# Operator's manual 20 Gauge Super-Speed



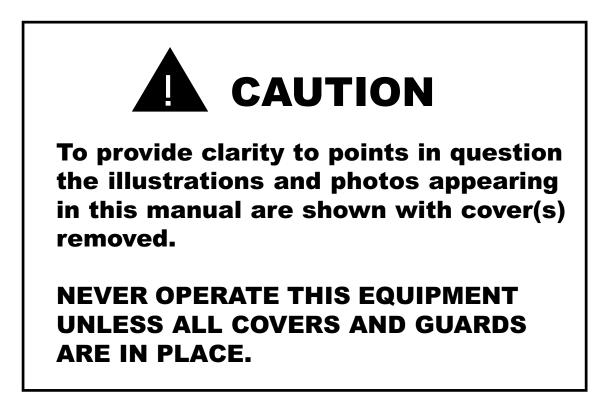


#### WARRANTY

Our guarantee on the products we manufacture is limited to repair or replacement without charge, of any part found to be defective in materials or workmanship. This guarantee is for a period of one year (unless otherwise specified) from the date of shipment from our factory, for all mechanical features of the machine, except purchased components that carry the warranty of the original manufacturer.

Warranty parts and components will be shipped freight collect from Lisle, Illinois. If the defective part has not been received by Lockformer within 15 working days after receiving the replacement part, your company will be responsible for the cost of replacement.

The warranty provided in this clause is in lieu of all other warranties, express or implied, arising by law or otherwise, including the implied warranties of merchantability and fitness for a particular purpose which are hereby disclaimed by Lockformer and excluded from this agreement. This warranty shall not be modified for any reason. In no event shall Lockformer be liable for consequential or incidental damages.



The information in this document has been reviewed and is believed to be completely accurate. However, no responsibility is assumed for inaccuracies. Furthermore, the LOCKFORMER COMPANY reserves the right to make changes to any products herein, at any time, to improve reliability, function, or design. The LOCKFORMER COMPANY does not assume any liabilities arising out of any use of any product described herein, neither does not convey any license under its patent rights nor the rights of others.

### SAFETY FIRST

Common sense and **extreme** care must be used at all times during the operation and maintenance of this equipment. It is important that **ALL** personnel who will operate, maintain, or supervise the use of this equipment, read and understand the sections of this manual concerning **SAFETY** and the **OPERATION** of the equipment.

The equipment described in this manual was designed and manufactured for a specific function. It should not be used for any other purpose or outside of the design specifications as this may be hazardous. Modifications or additions to this equipment should not be made without consulting The Lockformer Co.

Replacement and maintenance parts should be equal to the original equipment. Use of other parts may result in unsafe operation. If there is a question to the suitability of a part, The Lockformer Co. should be consulted.

In, general, every piece of equipment must be treated as dangerous. While operating or maintaining this equipment, each person must be aware of his own safety as well as the safety of all bystanders.

### SAFETY SIGN-OFF SHEET

It is the employer's responsibility to instruct all persons who may come in contact with this equipment on the safe operation and maintenance of this equipment. Have each person read the sections of this manual concerning SAFETY and the OPERATION of the equipment. If a language barrier or other restriction limits understanding, this manual can be read to the individual with appropriate follow up questions to verify understanding. Have each individual sign below only after demonstrating their understanding of the safety practices described in this manual.

## I verify that I have read and understand the safety and operation sections for this equipment installation:

NAME	DATE	NAME	DATE

# SAFETY GUIDELINES



You are not ready to operate this equipment if you have not read and understood the safety information in this manual.



Do not wear loose clothing, neckties, improper gloves, or jewelry while operating this machine. If long sleeves must be worn, avoid loose cuffs or buttons. Tie back or contain long hair.

Wear proper gloves to prevent lacerations caused by sharp edges of stock as it travels through the forming operation.

Never operate this equipment unless all covers and guards are properly installed.

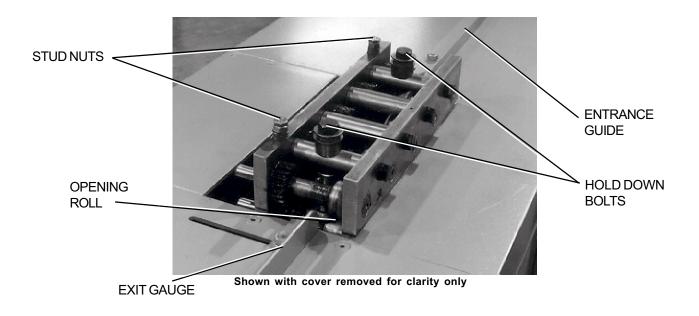
Be alert for loose, worn, or broken parts. Never operate this equipment unless it is in good working condition.

As the stock feeds into the rolls, a pinch point is created as the stock advances. Keep hands clear of this and all pinch points.

