

OPERATION, PARTS AND SAFETY MANUAL

MM SIGNODE®

AHP-34 AND AHP2-114

ALL-POWER COMBINATION STRAPPING TOOLS

**IMPORTANT!
DO NOT DESTROY**

**It is the customer's responsibility to
have all operators and servicemen
read and understand this manual.**

**Contact your local Signode representative
for additional copies of this manual.**

READ ALL INSTRUCTIONS BEFORE OPERATING THIS SIGNODE PRODUCT

WARNING

READ THESE INSTRUCTIONS CAREFULLY. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS PERSONAL INJURY.

STRAP BREAKAGE HAZARD

Improper operation of the tool or sharp corners on the load can result in strap breakage during tensioning, which could result in the following:

- A sudden loss of balance causing you to fall.
- Both tool and strap flying violently towards your face.



Failure to place the strap properly around the load or an unstable or shifted load could result in a sudden loss of strap tension during tensioning. This could result in a sudden loss of balance causing you to fall.

- If the load corners are sharp use edge protectors.
- Positioning yourself in-line with the strap, during tensioning and sealing, can result in severe personal injury from flying strap or tool. When tensioning or sealing, position yourself to one side of the strap and keep all bystanders away.

TRAINING

This tool must not be used by persons not properly trained in its use. Be certain that you receive proper training from your employer. If you have any questions contact your Signode Representative.

EYE INJURY HAZARD

Failure to wear safety glasses with side shields can result in severe eye injury or blindness. Always wear safety glasses with side shields which conform to ANSI Standard Z87.1 or EN 166.



FALL HAZARD

Maintaining improper footing and/or balance when operating the tool can cause you to fall. Do not use the tool when you are in an awkward position.

CUT HAZARD

Handling strap or sharp parts could result in cut hands or fingers. Wear protective gloves.



TOOL CARE

- Inspect and clean the tool daily. Replace all worn or broken parts.
- Lubricate all moving parts weekly unless otherwise specified.
- On air powered tools, always disconnect the pneumatic connection to the tool when performing part removal and replacement procedures. NEVER connect a pneumatic source to a disassembled tool unless otherwise specified.

WORK AREAS

Keep work areas uncluttered and well lighted.

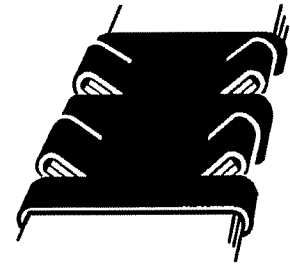
⚠️ WARNING

READ THESE INSTRUCTIONS CAREFULLY. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS PERSONAL INJURY.

- Use correct Signode products for your application. If you need help contact your Signode Representative.
- Signode tools and machines are designed and warranted to work together with Signode strapping and seals. Use of non-Signode strap and seals and/or manufactured or specified replacement parts may result in strap breakage or joint separation while applying strapping to a load or during normal shipping and handling. This could result in severe personal injury.

JOINT FORMATION

- Before using this tool, read its Operation and Safety instructions contained in this manual.
- The AHP tools are double reverse notch-joint sealers. Each notch-joint must be inspected to make certain it has four (4) good notches. A properly formed notch-joint will appear as shown in the illustration. If the notch-joint does not appear as shown, then the operator must proceed as follows.
 1. Make certain that the tool's operating instructions are being followed before applying another strap.
 2. Cut the strap off and apply a new strap and seal.
 3. An improper formed seal which does not have four (4) good notches, could result in strap separation. Before moving any package be certain that the seal is formed as shown. Inspect the joint to make certain it appears as shown in the illustration. If not, remove the broken strap and check the tool for worn or broken parts. Repair the tool for worn or broken parts. Repair the tool before applying another strap.



MOVING AND STACKING STRAPPED LOADS

Before moving or stacking any strapped load, follow all standard industry practices regarding safe material handling procedures.

CUTTING TENSIONED STRAP

Use only cutters designed for cutting strap; never use claw hammers, crowbars, chisels, axes or similar tools. Such tools will cause the strap to fly apart with hazardous force. Before using any Signode product read its Operation and Safety Manual.

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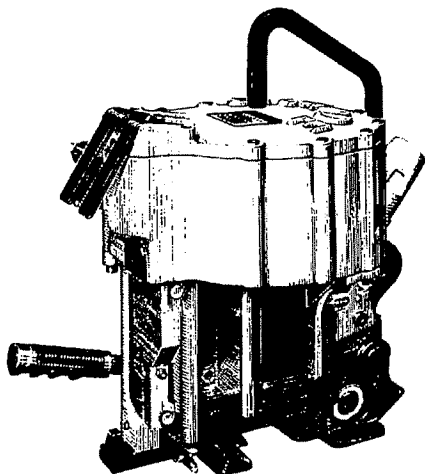
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⚠ WARNING

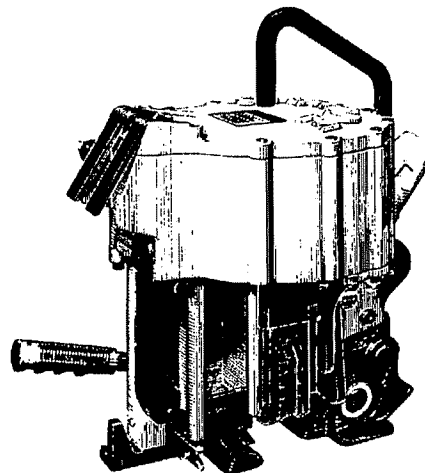
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TOOL INSTALLATION

To operate effectively, your tool must be installed properly. This installation includes proper suspension of the tool over the package to be strapped, correct placement of a strapping dispenser to provide a continuous easy supply of strap for the application, and a satisfactory air supply.



