PARTS LIST PL14-420 1st EDITION

MODEL NUMBERS: 27300AB8, 27310AB7, 27360AB2, 27370AB1

CAUTION: Disconnect plug from receptacle before doing any maintenance on these 'tools.

## INSTALLATION

These Wire-Wrap tools are shipped as complete tools, less bit and sleeve. To equip the tool for operation, loosen the collet nut and first insert the bit and then the sleeve into the collet. With the tool running, <u>tighten the collet nut finger</u> tight only.

### **OPERATION**

Do not run tool longer than required for wrapping the connection. Release the trigger quickly to assure proper indexing. An audible "click" will be heard when a proper index is obtained. Burping of the tool is not necessary and will decrease tool life.

### LUBRICATION

Lubricate the sides of the gears, gear pins, teeth of ring gear, and the two "O" rings in the idler gear plate lightly with part number 513156 grease. Oil the spline, large end of the drive shaft, yoke groove of clutch and helical face of indexer block lightly with part number 500021 oil. Excessive lubrication will reduce performance of the tool. Lubricate every 500,000 cycles or whenever the tool is disassembled.

### TROUBLE SHOOTING

If the tool should fail to start or stop properly, disassemble and check to see if the relationship between the clutch, index block, trigger and microswitch are correct. The microswitch should only turn the motor on after the trigger has pulled the clutch free from the index block and has just started engagement with idler gear plate. With the motor turned off, the clutch must disengage with the idler gear plate and be fully engaged and index with the index block.

#### DISASSEMBLY

- Disassemble the tool as shown in the exploded parts drawing.
- 2. The circuit board assembly and cord assembly can be disconnected from the motor assembly by unplugging the black and red wires from the motor assembly. Do not dismantle the circuit board as this is a non-serviceable item. Line cord can also be unplugged from the circuit board.
- 3. Check the splines on both the clutch and drive shaft for wear. These parts must work freely. If any wear occurs, replace the part. Also, the end of shaft that rotates on the "0" rings of idler gear plate shows wear or deformation, replace drive shaft.

# DRIVE SHAFT DISASSEMBLY OR ASSEMBLY

- Remove pin from drive shaft using a small diameter pick or punch. Insert a rod into small end of drive shaft and push the drive pawl out. Some models may have a backforce spring behind the drive pawl.
- 2. To assemble drive shaft, insert correct backforce spring (if one is used) and drive pawl into drive shaft. Insert pin in proper hole and be sure drive pawl is aligned to pin hole of shaft before pressing pin into pawl. On backforce models, the pawl must operate freely.



## CIRCUIT BOARD AND SWITCH ASSEMBLY

The circuit board should be replaced when necessary and not repaired.

### ASSEMBLY

- Connect red wire of circuit board assembly to positive terminal of motor. Positive identification mark is molded into the plastic next to the terminal. Also, connect black wire to negative terminal of the motor.
- Be sure helix index tab of clutch block (990272) is in alignment with pawl (530956) of drive shaft (990278).
- Place the motor assembly and drive shaft assembly into left case half.
- 4. Position the trigger over the switch. Insert trigger yoke into clutch groove and rotate trigger and switch together downward until position in case half. Next, install the return spring in the trigger and case half.
- 5. Install right case half and secure all screws.

# TRIGGER ADJUSTMENT

Insert a 1/16" Allen wrench into end of set screw through the small hole of the trigger. Turn set screw clockwise if the tool chatters during the wrap cycle. However, if excessive trigger pressure is required to actuate the motor, turn the set screw counterclockwise for proper adjustment.

For factory repair send to:

The Cooper Group Wire Wrap 591 East Church Street Reed City, MI 49677 (616) 832-2231

TROUBLE	PROBABLE CAUSE	REMEDY
Tool Will Not Run	Switch may be out of adjustment or inoperative.	Adjust set screw on trigger or replace switch.
	Brushes may be worn.	Replace motor.
	Leads may be broken or disconnected.	Repair wire or wire harness
	Armature wire may be broken.	Replace motor.
	Cord assembly may be broken at the flexing point below the tool handle.	Replace cord assembly.
Improper Indexing	Wrapping bit and/or station ary sleeve may be bent.	Replace wrapping bit and/or stationary sleeve. Be sure bit rotates freely inside of sleeve.
	Excessive dirt may cause binding of index mechanism.	Clean index mechanism.
	Base of stationary sleeve may be pressing too firmly against the tang of the wrapping bit.	Loosen collet nut to reliev pressure, pull sleeve out slightly then tighten colle nut.
	End of spline shaft or "O" rings in idler gear plate may be worn.	Replace defective part.
Intermittent Operation of Tool	Switch may be out of adjustment.	Adjust set screw in trigger
	Contact between brushes and commutator may be poor or worn brushes.	Replace motor.
	Defective armature in motor.	Replace motor.
	Wire in cord may be broken or may h <b>ave a</b> loose connec- tion.	If wire in cord assembly is broken, replace cord; if it is a loose connection, tighten connection on motor
Excessive Running Temperature of Tool	Contact between brushes and commutator may be poor.	Check brush springs.
	Index assembly and/or motor assembly may be dirty or may lack lubrication.	Clean index assembly and/or motor assembly and lubricat index assembly. Check moto bearings and be sure motor runs freely.

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