

Useful Notes:

Westpac MK5

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Westpac: USEFUL FAULTING GUIDE PART 1 OF 5	
RELAYS IN THE TRACK TYPE UNITS	
RELAY	FUNCTION
CLCR	REPEATER OF CUR DOWN & LUR UP, (I.E: UNIT FREE OF ROUTE LOCKING)
CLCSR	STICK RELAY SIMILAR TO ABOVE BUT DOWN WHEN ROUTE LOCKING APPLIED
CULPR	REPEATER OF CUR DOWN & LUR DOWN (PROVES ROUTE CALLING & LOCKING COMPLETED)
CUPR	REPEATER OF CUR UP
CUR	CALLING ROUTE RELAY
CURCR	SIMULATES CUR RELEASE TO ADJACENT UNITS
LUPR	REPEATER OF LUR UP
LUR	ROUTE LOCKING RELAY
LUSR	SIMULATES LUR OPERATE SEQUENCE FOR ROUTE LIGHTS
UZR	ROUTE PRIMING RELAY
ADDITIONAL RELAYS IN GROUND FRAME UNITS	
LR	LOCK RELAY –GIVE RELEASE TO GF
LCR	REPEAT OF LR DE-ENERGISED
NCR(F) OR (L)	GF DETECTION AND LOCK PROVING
NCPR (L)	REPEATER OF ABOVE
ADDITIONAL RELAYS IN POINT UNITS	
CR	POINT SWITCH IN CENTRE
KLR	REPEATER OF MASTER R/ROOM POINT DETECTION RELAY
KLZPR	REP OF KLR BUT ALSO PROVING POINTS LOCKED WITH WZR DOWN
LR	POINT LOCK RELAY
LPR	REPEAT OF LR ENERGISED
RLUR	SIMULATES LUR OPERATE SEQUENCE FOR ROUTE LIGHTS
RXR	POINT SWITCH N OR R REPEAT RELAY
WZPR	REP OF WZR ENERGISED
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RELAYS IN THE TRACK TYPE UNITS	
RELAY	FUNCTION
ALSPR	REPEAT OF ALSR ENERGISED
AR	APPROACH RELAY; INFORMS DESTINATION UNIT OF A TRAIN ON BERTH TC (APPROACH LIT)
CULPR	CALLING & ROUTE LOCKING REPEAT R. USED TO OPERATE OFR WHEN INNER ROUTE CALLED
CURCR	REP (REPEAT) OF CUR DOWN
DACR	REP OF DAR DOWN
DAPR	REP OF DAR UP
(M) OR (S)	DESTINATION AVAILABLE RELAYS
(S)/(F) AYPR	STEADY/FLASHING AUTO SLOT REPEATING RELAY (<i>FOR FLASHING ASPECTS</i>)
(D)R/DR	DESTINATION RELAY
FKO	SHUNT RESISTOR FOR FKR
FKR	FINISH INDICATION R. IND COMPLETION OF ROUTE CALLING
MYR(P)	PRESET SIGNAL ASPECT REPLACEMENT RELAY
NUPR	REPEATER OF CLCSR UP
ODAR	OVERLAP DESTINATION AVAIL
OECR	REP OF OER DOWN
OEPR	REP OF OER UP
OER	OVERLAP ENTRANCE RELAY
OFCR	REP OF OFR DOWN
OFR	OVERLAP FINISH RELAY
OJR	OVERLAP TIME RELEASE
OJPR	REP OF OJR OPERATED
OLCR	OVERLAP CHECKING R
OLNR	OVERLAP LOCKING NORMAL
(F)PR	PROVIDES ONE BUTTON ONLY FEATURE
PSR	PASSED SIGNAL RELAY
UCCR	REP OF UCR UP
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Westpac: USEFUL FAULTING GUIDE PART 3 OF 5	
RELAYS IN THE TRACK TYPE UNITS	
RELAY	FUNCTION
UECR	REP OF UER DOWN
UEPR	REP OF UER UP
UER	ROUTE ENTRANCE RELAY, IDENTIFIES BEGINNING OF ROUTE
UESR	REP OF UER DOWN BUT DEPENDANT OF SR
(W) UFPR	REP OF (W)UFR UP
UFR	ROUTE FINISHED RELAY
UFZPR	REP OF ANY ONE UFR UP
UNR	ROUTE NORMAL (DIRECTION) RELAY
USCR	REP OF USR DOWN
USPR	REP OF USR UP
(O) USPR	REP OF (O)USR UP
USR	ROUTE SET RELAY
