

**Pewee Valley Fire Department  
Pump Reference Sheet**

rev. 6-16-03

<u>Hose Load</u>	<u>Pump at *</u>	<i>*Start at pressure listed raise or lower as requested.</i>
Booster	<b>200</b> psi	
8433 Front Line	<b>150</b> psi	
Crosslay	<b>150</b> psi	
Rear 2 ½" at 250 gpm (attack mode)	<b>130</b> (comb.) <b>80</b> (smooth bore)	
Rear 2 ½" at 350 gpm (defense, anchored)	<b>150</b> (comb.) <b>100</b> (smooth bore)	
2 ½" with thief and bundle	150 + 15 psi per 100' of 2 ½ " hose used	
Relay pumping	<b>50</b> psi at receiving pumper	
Sprinkler or Standpipe	<b>150</b> + 5 psi per floor	
Deck Gun: on ground, at nozzle** on truck, at pump:	<b>80</b> psi for smooth bore, <b>100</b> psi for comb. <b>120</b> psi for smooth bore, <b>140</b> psi for comb.	

\*\*When deck gun is on the ground, do not use 2" tip or 1000 gpm setting on comb. nozzle

**-The person at the nozzle is  
the final judge of proper pressure**

Positive Water Supply

- Maintain **20** psi residual
- At **20** psi, notify IC:  
"Pumping at Maximum Capacity"

**-Raise or Lower pressure in 20 lb increments**

- Never exceed **270** psi on attack lines
- Never exceed **150** psi on 5" supply lines,  
or lines supplying other pumps

Smooth Bore nozzles: **50** psi  
Combination nozzles: **100** psi  
Low psi comb. nozzles: **50** psi

<u>Hose Size</u>	<u>Friction Loss per 100' (at max. flow)</u>	<u>Max. Flow</u>
1"	50 psi	50 gpm
1¾"	<b>60 psi</b>	<b>200 gpm</b>
2"	30 psi	200 gpm
2 ½"	<b>15 psi</b>	<b>250 gpm</b>
3" (attack use)	5 psi	250 gpm
3" (supply use)	20 psi	500 gpm
5"	<b>7 psi</b>	<b>1000 gpm</b>

Deck Gun (at 80 psi)

<u>Tip Size</u>	<u>Flow</u>
1 3/8"	500 gpm
1 1/2"	600 gpm
1 3/4"	800 gpm
2"	1000 gpm

Ballpark Rules for Quick Figuring

- Supply Hoses: Friction Loss =  
"7 per section" psi
- 1 ¾" lines w/ comb. nozzles:  
"Pump psi = GPM pumped"