

Winch Calculations

RR = rolling resistance GR = gradient resistance DR = damage resistance SF = safety factor EP = estimated pull

WOV = weight of vehicle GF = ground factor DOS = degrees of slope NDW = number of damaged wheels

TNW = total number of wheels (Road = 25 Grass = 7 Mud = 2)

<u>Wov</u>	<u>Ground</u>	<u>Slope</u>	<u>Damage</u>
<i>Calculations</i>	<i>Figures</i>		<i>Answers</i>
<ul style="list-style-type: none"> • $RR = \frac{WOV}{GF}$ • $GR = \frac{WOV \times DOS}{60}$ • $DR = \frac{WOV \times NDW}{TNW}$ • $SF = \frac{RR + GR + DR}{4}$ • EP= RR + GR + DR + SF • ----- • $WOV \times A = \frac{\quad}{B}$ • 			