

BOLT LENGTH CHART

047 Series Bolt-On Sweeps on light- and medium-duty cultivators

| APPLICATION | TOP BOLT | BOTTOM BOLT | SPECIAL NOTES |
|-----------------------------------------------------------|----------------|----------------|-----------------------------------------|
| 1" Bourgault shank without seed boot | 1/2" x 2" | 1/2" x 2" | Plow bolts, no lock washer, regular nut |
| 1" Bourgault shank with Bourgault round tube seed boot | 1/2" x 2" | 1/2" x 2" | Plow bolts, no lock washer, regular nut |
| 1" Bourgault shank with Bourgault square tube seed boot | 1/2" x 2-1/4" | 1/2" x 2" | Plow bolts, no lock washer, regular nut |
| 7/8" Bourgault shank without seed boot | 1/2" x 1-3/4" | 1/2" x 1-3/4" | Plow bolts, no lock washer, regular nut |
| 7/8" Bourgault shank with Bourgault round tube seed boot | 1/2" x 2" | 1/2" x 1-3/4" | Plow bolts, no lock washer, regular nut |
| 7/8" Bourgault shank with Bourgault square tube seed boot | 1/2" x 2-1/4" | 1/2" x 1-3/4" | Plow bolts, no lock washer, regular nut |
| 3/4" Bourgault shank without seed boot | 1/2" x 1-3/4" | 1/2" x 1-3/4" | Plow bolts, no lock washer, regular nut |
| 3/4" Bourgault shank with Bourgault round tube seed boot | 1/2" x 1-3/4" | 1/2" x 1-3/4" | Plow bolts, no lock washer, regular nut |
| 3/4" Bourgault shank with Bourgault square tube seed boot | 1/2" x 2" | 1/2" x 1-3/4" | Plow bolts, no lock washer, regular nut |
| 3/4" Degelman shank without seed boot | 7/16" x 1-3/4" | 7/16" x 1-3/4" | Plow bolts, no lock washer, regular nut |
| 7/8" Flexi-Coil shank without seed boot | 7/16" x 1-3/4" | 7/16" x 1-3/4" | Plow bolts, no lock washer, regular nut |
| 1/2" Morris Challenger shank without seed boot | 3/8" x 1-1/2" | 3/8" x 1-1/2" | Plow bolts, no lock washer, regular nut |
| 5/8" Morris Challenger shank without seed boot | 3/8" x 1-1/2" | 3/8" x 1-1/2" | Plow bolts, no lock washer, regular nut |
| 5/8" John Deere shank without seed boot | 7/16" x 1-1/2" | 7/16" x 1-1/2" | Plow bolts, no lock washer, regular nut |
| 9/16" CIL shank without seed boot | 3/8" x 1-1/2" | 3/8" x 1-1/2" | Plow bolts, no lock washer, regular nut |
| 1/2" Case IH shank without seed boot | 7/16" x 1-1/2" | 7/16" x 1-1/2" | Plow bolts, no lock washer, regular nut |

