

YORK

PORTABLE MACHINE TOOLS

4-14ET Line Boring Machine And Accessories Catalogue



Portable - Powerful - Flexible - Easy to Use

Line Boring | Bore Welding | Inline Turning | Rotary Milling
1641-17th Ave. Campbell River BC Canada V9W 4L5
1-888-783-9675

4-14ET Line Boring Machine

The York 4-14ET (electric touch) portable line boring machine is our finest yet. Proven dependable and extremely powerful. Shown below with the Fein 4 speed reversible bar drive motor, this combination makes the 4-14ET extremely portable. A unique feature is the variable speed feed system with rapid traverse. This feed system provides 14 inches of cutting tool travel. Our control panel adds ease to the operation with the ability to add the optional remote control.



Electric or Hydraulic Boring Bar Drives

- Electric: 4 speed boring bar drive, faster speeds for better results 100/150/260/420 RPM
- Hydraulic: Three powerful variable speed motors to choose from



- Variable feed speeds, 14" tool travel with rapid traverse, automatic feed with optional remote control
- Line bore vertically or horizontally
- Line boring from 1 1/2 – 16" with our electric drive or up to 24" with our hydraulic bar drive
- Calibration wrench supplied to accurately adjust the cutting tool
- Universal mount for line boring and bore welding – allowing you to set up ahead while you work.
- Factory trained dealer representatives provide demo's and training for line boring and bore welding machines.
- Available in 110/240V 50/60 Hz
- Patents 4,932,814 and 5,000,627 Other patents pending

Portable - Powerful - Flexible - Easy to Use

Automatic Feed

4-14ET Full Function Electric Feed Carriage

- 14" (358mm) cutting tool travel
- Feed Speeds of 0-2.5 inches per minute (64mm/min)
- Feed Torque 200 inch lbs (22.6Nm)
- Rapid Travers: 9 inches per min (228mm/min)
- Weight: 55 lbs (25 kg)
- Adjustable limit stops
- Comes with custom aluminum carrying case

Part Number: 414-900ET-110V (60 Hz)

Part Number: 414-900ET-230V (50/60 Hz)



Manual / Hand Feed

4-14 Manual Feed

- 14" (358mm) Cutting tool travel
- Manual feed by using hand wheel or ratchet
- Weight: 35 lbs (15.9 kg)
- Upgradeable to a full function machine

Part Number: 414-901



Electric Bar Drive

FEIN 4 Speed Electric Bar Drive

- 110v—9.6 amps
- 1.2 hp (900W) 35 ft lbs torque (47.46Nm)
- 110 or 240 v 50/60 HZ
- 4 bar speeds, 100/150/260/420 RPM
- Reversible drive
- Weighs 22 lbs (10kg)

Part Number: 414-001-110V60Hz

Part Number: 414-001-230V50Hz

Part Number: 414-001-230V60Hz



5 Hp Hydraulic Power Units and Bar Drives

Available Units:

Three Phase

Hydraulic Power Unit c/w Hydraulic Bar Drive

190 Volt, 50 Hz **Part Number:** HPU-05-319050

220~240 Volt, 50Hz **Part Number:** HPU-05-322050

380 Volt, 50 Hz **Part Number:** HPU-05-338050

440~460 Volt, 50 Hz **Part Number:** HPU-05-344050

230 Volt, 60 Hz **Part Number:** HPU-05-323060

440~460 Volt, 60 Hz **Part Number:** HPU-05-346060

575 Volt, 60 Hz **Part Number:** HPU-05-357560

Single Phase

Available Units:

220~240 Volt, 60Hz **Part Number:** HPU-05-123060

220~240 Volt, 50Hz **Part Number:** HPU-05-123050

- 9 gallon (40.3Lt) fluid tank
- Power Supply weight 275 lbs. (125kg)

Features:

- 5 Hp single or three phase electric
- Reversible hydrostatic drive
- Variable Rotational Bar Drive Motors Available
 - 100 rpm, 183.5 ft lb Torque (249 Nm)
 - 160 rpm, 145.9 ft lb Torque (198 Nm)
 - 290 rpm, 73.6 ft lb Torque (100 Nm)
- Bar rotation lock valve mounted on bar drive
- Bar drive weight 26 lbs (12kg)

Part Number: depends on voltage/rpm

Eg. HBD-E- 12090

HBD-E- 240460



A) Premium Plus Package: 1.5 to 16" (38 to 406mm)

Complete 5 bar package that covers the entire operating range of the 4-14. This is a very dynamic package designed for those who work on a wide range of large and small bores.

