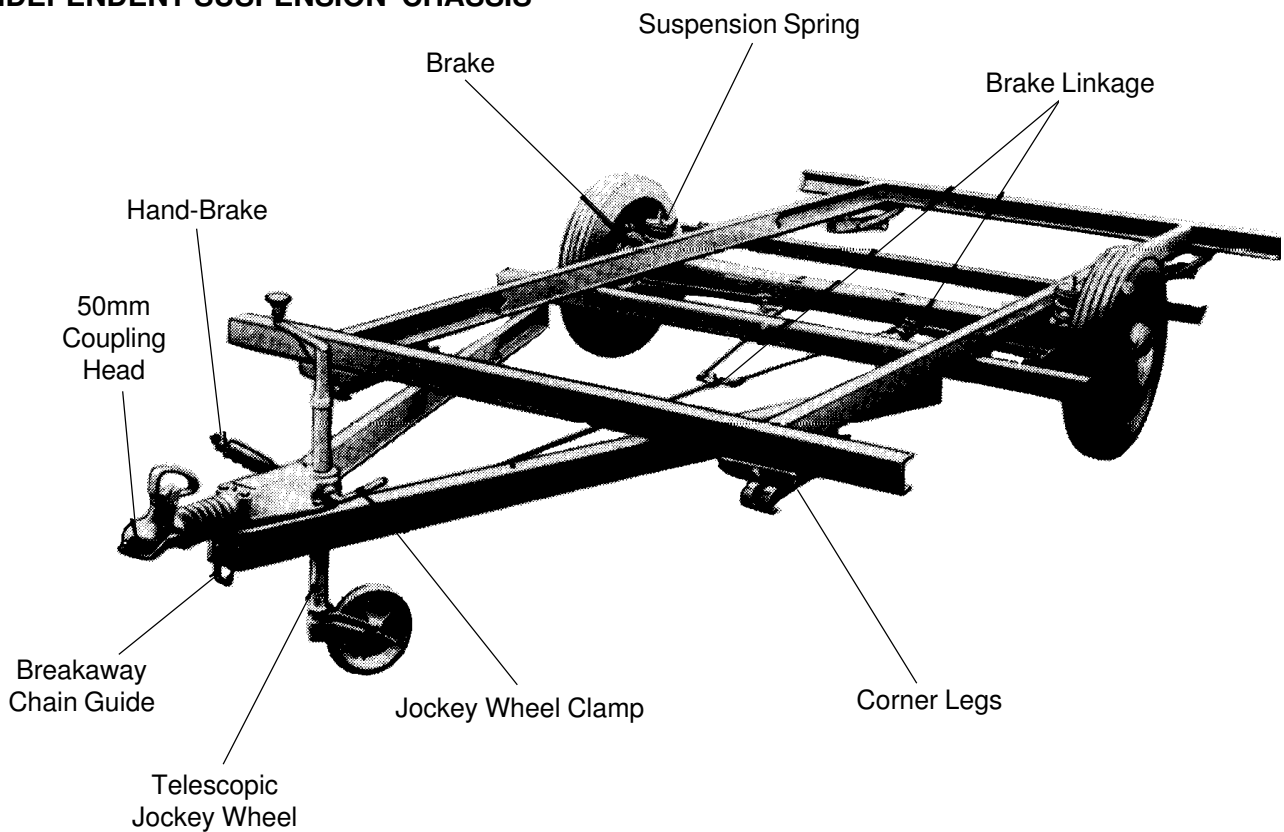
## ASBESTOS BRAKE LININGS

Care should be taken in handling brake shoes which contain asbestos and the relevant regulations adhered to.