(O)USR	OVERLAP SET RELAY
USZR	SPECIAL OPPOSING ROUTE SET R
XNSR	OPPOSING DIRECTION ROUTE CANCELLING RELAY
YR(P)	SIGNAL REPLACEMENT RELAY (DENERGISED WHEN SIG BUTTON PULLED)
ZCR	REP OF ALL OPPOSING LOCKING RELAYS DOWN (UFR, UER ETC)
(F)CR	NO BUTTON PRESSED CHECKING
(M) or (S)	ENTRANCE REGISTERED ((S)R UP)
(PO) JCSR	POWER OFF TIME DELAY UP
(PO)JPR	POWER OFF RESTORED
(PO)JR	POWER OFF TIME RELAY
O(N)PR	OVERLAP SWINGING RELAY
(RT)R	RING TEST RELAY
UFRKPR	ROUTE FINISHED CALLING R
TPR (A OR F)	TPR (F-FIRST TC/A-APPROACH TC)
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NORMAL STATE OF PBI UNIT	
RELAY	POSITION & MEANING
(S)R	(DOWN) NO START ROUTE REQUESTED <i>(MAY APPEAR AS 'SR')</i>
(D)R	(DOWN) NO DESTINATION REQUESTED <i>(MAY APPEAR AS 'DR')</i>
(F)CR	(UP) NO BUTTON PRESSED
(M)ER	(DOWN) NO MAIN ENTRANCE RELAY
(S)ER	(DOWN) NO SUB ENTRANCE RELAY
DCR	(UP) NO DESTINATION BEING SET
DCPR	(UP) [REPEAT OF ABOVE]
UFKPR	(DOWN) ROUTE FINISHED CALLING
DJR	(UP) TIME RELAY RESET
N(O)PR	(DOWN) NO SWINGING OVERLAP SET
(PO)JSR	(UP) POWER OFF RESTORED
(PO)JCSR	(UP) POWER OFF TIMER OFF
(PO)JR	(UP) POWER OFF TIMER OFF
(RT)R	(UP) RING TEST NOT IN USE
FOLLOWING LIGHTS LIT ON PBI IND UNIT: (F)CR (B), (F)CR(N), SR PU, SR (B), DCR	
OPERATION OF PBI (SIGNAL ROUTE CLEARED)	
SIGNALLERS ACTIONS	INTERLOCKING ACTIONS
PUSHES ENTRANCE BUTTON	(F)SR UP
	(F)PR UP
	(F)CR DOWN (A BUTTON PRESSED REG)
	(S)R UP [BUTTON FLASHES]
SIGNALLER RELEASES BUTTON	(F)SR DOWN
	(F)PR DOWN
	(F)CR UP
DESTINATION BUTTON PRESSED	(D)R UP
	DCR DOWN
	DCPR DOWN
	(F)SR UP
	(F)PR UP
SIGNALLER RELEASES BUTTON	DJR [STARTS DISCHARGING]
	UFKPR UP
	DJR DOWN
	(S)R DOWN
	(D)R DOWN
SEE NEXT PART (5) FOR CONTINUATION	
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NORMAL STATE OF PBI UNIT	
OPERATION OF PBI (SIGNAL ROUTE CLEARED)	
SIGNALLERS ACTIONS	INTERLOCKING ACTIONS
>>>>>CONTINUED FROM PART 4>>>>>	DCR UP
<i>(NO SIGNALLER ACTIONS FROM RELEASING DESTINATION BUTTON)</i>	(F)CR UP
	DCPR UP
	DJR UP <i>(SEE UER CIRCUIT NEXT)</i>
UER CIRCUIT	
	(S)R UP (FROM PREVIOUS)
	UER UP <i>(SEE DAR CIRCUIT NEXT)</i>
DAR CIRCUIT	
	(S)R UP (FROM PREV)
	UER UP (FROM PREV)
	(D)R UP (FROM PREV)
	[CLCSR UP] FROM ANOTHER CIRCUIT
	(M) OR (S) DAR UP <i>(SEE UFR CIRCUIT NEXT)</i>
UFR CIRCUIT	
	DAR UP (FROM PREV)
	UFR UP
	(M) (W) OR (C) IS THEN SELECTED BY WHICH TC'S ARE CLEAR OR OCCUPIED
SIGNAL WILL CLEAR ONCE ALL POINTS, TRACK CIRCUITS, OVERLAPS, ROUTES ETC HAVE BEEN SELECTED AND PROVED.	
PLEASE NOTE THIS SELECTION GUIDE IS NOT EXHAUSTIVE, THERE ARE MANY OTHER RELAYS THAT NEED TO BE ENERGISED OR DE-ENERGISED ALSO.	
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