Part Number: P-1

B) Premium Package: 1.5 to 10" (38 to 254mm)

Complete 5 bar package that is designed for those in the heavy equipment industry that work on bores up to 10 inches, this kit can be easily upgraded at any time to 16" (406mm) diameters.

Part Number: P-2

C) Standard Package: 2.5 to 6" (63.5 to 152mm)

3 bar package using our 2" (52mm) boring bars. Small bars can be added at any time if required.

Part Number: P-3

D) Combo Package: 1.5 to 6" (38 to 152mm)

Kit is designed to meet the needs of most equipment owners. This kit is upgradeable by adding components as needed.

Part Number: P-4

E) Small Bore Package: 1.5 to 3" (38 to 76mm)

2 bar package is designed for our 1-1/4" (32mm) bars for small diameters, we have an upgrade kit that can be added to reach 5" (127mm) using our 1 1/4" (32mm) bars.

Part Number: P-5

Custom packaging is also available. All our bars can be supplied with either imperial or metric tool ports.

A	B	C	D	E	Package Includes
1 1/4" Bar Package					
1	1			1	4 Foot Bar
1	1		1	1	6 Foot Bar
2	2		2	2	3" Line-up Cones
2	2		1	2	Mounting Head
2	2		1	2	Bore weld Interface
2	2		2	2	Tail Support
2	2		2	2	Clamping Collars
1	1		1	1	Calibration Tool
1	1		1	1	Accessories Tool Box
2" Bar Package					
1	1	1			3 Foot Bar
1	1	1	1		5 Foot Bar
1	1	1			7 Foot Bar
2	2	2	2		2-4 " Line-up Cones
2	2	2	2		4-6" Line-up Cones
2	2				6-8" Line-up Cones
	2				8-10" Line-up Cones
1					8-16" Line-up Spiders
2	2	2	1		Mounting Head
2	2	2	1		Bore welder Interface
1					Adjustable X/Y Mounting Kit
2	2	2	2		Tail Support
2	2	2	2		Clamping Collars
1	1	1	1		Calibration Tool
1	1				6-10" Big Bore Adaptor
1					10-13" Big Bore Adaptor
1					13-16" Big Bore Adaptor
1	1	1	1		Accessories Tool Box
2 1/4" (58mm) Bars now available using our Hydraulic drives – bore up to 24" (609mm)					

Chrome Plated Bars Available as an Option

2" (50.8mm) Boring Bars & Accessories

2" (50.8mm) Mounting Head

- Two bearings for added support
- One bore welder mounting plate included
- Alignment adjusting screws

Part Number: 414-201

Replacement Inserts

Part Number: 414-201A



2" (50.8mm) Tail Support

- 4 bolt flange bearings on replaceable mounting plates

Part Number: 414-202

Replacement Weld Plate

Part Number: 414-202A

Replacement Flange Bearing

Part Number: 414-202B



X/Y Adjustable Mounting Kit

- Freedom to move - the X/Y mounting head allows you to move the bar 5/8" (15.8mm) in any direction from center. You also have a 6 degree spherical adjustment. This feature is a huge asset for bores larger than 10" (254mm) that might require an extra degree of precision alignment.

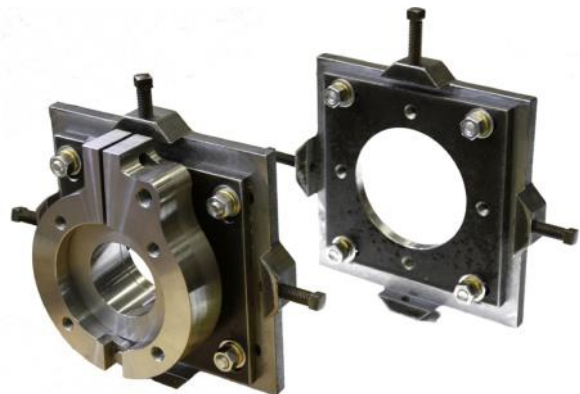
Part Number: 414-309 (Kit)

