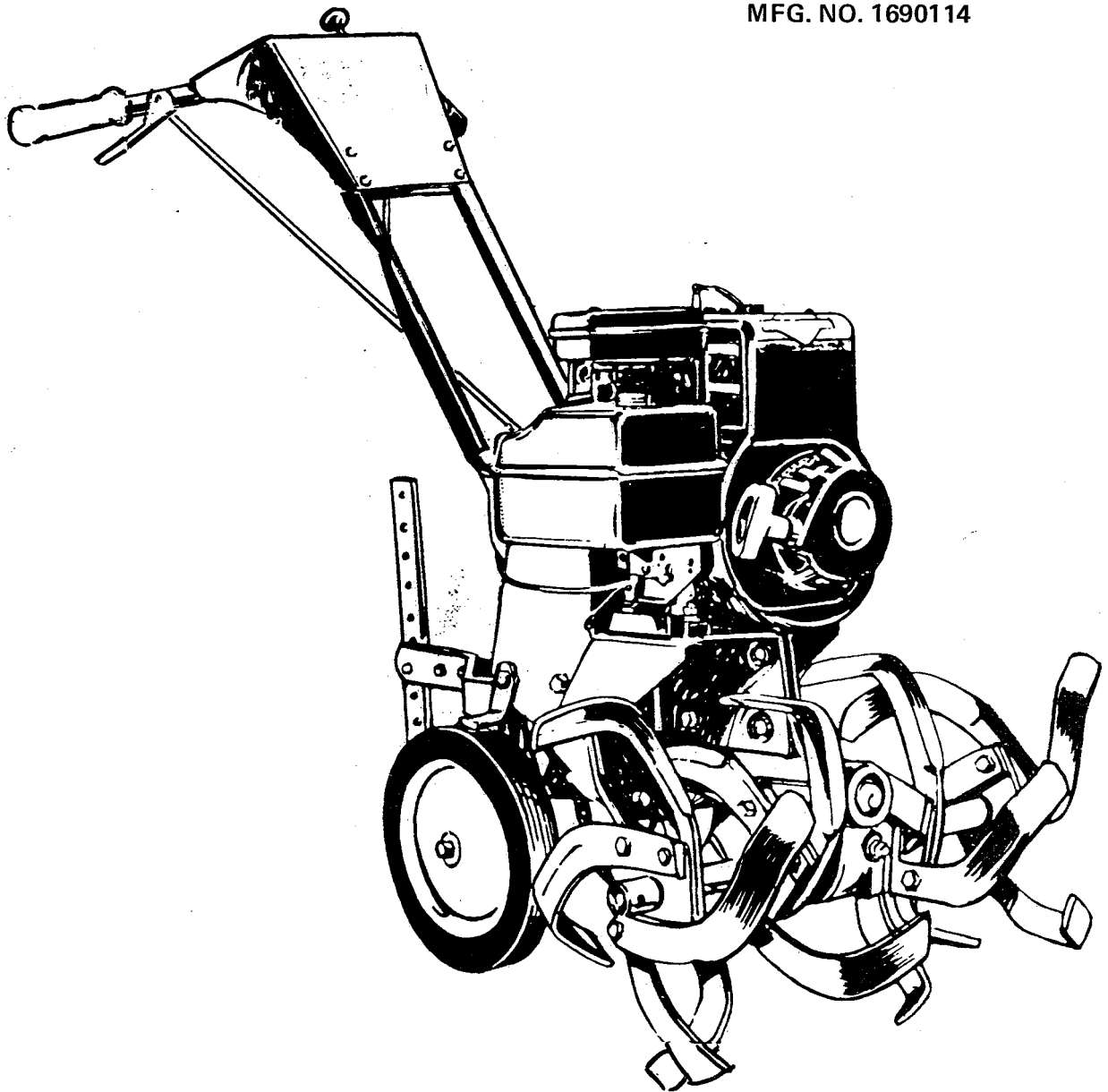


***Simplicity***

# **5hp TILLER**

MFG. NO. 1690114



### **— SIMPLICITY'S NEW EQUIPMENT WARRANTY —**

The Company warrants Simplicity products to be free from defects in material and workmanship, except the Company makes no warranty, express or implied, with respect to tires, engines, generators and voltage regulators, which are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year (45 days for equipment used for rental, municipal or commercial purposes) under normal use, from date of purchase, will be replaced without charge, provided such part is returned to the factory, (if requested), and is found to be defective upon examination at the factory. This warranty does not apply to any Simplicity products altered outside of the Simplicity factory. THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE. The Company's obligation under its warranty is strictly and exclusively limited to the replacement of such parts, and in no event shall the Company be liable for any other damages, whether direct, immediate, incidental, special, or consequential. Simplicity Manufacturing Company, Inc., reserves the right to modify or change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

