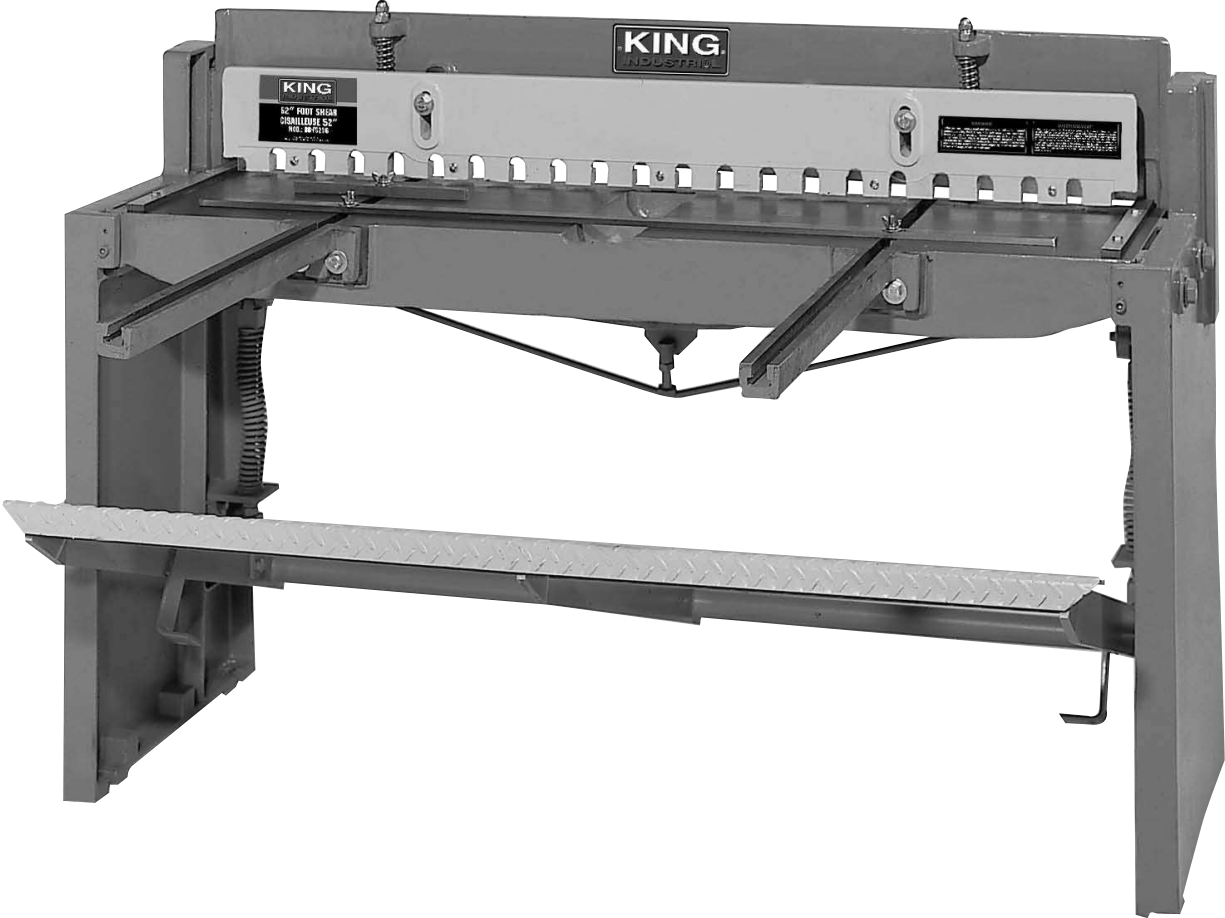




52"-16GA. SHEAR



MODEL: KC-F5216

INSTRUCTION MANUAL

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IMPORTANT INFORMATION

2-YEAR
LIMITED WARRANTY
FOR THIS 52" SHEAR

PROOF OF PURCHASE

Please keep your dated proof of purchase for warranty and servicing purposes.

REPLACEMENT PARTS

Replacement parts for this tool are available at our authorized KING CANADA service centers across Canada. For servicing, contact or return to the retailer where you purchased your product along with your proof of purchase.