AH
P2-114 - Part No. 015650



AHP-34 - Part No. 023700

SPECIFICATIONS

MODEL	STRAP			SEALS
	TYPE	WIDTH	THICKNESS	
AHP-34	Magnus	3/4" (19mm)	.031" to .035" (0.78mm - 0.88mm)	34-AHP
AHP2-114		1-1/4" (32mm)		114-A

PNEUMATIC INFORMATION

AIR PRESSURE REQUIREMENTS

The AHP tools are designed to operate at air pressures ranging between 70 and 90 psig (4.8 - 6.2 Bar). Operating these tools outside this pressure range could result in strap breakage due to over tensioning or poor quality strap joints.

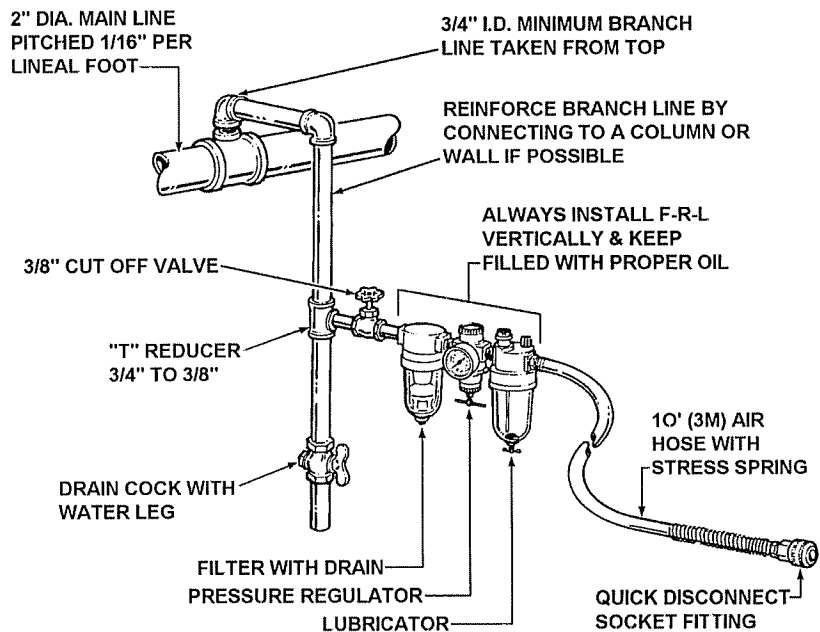
AIR SUPPLY INSTALLATION

If compressor has a good dryer unit, use black pickled pipe. When a dryer unit is not installed, use galvanized or copper pipe. To perform reliably, a pneumatic tool requires a continuous source of clean, water-free air at adequate pressure.

WARNING

- Never operate this tool using a bottled air or gas source.
- Bottled air/gas sources do not provide consistent operating pressure and could result in air pressures that exceed the maximum allowed for this tool.
- Exceeding the maximum allowable air pressure could result in severe personal injury.

A filter-regulator-lubricator unit (Signode P/N 008559) must be installed as close to the air tool as possible, preferably within 10 feet. It should be placed in a convenient location where it can easily be drained, adjusted, and filled with oil. The air hose (Signode P/N 008558) must have at least a 3/8" I.D. A quick-connect press-on socket (Signode P/N 008569) is installed on the stress spring end of the hose for convenient hookup to the air tool.



Filter and lubricator bowls are made of polycarbonate material. Do not install where bowls may be exposed to materials incompatible with polycarbonate. Certain oils, solvents, and chemicals or their fumes can weaken these bowls and possibly cause them to burst. Clean only with warm water. A cut-off valve placed ahead of the filter will be useful when cleaning the filter or replenishing the lubricator.

PNEUMATIC INFORMATION, Continued

MOISTURE

Moisture is always present in air lines due to condensation within the lines as the air cools. Steps must be taken to remove this moisture and to keep it from the air tool. This is because water tends to wash away lubricants and cause corrosion, sticking and failure of internal parts.

The main line should be pitched so the far end terminates in a water leg. Branch lines are taken from the top of the main, never off the bottom. Every branch should have a water leg at its lowest point, with a drain cock which is drained daily.

If these precautions are taken and water is still present, an after cooler and a moisture separator are required between the compressor and the air receiver tank. A large air line separator can be installed in the air tool line, but precautions must be taken to insure that it will be drained daily, before the air tool is operated.

Water in air lines is a constant threat to the proper operation of air tools. Even near freezing operating conditions, a good refrigerant type dryer is essential. A good dryer will remove 95% or more of water right at the compressor. The remaining moisture is removed at the water leg in the piping system or in the filter (Signode Part No. 008559).

NOTE: Additional information is available in the Signode publication, "Air Supply Manual" (E-186038). If you have any questions, contact your local Signode Representative.

LUBRICATION

The air motor must be properly lubricated. This is achieved by keeping the air line lubricator filled with oil and correctly adjusted. Without proper lubrication, the motor will become sticky and the tool will give low and erratic tension and be difficult to release from the strap.

