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TOOLING GROUP - 18 ....................................................... AA55281
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SAFETY GUIDELINES

Before operating the machine, study and follow the safety precautions in this section. These precautions are intended to prevent injury to you and your fellow workers. They cannot, however, cover all possible situations. Therefore, EXERCISE EXTREME CAUTION before performing any procedure or operation.

Safety Precautions Before Starting The Machine(s)

Protect yourself. Wear safety glasses. Do not wear loose clothing, neckties, or jewelry. If long sleeves must be worn, avoid loose cuffs and buttons. Tie back and contain long hair.

Keep your work area clean. Remove all scrap, oil spills, rags, tools and other loose items that could cause you to slip, trip and fall.

Make sure that hydraulic and pneumatic pressures are at specified levels before operating this equipment.

Be sure all guards and covers are in place.

Keep this equipment properly maintained.

Be alert for loose, worn or broken parts. Do not attempt to operate any machinery with such parts present or if the machinery is making unusual noises or actions.

Be sure that this Instruction Manual is kept near the machine so the operator can refer to it when necessary.

Be aware of the locations of the Power Off or Emergency Stop button in case of an emergency.
Safety Precautions While Operating The Machine(s)

Always turn the air shut-off valve OFF before performing any maintenance or adjustments so accidental start-up cannot occur.

Always be alert whenever operating any machinery.

Only one person should control the machine(s). Never allow anyone to operate the controls while you are working on this equipment. In addition to disconnecting air, always use lock-outs and warning signs to indicate that you are working on the machines(s).

Keep your hands and arms away from any pinch points when starting, running or stopping.

Never leave the work area while the equipment is in operation.

When cleaning the machine or any of its components, do not use toxic or flammable substances. Do not perform any cleaning while the equipment is running.

Never over-ride or disable any safety switch or safety interlock.
UNPACKING AND INSPECTION

The following items should be found shipped with your Quiclok machine:

- Complete assembly with punch and die of choice
- Foot Pedal
- Tools
- Manual with Parts List
- Button Lok Samples (for reference)
- Spare Dies (if ordered)

Unpack unit and inspect for any damage during shipping.

Please record Serial Number stamped on the side face of the Quiclok frame:

Serial # ________________

INSTALLATION

Using the frame floor tubes, use fork truck to remove machine from shipping skid, and level the machine to the floor area where it will be operated.

Connect 1/2" air supply hose from the main supply line and directly to the shut-off valve provided.

SERVICE

For factory service inquiries contact the Lockformer Service Department at (630) 964-8000.
AIR SUPPLY

Connect air hose to the inlet shut-off valve of the equipment (1/2" is the minimum diameter recommended). Set the air regulator to 75 psi by turning the dial on top of the regulator clockwise. The filter should be clean and light lubrication is recommended. With the unit operating with a stroke of 3/4", the unit uses approximately 48 cubic inches of air at 75 psi per buttonlok. A 1 horse power compressor in good condition should be capable of sixty buttonloks per minute with a 50% duty cycle.

BUTTONLOK DESCRIPTION

Principle of the Buttonlok

In order to get the best out of your Quiclok, a basic understanding of the buttonlok is advised. The reference numbers in brackets (#), refer to the parts shown on illustrations 1 and 2.

The button is formed when the upper squeezes the two layers of material to be joined between the punch and the die. The amount of squeeze is very important to the strength of the buttonlok and to the life expectancy of the punch and the die.

The amount of this squeeze is controlled by adjusting the punch either towards the die or away from the die, with a cam adjusting screw. For thin material, the punch will have to be lowered (moved towards the die) and for thick material, the punch will have to be raised (moved away from the die).

The correct punch depth is the most critical adjustment on the unit. Please read the punch depth adjustment section of this manual.
MATERIALS TO BE JOINED

The Quiclok is capable of joining two ply commercial quality mild steel, from 28 gauge to 16 gauge. Both layers of material should be of the same or similar thickness.

If different thicknesses are to be joined (not recommended) the best results will normally be found with the thicker material on the top (punch) side of the two ply.

The top (punch side) material should not be more than twice the thickness of the lower material (die side) and the combined thickness of the two layers should not exceed 0.125".

Other materials can be joined with the Quiclok as long as they are not harder than commercial quality mild steel. In most cases, both plies should be of the same hardness, but if a different hardness is used for each ply (not recommended) the harder material should be on the top (punch side).