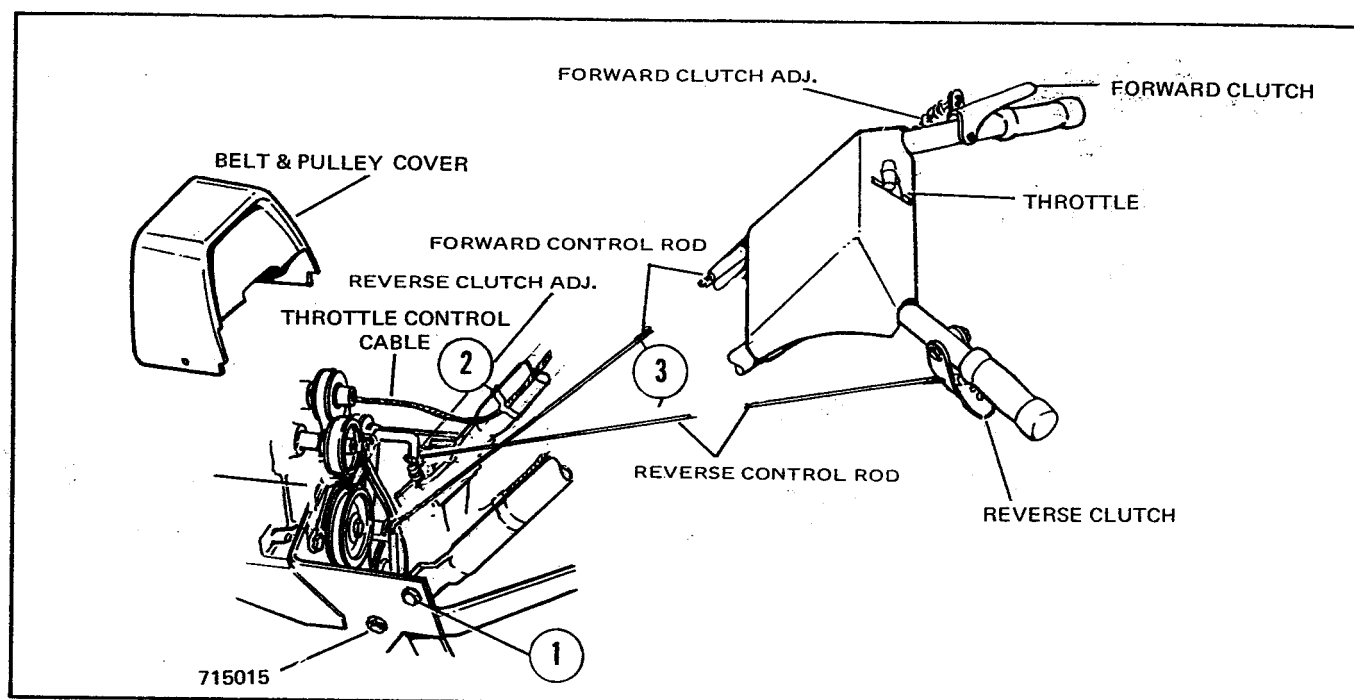


Figure 1

## PACKING

The Tiller is delivered complete in one carton. The carton contains:

- 1 - Depth Bar
- 1 - Handle Assembly
- 1 - Engine, frame and transmission housing Assy.
- 2 - Wheel and Tire Assemblies
- 4 - Tine Assemblies
- 1 - Hardware Pack

Should shortages of any of the above items occur, advise by stating packer's number listed on green packing slip, part number and description of items missing and serial number of unit.

## ASSEMBLY

1. Remove the belt and pulley cover from the Tiller frame.

2. Attach the handle assembly to the handle support with the (2)  $\frac{3}{8}$ "-16 x 1" long capscrews,  $\frac{3}{8}$ " lockwashers and  $\frac{3}{8}$ "-16 hex nuts. See Item 1, Figure 1.

3. Attach the forward and reverse control wires as shown in Item 3, Figure 1. Refer to Clutch Adjustments for proper settings.

4. Remove the cable clip which holds the throttle cable to the left hand handle assembly. See Item 2, Figure 1. Insert the curved end of the throttle control on the engine throttle lever located on the right hand side of the engine. Loosen the engine throttle clip. Place the throttle

lever in the STOP position and the engine throttle lever in the STOP position and retighten clip.

5. Tilt the Tiller back and attach the right and left inner tine assemblies to the shaft and secure with the pins and clips supplied in the hardware pack. The inner tine assemblies are shorter and will slide on easily if installed on the correct side. Insert clips completely through the pins to prevent loss. Then attach the outer tine assemblies in a similar manner. Check to see that the sharp edge of the upper tines face forward.

