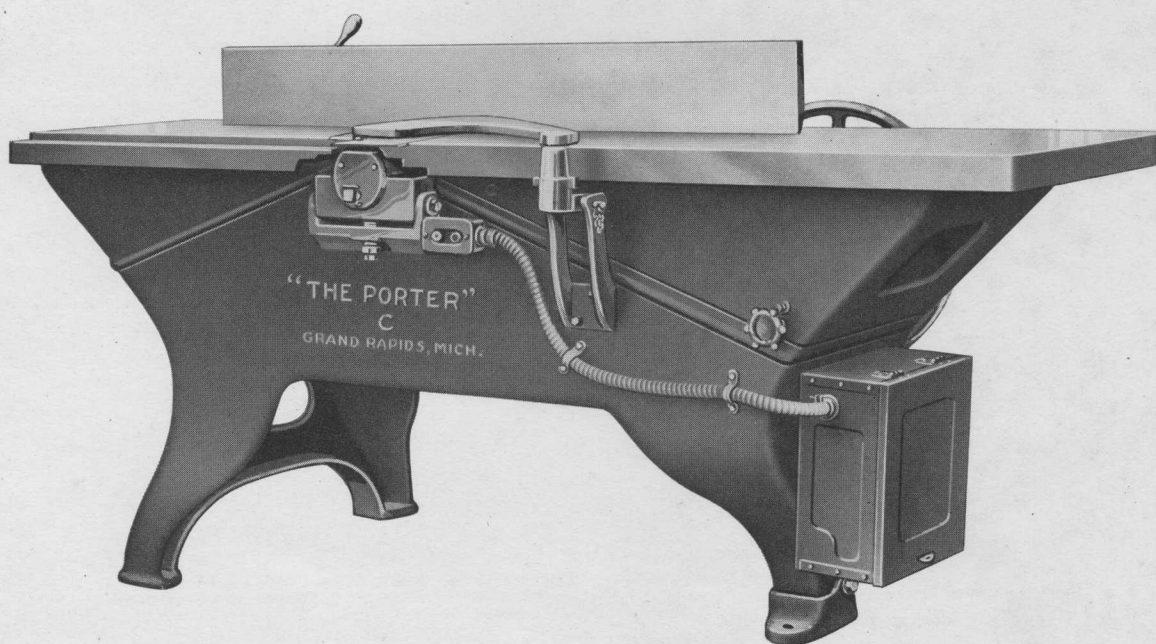




# "THE PORTER"

*Type "C" Incline Bed Hand Jointers  
Ball Bearing — Belt and Motor Drive*



Operator's side of The Porter Type CM Ball Bearing Hand Jointer showing the three point suspension and long floor bearing. Note the long inclines and negligible table overhang. Built properly throughout.

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C. O. PORTER MACHINERY COMPANY — Grand Rapids, Michigan

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## The Jointer that is Sold on its Merits

GRANTED this to be the day of the fast feed edge jointer and the Porter Power Feed Facing Planer (for fast buzzing of stock), the conventional hand jointer still continues to be an indispensable machine for general work.

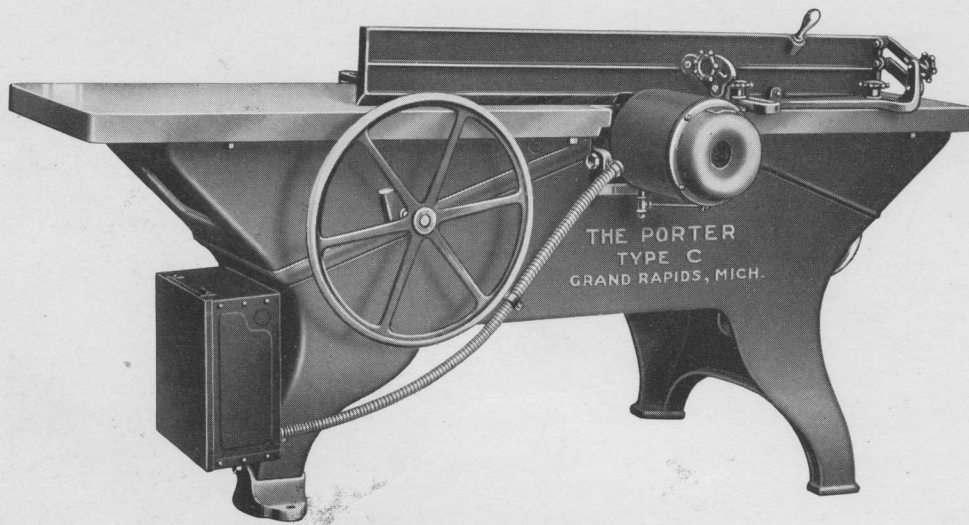
While it may be thought that a jointer is a jointer, such a belief is in error and to disprove this, it is necessary that each part of the machine be studied.

No single feature makes the jointer and more than good specifications are required. Timely construction, ample weight, and building with unceasing care to

make every machine trouble free are all necessary if the desired goal is to be attained.

The Porter Type C Jointer is the highest development of jointer specialists. It possesses outstanding service. It is built to be a low cost producer of high grade work; and its merits are not appreciated without seeing, and better, using the machine.