Always disconnect the main power supply power and install lock outs when making adjustments or repairs.

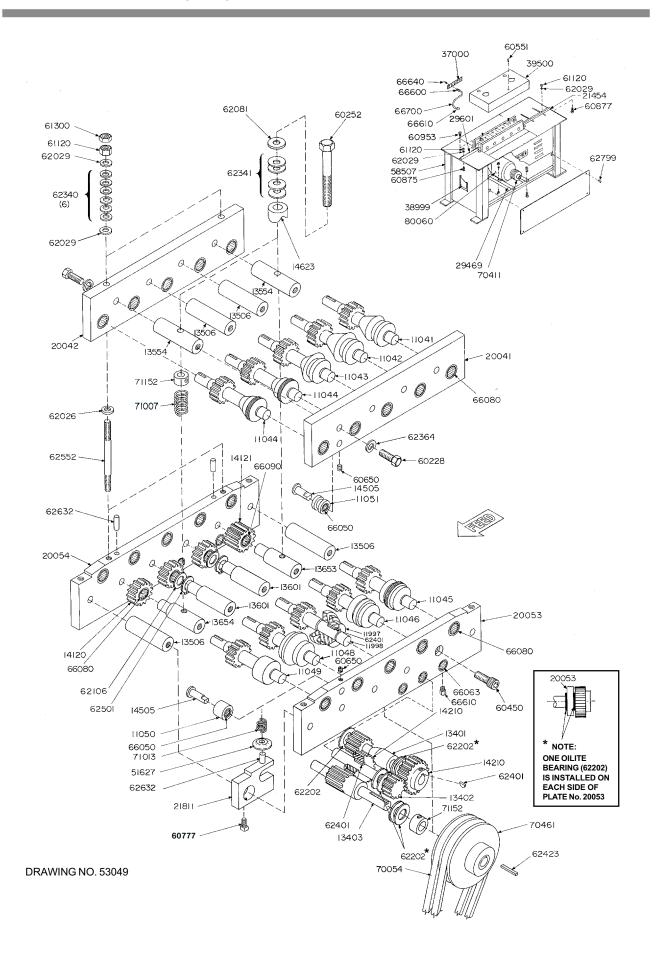
When transporting, take into consideration that this machine is top heavy.

Remember that the information contained in this manual is only a portion of an adequate training program. It must be coupled with specific instructions for your application along with full information of national and local safety regulations that may apply.