7. Tilt the Tiller forward and rest it on its engine. Insert the two (2)  $\frac{1}{2}$ "-13 x  $\frac{3}{4}$ " long capscrews with the  $\frac{1}{2}$ " plain washers on the outside of the wheel, in the wheels. Install the two (2)  $\frac{1}{2}$ " jam nuts on the wheels. Insert the wheel assembly in the upper hole on the frame upright and secure with the two (2)  $\frac{1}{2}$ " jam nuts. Tighten the jam nuts and insure the wheels turn freely with little wobble. See Figure 2. Adjust the wheel scrapers to clear the wheels  $\frac{1}{8}$ ".

8. Install the depth bar and clamp with the round end of the depth bar toward handle and secure with the pin and clip supplied in the hardware pack. See Figure 2.

9. Install cover over frame assembly behind engine and secure with four (4) screws.

10. This Tiller has an oilite bronze filter in the vent hole located at the rear of the worm drive housing. DO NOT REMOVE THIS FILTER.

## LUBRICATION -- ENGINE

Prepare and maintain engine in accordance with the instructions furnished by the engine manufacturer. Be sure to fill engine crankcase with proper oil and check air cleaner as recommended.

## WORM GEAR HOUSING

THE WORM GEAR DRIVE ON THE TILLER IS LUBRICATED WITH SPECIAL WORM GEAR OIL AVAILABLE.

### DO NOT USE ORDINARY TRANSMISSION OILS.

If ordinary gear oil is used, gears may fail. It is filled at the factory but should be checked before use and again after every hour to five hours of operation. To add oil to the worm gear housing, the tiller should be tipped far enough backward on the handles so the housing is as near vertical as possible. FILL WITH OIL UNTIL THE OIL SHOWS AT THE PLUG WHEN TILLER IS RESTING ON TINES. DO NOT OVER FILL. Screw plug back on tight.

### NOTE

During operation, the action of the worm gear drive may cause the housing to become quite warm. This is normal and no harm will be done to the gears as long as the housing is filled with special worm gear oil.

