Rcd 1978 – SER NO. 3HD. 27358

KELLER

POWER HACK SAWS

PARTS MANUAL AND OPERATING INSTRUCTIONS

JEFFERSON "601"

NO. 1-B BENCH MODEL

NO. 1-F FLOOR MODEL

NO. 1-HB BENCH MODEL

NO. 1-HF FLOOR MODEL

NO. 1 WET CUT

NO. 3B DRY CUT

NO. 3C WET CUT

NO. 3 HY-DUTY

NO. 4 HY-DUTY

NO. 5 HY-DUTY

SAW SPEED SELECTOR

BLADES - HOW TO USE

INCLUDES ALL SAWS

This Keller Parts Page includes parts for all Keller saws from Jefferson "601" to the No. 5 Hy-Duty.

Order all parts by number and description as indicated on this sheet and BE SURE to indicate both the MODEL and SERIAL number of your saw. (As Keller saws are being improved continuously, these improvements mean changes in parts.) Save time and additional correspondence by giving us complete information.

All parts are shown except the "nuts-and-bolts" hardware. It is, of course, more convenient for you to pick them up locally.

IMPORTANT INSTRUCTIONS

Order all parts by Number and Description. BE SURE to indicate both MODEL and SERIAL Number of your saw. These numbers are located on top of saw table near vise on the drive side.

Keller Manufacturing

DIVISION OF SALES SERVICE MACHINE TOOL CO.

3150 Mike Collins Drive/St. Paul (Eagan), MN 55121/Phone (612) 452-3320/Telex: 29-7097

OPERATING INSTRUCTIONS

Your Keller saw is an extremely simple machine to operate. However, there are just a few general instructions which should be followed. All Keller Saws are completely wired, ready to run. However, when connecting reversible motors, be sure crank disc is revolving in counter-clockwise direction as shown by the arrow. Oil each hole daily except the motor. Do not drop the saw blade on the work.

HYDRAULIC LIFT ADJUSTMENT:
Before using machine for the first time, fill Hydraulic Lift Tank to proper oil level as indicated on decal. Use No. 10 Non-Detergent Motor Oil. Run machine 15 to 20 minutes to work the air out of the Hydraulic Lift System.

- To INCREASE Lift: Lengthen Push Rod with the two jam nuts on cam or eccentric lever.

  CAUTION: DO NOT lengthen too far as plunger will bottom on cylinder. The lift should not exceed 1/8-inch at handle end of guide bar.

- To DECREASE Lift: Reverse the procedure to shorten push rod.

ADJUSTABLE BRONZE GIBS. Guide bar operates in bronze gibs in saw frame. Gibs may be adjusted by take up screws in the saw frame to compensate for wear and to maintain proper alignment. The bronze gibs are easily and inexpensively replaced.

TEN HOUR CHECK. After the new saw has been in operation for about ten hours, the bronze gibs should be tightened to compensate for normal wear in of the machine.

HYDRAULIC LIFT is standard equipment on all Keller Hy-Duty Power Hack Saws. This hydraulic lift mechanism automatically lifts blade on return stroke. Blades last longer, run cooler and cut better.

VARIABLE FEED PRESSURE CONTROL. Simply turn knob clockwise to increase feed pressure for heavy bar stock, etc., and turn counter-clockwise for sawing thinwall, tubing, softer metals, etc. On cabinet base Hy-Duty models, the maximum feed pressure is 200 lbs. CAUTION: Do not apply excessive pressure to work. Few jobs require over 150 lbs. working pressure. For maximum cutting efficiency, select the correct sawing combination. Follow the suggestions listed on page 4. The Pressure Feed Control is located on the front of the Hy-Duty models.

FOR ANGLE CUTTING. Simply swivel the vise up to 45-degrees and tighten, or use the Keller "Quick-Set" Angle Vise Block which automatically provides a 45-degree angle.