LIMITED TOOL WARRANTY

KING CANADA Every effort to is made to ensure that this product meets high quality and durability standards. KING CANADA warrants to the original retail consumer a 2-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations and lack of maintenance. KING CANADA shall in no event be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products. To take advantage of this warranty, the product or part must be returned for examination by the retailer. Shipping and handling charges may apply. If a defect is found, KING CANADA will either repair or replace the product.

PARTS DIAGRAM & PARTS LISTS

Refer to the Parts section of the King Canada web site for the most updated parts diagram and parts list.

IMPORTANT: IF THIS MACHINE IS DAMAGED DUE TO FEEDING MATERIALS THAT ARE A THICKER GAUGE STEEL THAN 16GA., THE WARRANTY WILL BE NUL AND VOID.

IMPORTANT INFORMATION



TOOL DESCRIPTION

KING CANADA 52" Foot Shear is capable of shearing 16 gauge (.060" thick) mild steel or equivalent up to 52" long. The frame, bed and cutterhead are constructed of cast iron. Blades are made of tool steel and are relieved on the cutting edges. Safety features include hold-down with finger guard and pedal stops. Accessories included are bevel gauge, front work stop, front gauge arms, and double locking back gauge with micro adjustment.

Check for shipping damage. If damage has occurred, a claim must be filed with carrier. Check for completeness. Immediately report missing parts to dealer.

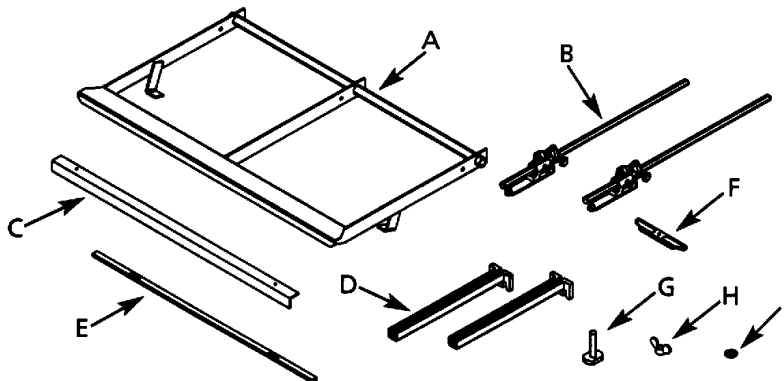
Carefully open crate, unbolt foot shear from shipping pallet and remove from crate using heavy duty lifting equipment such as an overhead crane.

WARNING! Be careful not to touch overhead power lines, piping, lighting, etc. If lifting equipment is used, Foot Shear weighs approximately 1100 lbs. Proper tools, equipment and personnel should be employed in all phases of unpacking and installation.

UNPACKING

The Foot Shear comes assembled as one unit. Additional parts which need to be fastened to the tool should be located and accounted for before assembling.

- A- Pedal assembly
- B- Back gauge assembly, 2 each
- C- Back gauge stop
- D- Front gauge arm, 2 each
- E- Front gauge stop
- F- Bevel gauge
- G- T-bolt, 3 each
- H- Wing nut, 3 each
- I- Washer, 3 each



IMPORTANT: Shear table, blades and back gauges are coated with a protectant. To ensure proper fit and operation, remove coating. Coating is easily removed with mild solvents, such as mineral spirits, and a soft cloth. Avoid getting cleaning solution on paint or any of the rubber or plastic parts. Solvents may deteriorate these finishes. Use soap and water on paint, plastic or rubber components. After cleaning, cover all exposed surfaces with a light coating of oil. Paste wax is recommended for table top.

WARNING! Never use highly volatile solvents. Non-flammable solvents are recommended to avoid possible fire hazard.