The lesser maintenance and increased earning power always repay the far sighted buyer of a good tool. The Porter Type C Ball Bearing Hand Jointer is not something cheap, nor is it a disappointment. It is a high grade machine and serves accordingly.



Showing the motor side of the CM jointer.

The long table elevation is accomplished by means of the large hand wheel. Observe the clean cut, compact and trouble free motor application. Push button station, magnetic control and motor are completely wired up and tested.

### SPECIFICATIONS

**Application:** Most generally used for planing out wind and edge jointing. Also used for rabbeting, beveling, squaring up, etc.

**Base:** Clear grey iron, cored and ribbed, and planed to receive the inclines. Underside planed to receive the legs which are also planed at point of contact. Wide double leg spread; and with the single leg forms a three point floor bearing, assuring perfect table alignment, and eliminating any possible base distortion. The single leg fits into a rocker foot.

**Inclines:** The long incline which carries the front table is supported at the point nearest the cylinder by a shaft held by the sliding frame described below. At the opposite end it rests on the tapered wedge attached to the frame. To obtain a long or hollow joint all that is necessary is to turn the wedge adjusting knob which in turn raises or lowers the end of the incline and, therefore, the table. The incline cannot be tipped up causing interference of the table with the cylinder. The short or rear

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The Jointer that Commands Respect

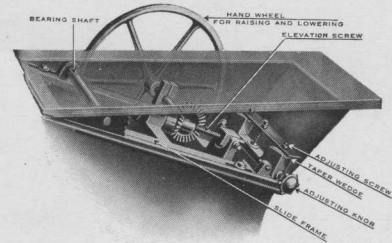
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incline rests directly on the main base, and is elevated and lowered by the small hand-wheel at the end. The angle of the inclines prevents the tables, when being raised or lowered, from coming in contact with the knives.

**Sliding Frame:**

This part is a planed casting and is the connecting part between the main base and the long incline. It rests on the full length of the planed ways of the bed, giving a total contact surface, invaluable when it is realized that in changing the depth of cut the surfaces subject to wear are very large. Elevation is accomplished by means of the large hand-wheel at the side of the machine, operating through cut bevel gears moving the frame, and, hence, the incline to and fro. On the incline side of this sliding frame, a shaft near to the cylinder supports the incline. At the opposite end the incline is supported by a tapered wedge. This wedge is manipulated by a knob which, when turned clockwise, drops the incline to give the long or hollow joint. A non-complicated, effective and wear-reducing method of making the end of the table adjustable.



Phantom view of long incline construction. To make long or hollow joints, adjusting knob is turned lowering end of table. The slide frame to which incline is attached makes a full bearing on main frame prolonging life of the machine. A distinct Porter feature.

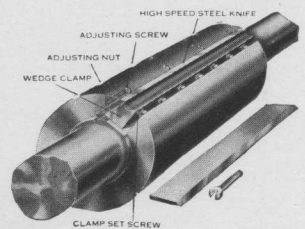
**Tables:**

Clear grey iron with steel lips and supported nearly thruout their entire length by the machined surfaces of the inclines. Planed perfectly true and then ground to accuracy by our own process. The grinding makes a perfect finish for both accuracy and wear. Tables are bolted to the inclines and may be withdrawn to give access to cylinder without changing their respective heights. Rear table has rabbeting groove and front table furnished with rabbeting arm.

**Cylinder (head):**

Forged from high carbon steel, completely machined and ground to accuracy. Combined knife wedge and chipbreaker which, with a proper knife angle and 5 1/4" cutting diameter, makes this an exceedingly free-cutting head, by breaking the chips into fine particles.

The Porter Type C Safety Head, carrying three thin high speed knives, is regularly furnished. Four knife head furnished on order.



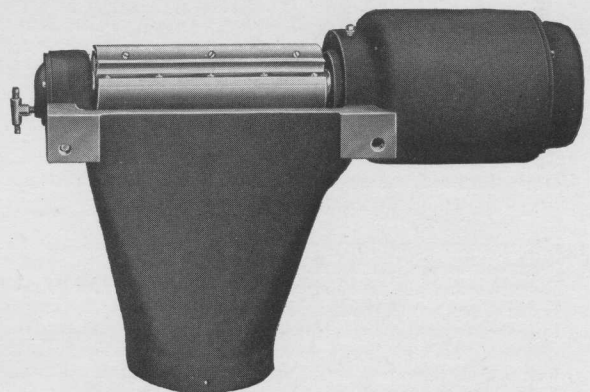
The Type C Safety Head

**Bearings:**

High grade selected type, made by a nationally known manufacturer of woodworking machinery bearings; of such size to give a large factor of safety. Proper consideration given to lubrication and exclusion of foreign matter.

**Yoke (see motor drive.):**

A one piece casting. On the motor driven machine the bearing housings, motor housing and shaving chute are cast integrally to form the yoke. On the belt driven machine the motor housing is omitted. The shaving chute tapers to a round hole eliminating shaving congestion and facilitating the attachment of the blowpipe. Machined at points of contact with main base into which it is fitted. Held in place by large cap bolts, and adjustable.



