

Exhibit R

QSI MATERIALS INCORPORATED INTO JMRI SOFTWARE

QSI Published Manual

dated 16 February 2005, page 161

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ID	Type	States	ID	States
0	Null Output	All	102	All
1	Whistle	LA Toggled	103	All
3	Bell	LA Toggled	104	All
5	Dynamic Brakes	LA, SD, Toggled	105	All
8	Blower Hiss/Diesel Cooling Fans	LA Toggled	107	All
9	Long Air Let-off	TA, Momentary	108	All
10	Short Air Let-off	TA, Momentary	109	All
12	Pop-off	TA, NFF/NFR	110	All
13	Blow Down	TA, NFF/NFR	111	All
14	Injector	TA, NFF/NFR	144	NFF/NFR
64	Mute	LA, SD, Toggled	145	All
65	Doppler Shift	TA, FWD/REV	176	FWD/REV
96	Directional Headlight	LA Toggled	178	All
97	Directional Reverse Light	LA Toggled	177	All
98	Headlight	LA Toggled	211	All
99	Dim Headlight	LA Toggled	215	All
100	Reverse Light	LA Toggled	216	All
101	Automatic Cab Lights	LA Toggled	217	All
			102	LA Toggled
			103	LA Toggled
			104	LA Toggled
			105	LA Toggled
			107	LA Toggled
			108	LA Toggled
			109	LA Toggled
			110	LA Toggled
			111	LA Toggled
			144	PA, Momentary
			145	PA, Progressive
			176	TA, SD, Toggled
			178	TA, Momentary
			177	TA, SD, Toggled
			211	TA, Enable and TA, Momentary
			215	TA, Momentary
			216	TA, Momentary
			217	LA Toggled

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"Outout 7 - Forward/Reverse Only" CVname="53.7.0" CV="53"
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  choice="Long Air Let-Off" value="9" />
  choice="Short Air Let-Off" />
  choice="Mute" value="64" />
  choice="Doppler Shift" />
  choice="Headlight" value="98" />
  choice="Dim Headlight" />
  choice="Reverse Light" />
  choice="Automatic Cab Lights" />
  choice="Directional Mars Lights" />
  choice="Mars Light" />
  choice="Strobe Mars Light" />
  choice="Number Board Lights" />
  choice="Directional Headlight + Directional Mars Light" />
  choice="Directional Headlight + Directional Ditch Lights" />
  choice="Ditch Lights" />
  choice="Strobe Ditch Lights" />
  choice="Cruise Control" value="177" />
  choice="Scale Worn Report and Status Report" />
  choice="Coupler Effect" value="211" />
  choice="Squealing Brakes" value="215" />
  choice="Squealing Brakes + Air Brakes" />
  
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choice="Headlight" value="98" />
choice="Dim Headlight" />
choice="Reverse Light" />
choice="Automatic Cab Lights" />
choice="Directional Mars Lights" />
choice="Mars Light" />
choice="Strobe Mars Light" />
choice="Number Board Lights" />
choice="Directional Headlight + Directional Mars Light" />
choice="Directional Headlight + Directional Ditch Lights" />
choice="Ditch Lights" />
choice="Strobe Ditch Lights" />
choice="Cruise Control" value="177" />
choice="Scale Worn Report and Status Report" />
choice="Coupler Effect" value="211" />
choice="Squealing Brakes" value="215" />
choice="Squealing Brakes + Air Brakes" />
  
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