20053     2101-A     Lower Plate (Left)     1       20054     2101-B     Lower Plate (Right)     1       20041     2102-A     Upper Plate (Left)     1       20042     2102-B     Upper Plate (Right)     1       11045     2103     Bottom 1 Forming Roll     1       11045     2103     Bottom 2 Forming Roll     1       11045     2105     Bottom 3 Forming Roll     1       11048     2106     Bottom 5 Forming Roll     1       11049     2107     Bottom 5 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11041     2110     Top 3 Forming Roll     1       11042     2101     Top 5 Forming Roll     1       11044     2111     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13564     2116     Step Spacer     1       62501     2117     Retaining Ring     2	NEW PART NUMBER	OLD PART NUMBER	DESCRIPTION QUA	
20054     2101-B     Lower Plate (Right)     1       20041     2102-A     Upper Plate (Left)     1       20042     2102-B     Upper Plate (Right)     1       11045     2103     Bottom 1 Forming Roll     1       11045     2103     Bottom 2 Forming Roll     1       11046     2104     Bottom 3 Forming Roll     1       11048     2106     Bottom 5 Forming Roll     1       11049     2107     Bottom 5 Forming Roll     1       11041     2108     Top 1 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11041     2110     Top 5 Forming Roll     1       11044     2111     Top 4 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       11051     2117     Retaining Ring     2       13506     2118     Plain Spacer     1       14210     2119     3 inch Gear With Hub 28 teet 20       <				
20041     2102-A     Upper Plate (Left)     1       20042     2102-B     Upper Plate (Right)     1       11045     2103     Bottom 1 Forming Roll     1       11045     2104     Bottom 2 Forming Roll     1       11046     2104     Bottom 3 Forming Roll     1       11048     2105     Bottom 3 Forming Roll     1       11049     2107     Bottom 5 Forming Roll     1       11049     2107     Bottom 5 Forming Roll     1       11041     2109     Top 2 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11044     2111     Top 4 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13654     2115     Plain Spacer Tapped     1       13601     2117     Retaining Ring     2       13506     2118     Plain Spacer     4		-	. ,	-
20042     2102-B     Upper Plate (Right)     1       11045     2103     Bottom 1 Forming Roll     1       11046     2104     Bottom 2 Forming Roll     1       11997, 11998     2105     Bottom 3 Forming Roll     1       11048     2106     Bottom 5 Forming Roll     1       11049     2107     Bottom 5 Forming Roll     1       11049     2107     Bottom 5 Forming Roll     1       11041     2108     Top 1 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11043     2110     Top 3 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13554     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 leetb		-	( ) ,	•
Initial     Initial <t< td=""><td></td><td>-</td><td></td><td>-</td></t<>		-		-
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11048     2106     Bottom 4 Forming Roll     1       11049     2107     Bottom 5 Forming Roll     1       11041     2108     Top 1 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11043     2110     Top 3 Forming Roll     1       11044     2111     Top 4 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13554     2115     Plain Spacer Tapped     1       13601     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2121     Idler Roll Pins     2       9952500     2122     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500			Bottom 2 Forming Roll	1
11049     2107     Bottom 5 Forming Roll     1       11041     2108     Top 1 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11043     2110     Top 3 Forming Roll     1       11044     2111     Top 4 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13654     2116     Step Spacer Tapped     1       13601     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teeta       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       13401     21	11997, 11998	2105	Bottom 3 Forming Roll	1
11041     2108     Top 1 Forming Roll     1       11042     2109     Top 2 Forming Roll     1       11042     2109     Top 3 Forming Roll     1       11043     2110     Top 3 Forming Roll     1       11044     2111     Top 4 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11044     2113     Lower Idler Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13554     2115     Plain Spacer Drilled     2       13661     2117     Step Spacer     1       62501     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teetb       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll     1       13402     2126     <	11048	2106	Bottom 4 Forming Roll	1
11042     2109     Top 2 Forming Roll     1       11043     2110     Top 3 Forming Roll     1       11044     2111     Top 4 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13554     2115     Plain Spacer Drilled     2       13654     2116     Step Spacer Tapped     1       13601     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teet     2       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403 <td>11049</td> <td>2107</td> <td>Bottom 5 Forming Roll</td> <td>1</td>	11049	2107	Bottom 5 Forming Roll	1
11043     2110     Top 3 Forming Roll     1       11043     2110     Top 3 Forming Roll     1       11044     2111     Top 4 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13654     2115     Plain Spacer Drilled     2       13654     2117     Step Spacer Tapped     1       13601     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teet 20       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       14400     2125     Third Drive Shaft     1       13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     212	11041	2108	Top 1 Forming Roll	1
11044     2111     Top 4 Forming Roll     1       11044     2112     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13554     2115     Plain Spacer Drilled     2       13654     2116     Step Spacer Tapped     1       13601     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teet     2       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       14401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13402     2128     Bearing 5/8" ID x 3/4" Long 2     2       70054     2130     V-Belt (B size Browing No. 5248)     2       29601     2131     Exit Angle Gauge     1 <tr< td=""><td>11042</td><td>2109</td><td>Top 2 Forming Roll</td><td>1</td></tr<>	11042	2109	Top 2 Forming Roll	1
11044     2112     Top 5 Forming Roll     1       11050     2113     Lower Idler Roll     1       11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13554     2115     Plain Spacer Drilled     2       13654     2116     Step Spacer Tapped     1       13601     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teet2       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       66063     2124     Bearing 7/8" ID x 3/4" Long 23     66063       66063     2124     Bearing 5/8" ID x 3/4" Long 6     13401       13402     2126     Second Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1 <t< td=""><td>11043</td><td>2110</td><td>Top 3 Forming Roll</td><td>1</td></t<>	11043	2110	Top 3 Forming Roll	1
11050     2113     Lower Idler Roll     1       11051     2114     Upper Idler Roll     1       13554     2115     Plain Spacer Drilled     2       13654     2116     Step Spacer Tapped     1       13601     2117     Step Spacer     1       62501     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teeth       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       66063     2124     Bearing 3/4" ID x 3/4" Long 6     1       13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       66050     213	11044	2111	Top 4 Forming Roll	1
11051   2114   Upper Idler Roll   1     11051   2114   Upper Idler Roll   1     13554   2115   Plain Spacer Drilled   2     13654   2116   Step Spacer Tapped   1     13601   2117   Retaining Ring   2     13506   2118   Plain Spacer   4     14210   2119   3 inch Gear With Hub 28 teet 2     51627   2120   Opening Roll   1     14505   2121   Idler Roll Pins   2     9952500   2122   Opening Roll Holder   1     66063   2124   Bearing 7/8" ID x 3/4" Long 23   66063     66063   2124   Bearing 3/4" ID x 3/4" Long 6   1     13401   2125   Third Drive Shaft   1     13402   2126   Second Drive Shaft   1     13403   2127   First Drive Shaft   1     13403   <	11044	2112	Top 5 Forming Roll	1