SPECIFICATIONS

| | |
|---------------------------------------|--------------------|
| Maximum Thickness 16 gauge | (.060") mild steel |
| Maximum length..... | 52" |
| Back gauge range | 30" |
| Front gauge range | 37" |
| Overall dimensions, less gauges | 62 x 38 x 42" |
| Weight..... | 1100 lbs |

GENERAL SAFETY INFORMATION

1. Keep hands out of path of Shear blades.
2. The maximum capacity of this Shear is (.060") mild steel or equivalent. Exceeding capacity may be dangerous to the operator.
3. Bolt machine to floor or sturdy stand that is bolted to the floor to prevent sliding or tipping of the Shear.
4. Do not remove finger guard. Keep hold-down adjusted as close as possible to the table, while providing clearance to feed material.
5. Do not cut rod with the Shear.
6. Do not attempt to shear any material less than 1/2" cut across the table under full capacity.



ASSEMBLY & INSTALLATION

ASSEMBLY

MOUNT PEDAL ASSEMBLY

NOTE: Two people are required to attach pedal assembly to shear.

1. Loosen set screw (Part# 37) located at the rear bottom of the supports (Part# 32 and 45). Pull pins (Part# 40) out of supports.
2. Position pedal assembly (Part# 44) so that it is aligned with the holes in the supports. Insert pins through supports into pedal assembly and tighten the set screws.
3. Loosen and remove bolts, nuts and washers (Part# 26, 31 and 46) from bottom swivels (Part# 47).
4. Lift pedal assembly so that the side bars of the pedal assembly are positioned inside the bottom swivels. Fasten pedal assembly to the bottom swivels with bolts, nuts and washers.

MOUNT BACK GAUGE

1. Loosen set screws (Part# 37) located on back of cutterhead (Part# 14).
2. Insert back gauge rods (Part# 62) into holes on the back of cutterhead. Make sure protective coating has been removed from the rods. Do not tighten set screws at this time.
3. Loosen and remove washers, nuts and bolts (Part# 57, 65 and 66) located on back gauge extension bars (Part# 64 and 69).

4. Place back gauge stop (Part# 56) across both extension bars. Attach the back gauge stop to the bars using bolts, washers and nuts (Part# 57, 65 and 65).

5. Loosen knobs (Part# 63) located on the back gauge adjusting blocks and brackets (Part# 58 and 61). Slide back gauge stop forward until the stop touches the upper blade (Part# 4). Adjust the back gauge rods forward or backward so that the pointer on the back gauge adjusting block coincides with the zero reference mark on the back gauge rod. Secure the rods in position by tightening the set screws (Part# 37).

MOUNT FRONT GAUGE

1. Loosen bolts (Part# 72) on front of the table (Part# 1).
2. Position one front gauge arm (Part# 70) on front of the table over the bolts and washers so that the top surfaces of the table and arm are level. Rotate washer (Part# 71) to fix arm in position and then tighten the bolts.
3. Repeat for the other front gauge arm.
4. Place front gauge stop (Part# 73) on top of the front gauge arms. Attach with wing nuts, washers and T-bolts (Part# 75, 65 and 74).

INSTALLATION

Machine should be installed on a level surface, with proper lighting. Place a precision level on the table surface to level the shear in both directions. Insert metal shims between supports and floor to adjust the level. Use the four mounting holes on the left and right supports to bolt machine securely to floor (fasteners not included). Area around machine should be clear of scraps, oil or dirt. Apply a suitable non-skid material to floor. Allow approximately three feet of clearance on all sides of the shear.

OPERATION & MAINTENANCE



OPERATION

The maximum capacity of the machine is .060" mild steel or equivalent. Below is an equivalency chart for use when working with materials other than mild steel:

EQUIVALENCY CHART

| | |
|---------------------------------|-------|
| Mild steel | .060" |
| Stainless steel..... | .036" |
| SAE 1050 cold-rolled steel..... | .036" |
| Aluminum | .100" |
| Soft brass | .072" |
| 1/2 Hard brass | .064" |
| Annealed phosphor bronze..... | .064" |
| ABS plastic. | .200" |

