## Exhibit W

## **QSI MATERIALS INCORPORATED INTO JMRI SOFTWARE**

Court Doc 237-31, Exhibit AD, page 11 QSI Published Manual dated 16 February 2005, page 161 Copyright TX 6-445-094

October 2008

Jacobsen

/-	019	<pre>ivariable label=" - Neutral Only" CVname="53.9.1" CV="53" PI="9" SI="100 detxult="4" comment="051" item="CV53.9.1"&gt; CV="53" PI="9" SI="100" SI</pre>		KienumCholoe choice Comamic Brakes value="5"/>	<pre></pre> <pre><th>choice (Mute) value="64"/&gt; choice (Headlight) value="98"/&gt; choice (Headlight) value="98"/&gt;</th><th>Section 1 Severse Light /&gt; Leximonic Choice Sultomatic Cab Lights /&gt; Lieximonic Choice Sultomatic Cab Lights /&gt; Light /&gt;</th><th>*"Mars Light"/&gt;</th><th>X tenum Shoice choice - thumber Board Lights -&gt;</th><th><pre><li><li><li><li></li></li></li></li></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre></th></pre> <pre></pre> <pre><!--</th--><th>Choice che ee Directional Ditch Lights 48</th><th><pre><!--enumchasee enoise = "Ditch Lights"./--> <!--enumchase choice="Stobe Ditch Lights"/--></pre></th><th><pre><lenumchoice "start="" choice="" ups="" value="144"></lenumchoice> <iannumchoice c<="" choice="" th=""><th>choice="Scale mph Report and Status Report" value="17</th><th><pre><lenumchoide choide="" clouder="" effects="" value="211"></lenumchoide> <ienumchoide choide("fumps")value="217"></ienumchoide></pre></th><th>/</th><th></th><th>of 2</th><th></th></iannumchoice></pre></th></pre>	choice (Mute) value="64"/> choice (Headlight) value="98"/> choice (Headlight) value="98"/>	Section 1 Severse Light /> Leximonic Choice Sultomatic Cab Lights /> Lieximonic Choice Sultomatic Cab Lights /> Light />	*"Mars Light"/>	X tenum Shoice choice - thumber Board Lights ->	<pre><li><li><li><li></li></li></li></li></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre>	Choice che ee Directional Ditch Lights 48	<pre><!--enumchasee enoise = "Ditch Lights"./--> <!--enumchase choice="Stobe Ditch Lights"/--></pre>	<pre><lenumchoice "start="" choice="" ups="" value="144"></lenumchoice> <iannumchoice c<="" choice="" th=""><th>choice="Scale mph Report and Status Report" value="17</th><th><pre><lenumchoide choide="" clouder="" effects="" value="211"></lenumchoide> <ienumchoide choide("fumps")value="217"></ienumchoide></pre></th><th>/</th><th></th><th>of 2</th><th></th></iannumchoice></pre>	choice="Scale mph Report and Status Report" value="17	<pre><lenumchoide choide="" clouder="" effects="" value="211"></lenumchoide> <ienumchoide choide("fumps")value="217"></ienumchoide></pre>	/		of 2	
	Allowed States		All	₽₹	₹/	₩					MFFINER	NFF/NFR	FWDAREV	FWD/REV NFF/NFR	FWD/REV	₩	FWD/BÆV	FWD/REV	NFF/NFR
	Si <del>gnal Ty</del> pe	LA Toggled	LA Toggled	LA Toggled	LA Toggled	LA Toggled	LA Toggled	LA Toggled	Toggled	LA Toggled	Momentany	Flægressive	TA-SD Toggled	TA Momentary	TA-S0	TA Enable and TA Momentary	TA	TA Momentary CA Toggled	LA Toggled
	Feature	Directional Mars Light	Mars Light	Strobe Mars Light	Number Board Lights	Directional Headlight + Directional Mars Light	enectional Headlight + Directional Ditch Lights	Directional Ditch Lights	Ditch Lights	Strake Ditah	Start Up	Shut Down	Air-Grakes	Status Beport	Oruise Control	Coupler Effect	Squealing Brakes	Squealing Brakes + Air Brakes	Pumps
$\setminus$	Feature ID	JOL	103	<b>)</b> 501	) 105	)	) 801	601	110	111	144	145	176	178		217	215	216	217
	Allowed States	All	AW	All	₩	Β	Β	MA	NYEMPR	NFF/NFR	NFF/NFR	All	FWD/REV	HV.	All	<u>F</u>	₩	M	All
	Signal Type		LA Toggled	LA Toggled	>LA SD- Toggled	LA Tøggled	TA Momentary	TA Momentary	TA Momentary	TA Momentary	TA Momentary	LA-SD Toggled	TA Momentary	LA Toggled	LA Toggled	LA Toggled	LA Toggled	LA Toggled	LA Toggled
	Feature	Null Output	Whistle	Bell	Dynamic Brakes	Blower Hiss/Diesel Cooling Fans	Cong Air Let-off	Short Air Let-off	Pop-off	Blow Down	Injector	Mute	Doppler Shift	Directional Headlight	Directional Reverse Light	Headlight	Dim Headlight	Reverse Light	Automatic Cab Lights
	Feature ID	0	1	ю	S.	ω	o	10	12	13	14	64	92	96	26	86	66	100	101

16 February 2005