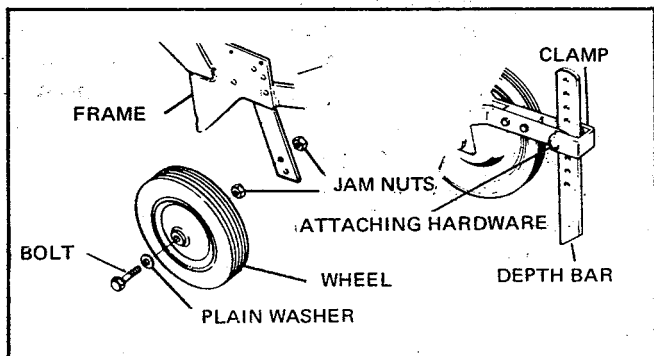


Figure 2

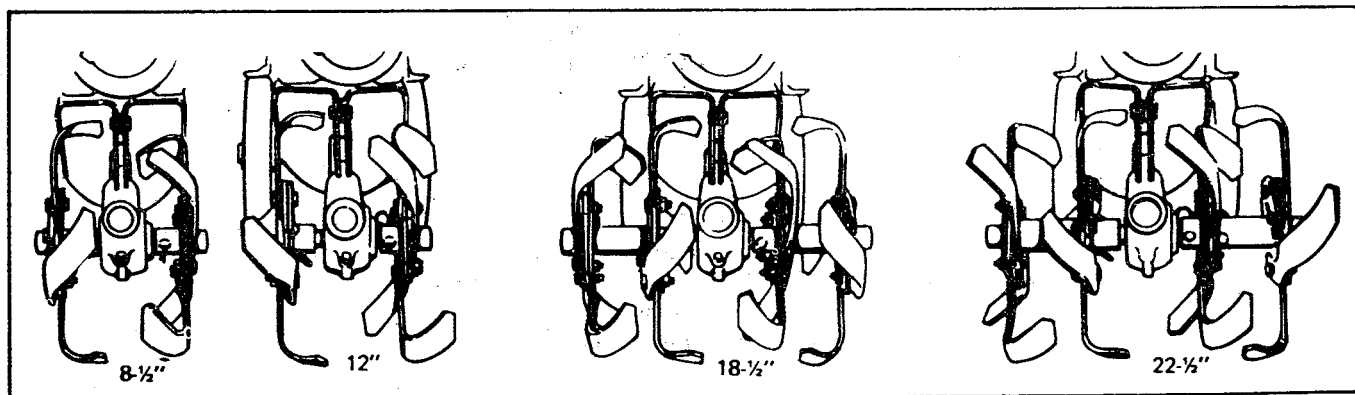


Figure 3

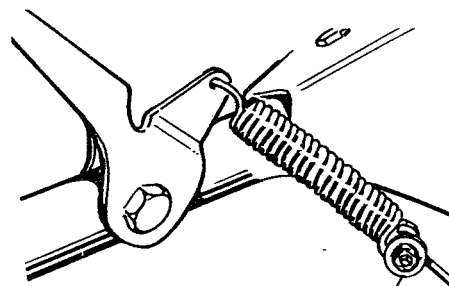
## MISCELLANEOUS

Lubricate the idler lever and clutch grip pivot points with SAE-30 oil frequently. CAUTION do not oil wheel bearings. Oil will collect dirt which will accelerate wear.

## TIRES

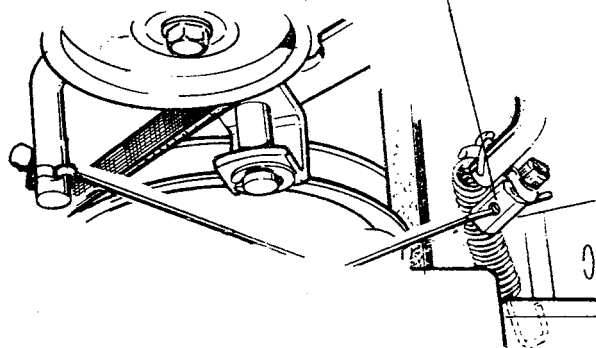
The Tiller is supplied with two solid rubber tires permanently mounted on wheels which contain solid bearings and do not require future attention.

## ADJUSTMENT CLUTCH



ADJUST FORWARD CONTROL ROD HERE TO ADJUST LOOSEN ALLEN SCREW AND MOVE CABLE AS REQUIRED FOR PROPER CLUTCHING ACTION. TIGHTEN ALLEN SCREW

ADJUST REVERSE CONTROL CABLE HERE TO ADJUST LOOSEN ALLEN SCREW AND MOVE CABLE AS REQUIRED FOR PROPER CLUTCHING ACTION. TIGHTEN ALLEN SCREW.



## TINES

The cover of this manual illustrates the tine arrangement as the tiller is shipped. The tiller will till 22-1/2" wide as standard. The two outer sets of tines may be removed for narrow cultivation by pulling the two spring clips and pins and sliding outer tine assembly off of the inner tine assembly. This permits narrow cultivation - 12" wide.

The tines may be further adjusted to cut additional width. By placing tines in position as shown in Figure 3, cutting widths may be adjusted to 8-1/2", 12", 18 1/2" or 22 1/2".

## OPERATION

Before putting the Tiller into operation, make sure that the engine has been serviced completely as described in the engine instruction book provided. The Tiller, if operated properly, will allow the operator to experience finger-tip ease in preparing the ground for seeding.

1. Start the Tiller engine by setting the throttle control to 1/2 to 3/4 open open the choke and pull the starting rope. When the engine starts, close the choke and adjust the throttle to the desired speed. For tilling work, full throttle is recommended.

2. To operate the tiller in the forward direction, grip the right hand clutch lever. To reverse the tiller release the right hand clutch lever and grip the left hand clutch lever. **DO NOT ATTEMPT TO OPERATE THE TILLER BY FORWARD GRIPPING BOTH THE FORWARD AND THE REVERSE CLUTCH LEVERS AT ONE TIME, AS SERIOUS DAMAGE COULD RESULT.**

3. The depth bar setting will determine the depth of the tilling action. For tilling at a depth of 4 to 6 inches, install the pin through the second or third hole from the top. For a more shallow tilling action, the depth bar can be raised. Remember the deeper the depth bar is set into the ground, the deeper the tine blades will dig into the ground.

4. To maintain easy control of the tiller, the operator should use the depth bar to furnish the necessary drag on the Tiller, rather than pulling back on the handles. While operating the Tiller in preparing the ground, the operator needs only to press down on the handles for a deeper tilling action. Remember a downward pressure on the handles results in a slow down of the forward movement and a deeper tilling action. An upward pressure on the handles results in an increase in the forward movement and a shallow tilling action.