1. The blade clearance has been adjusted at the factory and should not need any adjustment. However, in order to obtain the best results from the shear, it is suggested that the blade clearance be checked prior to operation.
 - a. Push down on the pedal assembly (Part# 44) so that the cutterhead (Part# 14) drops and the upper and lower blades (Part# 4 and 12) intersect.
 - b. Check clearance between the blades with a feeler gauge. Clearance should be within .001-.002". Check the clearance from right to left as the cutterhead moves downward.
 - c. If clearance is not correct, loosen the table bolts (Part# 36) and the hex nuts (Part# 33). Use the hex head bolts (Part# 39) to move table in to reduce clearance and use the cap screws (Part# 38) to move table out to increase clearance. After correct clearance has been obtained, tighten hex nuts and table bolts. Recheck clearance to make sure it has not changed.
 - d. If the clearance at the center of the blades needs to be adjusted, tighten or loosen adjusting nut (Part#10).

- e. The blade clearance must be checked and adjusted accordingly whenever blades are replaced or reversed.
2. Place workpiece on table against squaring guide (Part# 8) and position it where cut is desired. Stand on foot pedal and jump with enough force on pedal so that the blades cut through the workpiece.
3. If it is difficult to cut the workpiece, the angle of the cutterhead can be adjusted. Increasing the angle between the upper and lower blades reduces the force required at the pedal. The upper blade should be angled so that the right end makes initial contact with the workpiece. Remove the hex head bolt (Part# 46) from the pedal assembly and bottom swivel (Part# 47). Loosen hex nuts (Part#10) and adjust position of bottom swivel up or down, and then reassemble.
4. Identically sized workpieces can be fabricated using the back gauge. Loosen knobs (Part# 63) and use scales located on back gauge rods (Part# 62) to position the adjusting blocks (Part# 58) near to the desired size. Lock knobs on bracket (Part# 61) and use dials (Part# 59) to position the adjusting blocks so that the pointer on the blocks indicates the desired size on the scale. Lock knobs on adjusting blocks. Place workpiece on table against squaring guide, push workpiece through blades until workpiece rests against the back gauge stop (Part# 56). Jump on pedal and cut workpiece.
5. Identically sized workpieces can also be fabricated using the front gauge. Place the front gauge stop (Part# 73) on the table or front gauge arms at desired size of workpiece. Secure in position with T-bolts, washers and wing nuts (Part# 75, 65 and 74). Place workpiece on table against squaring guide, push workpiece through blades and then pull back against the front gauge stop. Jump on pedal and cut workpiece.
6. The bevel gauge (Part# 76) is used to make angular cuts in workpieces. Attach the bevel gauge to the table using T-bolt, washer and wing nut (Part# 75, 65 and 74). Set angle using a protractor or sample workpiece.

MAINTENANCE

LUBRICATION

All exposed iron surfaces such as shear table and shear blades should be coated with light oil to prevent rusting. Use a multi-purpose or bearing grease for lubrication. The sliding surface between cutterhead (Part# 14) and supports (Part# 32 and 45) should be oiled through holes at both ends of cutterhead.

SHEAR BLADES

Always keep shear blades lubricated and clean of any dirt or rust. Abrasive particles on blade will drastically reduce life of blades. Reverse or change blades as soon as one edge is dull or a burr is observed on the blade. Periodically check that the lock screws (Part# 18 and 49) are tight. Top blade is reversible. These blades should be sharpened according to industry standards by a competent grinding service only.

The variation of the ground blades should be no greater than .001" within any 12" length and .002" for entire length. When installing reground blades, put shim stock under the lower edge to raise the blade up flush with the table. It is recommended to keep a set of spare

blades in stock in order that production can continue when blades need to be reground.

ADJUSTMENT OF CUTTERHEAD WAYS

The cutterhead ways are adjustable to offset wear after years of use. Normally, when the shear is operated properly, adjustment is required every five years. To adjust:

1. Loosen all three hex nuts (Part# 33) located on the rear side of the right support (Part# 32).
2. Turn center hex head bolt (Part# 34) in tight to take up play.
3. Turn in top and bottom hex head bolts (Part# 34) until they strike the gib, then back off 1/16 of a turn and tighten hex nuts.
4. Back off center hex head bolt until it is aligned with the top and bottom bolts. Tighten nut.
5. Repeat steps 1 through 4 on left end of the cutterhead.
6. Check blade clearance and adjust if necessary.