

TCP Gun Lift Subs are used when perforating guns need to be connected together vertically on the drill floor. It consists of a standard 2ft (0.61m) N-80 pup joint. An elevator disc is screwed into the top of the pup joint and welded for security. This is where the rig elevators latch on and supports the entire gun weight. The lift sub connector at the bottom is removable allowing multi-functional use with different gun sizes.

ASSEMBLY PART NUMBERS

The part numbers in the following table include the respective lift sub connector.

Gun Size (in)[mm]	2-3/8" (60mm) EUE		2-7/8" (73mm) EUE		Booster-to-Booster Gun Connection Compatibility
	Assembly Part Number	Max. Gun Weight (lb)[kg]	Assembly Part Number	Max. Gun Weight (lb)[kg]	
1-3/8 [35]	0227-010-23B	59,000 [26,800]†	-	-	1-3/8" Top Sub and Tandem Adapter
1-9/16 [40]	0220-010-23B	80,000 [36,300]†	-	-	1-9/16" Tandem Adapter 1-9/16", 2" and 2-1/2" Top Sub
2 [51]	0222-010-23B	104,000 [47,200]	-	-	2" Tandem Adapter
2-1/2 [64]	0228-010-23B	80,000 [36,300]†	-	-	2-1/2" Tandem Adapter 2-3/4" and 2-7/8" Top Sub
2-3/4 [70]	0462-010-23B	104,000 [47,200]	-	-	2-3/4" Tandem Adapter
2-7/8 [73]	0464-010-23B	104,000 [47,200]	-	-	2-7/8" Tandem Adapter
3-1/8 [79]	0402-010-23B	104,000 [47,200]	0402-010-28B	145,000 [65,800]	3-1/8" Tandem Adapter 3-1/8" to 7" Top Sub
3-3/8 [86]	0403-010-23B	104,000 [47,200]	0403-010-28B	145,000 [65,800]	3-3/8" Tandem Adapter
4 [102]	0404-010-23B	104,000 [47,200]	0404-010-28B	145,000 [65,800]	4" Tandem Adapter
4-1/2 [114]	0414-010-23B	104,000 [47,200]	0414-010-28B	145,000 [65,800]	4-1/2" Tandem Adapter
4-5/8 [117]	0416-010-23B	104,000 [47,200]	0416-010-28B	145,000 [65,800]	4-5/8" Tandem Adapter
7 [178]	0407-010-23B	104,000 [47,200]	0407-010-28B	145,000 [65,800]	7" Tandem Adapter

† Gun carrier is the limiting factor

LIFT SUB CONNECTOR PART NUMBERS

Lift sub connectors can be purchased separately such that easy changes can be made at the wellsite when rigging up tandem and top guns with differing thread profiles.

Gun Size (in)[mm]	2-3/8" (60mm) Lift Sub Connector	2-7/8" (73mm) Lift Sub Connector
1-3/8 [35]	0227-001-23B	-
1-9/16 [40]	0220-001-23B	-
2 [51]	0222-001-23B	-
2-1/2 [64]	0228-001-23B	-
2-3/4 [70]	0462-001-23B	-
2-7/8 [73]	0464-001-23B	-
3-1/8 [79]	0402-001-23B	0402-001-28B
3-3/8 [86]	0403-001-23B	0403-001-28B
4 [102] Scalloped	0404-001-23B	0404-001-28B
4-1/2 [114]	0414-001-23B	0414-001-28B
4-5/8 [117]	0416-001-23B	0416-001-28B
7 [178]	0407-001-23B	0407-001-28B