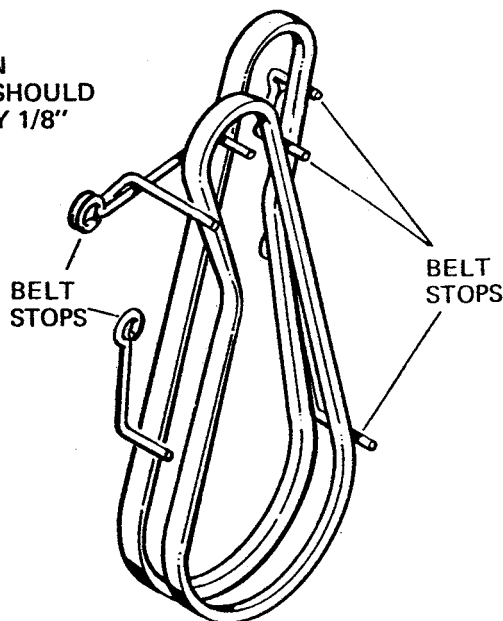
## LET THE DEPTH BAR DO THE WORK

Your Tiller is scientifically designed to prepare the soil for planting with a minimum of effort. Do not attempt to till when the soil is very wet as this may cause lumps which are difficult to work up. If the soil is extremely hard and dry you may find it desirable to cross-till to obtain the depth you want. On the first pass, till across the plot, and on the second pass, till in the direction in which the rows will run.

When operating your Tiller for the first time, we suggest you try it for a short time to get the "feel". You will want to find the most comfortable handle position, the correct location of the depth bar for ease of operation, the engine speed best suited to your soil condition. You will soon find the correct pressure to apply to the handles. Experiment with the clutch lever, and notice the immediate response from "tickling" the clutch. You will find this very desirable when doing close cultivation with the tiller.

DISTANCE BETWEEN  
BELT STOP & BELT SHOULD  
BE APPROXIMATELY 1/8"

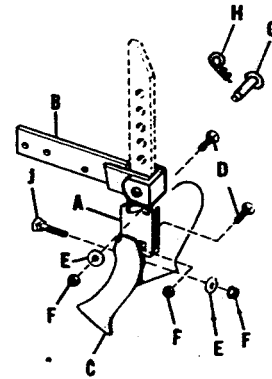
Check for proper clutching action. Set the belt stops as near as possible to the belts when they are engaged. Make sure that the belts stop turning when the clutch lever is released and do not slip when gripped. If adjustment is needed, loosen the round Allen screws in the wire clamps and reposition the control cables.



## FURROW OPENER

A furrow opener shovel is available which mounts on the depth bar. You will find this shovel very handy for digging furrows for crops such as potatoes that are planted in rows. When installing the furrow opener, turn the depth bar upside down and bolt to the tool holder with the carriage bolts, washers and nuts supplied. Remove the stop plate from between the support assemblies on the Tiller and install the extension support assembly with the same hardware. The depth bar is then positioned in this extension, the clamp installed and these pieces secured with the pin and clip supplied.

Ref. Let.	Part No.	Description
A	8271503	Tool Holder
B	118287	Extension Support Assembly
C	103010	8" Furrow Opener
D	703002	Carriage Bolt, 3/8"-16 x 1-1/4"lg.
E	719001	Plain Washer, 3/8"
F	717003	Hex.Nut, Full, 3/8"-16
G	118053	Pin
H	8161045	Spring Clip
J	704001	Plow Bolt



## TINE EXTENSION SET

The tine extension set consists of a left hand and right hand tine assembly. These additional extensions will allow an increase from the standard 22-1/2" tilling width to a width of 32-1/2" as shown in Figure 5. To install the extension tines, place long hubs of extension tines over hubs of tines previously installed, and secure with pin and spring clip. Be sure the extension tines are so mounted that the sharp edges of the tines on top face forward.