043 & 050 Series Bolt-On Sweeps on heavy-duty chisel plows

| APPLICATION | TOP BOLT | BOTTOM BOLT | SPECIAL NOTES |
|-------------------------------------------------------------------|---------------|---------------|-----------------------------------------|
| 1" Bourgault shank without seed boot | 1/2" X 2" | 1/2" X 2" | Plow bolts, no lock washer, regular nut |
| 1" Bourgault shank with Bourgault splitter seed boot #6505-42 | 1/2" X 2-1/4" | 1/2" X 2" | Plow bolts, no lock washer, regular nut |
| 1-1/4" Bourgault shank without seed boot | 1/2" X 2-1/4" | 1/2" X 2-1/4" | Plow bolts, no lock washer, regular nut |
| 1-1/4" Bourgault shank with Bourgault splitter seed boot #6505-42 | 1/2" X 2-1/2" | 1/2" X 2-1/4" | Plow bolts, no lock washer, regular nut |
| 1" John Deere shank without seed boot | 1/2" X 1-3/4" | 1/2" X 2" | Plow bolts, no lock washer, regular nut |
| 3/4" Degelman shank (50°) without seed boot | 1/2" X 1-3/4" | 1/2" X 1-3/4" | Plow bolts, no lock washer, regular nut |
| 1-1/4" Flexi-Coil shank without seed boot | 1/2" X 2-1/4" | 1/2" X 2-1/4" | Plow bolts, no lock washer, regular nut |
| 1" Morris shank (43°) without seed boot | 1/2" X 2" | 1/2" X 2" | Plow bolts, no lock washer, regular nut |
| 7/8" Shulte shank without seed boot | 1/2" X 2" | 1/2" X 2" | Plow bolts, no lock washer, regular nut |
| 1-1/4" CIL shank without seed boot | 1/2" X 2-1/4" | 1/2" X 2-1/4" | Plow bolts, no lock washer, regular nut |
| 1-1/4" IH shank without seed boot | 1/2" X 2-1/4" | 1/2" X 2-1/4" | Plow bolts, no lock washer, regular nut |
| 3/4" Case IH Vibra shank without seed boot | 1/2" x 1-3/4" | 1/2" x 1-3/4" | Plow bolts, no lock washer, regular nut |

NOTES: 1) All Bourgault sweeps come with 1/2" holes. Shanks with 3/8" and 7/16" holes require special oversize (O/S) head plow bolts. 2) When bolting a seed boot, usually it is the bottom bolt which bolts the seed boot to the shank; the top bolt should remain the same length as listed above. If the seed boot cross section at the point the bolt goes through is 1/8" thick or less, use the same bolt length as above without the lock washer. If the seed boot cross section at the point the bolt goes through is greater than 1/8", increase bolt length by adding the measured cross section of the seed boot at the point the bolt goes through to the above lengths.

200 Series QC Adapter – 200-QCA-4700

| APPLICATION | TOP BOLT | BOTTOM BOLT | SPECIAL NOTES |
|-----------------------------------------------------------|--------------------------------|------------------------------|-----------------------------------|
| 1" Bourgault shank without seed boot | 1/2" x 2-1/4" no lock washer | 1/2" x 2-1/4" no lock washer | Hex-head bolts |
| 1" Bourgault shank with round tube Bourgault seed boot | 1/2" x 2-1/4" no lock washer | 1/2" x 2" no lock washer | Hex-head bolts, grade 8 required |
| 1" Bourgault shank with square tube Bourgault seed boot | 1/2" x 2" no lock washer | 1/2" x 2-1/2" no lock washer | Hex-head bolts, grade 8 required |
| 7/8" Bourgault shank without seed boot | 1/2" x 2" no lock washer | 1/2" x 2" no lock washer | Hex-head bolts |
| 7/8" Bourgault shank with round tube Bourgault seed boot | 1/2" x 2-1/4" no lock washer | 1/2" x 2" no lock washer | Hex-head bolts, grade 8 required |
| 7/8" Bourgault shank with square tube Bourgault seed boot | 1/2" x 2-1/4" no lock washer | 1/2" x 2" no lock washer | Hex-head bolts, grade 8 required |
| 3/4" Bourgault shank without seed boot | 1/2" x 2" no lock washer | 1/2" x 2" no lock washer | Hex-head bolts |
| 3/4" Bourgault shank with round tube Bourgault seed boot | 1/2" x 2" c/w with lock washer | 1/2" x 1-3/4" no lock washer | Hex-head bolts |
| 3/4" Bourgault shank with square tube Bourgault seed boot | 1/2" x 2-1/4" with lock washer | 1/2" x 1-3/4" no lock washer | Hex-head bolts |
| 3/4" Ezee-On shank without seed boot | 7/16" x 1-3/4" | 7/16" x 1-3/4" | Hex-head bolts (see note 3 below) |
| 7/8" Ezee-On shank without seed boot | 7/16" x 2" | 7/16" x 2" | Hex-head bolts (see note 3 below) |

NOTES: 1) Above bolt lengths are determined using prevailing torque side locknuts – grade C. This special locknut is necessary to keep the adapter tight. It is very important to use it, especially in stony or hard ground conditions. 2) Grade 8 bolts are required with the Bourgault 7/8" and 1" shanks where seed boots are involved. If not used, bolt loosening may occur. 3) Shanks with 7/16" holes require the special oversize head hex bolt.