Adjustable X/Y Mounting Head only

Part Number: 414-310

Adjustable X/Y Tail Support only

Part Number: 414-330



4-14 ET 2" (50.8mm) Items

2" Diameter (50.8mm) Boring Bars

- Staggered 1/2" tool ports every three inches along the bar.
- Tool ports are broached and threaded
- Bars are made from C1045 precision ground shafting
- Available chrome plated and polished

3' Bar

Part # 414-213-36 Polished Bar

Part # 414-213-36C Chrome Bar

5' Bar

Part # 414-213-60 Polished Bar

Part # 414-213-60C Chrome Bar

7' Bar

Part # 414-213-84 Polished Bar

Part # 414-213-84C Chrome Bar



Note: For Metric bars place an M at the end of the part number

Custom bars and lengths available on request

2" (50.8mm) Line-Up Cones

- Steel cones
- Precision alignment
- Relieved in the back to reduce weight

2 to 4" (50.8 to 101.6mm)

Part Number: 414-203

4 to 6" (101.6 to 152.4mm)

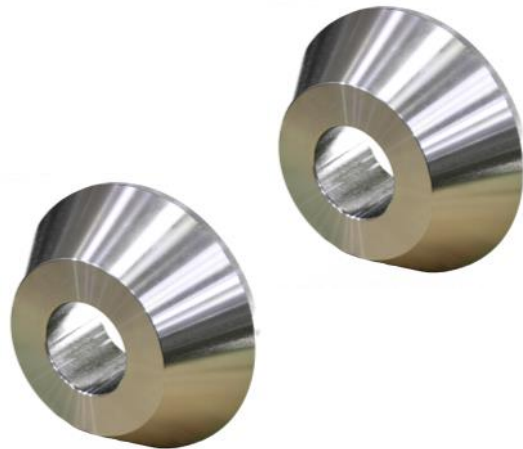
Part Number: 414-204

6 to 8" (152.4 to 203.2mm)

Part Number: 414-215

8 to 10" (203.2 to 254mm)

Part Number: 414-214



4-14ET 2" (50.8mm) Items

2" (50.8mm) Adjustable Line-Up Tool (Spider) for bores 8"- 16" (203mm - 406mm) or 8" - 24" (203mm-609mm)

- For aligning and centering the bar when working with bores larger than 8" (203mm). The line up tool dials out to the diameter that you need.
- The kit comes in a custom carrying case, with two centering tools and four sets of extensions

Part Number: 414-501

Part Number: 414-502



2" (50.8mm) Clamping Collars

- To secure the line up cones in place during set up
- Split collar with allen head screws

Part Number: 414-205

(sold in package of 2)



2" (50.8mm) Calibration Wrench

- The calibration wrench allows accurate cutting tool adjustment in increments of .001". All of our boring bars have broached and threaded tool ports with a scribed line on center. We put an adjusting screw at the base of the cutting tool that the calibration wrench fits into. There are 50 graduations on the wrench. With each graduation past the scribed line the cutting tool advances .001"

Part Number: 414-207 (c/w 5 cutting tool adjusters)

Cutting Tool Adjusters

Part Number: 414-206

(sold in package of 5)



**A York
Exclusive!**

4-14ET 2" (50.8mm) Items

2" (50.8mm) Accessories Tool Box

Includes:

- Tool box (26")
- Set screws
- Sample Micro 100 carbide tooling
- Wrenches
- Allen keys

Part Number: 414-250



2" (50.8mm) Large Bore Adapters

- The York large bore adapters clamp securely to our 2" (50.8mm) boring bar. The large bore adapter supports the tool bit to accommodate larger bores over 6" (152mm) in diameter. The 6-10" (152-254mm) adapter can be used with the York calibration wrench and is our standard adapter. Custom large bore adapters are also available for 10-13" (254-330mm) and 13-16" (330-406mm)



6 to 10" (152.4 to 254mm)

Part Number: 414-303

10 to 13" (254mm to 330mm)

Part Number: 414-301

13 to 16" (330.2 to 406mm)

Part Number: 414-302



4-14ET 1-1/4" (32mm) Items

1 1/4" (32mm) Mounting Head

- Two bearings for added support
- One bore welder mount plate included
- Alignment adjusting screws