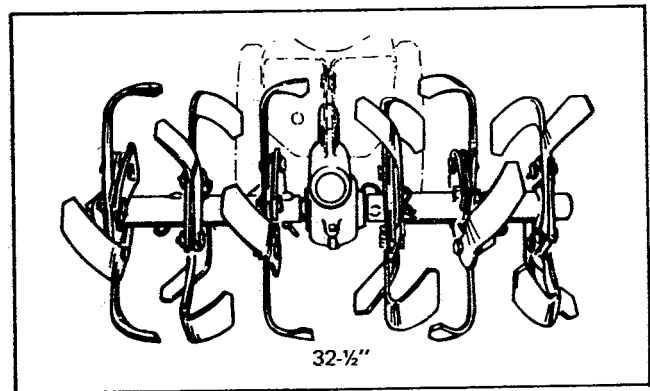
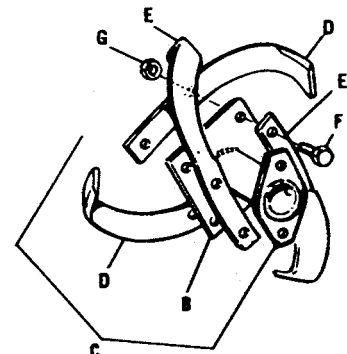
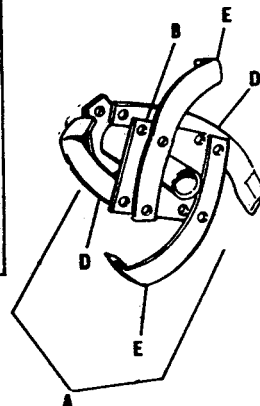
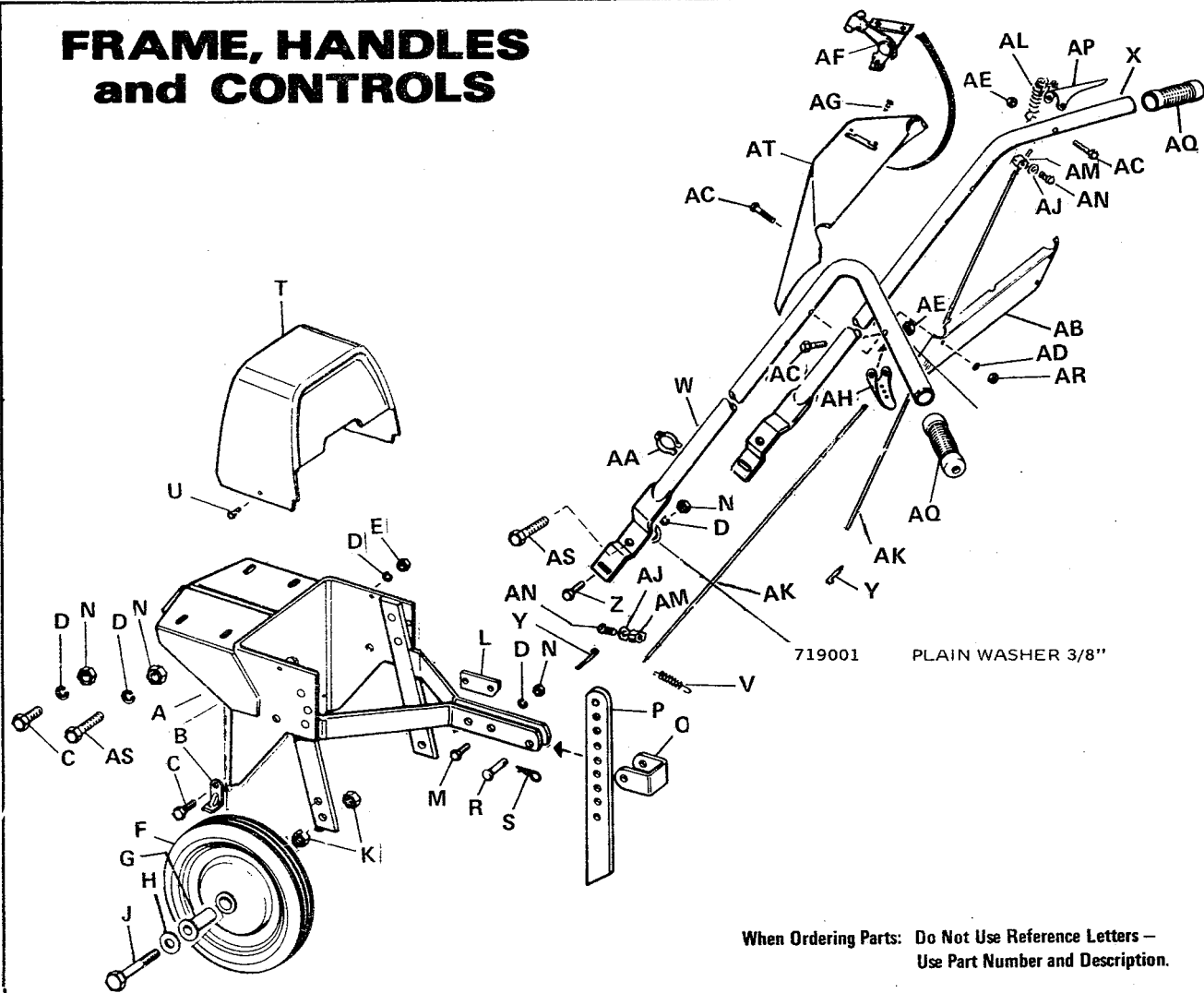


Figure 5.