200 Series QC Adapter – 200-QCA-4710

| APPLICATION | TOP BOLT | BOTTOM BOLT | SPECIAL NOTES |
|--------------------------------------------------|-------------------------------|-------------------------------|------------------------------|
| 3/4" and 7/8" Flexi-Coil shank without seed boot | 7/16" x 2-1/4" no lock washer | 7/16" x 2-1/4" no lock washer | Plow bolt (see note 2 below) |
| 7/8" Flexi-Coil shank with 5649 seed boot | 7/16" x 2-1/2" no lock washer | 7/16" x 3-7/8" no lock washer | Plow bolt (see note 2 below) |
| 1/2" Morris Challenger shank without seed boot | 3/8" x 1-3/4" no lock washer | 3/8" x 1-3/4" no lock washer | Plow bolt (see note 2 below) |
| 5/8" Morris Challenger shank without seed boot | 3/8" x 2" no lock washer | 3/8" x 2" no lock washer | Plow bolt (see note 2 below) |
| 7/8" Morris shank without seed boot | 7/16" x 2-1/4" no lock washer | 7/16" x 2-1/4" no lock washer | Plow bolt (see note 2 below) |
| 9/16" CIL shank without seed boot | 3/8" x 2" no lock washer | 3/8" x 2" no lock washer | Plow bolt (see note 2 below) |
| 5/8" John Deere shank without seed boot | 7/16" x 2" no lock washer | 7/16" x 2" no lock washer | Plow bolt (see note 2 below) |
| 3/4" Degelman shank | 7/16" x 2-1/4" no lock washer | 7/16" x 2-1/4" no lock washer | Plow bolt (see note 2 below) |
| 9/16" Wil-rich shank without seed boot | 1/2" x 2" no lock washer | 1/2" x 2" no lock washer | Plow bolt |

200 Series QC Adapter – 200-QCA-5010

| APPLICATION | TOP BOLT | BOTTOM BOLT | SPECIAL NOTES |
|---------------------------------------------------|--------------------------------|--------------------------------|---------------|
| 1" shank without seed boot or wedge | 1/2" x 2-1/2" with lock washer | 1/2" x 2-1/2" with lock washer | Plow bolt |
| 1-1/4" shank without seed boot seed boot or wedge | 1/2" x 2-3/4" with lock washer | 1/2" x 2-3/4" with lock washer | Plow bolt |

NOTES: 1) Above bolt lengths are determined using prevailing torque side locknuts – grade C. This special locknut is necessary to keep the adapter tight. 2) Shanks with 3/8" and 7/16" holes require special oversize head plow bolts. 3) When bolting a seed boot, usually it is the bottom bolt which bolts the seed boot to the shank; the top bolt should remain the same length as listed above. If the seed boot cross section at the point the bolt goes through is 1/8" thick or less, use the same bolt length as above without the lock washer. If the seed boot cross section at the point the bolt goes through is greater than 1/8", increase bolt length by adding the measured cross section of the seed boot at the point the bolt goes through to the above lengths.

BOLT LENGTH CHART

410 Series QC Adapter – 410-QCA-5000

| APPLICATION | TOP HOLE | BOTTOM HOLE | SPECIAL NOTES |
|------------------------------------------------------------------|---------------|---------------|---------------|
| 1" Bourgault shank without seed boot | 1/2" x 2-1/2" | 1/2" x 2-1/2" | Hex-head |
| 1" Bourgault shank with Bourgault splitter seed boot 6505-42 | 1/2" x 2-1/2" | 1/2" x 2-3/4" | Hex-head |
| 1-1/4" Bourgault shank without seed boot | 1/2" x 2-3/4" | 1/2" x 2-3/4" | Hex-head |
| 1-1/4" Bourgault shank with Bourgault splitter seed boot 6505-42 | 1/2" x 2-3/4" | 1/2" x 3" | Hex-head |