Part Number: 414-101

Replacement Inserts

Part Number: 414-101A



1 1/4" (32mm) Tail Support

- 4 bolt flange bearing on a replaceable mounting plate

Part Number: 414-102

Replacement Weld Plate

Part Number: 414-102A

Replacement Flange

Part Number: 414-102B



1 1/4" (32mm) Line-Up Cones

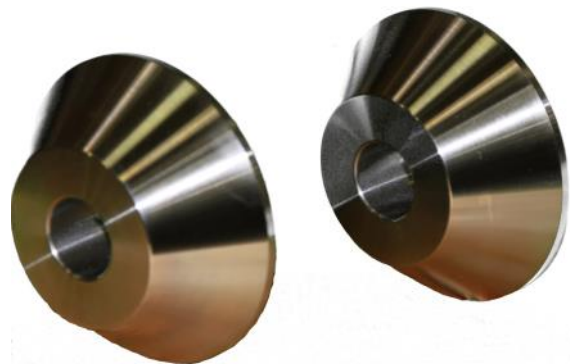
- Steel cones 1 1/4 to 3" and 3 to 5"
- Precision alignment
- 1 1/4 to 3"
- 3 to 5"

1 1/4" to 3" (32 to 76mm)

Part Number: 414-103 (set of 2)

3" to 5" (76 to 127mm)

Part Number: 414-104 (set of 2)



4-14ET 1-1/4" (32mm) Items

1 1/4" (32mm) Boring Bars

- Staggered 3/8" (9.5mm) tool ports every 3" (76.2mm) along the bar
- Tool ports are broached and threaded
- Bars are made from C1045 precision ground shafting
- Available chrome plated and polished

4' Bar (1219.2mm)

Part Number: 414-113-48 Polished bar

Part Number: 414-113-48C Chrome bar

6' Bar (1828.8mm)

Part Number: 414-113-72 Polished bar

Part Number: 414-113-72C Chrome bar

Note: For Metric bars place an M at the end of the part number

Custom bars and lengths available on request



1 1/4" (32mm) 3-5" (76 to 127mm)

Large Bore Adaptor

- This adaptor is used to support tooling for bores greater than 3". It will help reduce tool breakage and chatter. For maximum success we recommend using our 2" bars for bores greater than 3"

Part Number: 414-307



1 1/4" (32mm) Clamping Collars

- Used to secure the line up cones in place during set up
- Spit collar with allen head screw

Part Number: 414-105

(sold in a package of 2)



4-14ET 1-1/4" (32mm) Items

1 1/4" Calibration Wrench

- The calibration wrench allows accurate cutting tool adjustment in increments of .001". All of our boring bars have broached and threaded tool ports with a scribed line on center. We put an adjusting screw at the base of the cutting tool that the calibration wrench fits into. There are 50 graduations on the wrench. With each graduation past the scribed line the cutting tool advances .001".

Part Number: 414-107 (c/w 5 cutting tool adjusters)

Cutting Tool Adjusters

Part Number: 414-106
(sold in package of 5)



**A York
Exclusive!**

1 1/4" (32mm) Accessories Tool Box

Includes:

- Tool box (21")
- Set screws
- Sample Micro 100 carbide tooling
- Wrenches
- Allen keys

Part Number: 414-150



4-14 ET 2-1/4" (57mm) Items

Recommended with our hydraulic bar drives

2 1/4" (57mm) Mounting Head (Standard)

- Two bearings for added support
- One bore welder mount plate included
- Alignment adjusting screws

Part Number: 414-601

Replacement Inserts

Part Number: 414-601A



X/Y Adjustable Mounting Head & Tail Support

- Freedom to move - the X/Y mounting head allows you to move the bar 5/8" (15.8mm) in any direction from center. You also have a 6 degree spherical adjustment. This feature is a huge asset for bores larger than 10" (254mm) that might require an extra degree of precision alignment.