<table>
<thead>
<tr>
<th>Common Materials</th>
<th>Button Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing Quality Steel</td>
<td>Recommended</td>
</tr>
<tr>
<td>Commercial Quality Steel</td>
<td>OK</td>
</tr>
<tr>
<td>Copper</td>
<td>OK</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Usually OK</td>
</tr>
<tr>
<td>Brass</td>
<td>Usually OK</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>Not Usually Possible</td>
</tr>
<tr>
<td>High Carbon Steel</td>
<td>Not Usually Possible</td>
</tr>
</tbody>
</table>

DIE SELECTION

There are three sizes of dies required to cover the complete range of material that the Quiclok can handle. The punch in the upper tooling remains the same. The die selection chart on the next page can be used to find which die will be most suitable for your application, however, the chart is a guide only. Different types of material may require a different size die.

#50 die  2 ply 16 gauge max  2 ply 18 gauge min
#40 die  2 ply 20 gauge max  2 ply 24 gauge min
#30 die  2 ply 26 gauge max  2 ply 30 gauge min
DIE SELECTION CHART

Please Note:
1. Die Size (denoted by color) directly relates to the anvil depth.
2. The thicker the material, the greater the anvil depth.
3. All punches are the same; 0.187" tip diameter, 0.015" chamfer radius.

<table>
<thead>
<tr>
<th>Condensed Die / Gauge Chart - Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>#50 DIE (Red) 16-18 GAUGE</td>
</tr>
<tr>
<td>#40 DIE (Blue) 20-22-24 GAUGE</td>
</tr>
<tr>
<td>#30 DIE (Yellow) 26-28 GAUGE</td>
</tr>
<tr>
<td>#30 DIE (Yellow) 30* GAUGE</td>
</tr>
</tbody>
</table>

C/Q = Commercial Quality Mild Steel
D/Q = Drawing Quality Mild Steel

DETAILED DIE SELECTION CHART (For Reference Only)

Drawing Quality of material will determine the most successful die/gauge combination. This chart is a guide only. Some materials will require a different anvil depth.

<table>
<thead>
<tr>
<th>Material Thickness (T.B)</th>
<th>Gauge (Top - Bottom)</th>
<th>Die (Anvil Depth)</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.063 - 0.053</td>
<td>16-16</td>
<td>#50 (Red)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.063 - 0.052</td>
<td>16-18</td>
<td>#50 (Red)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.063 - 0.040</td>
<td>16-20</td>
<td>#50 (Red)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.052 - 0.052</td>
<td>18-18</td>
<td>#50 (Red)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.052 - 0.040</td>
<td>18-20</td>
<td>#50 (Red)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.040 - 0.040</td>
<td>20-20</td>
<td>#40 (Blue)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.040 - 0.034</td>
<td>20-22</td>
<td>#40 (Blue)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.040 - 0.028</td>
<td>20-24</td>
<td>#40 (Blue)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.034 - 0.034</td>
<td>22-22</td>
<td>#40 (Blue)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.034 - 0.028</td>
<td>22-24</td>
<td>#40 (Blue)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.034 - 0.022</td>
<td>22-26</td>
<td>#40 (Blue)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.028 - 0.028</td>
<td>24-24</td>
<td>#40 (Blue)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.028 - 0.022</td>
<td>24-26</td>
<td>#40 (Blue)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.022 - 0.022</td>
<td>26-26</td>
<td>#30 (Yellow)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.022 - 0.018</td>
<td>26-28</td>
<td>#30 (Yellow)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.022 - 0.016</td>
<td>26-30*</td>
<td>#30 (Yellow)</td>
<td>C/Q-(D/Q)</td>
</tr>
<tr>
<td>0.018 - 0.018</td>
<td>28-28</td>
<td>#30 (Yellow)</td>
<td>C/Q</td>
</tr>
<tr>
<td>0.018 - 0.016</td>
<td>28-30*</td>
<td>#30 (Yellow)</td>
<td>C/Q-(D/Q)</td>
</tr>
<tr>
<td>0.016 - 0.016</td>
<td>30-30</td>
<td>#30 (Yellow)</td>
<td>D/Q</td>
</tr>
</tbody>
</table>
REMOVING THE DIE / DIE HOLDER ASSEMBLY

CAUTION!
SHUT OFF AIR SUPPLY VALVE BEFORE REMOVING DIE
(AIR WILL BLEED OFF AUTOMATICALLY)

The buttonlok die may be removed by simply removing the Die Securing Set Screw (A). See illustration below.

REPLACING THE DIE HOLDER

1. Remove the die holder retaining screw
2. Install new die holder and tighten the Die Holder Retaining Screw
3. Replace the Plastic Guard (if removed).
4. Turn on the Air Supply.
BUTTON STRENGTH

There are two ways to measure the strength to a buttonlok joint, shear (pull) and peel (see illustration 3 on page 8).

