

Williams & Hussey Machine and Tool Co.

Manual # OM-992 VARI-FEED RETRO KIT (VF-104-K)

Kit includes the following:

(1) VF-100; Vari-Feed Assembly includes:

VF-1	(1) motor
VF-90	(1) chain guard
VF-36	(4) 10-32 x 5/8" SHCS
VF-12 REV A	(2) 17 tooth chain sprockets

(1) 54-417-C; Control, Single Phase, 240V, AC/DC

(1) 084177.21; Control mounting brace w/hardware

(1) Bagged Hardware to include:

VF-3	(2) Sprockets, 14 tooth
VF-4	(1) Chain, #25 short infeed 36 pitch
VF-5	(1) Chain, #25 long outfeed 54 pitch
P-242	(1) Thread Locker, Blue

INSTALLATION: FIRST DISCONNECT THE POWER SOURCE TO THE MACHINE

These instructions are for **220 volt single phase controls only!**
We recommend you have an **electrician** wire this motor control.

State and local codes may supersede these instructions.

The Vari-Feed motor runs on 90 volts direct current, supplied by the Vari-Feed portion of the control..

WIRING INSTRUCTIONS

Caution! These instructions are for wiring a **WEG 2hp motor**, catalogue number L3515M, with a specification number 35J 383 2013, 56/56H frame, **only!**

230 volt wiring instructions (high voltage)

The 230 volt switch is for 230 volt applications only!

There is a wiring diagram on the motor connection box. The following is a word description of this diagram.

- 1) The cord coming out of the side of the panel is your power supply connection.
- 2) The cord coming out of the bottom of the panel goes to the 2hp motor.
 - a) Cut back the outer covering on the cord 6".
 - b) Strip off $\frac{3}{4}$ " of insulation of each of the three wires.
 - c) Take the cover of the connection box on the motor.
 - d) Install the cord connector in the connection box on the motor.
 - e) Insert the cord 6" and tighten the connector onto the full cord casing.
 - f) Crimp the forked terminal onto the **green** cord wire and place it under the **green screw** in the motor connection box and tighten the screw.



Connections for Motor Wires

From Control	Baldor Motor
Line # 1	to 1,8
Line # 3	to 4
Green	Grounding Screw
	Cap 2,3,5 together
	Cap J

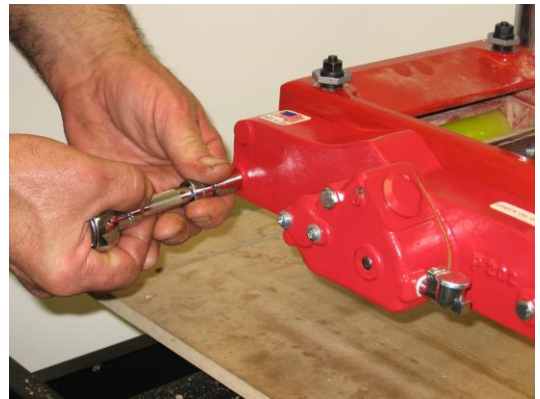
INSTALLATION OF THE VARI FEED MECHANISM

Remove your old feed unit.

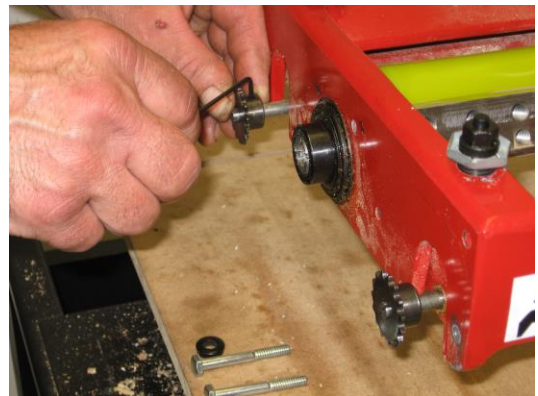
Start by removing the 2 sets of pressure screws, pressure screw guides, and springs from the infeed swing arm.

Next remove the rest screw below the infeed swing arm allowing it to swing down out of position.

Remove the attaching bolts holding your old feed unit to your machine. Save two of the shorter bolts. Pull your feed unit off and disconnect the chains.



Remove both P-111 (15 tooth) axle sprockets, replacing them with the VF-3 (14 tooth) sprockets (hub first), using thread locker on the setscrews setting the outfeed sprocket 5/32" in from the end of the axle and the infeed 1/16" in from the end of the axle.



Pick up the vari-feed unit and put the new **54 pitch long chain (outfeed roller chain)** over the driving sprocket closest to the chain guard housing. Put the **new 36 pitch short chain (infeed roller chain)** over the outer driving sprocket



Note:

Some chains may have master links. Install the chain with the rounded end of the master link clip moving in the direction of chain travel.