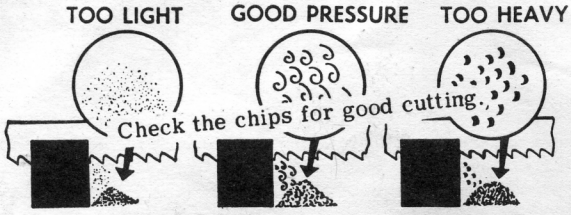
VARI-SPEED DRIVE is featured on all models from No. 1 Wet Cut and up. Provides infinite adjustment of cutting speed from 65 to 170 strokes per minute.

FOUR SPEEDS ARE AVAILABLE on the No. 1 models by simply shifting belt. TWO SPEEDS are available on the Jefferson 601.

HOW TO SELECT AND USE POWER HACK SAW BLADES

Power hack saws automatically take a Full Stroke each time, automatically Lift the blade on reverse stroke and apply steady cutting pressure throughout the length of the stroke.

The proper tensioning of the power hack saw blade is most important. Insufficiently tensioned blades wear rapidly, cut inaccurately and deliver a blank with a poor finish. A blade tensioned too tightly breaks prematurely or pulls out at the pin hole.



If chips are burned you are feeding too heavy. If chips are fine and powdery you are feeding too light. A free cut with nicely curled chips indicates ideal feeding pressure, fastest cutting time and longest blade life.

For most cutting jobs, the all-hard blade is first choice for straight, accurate cutting. The all-hard tungsten blade is unexcelled for retaining its sharp teeth. It handles work hardening materials, abrasive materials, stainless, high manganese steels and the low machinability bronzes. Molybdenum blades are good for fast, accurate cutting, but especially on low or medium alloy steels, iron and most non-ferrous metals.

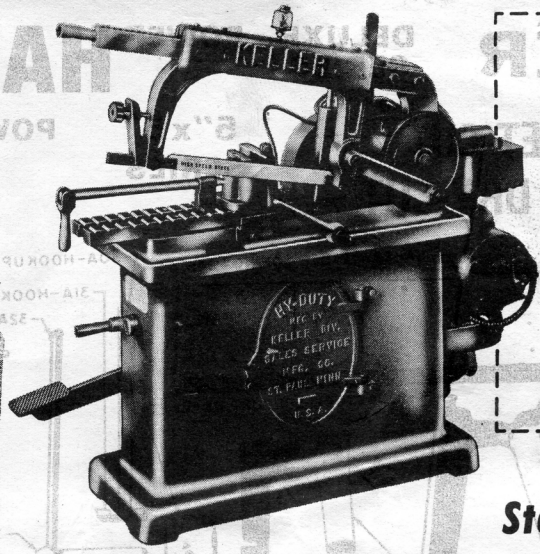
You gain more by selecting the COARSEST TOOTH for the work. This is necessary for good chip appearance as more pressure can be applied... for a better bite, without clogging. (Of course, the feed-pressure-per-tooth must be kept below the point of fracturing the teeth).

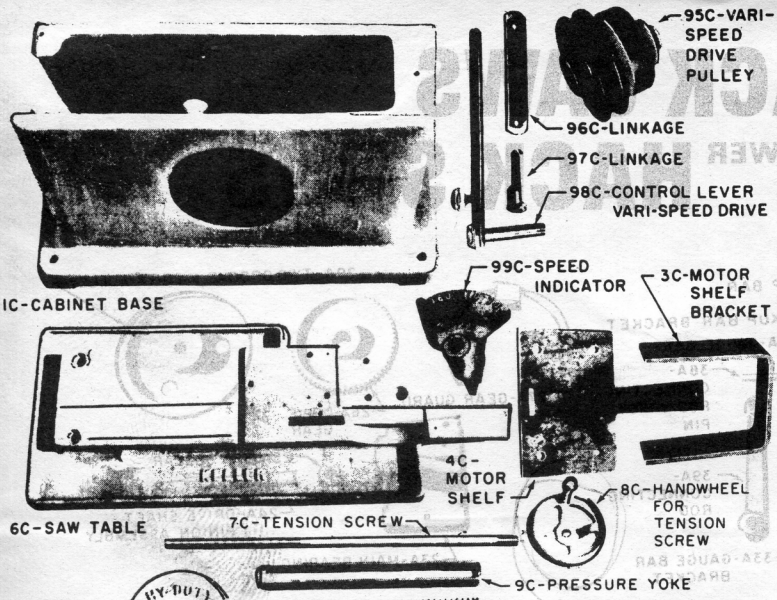
Large sections and soft materials require coarse teeth. Thin sections and hard-to-machine materials require fine teeth.