Install the lubricator as close to the air tool as possible. The arrow on the lubricator's top surface must point in the direction of air flow. For proper operation, oil must drop through the lubricator sight glass at a rate of 1 to 4 drops per minute. This rate is checked while the air tool is running free. Only 20% of this oil is actually delivered to the tool. The remaining oil drops back into the oil reservoir. The unit is factory set and should require no adjustment. If an adjustment is required, the adjusting screw on top of the lubricator may be turned as marked to reduce or increase the flow of oil.

The correct grade of oil must be used in the lubricator; too heavy an oil will not provide sufficient lubrication and will cause sticking and sluggish operation of the air tool. Recommended oils are any good grade of rust and oxidation inhibiting oil with a viscosity of 80-120 S.U.S. at 100 degrees Fahrenheit. (0.15 to 0.25 cm²/sec. at 38 degrees Celsius), such as:

Non Fluid Oil Co., grade #LS-1236

Signode oil - Part No. 008556

If necessary, use SAE #5 or SAE #10 non-detergent, cut 1 to 1 with kerosene.

NOTE: Some oils contain anti-wear additives which may disable the air motor. Be certain to use recommended oil.

Several drops of lubricator oil added to the inlet of the air motor or into the air line each day will help insure good operation. A noticeable reduction of air motor performance can usually be corrected by squirting a few drops of oil into the air line.

OPERATING INSTRUCTIONS

⚠ WARNING

- Wear safety glasses which conform to ANSI Standard Z87.1 or EN 166.
- Stand to one side of the strap while tensioning. Make sure all bystanders are clear before proceeding.
- Do not exceed 90 psig inlet pressure. Doing so will result in strap breakage during tensioning.

Failure to follow the above could result in serious personal injury.

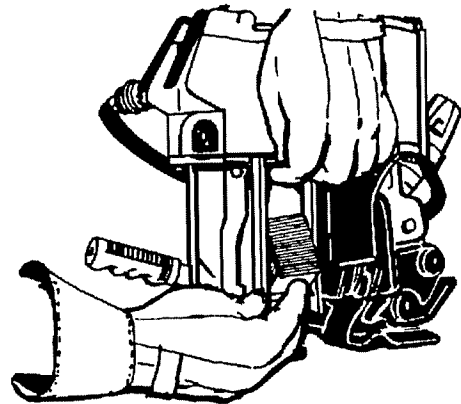
CONNECTING AIR TO TOOL

Strap tension is controlled by Air Pressure. Your air pressure gauge must be accurate, therefore, confirm its accuracy by comparing it to a calibrated master gauge. The following tools will operate between an air pressure range of 70 and 90 psig to draw the following tensions:

AHP-34: 2000 Lbs. AHP2-114: 3000 Lbs.

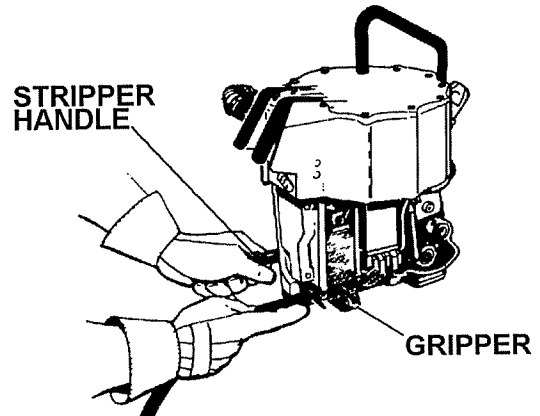
LOADING SEALS

Disconnect air to the tool before proceeding. Raise the seal follower and insert a stack of seals through the wide opening in the side of the magazine. Push the seal stack all the way in. You can load seals at any time without waiting for the seals to run out by separating the stack and loading as many or few as needed. An extension on the seal follower prevents the top strap from being loaded into a tool as a reminder to add seals.

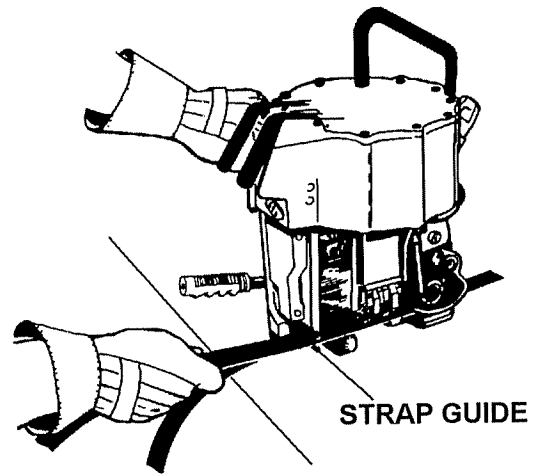


STRAPPING CYCLE

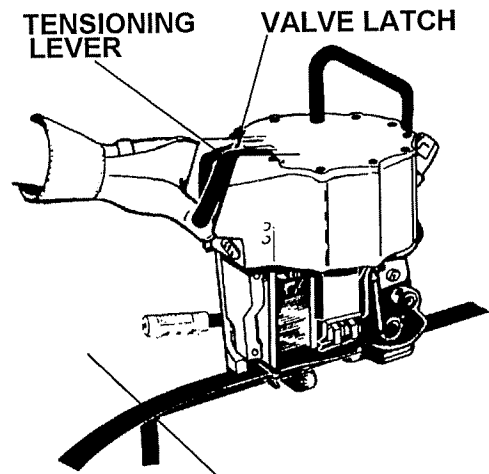
1. Encircle the package with strap. Press the stripper handle with your left hand and insert the free end of strap in the gripper, passing the strap under the feedwheel and just beyond the clutch plug.



