Exhibit Z

QSI MATERIALS INCORPORATED INTO JMRI SOFTWARE

QSI Published Manual
dated 16 February 2005, page 161
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Jacobsen
Court Doc 237-31, Exhibit AD, page 12
October 2008


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<ivariable label="Output 11 - Forward/Reverse Only" CVname="53.11.0"
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    <ienumChoice choice="Mars Light" />
    <ienumChoice choice="Strobe Mars Light" />
    <ienumChoice choice="Number Board Lights" />
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    <ienumChoice choice="Directional Headlight + Directional Ditch Lights" />
    <ienumChoice choice="Directional Ditch Lights" />
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    <ienumChoice choice="Squealing Brakes" value="215" />
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Feature ID	Feature	Signal Type	Allowed States	Feature ID	Feature	Signal Type	Allowed States
0	Null Output		All	102	Directional Mars Light	LA Toggled	All
1	Whistle	LA Toggled	All	103	Mars Light	LA Toggled	All
3	Bell	LA Toggled	All	104	Strobe Mars Light	LA Toggled	All
5	Dynamic Brakes	LA-SD Toggled	All	105	Number Board Lights	LA Toggled	All
8	Blower Hiss/Diesel Cooling Fans	LA Toggled	All	107	Directional Headlight + Directional Mars Light	LA Toggled	All
9	Long Air Let-off	TA Momentary	All	108	Directional Headlight + Directional Ditch Lights	LA Toggled	All
10	Short Air Let-off	TA Momentary	All	109	Directional Ditch Lights	LA Toggled	All
12	Pop-off	TA Momentary	NFF/NFR	110	Ditch Lights	LA Toggled	All
13	Blow Down	TA Momentary	NFF/NFR	111	Strobe Ditch Lights	LA Toggled	All
14	Injector	TA Momentary	NFF/NFR	144	Start Up	PA Momentary	NFF
64	Mute	LA-SD Toggled	All	145	Shut Down	PA Progressive	NFF
65	Doppler Shift	TA Momentary	FWD/REV	176	Air Brakes	TA-SD Toggled	FWD
96	Directional Headlight	LA Toggled	All	178	Status Report	TA Momentary	FWD/NFR
97	Directional Reverse Light	LA Toggled	All	177	Cruise Control	TA-SD Toggled	FWD/REV
98	Headlight	LA Toggled	All	211	Coupler Effect	TA Enable and TA Momentary	All
99	Dim Headlight	LA Toggled	All	215	Squealing Brakes	TA Momentary	FWD/REV
100	Reverse Light	LA Toggled	All	216	Squealing Brakes + Air Brakes	TA Momentary	FWD/REV
101	Automatic Cab Lights	LA Toggled	All	217	Pumps	LA Toggled	NFF/NFR