13554     2115     Plain Spacer Drilled     2       13654     2116     Step Spacer Tapped     1       13601     2117     Step Spacer     1       62501     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teet     2       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       66080     2123     Bearing 7/8" ID x 3/4" Long 23     66063       66063     2124     Bearing 3/4" ID x 3/4" Long 6     1       13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     Kange Gauge     1       70054     2130     V-Belt ( B size Browing No. 5248) <t< td=""><td>11050</td><td>2113</td><td>Lower Idler Roll</td><td>1</td></t<>	11050	2113	Lower Idler Roll	1
13554     2115     Plain Spacer Drilled     2       13654     2116     Step Spacer Tapped     1       13601     2117     Step Spacer     1       62501     2117     Retaining Ring     2       13506     2118     Plain Spacer     4       14210     2119     3 inch Gear With Hub 28 teet     2       51627     2120     Opening Roll     1       14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       66080     2123     Bearing 7/8" ID x 3/4" Long 23     66063       66063     2124     Bearing 3/4" ID x 3/4" Long 6     1       13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     Kange Gauge     1       70054     2130     V-Belt ( B size Browing No. 5248) <t< td=""><td>11051</td><td>2114</td><td>Upper Idler Roll</td><td>1</td></t<>	11051	2114	Upper Idler Roll	1
13654   2116   Step Spacer Tapped   1     13601   2117   Step Spacer   1     62501   2117   Retaining Ring   2     13506   2118   Plain Spacer   4     14210   2119   3 inch Gear With Hub 28 teet   2     51627   2120   Opening Roll   1     14505   2121   Idler Roll Pins   2     9952500   2122   Opening Roll Holder   1     66063   2123   Bearing 7/8" ID x 3/4" Long 23   6     66063   2124   Bearing 3/4" ID x 3/4" Long 6   1     13401   2125   Third Drive Shaft   1     13402   2126   Second Drive Shaft   1     13403   2127   First Drive Shaft   1     13403   2127   King Gauge   1     70054   2130   V-Belt ( B size Browing No. 5248     29601   21	13554	2115		2
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14210   2119   3 inch Gear With Hub 28 teet2     51627   2120   Opening Roll   1     14505   2121   Idler Roll Pins   2     9952500   2122   Opening Roll Holder   1     66080   2123   Bearing 7/8" ID x 3/4" Long 23   66063     66063   2124   Bearing 3/4" ID x 3/4" Long 6   1     13401   2125   Third Drive Shaft   1     13402   2126   Second Drive Shaft   1     13403   2127   First Drive Shaft   1     13403   2127   First Drive Shaft   1     13403   2127   First Drive Shaft   1     66050   2128   Bearing 5/8" ID x 3/4" Long 2   2     70054   2130   V-Belt ( B size Browing No. 5248)   2     29601   2131   Exit Angle Gauge   1     70461   2132   Machine Pulley (Double Grootve)   6     62401   2135   Woodruff Key No. 9   3     60650   2136   Hex Head Set Screw 5/16 x 2/16   14623     14623   2137   Locking Collar			<u> </u>	_
51627   2120   Opening Roll   1     14505   2121   Idler Roll Pins   2     9952500   2122   Opening Roll Holder   1     66080   2123   Bearing 7/8" ID x 3/4" Long 23   66063     66063   2124   Bearing 3/4" ID x 3/4" Long 6   1     13401   2125   Third Drive Shaft   1     13402   2126   Second Drive Shaft   1     13403   2127   First Drive Shaft   1     13403   2127   First Drive Shaft   1     13403   2128   Bearing 5/8" ID x 3/4" Long 2   2     70054   2130   V-Belt ( B size Browing No. 5248)   2     29601   2131   Exit Angle Gauge   1     70461   2132   Machine Pulley (Double Grootve)   6     62401   2135   Woodruff Key No. 9   3   6     60650   2136   Hex Head Set Screw 5/16 x 2/16   14623   2137   Locking Collar   2     60953   2138   Flat Head Cap Screw   4   62081   2139   Steel Washer for Part No   2144				•
14505     2121     Idler Roll Pins     2       9952500     2122     Opening Roll Holder     1       66080     2123     Bearing 7/8" ID x 3/4" Long 23     66063     2124     Bearing 3/4" ID x 3/4" Long 6       13401     2125     Third Drive Shaft     1     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       66050     2128     Bearing 5/8" ID x 3/4" Long 2     2       70054     2130     V-Belt ( B size Browing No. 5248)     2       29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootwe)       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16     14623       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144	-			
9952500     2122     Opening Roll Holder     1       66080     2123     Bearing 7/8" ID x 3/4" Long 23     66063     2124     Bearing 3/4" ID x 3/4" Long 6       13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       66050     2128     Bearing 5/8" ID x 3/4" Long 2     2       70054     2130     V-Belt ( B size Browing No. 5248)     2       29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootve)     6       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16     14623       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144 </td <td></td> <td>-</td> <td>, ,</td> <td>•</td>		-	, ,	•
66080     2123     Bearing 7/8" ID x 3/4" Long 23       66063     2124     Bearing 3/4" ID x 3/4" Long 6       13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       66050     2128     Bearing 5/8" ID x 3/4" Long 2     2       70054     2130     V-Belt ( B size Browing No. 5248)     2       29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootve)     6       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16     14623       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No 2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25auge				
66063     2124     Bearing 3/4" ID x 3/4" Long 6       13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       66050     2128     Bearing 5/8" ID x 3/4" Long 2     2       70054     2130     V-Belt ( B size Browing No. 5248)     2       29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootve)     6       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16     14623       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25 auge			, ,	-
13401     2125     Third Drive Shaft     1       13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       66050     2128     Bearing 5/8" ID x 3/4" Long     2       70054     2130     V-Belt (B size Browing No. 5248)     2       29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootve)     6       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25auge		-		
13402     2126     Second Drive Shaft     1       13403     2127     First Drive Shaft     1       13403     2127     First Drive Shaft     1       66050     2128     Bearing 5/8" ID x 3/4" Long 2     2       70054     2130     V-Belt (B size Browing No. 5248)     2       29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootve)     6       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16     14623       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25 auge				
13403     2127     First Drive Shaft     1       66050     2128     Bearing 5/8" ID x 3/4" Long 2     2       70054     2130     V-Belt (B size Browing No. 5248)     2       29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootve)     6       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25auge				-
70054     2130     V-Belt (B size Browing No. 5248)       29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootve)     6       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent.25auge				
29601     2131     Exit Angle Gauge     1       70461     2132     Machine Pulley (Double Grootve)     6       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 3/16       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25 auge	66050	2128	Bearing 5/8" ID x 3/4" Long	2
70461     2132     Machine Pulley (Double Grodve)       62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25auge	70054	2130	V-Belt ( B size Browing No.	522.48)
62401     2135     Woodruff Key No. 9     3       60650     2136     Hex Head Set Screw 5/16 x 2/16       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25 auge	29601	2131	Exit Angle Gauge	1
60650     2136     Hex Head Set Screw 5/16 x 3/16       14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. 25 auge				
14623     2137     Locking Collar     2       60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. Bauge			-	
60953     2138     Flat Head Cap Screw     4       62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. Bauge				
62081     2139     Steel Washer for Part No     2144       62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. Bauge				
62364     2140     Washer     19       60875     2141     Carriage Bolt 3/8 x 1 for Ent. ZBauge				-
60875 2141 Carriage Bolt 3/8 x 1 for Ent. 25auge				
	37000		Lube Bracket	2