Put two **old mounting bolts with new black washers** on the top of the machine stand as you ready the unit to be attached to the machine head. Pull the unit up close to the attaching point and droop the long chain over the out feed chain sprocket and loop the infeed chain around the infeed sprocket.

Position the new Vari-Feed chain guard to align the holes on each end to the tapped holes in the head casting. Install the old mounting bolts in these holes. Do not tighten yet.



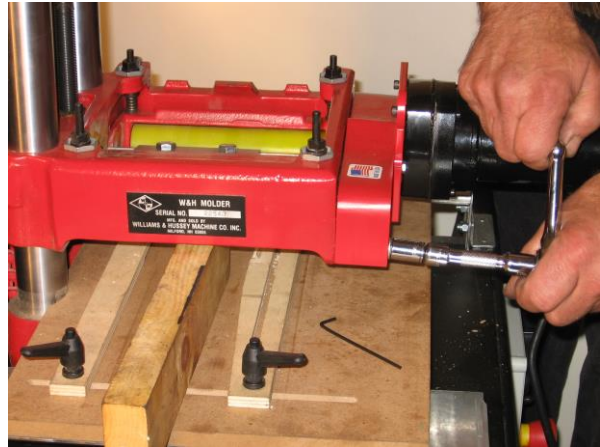
There is a third central bolt hole location which is used on the W&H Model 206 machine. It may be used in a retro fit situation if you have a head casting with a broken corner. The central hole location will give you a second mounting hole. Some machines do not have the matching threaded hole in the head casting. If needed you would have to drill and tap a 1/4-20 hole from the new chain guard hole. If your machine head casting has the matching threaded hole you still may need some enlarging of the VF-9A chain guard hole due to some minor variations in the location of that hole over the years.



Pivot the infeed swing arm up in position and reinstall the rest screw (54-16) with thread locker, then reinstall the pressure screws, pressure screw guides, and springs.

Tighten the mounting bolts attaching the vari-feed unit to the machine head

Check the short chain for a proper amount of tension. It should have nearly no slack in it and the long chain should have plenty of slack. This is the correct setting. The short chain gains slack in the operating position and the long chain **loses** slack in the operating position. To obtain the correct setting, in most cases, crank the head down so the out feed roller is pushed up into the running position by placing a piece of stock under the out feed roller. There is some variation in machines through the years and you may have to make a custom adjustment using the attaching bolt hole clearance to obtain an optimum chain tension/slack setting.



Align the in-feed sprocket in line with its driving sprocket, and tighten its set screw. Sprocket should be positioned so the chain is in a straight path to its mate.



Check to see that it is **safe to start the machine**.

Plug in the power cord to your power supply.

Test the **direction of travel of the feed rollers**. As you face the butt end of the feed motor the rollers should be turning in a clockwise direction.

You are now ready to use your new Vari-Feed unit. See the next page for an **operation overview**.

OPERATION OF THE VARI-FEED RETRO. A SUPPLEMENT TO THE OWNERS MANUAL

We are sure you will enjoy your new Vari Feed. It will give you much more control, more knife power, more feeding power, and more versatility.

The Vari-Feed function is very simple to operate. First familiarize yourself with the "Owners Manual". **It is very important to safely operate the machine as outlined in the "Owners Manual"! Operate the machine only within the described design intent.** When you are ready to safely start the machine, press the start button and also press the Vari-Feed toggle switch "on". This will start both your knife and the feed system. Adjust the dial on the feed control to set an appropriate feed speed. The dial will set the rate of feed from no feed to approximately 19 fpm (feet per minute).

When the dial is in the 9 o'clock position the feed speed is approximately 4 fpm.

At the 12 o'clock position = approximately 6 fpm

At the 3 o'clock position = approximately 14 fpm

At the full to the right position = approximately 19 fpm

You may adjust the feed rate while the stock is in the process of being molded.

As the grain structure changes throughout the cut you can vary the stock feed rate to reduce the possibility of chip outs and the spoilage of your piece of stock.

TROUBLE SHOOTING

If the feed motor will not operate;

Check to see that your rocker switch is in the on position.

Check to see that your motor electrical plug is fully seated in its receptacle.

Check for blown fuses. The armature fuse is a 2 amp, the 120 volt line fuse is a 5 amp.

Fuses are type AG, 250 volt, dimensions are 1/4" diameter by 1 1/4" length, glass or ceramic.

CONTACT INFORMATION:

WILLIAMS & HUSSEY MACHINE and Tool CO.
465 3rd Ave. SE
Britt, IA 50423

Phone: 800-258-1380 Local: 641-843-3868
Fax: 641-843-3869

E-Mail: customerservice@williamsnhussey.com

Website: williamsnhussey.com