The Porter one piece CM yoke.

A single casting forms the front bearing housing, rear bearing housing, motor housing and shaving chute. All housings are carefully bored at one setting; hence, no misalignments, and adjustments of all kinds are avoided. The air gap in the motor is equal at all points giving full torque and life.

**Guard:**

The Porter aluminum swing-out type, and so made that shield may be swung to side of machine when not wanted in position.

**Gauge (fence):**

Accurately planed and well-ribbed casting. May be tilted to 45 degrees, and locked at any angle. Full cutting width capacity of machine may be utilized without removing this part.

"Porter Built"—Satisfaction Assured



- Motor Drive:** Simplicity. As mentioned under "yoke," motor housing is integral with the bearing housings. Entire three housings are bored at the same setting positively assuring concentricity. The extended bearing of the cylinder forms the motor shaft to which the rotor is keyed. The stator (field winding) is inserted and tightly fastened. An equal air gap between the revolving and stationary parts of the motor has been predetermined in the machining. No adjustments required; full motor efficiency and smooth operation. Full load speed approximately 3500 R. P. M., and applicable to 50 or 60 cycle, 2 or 3 phase, 220, 440 or 550 volts. Motor drives for any other current can be arranged.
- Control:** Relay magnetic type having overload and undervoltage protection with push button mounted close to operator.
- Countershaft:** Includes tight and loose pulleys, drive pulley, shaft, hangers and shifter. Furnished on order only. Ball bearing loose pulley is furnished at extra cost.
- Equipment:** Set of three knives in the head, gauge, guard, cylinder wrench, cylinder screw driver, and general purpose wrench. On motor drive, motor and push button control are supplied and completely wired.
- Test:** Tested for accuracy of cut under own power, and again to prove up complete wiring.
- Guarantee:** Against defective material and imperfect workmanship.

## TECHNICAL SPECIFICATIONS

### Common to Motor and Belt Driven Types (Hand Feed)

Width of cut.....	12"	16"	20"	24"
Extreme width of tables.....	18½"	22½"	26½"	32"
Overall length of tables.....	86"	86"	86"	86"
Length of front table.....	48"	48"	44"	44"
Length of rear table.....	36"	36"	40"	40"
Length of top of inclines with tables removed.....	77"	77"	77"	77"
Width of top of inclines.....	17"	21"	25"	30"
Height.....	33"	33"	33"	33"
Base bearing.....	27" x 52"	31" x 52"	35" x 52"	40" x 52"
Number of knives in head, regular.....	3	3	3	3
Cutting diameter of cylinder.....	5¼"	5¼"	5¼"	5¼"
Width and thickness of knives.....	1½" x ⅛"	1½" x ⅛"	1½" x ⅛"	1½" x ⅛"
Vertical adjustment.....	¾" plus	¾" plus	¾" plus	¾" plus
Dimensions of gauge wing.....	54" x 6½"	54" x 6½"	54" x 6½"	54" x 6½"

### Common to Motor Drive Type Only

Horsepower furnished.....	4	4	4	5
Speed of cylinder.....	3600 sync.	3600 sync.	3600 sync.	3600 sync.
Net weight of machine, approximate.....	1450 lbs.	1700 lbs.	1900 lbs.	2200 lbs.
Crated weight of machine, approximate.....	1650 lbs.	1900 lbs.	2100 lbs.	2450 lbs.
Add to crated weights for export boxing.....	150 lbs.	150 lbs.	150 lbs.	200 lbs.
Cubic measure boxed for export.....	75'	85'	95'	110'
Overall floor space required.....	32" x 86"	36" x 86"	42" x 86"	47" x 86"

### Common to Belt Driven Type only

Horsepower recommended.....	3	3	3	5
Dimensions cylinder pulley.....	4" dia. x 4½"	4" dia. x 4½"	4" dia. x 4½"	4" dia. x 4½"
Dimensions tight and loose pulleys on countershaft.....	8" x 4"	8" x 4"	9" x 5"	10" x 5"
Dimensions drive pulley on countershaft.....	16" x 4"	16" x 4"	18" x 5"	20" x 5"
Speed of countershaft, approximate.....	1200 R. P. M.	1200 R. P. M.	900 R. P. M.	800 R. P. M.
Speed of cylinder, approximate.....	4500 R. P. M.	4500 R. P. M.	4000 R. P. M.	4000 R. P. M.
Net weight machine only, approximate.....	1400 lbs.	1650 lbs.	1850 lbs.	2100 lbs.
Crated weight machine only, approximate.....	1600 lbs.	1850 lbs.	2050 lbs.	2350 lbs.
Add to crated weight for export boxing.....	150 lbs.	150 lbs.	150 lbs.	200 lbs.
Cubic measure, boxed for export.....	70'	80'	90'	105'
Net weight countershaft, only.....	140 lbs.	140 lbs.	160 lbs.	180 lbs.
Crated weight countershaft, only.....	225 lbs.	225 lbs.	250 lbs.	275 lbs.
Overall floor space required, machine only.....	30" x 86"	34" x 86"	40" x 86"	45" x 86"