



Calculated Weight and Balance
 (33019 Removable Ballast)

Model No. :	SGS 2-33	Serial No. :	Registration No. :
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	Weight [lb.] (W1)	Station [in.]	Moment [in·lb] (M1)
Empty Weight (from Wt. & Bal. dated _____)			

Note: Weight × Station = Moment

Optional Equipment Added:	Weight [lb.] (W2)	Station [in.]	Moment [in·lb] (M2)
a. P/N 33019, Removable Ballast Installation	19.50	10.43	203.39

Note: 33019, Removable Ballast Installation, shown in figure 1.

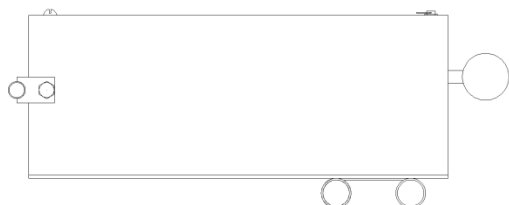


Figure 1: 33019, Removable Ballast Installation

Select Gross Weight*

1040# Gross Weight

1080# Gross Weight

Station [in.] (S1)	
$\frac{(M1 + M2)}{(W1 + W2)} = S1$	$\frac{(\quad + 203.39)}{(\quad + 19.50)} = \quad \text{in.}$

Max. Weight Aft Pilot With 220 lb. Forward Pilot	
$\text{Max. Gross Wt.}^* - ((W1 + W2) + 220)$	$- ((\quad + \quad) + 220) = \quad \text{lbs.}$
*1040# or 1080# Maximum Gross Weight (Select Above)	

Min. Weight Aft Pilot With 100 lb. Forward Pilot	
$\frac{(W1 + W2) \times (S1 - 86.10)}{11.40} - 372$	$\frac{(\quad + \quad) \times (\quad - 86.10)}{11.40} - 372$ $= \quad \text{lbs.}$

Min. Weight Forward Pilot – Solo	
$\frac{(W1 + W2) \times (S1 - 86.10)}{42.30}$	$\frac{(\quad + \quad) \times (\quad - 86.10)}{42.30} = \quad \text{lbs.}$

Note: The above minimum and maximum pilot weights are valid ONLY when the removable ballast weight is in place.

Calculated by: _____ Date: _____

Checked by: _____ Date: _____