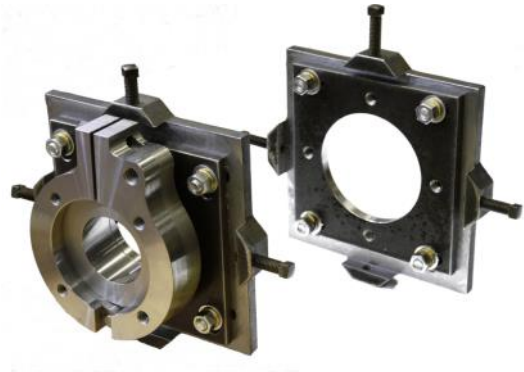
Part Number: 414-609 (Kit)

Mounting Head Only

Part Number: 414-610 Adjustable X/Y

Adjustable X/Y Tail Support Only

Part Number: 414-630



2 1/4" (57mm) Tail Support

- 4 bolt flange bearing on a replaceable mounting plate

Part Number: 414-602

Replacement Weld Plate

Part Number: 414-602A

Replacement Flange

Part Number: 414-602B



4-14 ET 2-1/4" (57mm) Items

2 1/4" (57mm) Boring Bars

- Staggered 1/2" (12.7mm) tool ports every 3" (76mm) along the bar.
- Tool ports are broached and threaded
- Bars are made from C1045 precision ground shafting.
- Available chrome plated and polished

3' (914mm) Boring Bar

Part Number: 414-613-36 Polished Bar

Part Number: 414-613-36C Chrome Bar

5' (1524mm) Bar

Part Number: 414-613-60 Polished Bar

Part Number: 414-613-60C Chrome Bar

8' (2438mm) Bar

Part Number: 414-613-96 Polished Bar

Part Number: 414-613-96C Chrome Bar

Note: for Metric place an *M* at the end of the part number

Custom bars and lengths available on request



2 1/4" (57mm) Line-Up Cones

- Steel cones
- Precision alignment
- Relieved in the back to reduce weight

2" to 4" (50.8 to 101.6mm)

Part Number: 414-603 (Set of 2)

4" to 6" (101.6 to 152.4mm)

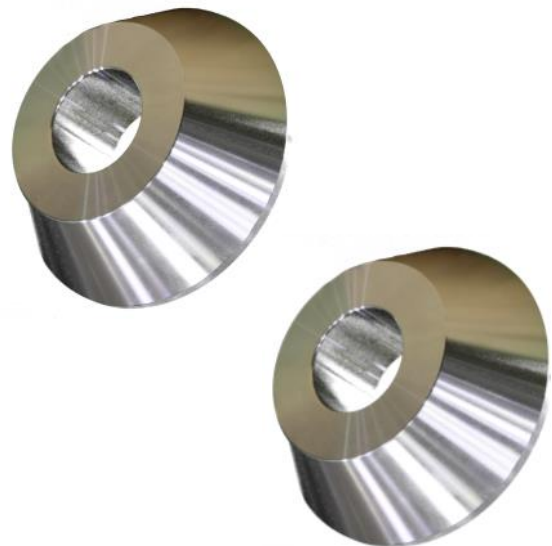
Part Number: 414-604 (Set of 2)

6" to 8" (152.4 to 203.2mm)

Part Number: 414-615 (Set of 2)

8" to 10" (203.2 to 254)

Part Number: 414-614 (Set of 2)



4-14 ET 2-1/4" (57mm) Items

2 1/4" (57mm) Adjustable Line-Up Tool (Spider) for bores 8" to 16" (203–406mm) or 8" to 24" (203–609mm)

- For aligning and centering the bar when working with bores larger than 8" (203mm). The line up tool dials out to the diameter you need.
- The kit comes in a custom carrying case, with two centering tools and four sets of extensions.

Part Number: 414-503

Part Number: 414-504



2 1/4" (57mm) Clamping Collars

- Used to secure the line up cones in place during setup
- Split collar with allen head screw

Part Number: 414-605



Accessories Tool Box

Includes:

- Tool Box (26")
- Set Screws
- Sample Micro 100 carbide tooling
- Allen keys
- Key Stock
- Wrenches

Part Number: 414-250



Optional Accessories

Facing Tools

- The York facing tools are designed to machine surfaces 90 degrees to the bore. The facing tool attaches to our boring bar. Two tool ports are set in the facing tool; one at 45 degrees and the other at 90 degrees. Each revolution of the bar actuates a gear driven lead screw that advances the cutting tool .005" (.127mm).