71152     2142     3/4" Collar     3       60450     2143     1/2 - 13 x 1" S.H.C. Screw     1       60252     2144     Hold Down Stud 5/8 x 6     2       66600     2145     Connector (Lubrication)     6       66610     2146     Half Union (Lubrication)     6       62552     2147     Hold Down Stud 3/8 x 4-3/4 2       14120     2149     Idler Gear (66080 Bearing)     3       62340     2151     Spring Washer 1-1/2" O. D. 8     8       62340     2151     Spring Washer 3/4" O.D     12       58507     2152     Stand Assembly     1       39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       80060     2161     Motor 2 H.P.     1       6233     2162     Dowel Pin     2  <	NEW PART NUMBER	OLD PART NUMBER	DESCRIPTION G	UANTIT
11/10     11/2     11/2     13     1"     1       60450     2143     1/2     13     1"S.H.C. Screw     1       60252     2144     Hold Down Stud 5/8 x 6     2       66600     2145     Connector (Lubrication)     6       66610     2146     Half Union (Lubrication)     6       62552     2147     Hold Down Stud 3/8 x 4. 3/4 2     1       14120     2149     Idler Gear (66080 Bearing)     3       62340     2151     Spring Washer 1-1/2" O. D. 8     8       62340     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       80600     2161     Motor 2 H.P.     1       6233     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120 <td< td=""><td></td><td>_</td><td></td><td></td></td<>		_		
60252     2144     Hold Down Stud 5/8 x 6     2       66600     2145     Connector (Lubrication)     6       66610     2146     Half Union (Lubrication)     6       62552     2147     Hold Down Stud 3/8 x 4     3/4 2       14120     2149     Idler Gear (66080 Bearing)     3       62341     2150     Spring Washer 1-1/2" O.D.     8       62340     2151     Spring Washer 3/4" O.D.     12       58507     2152     Stand Assembly     1       39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       60750     2166     Square Head Set Screw 1/4 & 1/2       60640     2167     Grease Fitting (Alemite)     2				-
66600     2145     Connector (Lubrication)     6       66610     2146     Half Union (Lubrication)     6       62552     2147     Hold Down Stud 3/8 x 4-3/4 2       14120     2149     Idler Gear (66080 Bearing) 3       62341     2150     Spring Washer 1-1/2" O.D. 8       62340     2151     Spring Washer 3/4" O.D. 12       58507     2152     Stand Assembly     1       39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60877     2168     Carr				
66610     2146     Half Union (Lubrication)     6       62552     2147     Hold Down Stud 3/8 x 4-3/4 2     14120     2149     Idler Gear (66080 Bearing) 3       62341     2150     Spring Washer 1-1/2" O.D. 8     62340     2151     Spring Washer 3/4" O.D. 12       58507     2152     Stand Assembly     1       39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       60750     2166     Square Head Set Screw 1/4 & 1/2       60750     2166     Square Head Set Screw 1/4 & 1/2       60877     2168     Carriage Bolt 3/8 x 1-3/4       80923     Starter 609AOW     1       80928				
62552     2147     Hold Down Stud 3/8 x 4-3/4 2       14120     2149     Idler Gear (66080 Bearing) 3       62341     2150     Spring Washer 1-1/2" O.D. 8       62340     2151     Spring Washer 3/4" O.D. 12       58507     2152     Stand Assembly     1       39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     2       60750     2166     Square Head Set Screw 1/4& 1/2     6       6640     2167     Grease Fitting (Alemite)     2       60877     2168			· · · · · · · · · · · · · · · · · · ·	
14120   2149   Idler Gear (66080 Bearing) 3     62341   2150   Spring Washer 1-1/2" O.D. 8     62340   2151   Spring Washer 3/4" O.D.   12     58507   2152   Stand Assembly   1     39500   2153   Forming Head Cover   1     60777   2154   Set Screw 3/8 x 3/4"   1     62026   2155   Spacer Washer 3/8"   2     21454   2156   Entrance Gauge Bar   2     66700   2157   Plastic Tubing 11" Lg.   3     66700   2158   Plastic Tubing 16" Lg.   3     80060   2161   Motor 2 H.P.   1     62633   2162   Dowel Pin   2     62029   2163   Steel Washer 3/8"   14     61120   2164   Hex Nut 3/8"   6     61300   2165   Hex Jam Nut 3/8"   2     60750   2166   Square Head Set Screw   1/4 & 1/2     60877   2168   Carriage Bolt 3/8 x 1-3/4   2     80923   Starter 609AOW   1     80928   Enclosure Back <t< td=""><td></td><td></td><td>( ,</td><td></td></t<>			( ,	
And Construction     And Construction     And Construction     And Construction       62341     2150     Spring Washer 1-1/2" O. D. 8       62340     2151     Spring Washer 3/4" O.D. 12       58507     2152     Stand Assembly     1       39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2				
62340     2151     Spring Washer 3/4" O.D.     12       58507     2152     Stand Assembly     1       39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw 1/4 & 1/2     6       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       606532	14120	2149		<u> </u>
58507     2152     Stand Assembly     1       39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw 1/4 & 1/2     66640       66640     2167     Grease Fitting (Alemite)     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       60632     2122-B	62341	2150	Spring Washer 1-1/2" O.	D. 8
39500     2153     Forming Head Cover     1       60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw 1/4 & 1/2     6       6640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       71013     2122-C	62340	2151	Spring Washer 3/4" O.D.	12
60777     2154     Set Screw 3/8 x 3/4"     1       62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       60640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bear	58507	2152	Stand Assembly	1
62026     2155     Spacer Washer 3/8"     2       21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearlhg)	39500	2153	Forming Head Cover	1