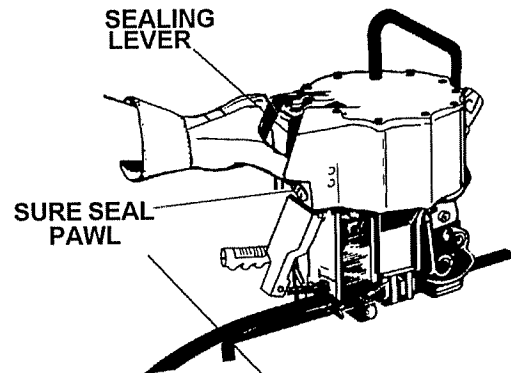
2. Grasp the handle at the air inlet as shown. Slide the top strap in from the side - under the feedwheel and into the strap guide. Both straps are now under the feedwheel. Pull out excess slack.



3. While standing to one side of the strap line, press the tensioning lever. This is a two position lever - the first position, half way down, clamps straps in the tool so that the corner protectors may be inserted; in the fully depressed position, the lever actuates tensioning. The lever may be released from either position by pushing the valve latch.

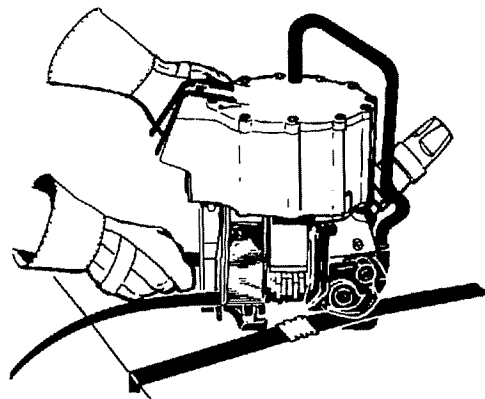


4. When tension has been drawn, and the air motor stalls, press the sealing lever to seal and cut the strap. A sure seal device prevents partial sealing. If the sealer jaws should lock in the down position, insert a screw driver in the slot of the sure seal pawl and gently turn clockwise.



5. Push the stripper handle down and swing the tool to the left to free the tool from the sealed strap. Inspect the seal to make sure a proper joint has been formed. Refer to the views below for details.

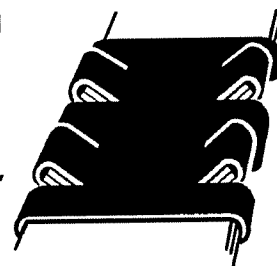
If the resulting tension level is not satisfactory for your strapping needs review "Strap Tension" in the Adjustments portion of this manual.



JOINT FORMATION

The AHP tools are double reverse notch-joint sealers. Each notch-joint must be inspected to make certain it has four (4) good notches. A properly formed notch-joint will appear as shown in the illustration. If the notch-joint does not appear as shown, then the operator must proceed as follows.

1. Make certain that the tool's operating instructions are being followed before applying another strap.
2. Cut the strap off and apply a new strap and seal.
3. An improperly formed seal which does not have four (4) good notches, could result in strap separation. Before moving any package be certain that the seal is formed as shown. Inspect the joint to make certain it appears as shown in the illustration. If not, remove the broken strap and check the tool for worn or broken parts. Repair the tool for worn or broken parts. Repair the tool before applying another strap.

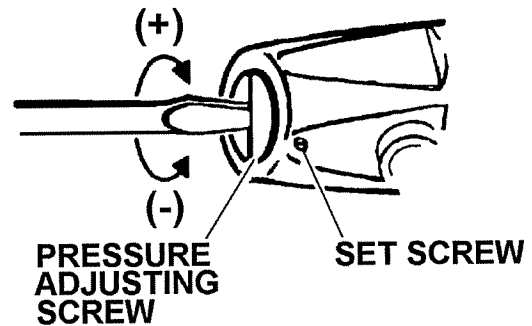


TOOL ADJUSTMENTS

STRAP TENSION (REDUCING)

NOTE: Make sure the input air pressure to the tool is set between 70 and 90 psig.

1. Loosen the set screw on the side of the air motor.
2. Turn the pressure adjustment screw counterclockwise (-) in increments of 1/4 turns until the desired tension level has been achieved.
3. When a satisfactory tension level has been reached, tighten the set screw.



STRAP TENSION (INCREASING)

⚠ WARNING

- Wear safety glasses which conform to ANSI Standard Z87.1 or EN 166.
- Stand to one side of the strap while tensioning. Make sure all bystanders are clear before proceeding.
- Failure to follow the above could result in serious personal injury.

1. Loosen the set screw on the side of the air motor.
2. Turn the pressure adjustment screw clockwise (+) in increments of 1/4 turns until the desired tension has been achieved. If the strap should break, turn the pressure adjustment screw counterclockwise (-) 1/4 turn or until strap no longer breaks.
3. When a satisfactory tension level has been reached, tighten the set screw.