**“BETA” OVERRUN ASSEMBLY**



**INDEPENDENT SUSPENSION CHASSIS**



PART	PART NO.	DESCRIPTION OF PART	QTY
12	CC 2194	Retaining Washer	1
13	CC 2118	Split Ring	2
14	04-22-092-100	Hydraulic Damper (Stabilus)	1
15	317 UNF	3/8" UNF x 2 1/4" Hex Bolt	1
16	CC 2293	Damper Bracket	1
17	CC 9308	Split Ring	2
18	CC 535	Rubber Washer	1
19	3008 UNF	3/8" UNF Binx Nut	1
20	CC 2201	Assembled Head and Shaft	1
21	CC 1454	Mills Pin	1
22		M.S. Pin	
23	CC 1470A	Safety Catch Assembly	1
24		Safety Catch Bolt M10 x 50	
25	CC 12610	50mm Plunger	1
26	CC 1265A	Outer Spring	1
27	C 1266A	Middle Spring	1
28	C 1653	Inner Spring	1
29	CC 1472A	Spring	1
30	CC 1471	Nylon Plunger	1
31	CC 2108	Release Handle	1*
32		Single Coil Washer M10 S.C.	1
33		Full Nut M10	1
34	CC 2760	PVC Boot	1
35	SP 182	Grease Nipple	2
36		Fixing Bolts, Spring Washer & Nut	2*
37	CC 2096	Body Casting	1*
38		Fixing Bolt, Spring Washer & Nut	2*
39	SP245	3/16" Washer (was SP481)	2*
40	SP 482	3/16" x 3/8" Screw	2*
41	300L UNF	3/8" UNF Locknut	2
42	2305 SC	3/8" Single Coil Washer	1
43	2305	3/8" MS Washer	1
44	CC 2485	Solenoid Cover Plate	1*
45	CC 2132	1/4" UNF x 3/8" Socket Set Screw	1
46	CC 2353	MS Pivot Tube	1
47	CC 2120	Collar	1
48	CC 2102	Overrun Brake Lever	1
49	CC 2203	Handbrake Sub-Assembly	1
50	CC 2548	Drive-in Rivet	2*
51	CC 2124A	Black Plastic Grip	1
52	CC 21288	Release Knob	1
53	CC 4147	Dirt Shroud (Stabilus)	1*
54	CC 3506M	Locking Handle (Jockey Wheel)	1
55	CC 914	Pressure Pad (Light) (Not Shown)	1
56	CC 715	Pressure Pad (Heavy) (Not Shown)	1