21454     2156     Entrance Gauge Bar     2       66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw 1/4 & 1/2     66640       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       60632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     6	60777	2154	Set Screw 3/8 x 3/4"	1
66700     2157     Plastic Tubing 11" Lg.     3       66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Enclosure Back     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     6       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4	62026	2155	Spacer Washer 3/8"	2
66700     2158     Plastic Tubing 16" Lg.     3       80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     C	21454	2156	Entrance Gauge Bar	2
80060     2161     Motor 2 H.P.     1       62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     6       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66610     Half Uni	66700	2157	Plastic Tubing 11" Lg.	3
62633     2162     Dowel Pin     2       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     60228       6040     Main Idler Gear (66090 Bearling)     1       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66610     Main Id	66700	2158	Plastic Tubing 16" Lg.	3
Construct     Distribution     Distribution       62029     2163     Steel Washer 3/8"     14       61120     2164     Hex Nut 3/8"     6       61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     60228       602423     Straight Key     1       71007     Compression Spring     1       66090     Main Idler Bearing     1       6610     Half Union     6       29469     Motor Base     2  <	80060	2161	Motor 2 H.P.	1
61120     2164     Hex Nut 3/8"     6       61120     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     60228       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66090     Main Idler Bearing     1       66610     Half Union     6       29469     Motor Base     2       70411     Sheave 2BK28     1       822	62633	2162	Dowel Pin	2
61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     60228       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66090     Main Idler Bearing     1       66090     Main Idler Bearing     1       66610     Half Union     6       29469     Motor Base     2       70411     Sheave 2BK28     1       82247	62029	2163	Steel Washer 3/8"	14
61300     2165     Hex Jam Nut 3/8"     2       60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     60228       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66090     Main Idler Bearing     1       66090     Main Idler Bearing     1       66610     Half Union     6       29469     Motor Base     2       70411     Sheave 2BK28     1       82247	61120	2164	Hex Nut 3/8"	6
60750     2166     Square Head Set Screw     1/4 & 1/2       66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt     3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66610     Half Union     6       29469     Motor Base     2       70411     Sheave 2BK28     1       82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x 9/2     9/2       62706     Washer     2		2165	Hex Jam Nut 3/8"	2
66640     2167     Grease Fitting (Alemite)     2       60877     2168     Carriage Bolt 3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)     60228       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66090     Main Idler Bearing     1       66090     Motor Base     2       70411     Sheave 2BK28     1       82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x 9/2     9/2       62706     Washer     2	60750	2166	Square Head Set Screw	1/4 6 1/2
60877     2168     Carriage Bolt     3/8 x 1-3/4     2       80923     Starter 609AOW     1       80928     Enclosure Back     1       21811     2122-A     Opening Roll Holder     1       62632     2122-B     Dowel Pin     1       71013     2122-C     Spring     1       13653     Spacer Main Idler     1       14121     Main Idler Gear (66090 Bearling)       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66610     Half Union     6       29469     Motor Base     2       70411     Sheave 2BK28     1       82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x 9/2     62706			•	
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14121     Main Idler Gear (66090 Bearling)       60228     2140-A     Hex Head Screw 1/2 - 13 x 119/4       62423     Straight Key     1       71007     Compression Spring     1       66090     Main Idler Bearing     1       66610     Half Union     6       29469     Motor Base     2       70411     Sheave 2BK28     1       82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x 9/2     9/2       62706     Washer     2			Spring	1
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71007     Compression Spring     1       66090     Main Idler Bearing     1       66610     Half Union     6       29469     Motor Base     2       70411     Sheave 2BK28     1       82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x \$/2     62706	60228	2140-A	Hex Head Screw 1/2 - 13	x 119/4
66090     Main Idler Bearing     1       66610     Half Union     6       29469     Motor Base     2       70411     Sheave 2BK28     1       82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x 9/2     9/2       62706     Washer     2				
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29469     Motor Base     2       70411     Sheave 2BK28     1       82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x 9/2     9/2       62706     Washer     2				
70411     Sheave 2BK28     1       82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x 9/2       62706     Washer     2				
82247     Heater W-47     1       60551     Round Head Screw 1/4-20 x \$\mathcal{9}/2       62706     Washer     2				
60551     Round Head Screw 1/4-20 x 9/2       62706     Washer     2				-
62706 Washer 2				
	62202		Oilite Thrust Bearing	7