Pull is almost always stronger than peel and is less sensitive to die adjustment. Typical button strengths for properly adjusted dies are given for commercial quality mild steel. These should be used as a guide only, different material will affect the button strength.

<table>
<thead>
<tr>
<th>Material Thickness Each / Two Ply</th>
<th>Button Strength (lbs.)</th>
<th>Recommended Die</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shear</td>
<td>Peel</td>
</tr>
<tr>
<td>.062&quot;</td>
<td>450</td>
<td>175</td>
</tr>
<tr>
<td>.032&quot;</td>
<td>375</td>
<td>85</td>
</tr>
<tr>
<td>.022&quot;</td>
<td>300</td>
<td>70</td>
</tr>
</tbody>
</table>

BUTTON FAILURE

If pulled hard enough, any buttonlok will pull apart (fail). There are two usual ways for a buttonlok to fail:

1. The two halves of the button will pull apart, leaving a male button half (punch side) and a female button half (die side).

2. The button will tear out of the top layer (punch side) leaving a hole in it. The button joint will remain in the lower layer (die side).

A correctly formed button will usually fail by tearing (2) in the pull test. The button strength usually increases as the die is adjusted towards the punch, however, it is easy to over adjust the die and overload the punch and die; reducing their life.

In the peel test, however, an under adjusted button (die too far away from the punch) will fail and an over adjusted button (die too close to the punch) will fail.

The correct adjustment is when the lock fails in peel.

If the peel strength of a correctly adjusted button is much less than shown in the chart above (for mild steel only), and the button tends to tear apart, the incorrect die may have been selected:

Change #50 die to #40 die.
Change #40 die to #30 die.

If this does not improve the peel strength of the button, then the material is not suitable for buttonlokking - probably too hard.
BUTTON FAILURE (CONTINUED)

If the peel strength of a correctly adjusted button is much less than shown in the preceding chart (for mild steel only), and the button does not tear apart, the incorrect die may have been selected:

- Change #30 die to #40 die.
- Change #40 die to #50 die.

If this does not improve the peel strength of the button, then the material is not suitable for buttonloking - probably too soft.

TESTING BUTTON STRENGTH

The best method of testing button strength is to pull the button apart in both shear (pull) and peel and measure the force required with a pull tester.

In production, however, an indication of the button strength can be found by measuring the diameter of the button cap (see illustration 3 on page 8).

If a button is tested in shear and peel with a pull tester and the upper and lower limits of the button strength are found, the cap diameters for these two limits can be measured.

Calipers can then be used in production to see if the cap diameter is within the measured limits.

NOTE: If the material changes or the die # is changed, the button cap diameters will change (see illustration 3 on page 8). When using the button cap diameter, shear and peel tests should also be used occasionally to confirm strengths.

THREE PLY MATERIAL

The Quiclok is primarily designed to join two ply material up to a maximum combined thickness of 0.125". It is possible to join three ply material up to a combined thickness of 0.125" however the strength of the top ply button joint (punch side) will be reduced.

It is possible to increase the strength of the top layer by using a punch with a larger punch tip radius; however this will slightly weaken any two ply joints formed with the new punch. Consult Lockformer if you have any problems with three ply material.
METHODS OF TESTING BUTTON STRENGTH

ILLUSTRATION 3

CHECKING BUTTON CAP DIA. WITH A CALIPER

SHEAR (PULL) AND PEEL TESTING

SHEAR

PEEL

BUTTON CAP DIAMETER
BUTTON VIEWS
ILLUSTRATION 4

1. TOOLING UNDER ADJUSTED
2. TOOLING ADJUSTED CORRECTLY
3. TOOLING OVER ADJUSTED
4. TOOLING CHIPPED OR BROKEN

CROSS SECTION OF BUTTON

TOP VIEW OF BUTTON (PUNCH SIDE)

3 LEAF
BOTTOM VIEW OF BUTTON (DIE SIDE)
AUTOMATIC RETURN ADJUSTMENT

The Quiclok press is equipped with a pressure sensing sequence valve that automatically retracts the punch when the forming is complete. When the foot pedal is depressed, the punch will close on the die and release when the preset pressure is reached. The punch will not retract, however, unless the foot pedal has been released. To adjust the release pressure, there is an adjusting screw on the bottom of the Auto Return Unit.

To increase the release pressure - turn the adjuster screw clockwise

To decrease the release pressure - turn the adjuster screw counterclockwise

IMPORTANT: If the punch release pressure is too low, the machine will produce a weak buttonlok. Therefore, the button should be checked after any Auto Return Adjustment.