USE PLENTY OF COOLANT

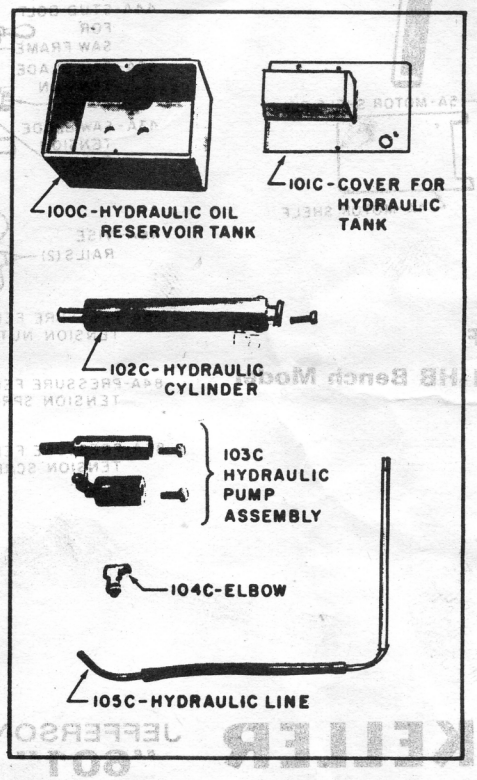
Start the coolant flow before the first cutting stroke. Coolant is needed on all materials (except cast iron. copper and some brasses) to reduce friction. blade wear. and chip clogging. Keep coolant flowing until job is finished and the blade is stopped.

HY-DUTY SERIES Power HACK SAWS





HYDRAULIC LIFT PARTS FOR HY-DUTY SAWS



*Standard KELLER FEATURES on ALL SAWS**

- **QUICK-ACTING SWIVEL JAW VISE** with Independent Steel Rails
- **VISE SWIVELS** to 45°
- **ALL CAST CONSTRUCTION**
- **HYDRAULIC LIFT** on all Keller Hy-Duty Saws
- **PRESSURE RELIEF** on Reverse Stroke on all other models.
- **AUTOMATIC STOP SWITCH** (Just set it and forget it.)
- **EXTRA-HEAVY GUIDE BAR BEARING** for true alignment
- **OILITE BEARINGS** throughout
- **ADJUSTABLE HOOK-UP BAR** for Saw Frame.
- **ADJUSTABLE BRONZE GIBS** on Saw Frame.
- **DRIVE** Vari-speed on #1 Wet Cut & larger 4-speed on #1-HB, 1-HF, 1B, 1F 2-speed on Jefferson "601"

USE HEAVY FEED PRESSURE

Normally you should set the feed pressure as heav as possible without breaking the teeth or making th blade cut crooked. Excessive pressure and strok speed increase the cutting rate at the expense of blad wear. (When in doubt, keep pressure at maximum bu reduce the stroke speed).

The heaviest practical pressure. . and the fast est reasonable stroke speed produce the mos efficient cutting.