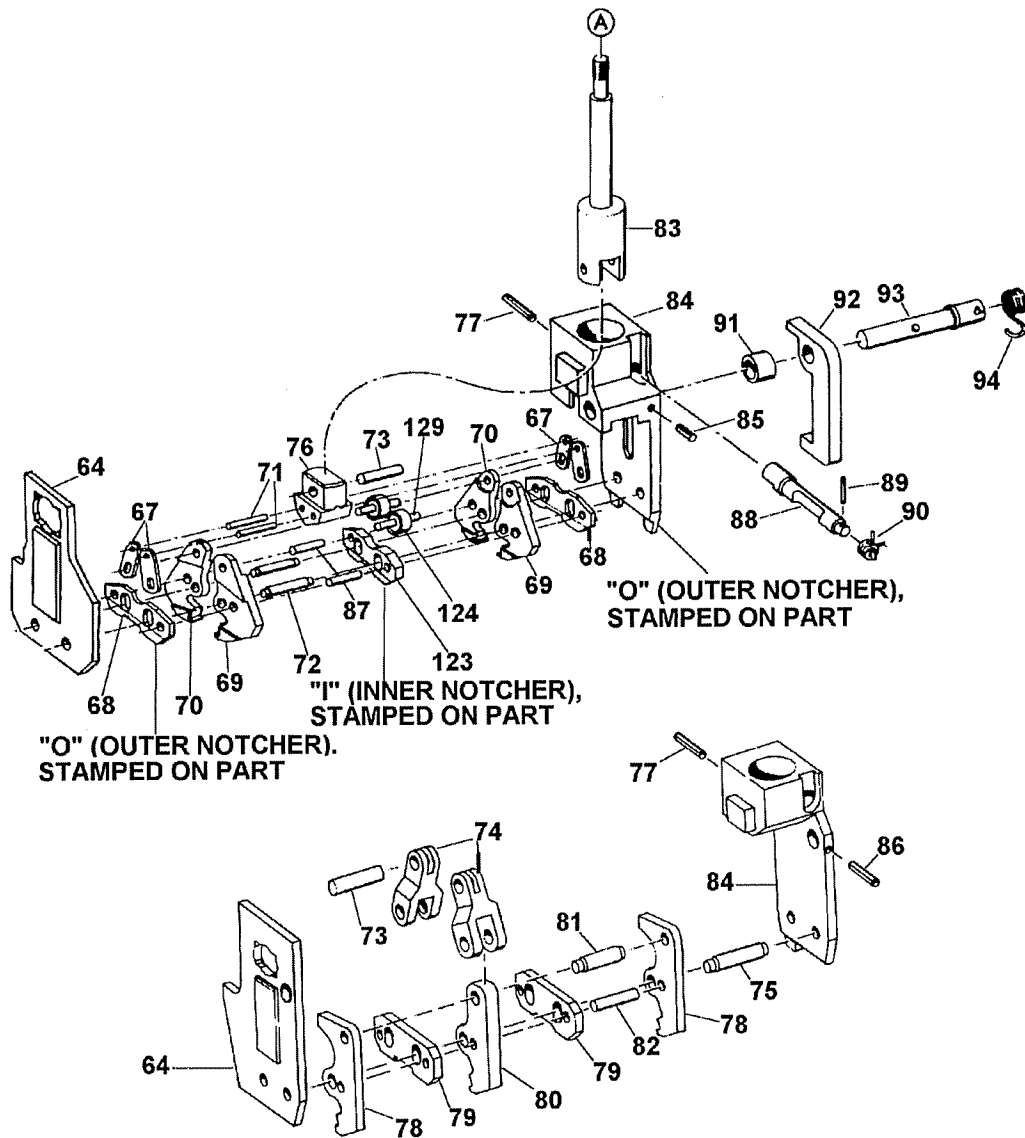
The tool is now set to operate at a given air pressure in combination with a particular strap size. Any change in air pressure or strap size could result in unsatisfactory tool performance or strap breakage.

STRAP CUTTER ADJUSTMENT

To adjust the cutter blade, push and hold the sealer operating lever (10) to lower the sealing mechanism. Disconnect the air supply. Release the operating lever and loosen the magazine mounting screws, (36, sealer frame location) and the two cutter block mounting screws, (107, base location). Gently snug the cutter support screw, (43) to remove clearance between the cutter blade and the cutter block. Tighten all four mounting screws. Do not over tighten (43), as excessive tension can bind the sealing mechanism.

AIR CYLINDER

If air cylinder leaks occur, loosen the socket set screws (11), remove the operating lever pin (8), and operating levers (9 and 10). Remove the shoulder screw (1), valve latch (2), and valve latch spring (3). Remove the cover (7), by removing twelve screws (4, 5 and 6). Remove the valve parts, clean thoroughly and replace O-rings (17 and 19) and gasket (12). Pack O-ring grooves with grease; Lubriplate #GR-132 or equivalent.



SEALING MECHANISM FOR AHP-34

PARTS REMOVAL AND REPLACEMENT

SEALER (AND MAGAZINE) - DISASSEMBLY

1. Disconnect the air supply from the tool and remove the seals from the magazine and the sealer mechanism.
2. Remove the hanger (109) by removing the roll pin (35).
3. Drive out the roll pin (98) from the stripper handle (96).
4. Remove the strap gripper (103) and the stripper handle (96) and the stripper handle spring (106).
5. Loosen the cutter adjustment set screw (43).
6. Remove the two magazine screws (36) on the side of the sealer frame.
7. With the tool lying on its left side, remove the three socket head cap screws (36 and 107) from the bottom of the base (108).

DISASSEMBLY, Continued

8. Swing the rear of the base down and away from the sealer frame.
9. Tilt the top of the magazine away from the sealer mechanism and lift the magazine assembly out.
10. The magazine and sealer mechanisms are now accessible for examination and replacement of worn or broken parts. The sealer mechanism is serviced by removing the cutter blade. Clean the parts. Jaws and notchers are replaced as required. Note that the outside notchers can be reversed front to back to provide new cutting edges, doubling the life of the parts. After the necessary repairs have been made, grease the parts or apply light machine oil. The tool is now ready for reassembly.