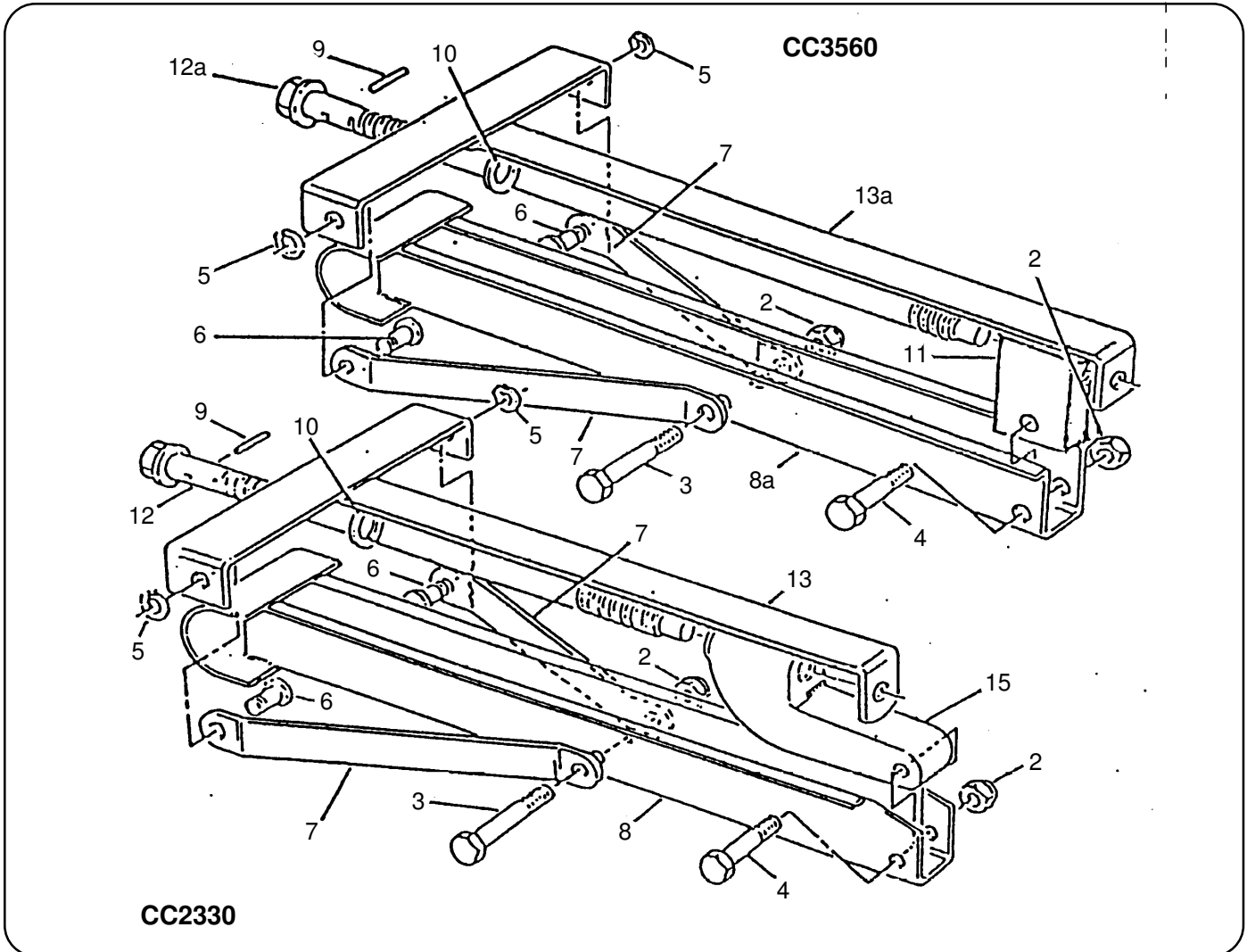
\* Check for availability

## INDEPENDENT SUSPENSION

PART	PART NO.	DESCRIPTION OF PART	QTY
1	CC2782	Brake Rod - 3/8" MS	1*
2	CC2884	Fork End	2
3	CC2884	Rod/Fork Assembly	2
	CC1749	Brake Return Spring	2
4	CC1787	Tab	2
	CC2049	Brake Rod Stop/Bolt Assembly	2
5	356 159	Damper Assembly (was SP 3608)	2
6		Suspension Spring	2
	CC1857	5" (Blue)	
	CC1746	6" (Black)	
	CC1747	6" (Red)	
	CC1927	6" (Brown)	
	CC2970	6" (Purple)	
7	CC2660	Spring Compression Bolt	2
8	356 193	Spring Place (was CC 1779)	2
9		Nut 5/8" B.S.F.	2
10	CC3887	Rebound Stop 5" Spring	2
	356 162	Rebound Stop 6" Spring (was CC 3857)	2
11	CC2242L	Swinging Arm Assembly MK III LH (8" Drum)	1
	CC2242R	Swinging Arm Assembly MK III RH (8" Drum)	1
	CC1698L	Swinging Arm Assembly MK II LH (8" Drum)	1
	CC1698R	Swinging Arm Assembly MK II RH (8" Drum)	1
12	356 157	Nylon Bush (was CC 2326)	8
13	356 158	Sleeve (was CC2376)	4
14	CC2882	Sleeve, Bolt, Nut, Tab Assembly	4*
15	CC2883	Brake Rod/Fork Assembly	2
16	CC3529	Compensator c/w Grease Nipple	2*
17	701 535	Compensator Pivot Bolt c/w Nut	2
18	377 433	Damper - Top Rubbers / Washer	2
19	377 434	Damper - Bottom Rubbers	2
20	556 295	Heavy Duty Washer	2