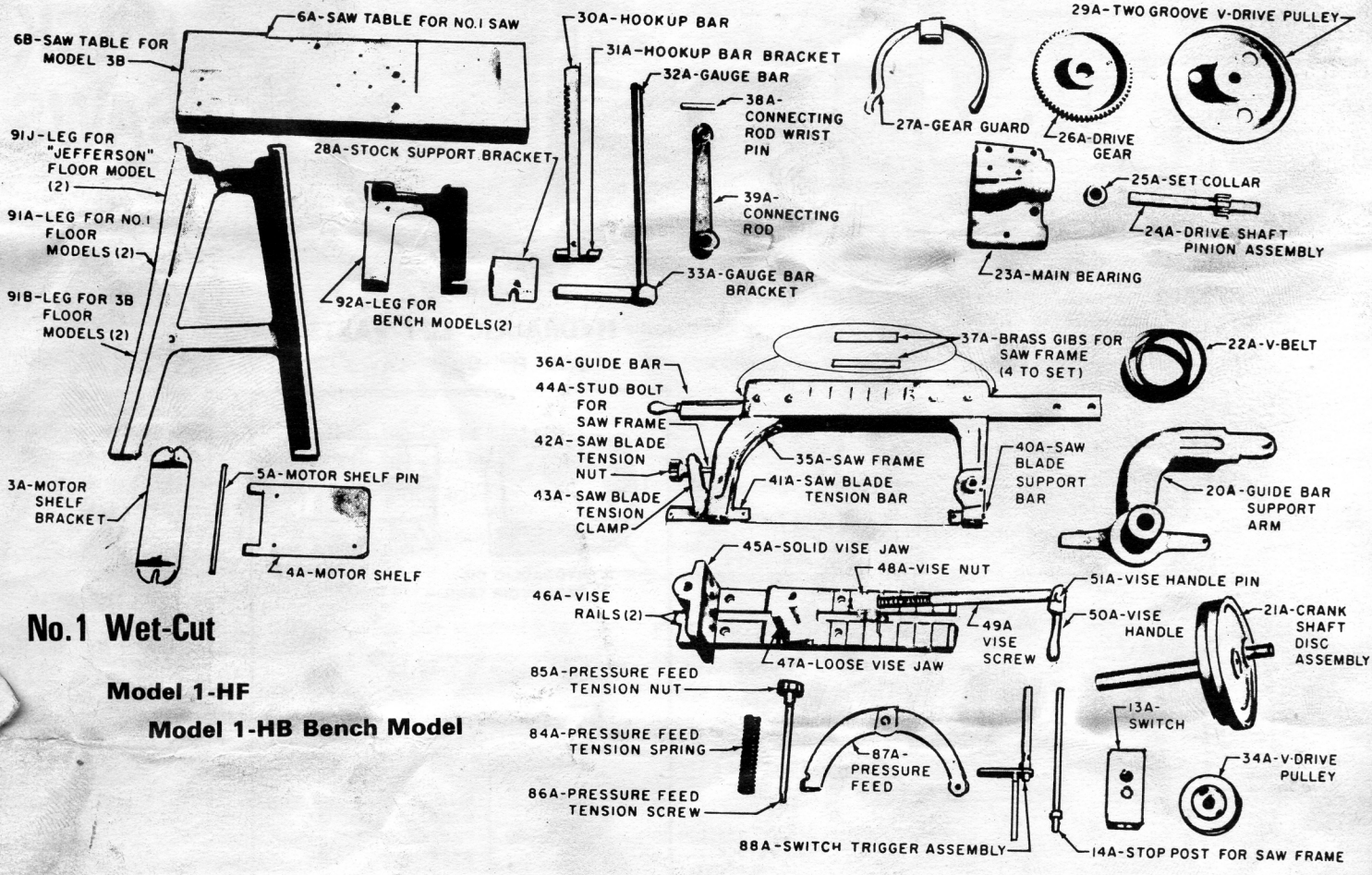
A feed-rate that is too light results in rubbing instea of cutting: (tooth points overheat, soften and breal down).

For optimum feed rate: Use heavy feed for hard very dense material -- light feed for thin or soft ma terial. For maximum production, you can increas feed by using coarse blades on soft materials. Bu remember to use moderate feed when straight, accur ate cutting is required.

KELLER DELUXE SERIES POWER HACK SAWS

3C WET-CUT 7"x7"
3B DRY-CUT 7"x7"

5"x5" SERIES POWER HACK SAWS



No.1 Wet-Cut

Model 1-HF

Model 1-HB Bench Model

KELLER JEFFERSON "601" America's Best SMALL Saw Buy...