NOTE: If the adjuster screw is turned fully clockwise (increasing), the unit will not return automatically.

Adjustment of the Bleed Off Screw:
Turn screw clockwise until tight and back out 1/2 turn.
MAINTENANCE

"C" FRAME
Visually inspect the frame for signs of damage or fatigue.

FILTERS AND MUFFLERS
Drain the filter regulator daily by opening the valve underneath the filter cup. Leave open until all the moisture has drained out, then close.

HOSES AND QUICK CONNECTS
Regularly (weekly) inspect all hoses and check 5/32 control lines for damage.
<table>
<thead>
<tr>
<th>Description</th>
<th>Medium Duty Quicklok</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame</td>
<td>Steel &quot;C&quot; Frame</td>
</tr>
<tr>
<td>Throat</td>
<td>18 or 24</td>
</tr>
<tr>
<td>Stroke</td>
<td>3/4 Standard setting</td>
</tr>
<tr>
<td>Capacity</td>
<td>Two ply 16 gauge mild steel (#50 Die)</td>
</tr>
<tr>
<td></td>
<td>Two ply 22 gauge mild steel (#40 Die)</td>
</tr>
<tr>
<td></td>
<td>Two ply 26 gauge mild steel (#30 Die)</td>
</tr>
<tr>
<td>Power Unit</td>
<td>4&quot; Bore x 2&quot; Stroke Air Cylinder</td>
</tr>
<tr>
<td>Die Type</td>
<td>55734 (anvil depth .030) yellow</td>
</tr>
<tr>
<td></td>
<td>55735 (anvil depth .040) blue</td>
</tr>
<tr>
<td></td>
<td>55736 (anvil depth .050) red</td>
</tr>
<tr>
<td>Punch Type</td>
<td>86255 3/16 diameter</td>
</tr>
<tr>
<td>Cycle Speed</td>
<td>120 buttons/minute (3/4 Stroke)</td>
</tr>
<tr>
<td>Duty Cycle</td>
<td>100%</td>
</tr>
<tr>
<td>Air Requirements</td>
<td>75 psi (minimum)</td>
</tr>
<tr>
<td>Air Consumption</td>
<td>0.025 cu. ft. air per button</td>
</tr>
<tr>
<td></td>
<td>(Approx. 1 hp @ 60 buttons per minute)</td>
</tr>
<tr>
<td>Approx. Weight</td>
<td>MDQL 18 - 1139 lbs.</td>
</tr>
<tr>
<td></td>
<td>MDQL 24 - 1679 lbs.</td>
</tr>
</tbody>
</table>
# TROUBLESHOOTING

## Total Failure of Joint (See also Troubleshooting Section DISTORTED JOINTS)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No button formed</td>
<td>Broken punch or die</td>
<td>Replace tool</td>
</tr>
<tr>
<td></td>
<td>High pressure too low</td>
<td>Increase pressure to 75 PSI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Re-adjust automatic return</td>
</tr>
<tr>
<td>Button partially formed no squeeze</td>
<td>Metal not of specified thickness</td>
<td>Use specified metal or use proper tooling</td>
</tr>
<tr>
<td></td>
<td>Pressure drop</td>
<td>Restore pressure</td>
</tr>
<tr>
<td></td>
<td>Incorrect tooling for metal being used</td>
<td>Verify joint data, change tooling if necessary</td>
</tr>
<tr>
<td></td>
<td>Incorrect shut height adjustment</td>
<td>Adjust shut height for correct clearance</td>
</tr>
<tr>
<td>Piercing/cracking of punch side</td>
<td>Metal not of specified thickness</td>
<td>Use specified metal or change to correct tooling</td>
</tr>
<tr>
<td></td>
<td>Incorrect tooling for metals</td>
<td>Verify joint data/change tooling if necessary</td>
</tr>
<tr>
<td></td>
<td>Weak or broken springs</td>
<td>Replace spring(s)</td>
</tr>
<tr>
<td></td>
<td>Punch/die not concentric</td>
<td>Realign tooling</td>
</tr>
</tbody>
</table>