Ref. Let.	Part No.	Description
A	105288	Extension, L.H. Tine Assy. Complete
B	105286	Plate Assy., Tine Extension
C	105289	Extension, R.H. Tine Assy. Complete
D	8152001	L.H. Tine Blade
E	8152002	R.H. Tine Blade
F	706009	Hex. Capscrew, 7/16"-20 x 1-1/4" lg.
G	717512	Hex. Nut, Full, 7/16"-20



# FRAME, HANDLES and CONTROLS

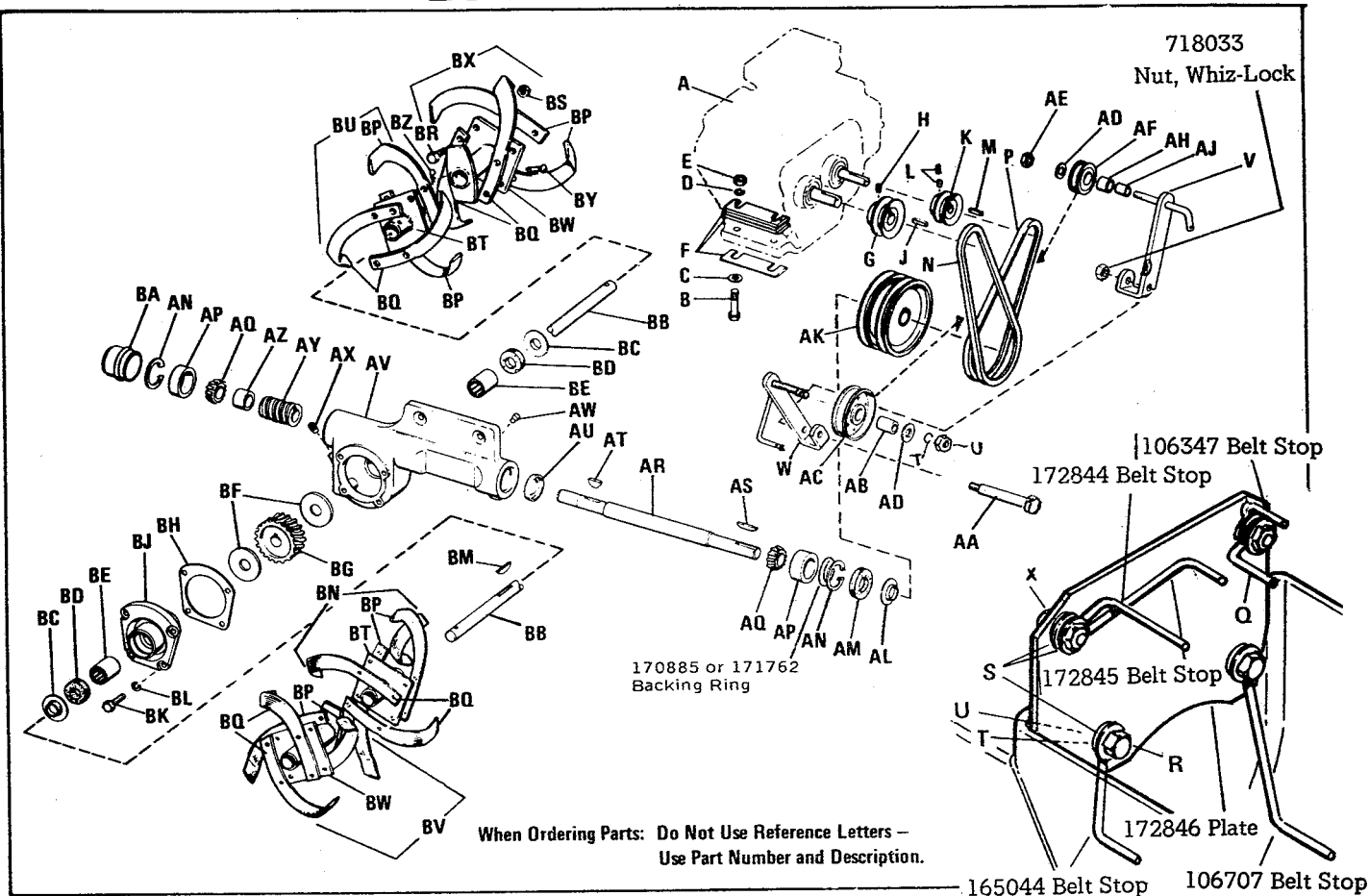


When Ordering Parts: Do Not Use Reference Letters –  
Use Part Number and Description.

Ref. Let.	Part No.	Description
A	170879	Body Assembly
B	170360	Scraper
C	705004	Hex Hd. Cap Screw 3/8"-16 N.C. x 3/4" lg.
D	720002	Lock Washer, 3/8"
E	717013	Hex Nut, Full 3/8"-16
F	118030	Wheel & Tire Assembly
G	118132	Bushing, Wheel
H	719004	Plain Washer, 1/2"
J	705037	Hex Hd. Cap Screw 1/2"-13 N.C. x 3-1/4" lg.
K	717017	Hex Jam Nut 1/2"-13
L	118207	Stop Plate
M	705009	Hex Hd. Cap Screw 3/8"-16 N.C. x 1-1/2" lg.
N	717003	Hex Nut 3/8"-16
P	118081	Bar-Depth
Q	118447	Clamp
R	105249	Pin
S	8161045	Spring Clip
T	170359	Cover
U	715067	Screw Washer Hd. Thread Forming 1/4"-20
V	121037	Spring
W	118466	Handle, L.H.