SEALER (AND MAGAZINE) - REASSEMBLY

1. With the sealer mechanism fully assembled and in place, insert the magazine by placing the lower portion of the magazine between the sealer mechanism and sealer frame. Tilt the top forward to align properly with the sealer mechanism.
2. Swing the base up against the sealer frame. Be sure the strap guide spring (105) and pin (104) are in their proper position in the base.
3. Insert the socket head cap screws (36 and 107) through the base into the magazine and sealer frame. Snug - do not tighten (107).
4. Insert the top and bottom screws (36) through the sealer frame and into the magazine. Snug - do not tighten.
5. Insert the stripper handle (96) and the strap gripper (103). Be sure the stripper handle spring (106) is in position. See Figure 1. Align roll pin hole through strap gripper and stripper handle. Drive in roll pin (98).
6. Install hanger (109) by reinstalling roll pin (35).
7. Connect the air supply and hold in the sealer lever (10). With jaws in the full downward position, adjust the cutter adjustment set screw (43). Tighten both magazine screws (36) through the sealer frame and socket head screws (107) through base. See Figure 2.

Insert a stack of seals in the magazine. Operate the sealer mechanism at its prescribed psig through 3 or 4 cycles to check tightness of the cutter adjustment screw and see that seals feed properly. If the sealer mechanism is excessively tight, back off the cutter adjustment set screw slightly. Next, apply a strap under tension to be sure all elements of the tool operate properly.

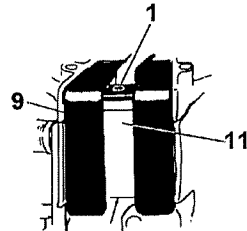
3. **Keep groups of parts together without separating bearings unless their replacement is necessary.**
4. **Wash out any dirty parts using a fresh clean oil base type solvent.**
5. **Rotate the bearings to make certain parts are clean. Apply a light coating of grease, #K-55, New York and New Jersey Lub. Co. or an equivalent light cup grease. Do not apply grease to rotor (19), since this will cause sticking of vanes (20). Do not grease bearing (16) located in the back end plate (17). Lubricate rotor, vanes and end bearing with air line oil only.**
6. **Replace worn gearing (24, 25 and 19) and replace vanes (20) if worn or cracked. Apply a light coating of grease to gearing and air line oil to rotor and vanes.**
7. **Reassemble parts making certain that the alignment pin (22) is correctly positioned to align the back end plate (17), the cylinder (18) and the front end plate (21) with hole in the motor housing (9).**
8. **Assemble parts (23 through 29) and place in gear housing (35) with bearing (32). Make certain roll pin (33) locates into the slot of ring gear (28).**
9. **Assemble gear housing (35), ring nut (31) and motor housing (9) hand tight and rotate pinion of gear case (25) by hand clockwise to be certain of freedom of parts. If parts are not free, gears are not in proper mesh.**
10. **Pour approximately 1 teaspoon of air line oil into the air motor at the inlet port. Then, with the air motor vertically positioned, lightly clamp the gear housing in a vise. Adjust the air pressure regulator to approximately 20 psig and connect it to the tool. With the air motor rotating, slowly tighten the motor housing and the gear housing assemblies by turning the motor housing in a counterclockwise direction. As the two assemblies are tightened there will be an increase in rotational speed. Maximum rotational speed will be reached at approximately 600-650 inch pounds torque. Do not over tighten as this will reduce the speed of the motor. Disconnect the air supply and attach the air motor to the tool.**

TROUBLESHOOTING

The following items are the most common tool symptoms if problems should occur. For symptoms or remedies not shown, contact your Signode service representative for additional information and details. The following tool symptoms are shown in this manual:

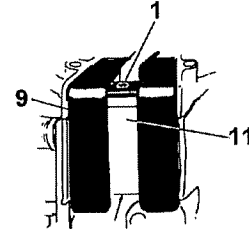
- #1 - Inadequate tension.
- #2 - Feedwheel milling or slipping.
- #3 - Off center and ruptured seals.
- #4 - Sealing incomplete.
- #5 - Low joint strength.
- #6 - The sealer actuation error.
- #7 - Bottom strap slippage.
- #8 - Partial ejection.

#1 SYMPTOM: Inadequate tension.	
CAUSE	REMEDY
<ol style="list-style-type: none"> 1. Improper strap being used with tool. 2. Improper pneumatic supply pressure. 3. Tool is being operated without proper lubrication. 4. Wrong application for tool or tool set-up. 5. Strap tension in need of adjustment. 	<ol style="list-style-type: none"> 1. Check that Signode lubricated strap is being used. 2. Check that air gauge setting is between 70-90 psig. 3. Add approximately one tablespoon of lubricating oil to tool inlet. 4. Check operation of the tool on the application. 5. Loosen set screw on motor and rotate tension adjustment clockwise to stop. Set air gauge at 90 psig. Mark the feedwheel and count the revolutions for a minute. Free speed of the feedwheel must be at least 15 RPM. If the feedwheel free speed does not reach 15 RPM at 90 psig, the air supply is inadequate. Occasionally, quick connectors and valves malfunction.
<ol style="list-style-type: none"> 6. Motor valve lever's latch screw may need adjustment. 	<ol style="list-style-type: none"> 6. Press the motor valve lever (9) to stop against the cylinder housing (26). If the air motor audibly slows down upon releasing, the latch screw must be adjusted. Remove excessive looseness by tightening screw (1) and lock with set screw (11).
<ol style="list-style-type: none"> 7. Restricted (or unreliable) pneumatic supply connection. 	<ol style="list-style-type: none"> 7. Check for restrictions or deterioration of air supply hose.
<ol style="list-style-type: none"> 8. Worn air motor pressure regulator. 	<ol style="list-style-type: none"> 8. Check to make sure that the pressure regulator diaphragm assembly (5) is not worn or cocked, thus preventing proper operation.