410 Series QC Adapter – 410-QCA-5010

| APPLICATION | TOP HOLE | BOTTOM HOLE | SPECIAL NOTES |
|-----------------------------------------|---------------|---------------|---------------|
| 1" shank without seed boot or wedge | 1/2" x 2-1/2" | 1/2" x 2-1/2" | Hex-head |
| 1-1/4" shank without seed boot or wedge | 1/2" x 2-3/4" | 1/2" x 2-3/4" | Hex-head |

NOTES: 1) Above bolt lengths are determined using prevailing torque side locknuts – grade C. This special locknut is necessary to keep the adapter tight. 2) When bolting a seed boot, usually it is the bottom bolt which bolts the seed boot to the shank; the top bolt should remain the same length as listed above. If the seed boot cross section at the point the bolt goes through is 1/8" thick or less, use the same bolt length as above without the lockwasher. If the seed boot cross section at the point the bolt goes through is greater than 1/8", increase bolt length by adding the measured cross section of the seed boot at the point the bolt goes through to the above lengths. 3) When bolting an adapter using a wedge, a wedge will only be used when using the 410-QCA-5010 adapter on 43° and 47° chisel plows. Measure the cross section of the wedge at both bolt holes and add this amount to the above numbers. Remember that the measured cross section will be different at each hole in the wedge.

600 Series Quick Tip Knives

| APPLICATION | TOP HOLE | BOTTOM HOLE | SPECIAL NOTES |
|-------------------------------------------------------------|----------------------------------|------------------------------|--------------------------------------------------------|
| For 47° and 50° applications, no wedge is needed | | | |
| 1-1/4" Bourgault shank | 1/2" x 2-3/4" | 1/2" x 2-3/4" | Hex-head bolt, regular nut and lock |
| 1" Bourgault shank | 1/2" x 2-1/2" | 1/2" x 2-1/2" | Hex-head bolt, regular nut and lock |
| 7/8" Bourgault shank | 1/2" x 2-1/2" | 1/2" x 2-1/2" | Hex-head bolt, regular nut and lock |
| 3/4" Bourgault shank | 1/2" x 2-1/4" | 1/2" x 2-1/4" | Hex-head bolt, regular nut and lock |
| 1-1/4" Flexi-Coil shank | 1/2" x 2-3/4" | 1/2" x 2-3/4" | Hex-head bolt, regular nut and lock |
| 1-1/4" Morris shank | 1/2" x 2-3/4" | 1/2" x 2-3/4" | Hex-head bolt, regular nut and lock (see note 1 below) |
| 1" John Deere shank | 1/2" x 2-1/2" | 1/2" x 2-1/2" | Hex-head bolt, regular nut and lock |
| 7/8" Shulte shank | 1/2" x 2-1/2" | 1/2" x 2-1/2" | Hex-head bolt, regular nut and lock |
| 3/4" Degelman shank | 1/2" x 2-1/4" | 1/2" x 2-1/4" | Hex-head bolt, regular nut and lock |
| For 43° applications, wedge 400-WDG-0700 is required | | | |
| 1" Morris shank for NH ₃ knives | 1/2" x 3" no lock washer | 1/2" x 2-3/4" no lock washer | Hex-head, regular nut |
| 1" Morris shank for granular knives | 1/2" x 3" no lock washer | 1/2" x 2-3/4" no lock washer | Hex-head, regular nut |
| 1-1/4" CIL shank, 2-1/2" hole center-to-center | 1/2" x 3-1/4" c/w no lock washer | 1/2" x 2-3/4" no lock washer | Hex-head, regular nut |
| 1-1/4" IH shank | 1/2" x 3-1/4" | 1/2" x 3" | Hex-head bolt, regular nut and lock (see note 2 below) |
| 3/4" Case IH vibra chisel shank | 1/2" x 2-3/4" | 1/2" x 2-1/2" | Hex-head bolt, regular nut and lock |

NOTES: 1) Some material may have to be ground off the bottom of the 1-1/4" Morris shank (front face) to get the knife holder to seat down tight against the shank. 2) The 1-1/4" IH shank will fit the NH₃ knives, but not the granular knife. 3) All knives come with holes to accommodate 1/2" bolts. If cultivator shanks have 7/16" holes, substitute 7/16" bolts for 1/2" and use a flat washer on the bolt head.