### Installation

Provide a clean, flat, well lighted installation site. Level the machine and anchor it to the floor. Inspect the gears and drive assembly, and remove any debris that may have accumulated during shipping.

Standard electrical installation requires a 115 volt grounded power supply. Provide a 115 volt receptacle at the point of operation. If a 230 volt motor is ordered, install the power supply in compliance with local and national electrical codes. For further information, contact a certified electrician or the Lockformer Service Department at (630) 964-8000.

### **Operating Instructions**

#### **BASIC OPERATION**

Hold the stock against the entrance gauge and slide it into the forming head. Be sure that the stock remains against the gauge until the trail edge of stock is engaged in the rolls.

Note: Minimum part length is 7 inches. If a shorter piece is needed, run a long piece, then notch and cut it to size.

Make hold down adjustments, as outlined below, to accommodate slight variations in metal thickness and hardness.

#### HOLD DOWN ADJUSTMENT PROCEDURE

- 1. DISCONNECT POWER!
- 2. Install lock outs to prevent accidental start up.
- 3. Remove top cover.
- 4. Tighten the hold down bolts until snug, then loosen them 3/4 turn. This setting should give good results for all stock thicknesses.
- 5. INSTALL THE COVER, remove lock outs, restore power.
- 6. Run a test piece.

<u>If the stock slips</u> in the rolls, tighten the hold down bolts equally in small increments until the desired results are obtained. <u>If the stock curls</u> up after forming or shows extremely heavy pressure marks, loosen the hold down bolts slightly.

7. Machine is now ready for production.

Do not adjust hold downs unless the stock slips in the rolls, pulls away from the entrance gauge, or curls when exiting the rolls.

BELLEVILLE SPRING WASHERS	
3/8" HOLD-DOWN STUDS 3/8 ID. x 7/8 OD. x 1/16 STEEL WASHER TOP AND BOTTOM 3 WASHERS PER GROUP 2 GROUPS PER STACK FULLY TIGHTEN THE STUD NUTS, THEN LOOSEN 1/2 TURN	5/8" HOLD-DOWN BOLTS 5/8 ID. x 1-1/2 OD. x 3/16 STEEL WASHER ON TOP 2 WASHERS PER GROUP 4 GROUPS PER STACK .616 ref. FULLY TIGHTEN THE HOLD DOWN BOLTS, THEN LOOSEN 3/4 TURN SADDLE WASHER

#### 5 <u>PITTSBURGH LOCK</u>

#### HAMMER-OVER LEG ADJUSTMENT



The width of the Pittsburgh lock hammer over leg is adjustable. Move *only* the right hand entrance gauge in to produce a wider leg and out for a narrower leg. ALWAYS move both ends of the entrance gauge equally, keeping it parallel to the top machine plates.

