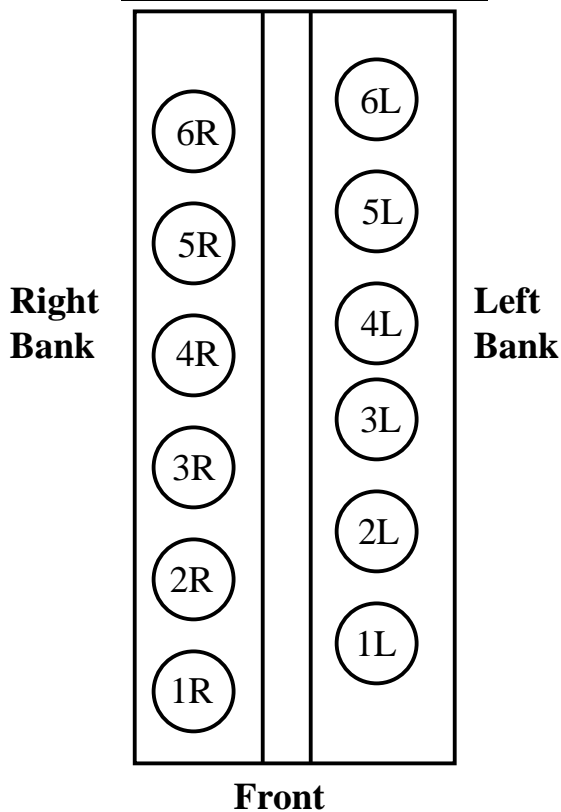


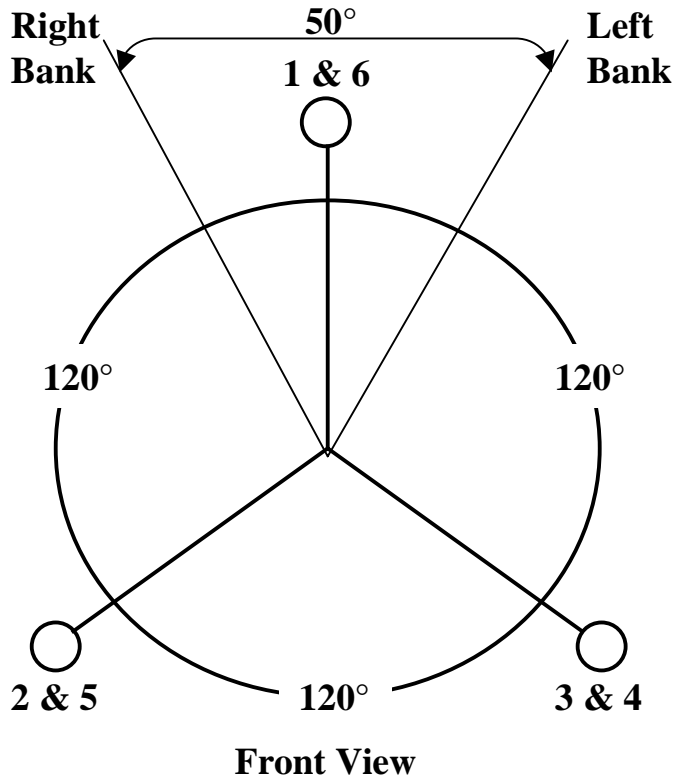
Engine Specifications:

Engine Model	QST30-G
Type	4 Cycle Diesel
No. of Cylinders	12
Bore of Cylinders	140 mm (5.51 in.)
Stroke	165 mm (6.50 in.)
Reciprocating wt/cyl	6.8 kg (15.04 Lbs)
Connecting Rod Length	305 mm (12.00 in.)

Cylinder Arrangement



Crankshaft Arrangement



Firing Order:

Right Hand Engine Rotation

1R-1L-5R-5L-3R-3L-6R-6L-2R-2L-4R-4L

Crank Interval between Successive Firing

50°-70°-50°-70°-50°-70°-50°-70°-50°-70°-50°-70°