Ref. Let.	Part No.	Description
X	118467	Handle, R.H.
Y	722011	Cotter Pin 3/16"x1"
Z	715061	Hex Hd. Cap Screw 3/8"-16 N.C. x 1" lg.
AA	8061108	Clip, Cable
AB	118298	Cover Handle Bar
AC	705025	Hex Hd. Cap Screw 1/4"-20 N.C. x 1-1/2" lg.
AD	720003	Lock Washer, 1/4"
AE	717513	Hex Nut, Full Lock, 1/4"-20
AF	118235	Throttle Control Assembly
AG	714016	Screw, Self Tapping No. 10-24
AH	118449	Grip, Clutch-Reverse
AJ	719010	Plain Washer No. 10-24 x 1/2"
AK	172924	Control Wire
AL	118495	Spring
AM	161092	Clamp, Wire
AN	714016	Set Screw No. 10-24 x 1/2"
AP	118431	Grip, Clutch-Forward
AQ	106558	Grip, Handle Bar
AR	717005	Hex Nut Full, 1/4"-20 N.C.
AS	715055	Hex. Hd. Cap Screw, 3/8"-16 N.C. x 1-1/4"
AT	118237	Control Housing Assembly

# DRIVE and TINES



Ref. Let.	Part No.	Description
A		Engine B & S 5 H.P.
B	705020	Hex Hd. Cap Screw 5/16"-18 N.C. x 2" lg.
C	719002	Plain Washer 5/16"
D	720001	Lock Washer 5/16"
E	717001	Hex Nut Full 5/16"-18
F	118463	Shim
G	118027	Pulley, Engine
H	713504	Set Screw 5/16"-18 N.C. x 3/8" lg.
J	8061081	Key
K	118457	Pulley, Engine
L	713502	Set Screw 5/16"-18 N.C. x 1/4" lg.
M	725007	Key
N	118494	Belt "V" Reverse
P	164146	Belt "V" Forward
Q	172843	Belt Stop
R	705005	Hex Hd. Cap Screw 3/8" - 18 N.C. x 1" lg.
S	719001	Plain Washer 3/8"
T	720002	Lock Washer 3/8"
U	717003	Hex Nut, Full 3/8"-16
V	118408	Lever Assembly-Idler
W	172751	Lever Assembly-Idler
X	703003	Carriage Bolt, 3/8"-16 x 1"
AA	171336	Pivot Bolt
AB	118335	Spacer
AC	154534	Pulley, Idler
AD	719002	Plain Washer 5/16"
AE	717524	Nut, Lock 3/8"-16 N.C.
AF	101002	Pulley, Idler Assembly w/ Bushing
AH	8161243	Bushing
AJ	8191020	Spacer
AK	171987	Pulley, Driven
AL	118400	Shield
AM	118393	Oil Seal

Ref. Let.	Part No.	Description
AN	118396	Snap Ring
AP	154393	Cup, Bearing
AQ	154486	Bearing, Roller
AR	170888	Shaft, Worm
AS	118439	Key
AT	725502	Key
AU	118399	Cup
AV	118392	Housing, Worm Drive
AW	118462	Plug, Vent
AX	726003	Plug, Pipe 3/8"
AY	118492	Worm, R.H.
AZ	118398	Spacer
BA	154487	Cup
BB	118021	Shaft, Worm Gear
BC	118403	Shield
BD	118118	Seal, Oil
BE	118020	Bearing, Needle
BF	118315	Washer, Thrust
BG	118022	Gear, Worm, R.H.
BH	118024	Gasket
BJ	118402	Cover
BK	715018	Hex Hd. Cap Screw 1/4"-20 N.C. x 5/8"lg.
BL	720003	Lock Washer 1/4"
BM	725005	Woodruff Key
BN	118083	Left Hand Inner Tine Assembly
BP	8152001	Left Hand Tine Blade
BQ	8152002	Right Hand Tine Blade
BR	706009	Hex, Capscrew, 7/16"-20 x 1-1/4"
BS	717512	Hex Nut, Full, 7/16"-20
BT	118084	Inner Tine Plate Assembly
BU	118120	Right Hand Inner Tine Blade Assembly
BV	105288	Extension, Left Hand Tine Blade Assembly
BW	105286	Plate Assembly, Tine Extension
BX	105289	Extension, Right Hand Tine Blade Assembly
BY	118053	Pin
BZ	8161045	Spring Clip