Never move the exit gauge bar for this roll set. This gauge is not intended to contact the material under normal circumstances.

#### **OPENING ROLL**

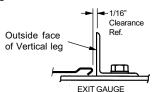
The flat roll mounted horizontally after the last roll station maintains the opening of the gap in the Pittsburgh lock. If burrs or twists caused by snips are present on the stock, they should be flattened. Failure to do this can result in breakage of the opening roll.

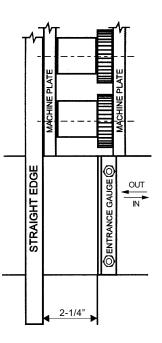
#### **INSTALLATION and OPERATION OF AUXILIARY ROLLS**

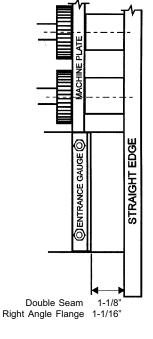
NOTE: Standard auxiliary rolls are interchangeable between the standard Lockformer 20 and the Super-Speed models. Since different entrance gauges are required, the model for which the rolls are intended should be specified

#### DOUBLE SEAM or STRAIGHT RIGHT ANGLE FLANGE ROLLS

- 1. DISCONNECT POWER.
- 2. Install lock outs to prevent accidental start up.
- 3. Remove the cover.
- 4. Unscrew and remove the right hand side table top section. This will expose the auxiliary shafts on which the rolls will be mounted.
- 5. Select the first pair of rolls which are marked T1 (Top roll first station) and B1 (Bottom roll first station). Slide them as a mated pair onto the shafts. All information stamped on the rolls must face outward. Slide a key into each keyseat. Follow this procedure in sequence with each remaining pair of rolls.
- 6. Fasten the rolls onto the shafts with the screws and washers provided.
- 7. Mount the entrance gauge and set it to the dimensions shown in the illustration.
- 8. Mount the exit gauge so the outside face of the vertical leg is parallel to the part as it passes over the exit table. Set to allow approximately 1/16" clearance between the part and the exit gauge.
- 9. Replace the table top.
- 10. INSTALL THE COVER.
- 11. Remove the lock outs.
- 12. Restore power to the machine.











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- 1. DISCONNECT POWER.
- 2. Install lock outs to prevent accidental start up.
- 3. Remove the cover.
- 4. Unscrew and remove the right hand side table top section. This will expose the auxiliary shafts on which the rolls will be mounted.
- 5. Select the first pair of rolls which are marked T1 (Top roll first station) and B1 (Bottom roll first station). Slide them as a mated pair onto the shafts. All information stamped on the rolls must face outward. Slide a key into each key seat. Follow this procedure in sequence with each remaining pair of rolls.
- 6. Fasten all rolls except the top number 2 onto the shafts with the screws and washers provided. Do not insert a mounting screw into the top 2 rollshaft; this allows the roll to "float" laterally, and center itself to the bottom roll as the stock passes through.
- 7. Mount the entrance gauges so that the centerline of the stock aligns with the centerline of the rolls.
- 8. Tighten the stud nuts so that the **T5** and **B5** rolls do not separate as the drive cleat passes through.
- Mount the exit gauge so the outside face of the vertical leg is parallel to the part as it passes over the exit table. Set to allow approximately 1/16" clearance between the part and the exit gauge.
- 10. Replace the table top.
- 11. INSTALL THE COVER.
- 12. Remove the lock outs.
- 13. Restore power to the machine.

**IMPORTANT:** BE SURE TO CUT STOCK EXACTLY 2-1/8 INCHES WIDE TO INSURE AN ACCURATELY FORMED CLEAT.

#### MAINTENANCE

#### **LUBRICATION**

Six grease fittings are located on the side panel of the stand. Lubricate these fittings after every eight hours of operation. The recommended lubricant is Molub-Alloy 777-1 or equivalent. Apply grease to all drive gears after every 40 hours of operation.

If the machine is to be used in a damp environment, apply a film of oil or grease to all unpainted metal surfaces to prevent rust.



#### **CLEANING THE ROLLS**

Keeping the roller dies clean is an important step toward efficient operation of your machine. Lockformer's GALV-OFF aerosol spray cleaner, will soften galvanized build up so that it flakes off by itself. Daily use is recommended to prevent harmful deposits from building up. GALV-OFF cleans and lubricates, as well as protects the forming rolls.