\* Check for availability

**CORNER LEGS (STEADIES)**



PART	PART NO.	DESCRIPTION OF PART	QTY
2/3	319 UNF/300B	2 1/2" x 3/8" UNF Bolt and Binx Nut	1
2/4	315 UNF/300B	2" x 3/8" UNF Bolt and Binx Nut	1
5/6	CC 602/CC 2762	Circlip and Pivot Pin	1
7	CC 2335	Side Arm	1
8	CC 2333	Leg (2330 Corner Steady)	1*
8a	CC 2337	Leg (CC 3560 Corner Steady)	1
9	CC 591	Mills Pin	1
10	CC 185	Washer	1
11	CC 4693	Nut	1
12	CC 2332	Screw (length 15 1/2") (CC 2330 Corner Steady)	1
12a	CC 651	Screw (length 17 3/4") (CC 3560 Corner Steady)	1
13	CC 2331	Base Plate (CC 2330 Corner Steady)	-*
13a	CC 3893	Base Plate (CC 3560 Corner Steady)	-*
15	CC 2338	Wing Nut	*

\* Check for availability

## Mechanical Brake for Caravans and Trailers

Ref	Description	4615-032RH	4615-036RH	4615-038RH	4622-240RH
		4615-033 LH 8 x 1 1/2ins 203 x 38mm	4615-037 LH 8 x 1 1/2ins 203 x 38mm	4615-039 LH 9 x 1 1/2ins 203 x 38mm	4622-241 LH 9 x 1 3/4ins 229 x 44mm
1	Micram Adjustor	25254	25254	+ See below	25254
2	Mask	25253	25253	25253	25253
3	Body	107282RH	32038	32038	32038
4	Inner Lever	3264-231	3624-231	3624-231	3624-231
5	Pin	3414-254	3414-254	3414-254	3414-254
6	Outer Lever (2)	115618	115618	115618	115618
7	Pin	3414-253	3414-253	3414-253	3414-253
8	Eye End	3761-420	4114055*	3761-420	3761-420
9	Boot	32324	32324	32324	32324
10	Pull off Spring	89726	89726	89726	33061
11	Backplate	4562-770 RH 4562-771 LH	4562-038 RH 4562-039 LH	4562-038 RH 4562-039 LH	4564-102 RH 4564-103 LH
12	Nut	K24001	K18609	K18609	K18609
13	Spring Washer	K19207	K19208	K19208	K19208
14	Abutment	25294	25294	25294	25294
15	Tension Spring	83462	25553	25553	25472
16	Brake Shoes	*	*	*	*
17	Expander	SSB75647	SSB75648	SSB75644	SSB75644
18	Pin	3443-232	-	3443-232	3443-232

\* Refer to Application Lists S101 or S825 + NB Ref 4615-038/9  
ñ Includes Pin Ref 18 Micram Part No. LB 04 HL031A Shoe S/A - 4523-092

Ref	Description	4622-242 RH	4622-244 RH	4632-028 RH	4632-286 RH
		4622-243 LH 9 x 1 3/4ins 229 x 44 mm	4622-245 LH 9 x 1 3/4ins 229 x 44mm	4622-245 LH 10 x 1 3/4ins 254 x 44mm	4632-287 LH 10 x 1 3/4ins 254 x 44mm
1	Micram Adjustor	34137	25254	25254	25254
2	Mask	25253	25253	25253	25253
3	Body	4151-619	32038	88645	88645
4	Inner Lever	3624-231	3624-231	88656	88645
5	Pin	3414-254	3414-254	3414-252	88653
6	Outer Lever (2)	115618	115618	88650	88650
7	Pin	3414-253	3414-253	3414-255	91139
8	Eye End	3761-420	3761-420	3761-422	104646
9	Boot	32324	32324	32324	32324
10	Pull off Spring	33061	33061	95393	95394
11	Backplate	4564-102 RH 4564-103 LH	4564-102 RH 4564-103 LH	4586-674 RH 4566-675 LH	102382 RH 102383 LH
12	Nut	K18609	K18609	K18609	K18609
13	Spring Washer	K19208	K19208	K19208	K19208
14	Abutment	25294	25294	25294	25294
15	Tension Spring	25472	25472	89963	25738
16	Brake Shoes	*	*	*	*
17	Expander	SSB75646	SSB75644	SSB75645	SSB75645
18	Pin	3443-232	3443-232	3443-232	-

\* Refer to Application Lists S101 or S825 + NB Ref 4615-038/9  
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