



AUSTRALIAN RAIL TRACK CORPORATION

INFRASTRUCTURE, STRATEGY AND PERFORMANCE

Engineering Standards and Documents

The following recommendation, together with attached supporting documentation, has been considered by the Manager Standards & Systems on 6th March 2007.

Documents:

Ref No:	08-08-10-056 - Systems & Equipment Approval
Subject:	'WRSA' ClawLock Points Mechanism
Dated:	17 th January 2007.

Prepared By: Arthur Haberlin, Signal Engineer - Equipment
Endorsed by: Trevor Moore, Signal Standards Engineer

Items Considered for Approval:

Manufacturer:	Westinghouse Rail Systems Australia.
Product:	ClawLock Point Mechanism
Item Identification:	See list 02-0610-032a .

The items in the form they were presented at the review date were approved for System & Equipment Approval to be used on all ARTC jurisdictions in accordance with the manufacturers published performance criteria and subject to the following.

Relevant ARTC Specifications:

Ref. No.	Title	Status	Date
SPS 02	Environmental Conditions	Issue1 Revision 2	May '05
SPS 16	Point Mechanisms	Issue 1 Revision 3	May '05
SMS 07	The Claw Lock Mechanism Overhaul	Issue 1 Revision 1	March '05

Specific Conditions of Approval:

- i.** Inspection procedures to confirm the engagement of the locking mechanism and the maintenance of sufficient retention force when point movement is detected complete shall be in place for points fitted with this mechanism.
- ii.** Only individual components from list **02-0610-032a** may be utilised in the assemblies listed and for application to the types of rail and turnout geometries shown.
- iii.** Approved components from different manufacturers may be combined only in accordance with ARTC specification SMS 07.

Certificate Issued to:

Westinghouse Rail Systems
Australia
179-185 Normanby Rd.
South Melbourne Vic. 3205

A general condition of approval is that the supplier remains accredited to ISO 9001 specifically for these products and ARTC is advised on a 12 monthly basis that accreditation is current. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011:2003.

Any subsequent change to the design, materials or manufacturing process is not covered by this approval.

Approved for use in the ARTC.



John Cowie
Manager Standards & Systems

APPROVAL No: 08-08-10-056

Approval Date: **6th March 2007**



AUSTRALIAN RAIL TRACK CORPORATION LTD

Ref No: 01-0610-032a

Date: 4th January 2007

Equipment Type Approval

Subject: 'Westinghouse' ClawLock Points Mechanism

The following lists the individual components (by piece number) of ClawLock Points Mechanisms manufactured by Westinghouse Rail Systems Australia (WRSa) which are type approved for use in signalling installations on ARTC infrastructure under Type Approval Certificate **08-08-10-056** subject only to any conditions shown on that Certificate and the Conditions of Use shown against individual types.

Piece No.	Quantity	Designation / Configuration	Conditions of Use
53kg rail 6100 or 10600 flexible switches			Main Drive
4070S5	2	ClawLock Housing	
4330332402	4	Housing Mounting Bolt (M20 x 80 thin head).	♣
3330393901	2	Locking Claw	
3330204601	2	Pin Assembly for locking claw	
801S5	2	Mechanism Cover	
2330333501	2	Switchblade Bracket	
4330332401	4	Bracket Mounting Bolt (M20 x 90 thin head).	♣
4330333601	2	Adaptor for switchblade bracket	
4330337001	2	Packing Set	
1330204807	1	Operating Bar (Complete assembly)	♣
60kg rail 6100 or 9150 flexible switches			Main Drive
684S5	2	ClawLock Housing	
4330332402	4	Housing Mounting Bolt (M20 x 80 thin head).	♣
3330393901	2	Locking Claw	
3330204601	2	Pin Assembly for locking claw	
801S5	2	Mechanism Cover	
2330204706	2	Switchblade Bracket	For 6100 flexible switches
2330204702	2		For 9150 flexible switches



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Piece No.	Quantity	Designation / Configuration	Conditions of Use
4330332401	4	Bracket Mounting Bolt (M20 x 90 thin head).	♣
3330322203	2	Adaptor for switchblade bracket	
4330322501	2	Packing Set	
1330204807	1	Operating Bar (Complete assembly)	♣ For 6100 flexible switches
1330204801	1		♣ For 9150 flexible switches
60kg rail 9150 flexible switches			Back Drive
684S5	2	ClawLock Housing	
4330332402	4	Housing Mounting Bolt (M20 x 80 thin head).	♣
3330393901	2	Locking Claw	
3330204601	2	Pin Assembly for locking claw	
801S5	2	Mechanism Cover	
2330204702	2	Switchblade Bracket	
4330332401	4	Bracket Mounting Bolt (M20 x 90 thin head).	♣
3330322203	2	Adaptor for switchblade bracket	
4330322501	2	Packing Set	
1330204802	2	Operating Bar (Complete assembly)	♣
Zu60kg asymmetric rail switches			Main Drive
684S5	2	ClawLock Housing	
5278/20-80	4	Housing Mounting Screw (M20 x 80 c' sink socket).	♣ Used except for 'In Bearer' layout.
5278/20-90		Housing Mounting Screw (M20 x 90 c' sink socket).	♣ Used only for 'In Bearer' layout.
951S5-LH	1ea	Locking Claw	
951S5-RH			
3330406201	2	Locking claw pin	¶
4330324501	2	Locking claw pin tab	
801S5	2	Mechanism Cover	
2330328001	2	Switchblade Bracket	
4330325101	4	Bracket Mounting Bolt	♣
4330327901	4	Shim Set	



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Piece No.	Quantity	Designation / Configuration	Conditions of Use
1330204801	1	Operating Bar (Complete assembly)	♣ Used except for 'In Bearer' layout.
1330204803	1	Operating Bar (Complete assembly)	♣ Use only for 'In Bearer' layouts.
Zu60kg asymmetric rail switches			Back Drive up to 800m (1 in 18.5)
684S5	2	ClawLock Housing	
5278/20-80	4	Housing Mounting Screw (M20 x 80 c'sink socket).	♣
951S5-LH	1ea	Locking Claw	
951S5-RH			
3330406201	2	Locking claw pin	¶
4330324501	2	Locking claw pin tab	
801S5	2	Mechanism Cover	
2330328001	2	Switchblade Bracket	
4330325101	4	Bracket Mounting Bolt	♣
4330327901	4	Shim	
1330204802	1	Operating Bar (Complete assembly)	♣
Zu60kg asymmetric rail switches			Back Drive over 800m (1 in 18.5)
684S5	2	ClawLock Housing	
5278/20-80	4	Housing Mounting Screw (M20 x 80 c'sink socket).	♣
951S5-LH	1ea	Locking Claws left and right hand.	
951S5-RH			
3330406201	2	Locking claw pin	¶
4330324501	2	Locking claw pin tab	
801S5	2	Mechanism Cover	
2330324801	2	Switchblade Bracket	
4330325101	4	Bracket Mounting Bolt	♣
4330327901	4	Shim	
1330204809	1	Operating Bar (Complete assembly)	♣

♣ Adjustment of fittings with M20 bolts to be secured by HARD-LOCK nuts having a minimum of one clear thread beyond second nut when run on hand tight.

¶ Replacement for p/n 4330324401 which may continue to be used in commissioned layouts.