TROUBLESHOOTING, Continued

#2 SYMPTOM: Feedwheel milling or slipping.	
CAUSE	REMEDY
<ol style="list-style-type: none"> 1. Feedwheel packed with dirt. 2. Tool is being operated without proper lubrication. 3. Wrong application for tool or tool set-up. 4. Strap tension in need of adjustment. 	<ol style="list-style-type: none"> 1. Clean feedwheel. 2. Add approximately one tablespoon of lubricating oil to tool inlet. 3. Check operation of the tool on the application. 4. Loosen set screw on motor and rotate tension adjustment clockwise to stop. Set air gauge at 90 psig. Mark the feedwheel and count the revolutions for a minute. Free speed of the feedwheel must be at least 15 RPM. If the feedwheel free speed does not reach 15 RPM at 90 psig, the air supply is inadequate. Occasionally, quick connectors and valves malfunction.
<ol style="list-style-type: none"> 5. Motor valve lever's latch screw may need adjustment. 	<ol style="list-style-type: none"> 5. Press the motor valve lever (9) to stop against the cylinder housing (26). If the air motor audibly slows down upon releasing, the latch screw must be adjusted. Remove excessive looseness by tightening screw (1) and lock with set screw (11).



#4 SYMPTOM: Off center and ruptured seals.	
CAUSE	REMEDY
<ol style="list-style-type: none"> 1. Improperly aligned top and bottom straps. 2. Rear strap guide (100A) not operating properly. 3. Seal magazine (46) loose or damaged. 	<ol style="list-style-type: none"> 1. Check strap alignment prior to sealing. 2. Check to see that the rear strap guide is functioning properly. Strap should be retained during tensioning cycle. Free up or replace as required. 3. Check that the magazine and base cap screws (107) are tight.

#3 SYMPTOM: Sealing incomplete.	
CAUSE	REMEDY
1. Pneumatic supply pressure is too low.	1. A minimum of 70 psig is required to complete the sealing cycle. The sealer mechanism may be returned to starting position by releasing the sure seal device as explained in Operating Instructions.
2. Bound, worn or broken sealer mechanism.	2. Lower the air pressure gauge to 20 psig. Actuate the sealer mechanism without strap or seals. The mechanism should go through a full cycle. If not check for dirt or obstruction in jaw linkage. Also check to make sure the cutter support screw (43) is not too tight.
3. Tool is being operated without proper lubrication.	3. Put a tablespoon of lubricator oil into the tool inlet and actuate the sealer valve several times.
4. Worn or broken sealer jaws.	4. Check jaws and notchers. Replace as required, noting that jaws have chamfered tip towards the seal magazine.

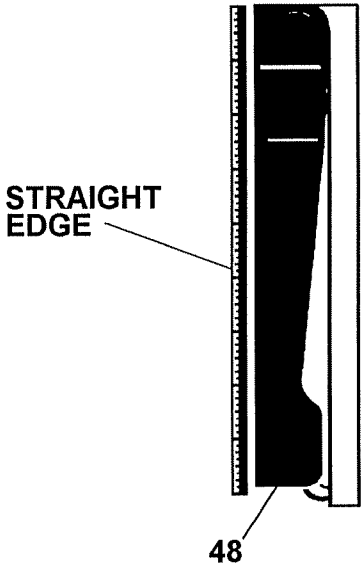
#5 SYMPTOM: Low joint strength.	
CAUSE	REMEDY
1. Worn or broken sealer jaws.	1. Replace obviously worn jaws or notchers.
2. Bound, worn or broken sealer mechanism.	2. Check for worn (or broken) pins or bearings in linkage.

#6 SYMPTOM: The sealing portion of the tool was actuated without strap in tool.
REMEDY
Seals notched without strap must be removed with a screwdriver or pliers before cycling the sealing mechanism again. Remove seals from magazine to prevent new seal from being injected when the old one is removed.

TROUBLESHOOTING, Continued

#7 SYMPTOM: Bottom strap slippage.	
CAUSE	REMEDY
1. Strap not inserted into tool properly.	1. Check that the bottom strap is extended slightly beyond the gripper at the feedwheel.
2. Stripper handle (96) sticking or bound.	2. If the bottom strap slips during the loading of the tool check freedom of the stripper handle. Lubricate and free if necessary.
3. Strap gripper (103) packed with dirt or worn.	3. Clean strap gripper with wire brush. Replace strap gripper if the teeth are worn.