Part Number: FT-1100 Max 10" (254mm)
Use with 2" boring bar

Part Number: FT-2100 Max 10" (254mm)
Use with 2 1/4" boring bar

Part Number: FT 9000 Max 18" (457mm)
Use with 2" or 2 1/4" boring bar



FT-1100 2" bar

FT-2100 2 1/4" bar

FT-9000

2" or 2 1/4" bar

FT-1100M, FT-2100M for metric bar

Off-Set Drive

(A unique feature no one else has)

- Our offset drive feature allows more flexibility than thru bar designs. The York line-boring machine is an excellent choice for working in constricted areas, as the driveline allows 30 degrees offset in any direction from the boring bar alignment.

Part Number: OFF-000

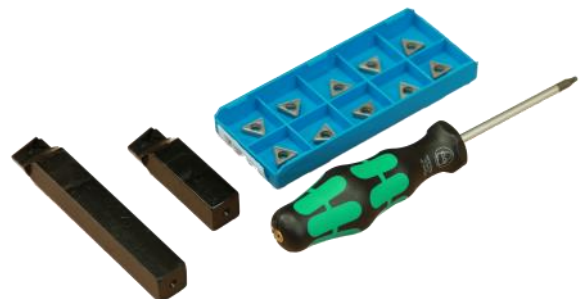


Carbide Insert Tool Package

1/2" (12mm)

- The York insert tool places the carbide cutting surface into the center of the bore, substantially improving cutting tool performance while extending tool holder life. Our tool holders use standard inserts that are readily available from most cutting tool suppliers. Insert tooling takes the guesswork out of tool geometry and improves the overall performance of your line boring machine.

Part Number: ITK-000



Optional Accessories

Thru Bar Measuring Kits

- Our thru bar measuring tool allows you to accurately measure the bore without removing the bar. The measuring tool is placed into an adjacent tool port and traversed into the bore. By loosening the setscrew, the spring loaded measuring tool snaps opens - capturing the size of the bore. Tighten the setscrew and traverse the tool from the bore. Pull the measuring tool out of the bar. Using a micrometer, measure the thru bar tool for the diameter of the bore.

1.9" to 12" (48.26 to 304.8mm)

Part Number: MT2-1000 fits Imperial bars

1.9" to 16" (48.26 to 406.4mm)

Part Number: MT2-2000 fits Imperial bars

1.9 - 12" (48.26 - 304.8mm)

Part Number: MT2-3000 fits Metric bars

1.9 - 16" (48.26—406.4mm)

Part Number: MT2-4000 fits Metric bars



MT2-1000



MT2-4000

Snap Ring Tool

- 3.8 to 7" (96.5 to 177.8mm)
- 5/8" stroke (15.8mm)
- Hydraulic feed
- Accurate adjustment

Part Number: SR-300-2.00

Part Number: SR-300-2.25

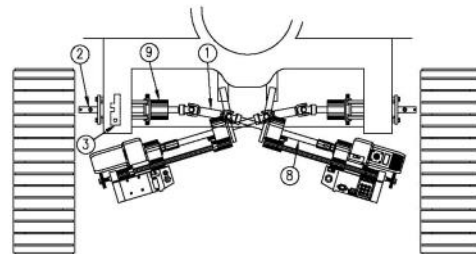


Ripper Shank Repair Kit

- A unique option that saves having to pull the tracks to repair worn bores on D-9 to D-10 Cat

(*Call us for kits to repair other models)

Part Number: RIP-000



Optional Accessories

4-14ET Full Function Remote Control

Part Number: 414-098 c/w 8ft Cable

Part Number: ET-180 - 12ft Cable

Part Number: ET-181 - 15ft Cable

**Note: 12 & 15 FT Cables available at additional cost*



These put the operator close to the bore. A must have for vertical boring applications!

Micro 100 Brazed Carbide Cutting Tools

- Micro 100 is highly shock resistant, will not chip or break under normal machining conditions and is unexcelled in interrupted cutting. Micro 100 carbide is a space age carbide with superior rupture strength for exceptional machining versatility.



#6 - 3/8"

Part Number: AR-6 or AL-6 MICRO 100 "A" Style

Part Number: BR-6 or BL-6 MICRO 100 "B" Style

#8 - 1/2"

Part Number: AR-8 or AL-8 MICRO 100 "A" Style

Part Number: BR-8 or BL-8 MICRO 100 "B" Style

Bore Welder Adapter Plates

Part Number: 414-212

(Sold in package of 2)

** NOTE: Will work with most brands of bore welders*