#8 SYMPTOM: Partial ejection.	
CAUSE	REMEDY
1. Improperly installed sealer jaws.	1. Check that jaws are correctly installed. That is, chamfer on lips must be towards the seal magazine.
2. Bound, worn or broken sealer mechanism.	2. Seal may be cut in two if it is not fully sealed in the jaw mechanism. Check for obstruction. Check for broken ejector (52) tip and replace if required. Determine that the seal follower (41) is free throughout its travel.
3. Ejector lever (48) malfunctioning.	3. Check that the ejector lever is straight and that the ejector cannot be pulled out of its slot when the sealer is down. A straight edge may be used at the back of the ejector arm to determine if it has been bent. Replace if necessary.



The diagram shows a vertical component, the ejector lever (48), being tested against a straight edge. A line labeled 'STRAIGHT EDGE' points to a vertical ruler-like object. The ejector lever (48) is positioned against it, and a curved arrow indicates the lever's movement. The lever appears to be bent, as its back edge does not align with the straight edge.

EU Declaration of Conformity
The Supply of Machinery (safety) Regulations
1992 (S.I. 1992/3073)

It is hereby declared that the undermentioned machinery has been designed and constructed to comply with the health and safety requirements defined in EC Directive 89/392/EEC

Machine Supplier: Signode, Division of ITW Ltd.
Queensway, Fforestfach
Swansea SA5 4ED

Machine Description: AHP-34, AHP2-114

Machine Type: Pneumatic Combination Hand Strapping tool.

Provisions with which machine complies:

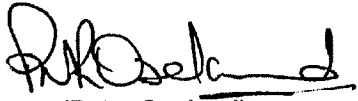
89/392/EEC, 91/368/EEC

Harmonized EuroNorms with which machine complies:

EN 292:1, EN 292:2, EN 294, EN 349

Technical Standards with which machine complies:

NA

Signature: 
(Peter Oseland) **Date:** 1 JULY 2000

SIGNODE NEW TOOL WARRANTY

Signode Engineered Products Warrants that a new Signode strapping tool will operate per functional specifications for a period of sixty (60) days after the date of shipment to the owner's place of business. Normal wearing parts, as outlined in the Operation, Parts & Safety manual, are covered by a thirty (30) day warranty unless, in Signode's judgement, these parts have been subjected to abnormal or extreme usage. Signode's sole liability hereunder will be to repair or replace, without charge, F.O.B. Signode's Glenview, Illinois plant, any tool which proves to not operate per functional specifications within the stated period. Signode reserves the right to replace any tool which proves not to operate per functional specifications with a new or like-new tool of the same model if in Signode's judgement such replacement is appropriate. Any new replacement tool provided to an owner will carry a full sixty (60) day warranty. Any warranty repaired tool or like-new replacement tool will carry a warranty for the balance of the time remaining on the initial sixty (60) day warranty. This warranty will be extended to compensate for the time the tool is in Signode's possession for warranty repairs.

This warranty is void as to any tool which has been: (I) subjected to mis-use, misapplication, accident, damage, or repaired with other than genuine Signode replacement parts, (II) improperly maintained, or adjusted, or damaged in transit or handling; (III) used with improperly filtered, unlubricated air or improper strapping material, (IV) in Signode's opinion, altered or repaired in a way that affects or detracts from the performance of the tool.

SIGNODE MAKES NO WARRANTY, EXPRESSED OR IMPLIED, RELATING TO MERCHANTABILITY, FITNESS OR OTHERWISE EXCEPT AS STATED ABOVE AND SIGNODE'S LIABILITY AS ASSUMED ABOVE IS IN LIEU OF ALL OTHERS ARISING OUT OF OR IN CONNECTION WITH THE USE AND PERFORMANCE OF THE TOOL. IT IS EXPRESSLY UNDERSTOOD THAT SIGNODE SHALL IN NO EVENT BE LIABLE FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES WHICH MAY ARISE FROM LOSS OF ANTICIPATED PROFITS OR PRODUCTION, SPOILAGE OF MATERIALS, INCREASED COSTS OF OPERATION OR OTHERWISE.

Considerable effort has been made to ensure that this product conforms to our high quality standards. However, should you experience any difficulties, please contact your Sales Representative providing samples and the manufacturing code specified on the tool.

PART #	DESCRIPTION	AREA OF USE
LUBRICANTS		
177029	BROWN K-55 GREASE	CLUTCH DRIVES, INTERNAL GEARS, GEAR SETS
422792	WHITE LUBRIPLATE GR-132 GREASE	PNEUMATIC PARTS, AIR CYLINDERS, AIR VALVES, O-RINGS
422793	BLACK LUBRIPLATE 3000W GREASE	MOVING INTERNAL PARTS, JAWS, LINKS
432322	EP ACCROLUBE GREASE	HIGH FRICTION CONTACT PARTS
008556	LS-1236 AIR LINE OIL	AIR MOTORS, AIR VALVES
ADHESIVES		
422794	LOCTITE #222, PURPLE	LOW STRENGTH, SCREWS 1/4" (6MM) OR SMALLER SIZES
422795	LOCTITE #242, BLUE	MEDIUM STRENGTH, SCREWS 5/16" (8MM) OR LARGER SIZES
422796	LOCTITE #271, RED	HIGH STRENGTH, SEMI-PERMANENT SCREW APPLICATION
422797	LOCTITE #609, GREEN	PERMANENT, CURVED SURFACE PART CONTACT
274111	LOCTITE #380, BLACK MAX	PERMANENT, FLAT SURFACE PART CONTACT
CLEANING BRUSHES		
023963	SMALL BRUSH	FEEDWHEEL & GRIPPER TEETH
269589	LARGE BRUSH	FEEDWHEEL & GRIPPER TEETH