## Intermittent Failure

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same tooling produces intermittently good and bad parts</td>
<td>Parts do not fit gauging</td>
<td>Re-adjust shut height with top adjusting knob</td>
</tr>
<tr>
<td></td>
<td>Parts interfere with tooling operation</td>
<td>Correct parts configuration</td>
</tr>
</tbody>
</table>
### TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cracks appear on button</td>
<td>Metal not of specified thickness or hardness</td>
<td>Use specified metal or use proper tooling</td>
</tr>
<tr>
<td></td>
<td>BD too large, tooling over adjusted</td>
<td>Back off shut height adjustment</td>
</tr>
<tr>
<td></td>
<td>Incorrect tooling for metals</td>
<td>Verify joint data, change tooling if necessary</td>
</tr>
<tr>
<td></td>
<td>Punch/die not concentric</td>
<td>Realign tooling</td>
</tr>
<tr>
<td></td>
<td>Excessive deflection</td>
<td>Check for damage</td>
</tr>
<tr>
<td>Cracks appear inside joint cup</td>
<td>Metal not of specified thickness or hardness</td>
<td>Use specified metal or use proper tooling</td>
</tr>
<tr>
<td></td>
<td>Tooling incorrect for metals</td>
<td>Verify joint data, change tooling if necessary</td>
</tr>
<tr>
<td></td>
<td>Punch/die not concentric</td>
<td>Realign tooling</td>
</tr>
<tr>
<td>Lump or irregularity on button</td>
<td>Chipped punch or die</td>
<td>Replace</td>
</tr>
<tr>
<td>Button tearing</td>
<td>Shut height to shallow</td>
<td>Re-adjust shut height</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check controls or operator</td>
</tr>
<tr>
<td>No backflow of button (refer to page 9, illustration 4, no. 2)</td>
<td>Shut height to shallow Material not drawing quality</td>
<td>Re-adjust shut height</td>
</tr>
<tr>
<td>Partial backflow of button (refer to page 9, illustration 4, no. 4)</td>
<td>Die leaf missing or opened before joining</td>
<td>Replace leaf if missing or check for interface causing leaf to open on part loading</td>
</tr>
<tr>
<td></td>
<td>Deflection in force frame or tool holder</td>
<td>Check for damage</td>
</tr>
</tbody>
</table>
**TROUBLESHOOTING**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimpling and unformed button</td>
<td>Die leaf missing</td>
<td>Replace leaf</td>
</tr>
<tr>
<td></td>
<td>Retaining ring leaf open</td>
<td>Replace ring</td>
</tr>
<tr>
<td>Button not round</td>
<td>Leaf not operating</td>
<td>Check for interference</td>
</tr>
<tr>
<td></td>
<td>Deflection is binding leaves</td>
<td>Check leaf guarding</td>
</tr>
<tr>
<td></td>
<td>Flexing of force frame</td>
<td>Check for damage</td>
</tr>
<tr>
<td></td>
<td>Punch and die are not concentric</td>
<td>Realign tooling</td>
</tr>
<tr>
<td>Parts are distorted during joining</td>
<td>Insufficient stripper force</td>
<td>Replace stripper spring (if broken)</td>
</tr>
<tr>
<td></td>
<td>Shut height to deep</td>
<td>Re-adjust shut height</td>
</tr>
</tbody>
</table>
**MANORL DIE RE-ALIGNMENT**

1. Remove die holder by removing retaining screw.

2. Bolt MANORL DIE in place.

3. Insert adjusting bronze inside MANORL DIE until from looks right.

4. Unload MANORL DIE to back position, right.

5. Place die in center of set screw on side will die to extreme rear position.

6. Set screw to front will move.

7. Insert adjusting bronze inside MANORL DIE.

8. Make new left punch, and punch from left.

9. Make new left punch, and punch counterclockwise direction.


11. Make left punch with one piece of metal, and install piece of metal, right.

12. Install adjusting bronze inside MANORL DIE.


14. Adjust MANORL DIE, and install adjusting bronze inside MANORL DIE.
ADJUSTMENT & CLEVIS
OPEN HEIGHT
PUNCH DEPTH
A55280

PUNCH DEPTH WILL NOT BE AFFECTED
BETWEEN THE PUNCH AND DIE
RESULTING IN LESS OPEN HEIGHT
THE LESS THE CYLINDER CAN RETRACT
THE FURTHER BACK IT IS ADJUSTED
BACK TOWARDS THE OPERATING SHOCK PAD
ADJUST THE OPEN HEIGHT HEX NUT

FIT CORNER RADIUS OF CAM BLOCK
ADJUST CYLINDER ROD CLEARANCE BEARING

(CW DECREASES PUNCH DEPTH)
(CW MAKES PUNCH GO DEEPER)
PUNCH DEPTH ADJUSTING KNOB

CINCINNATI PRECISION MACHINERY 513 866 4133

1900-20
DIAGRAM
PNEUMATIC
OLMD 18/24
AASS291

1

1-3
PULSE VALVE
AAG5568

200-0038-025
3-WAY FOOT VALVE
64013

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65862
MUFFLER

64007

200-0020
4-WAY VALVE

65862
MUFFLER

200-0024-050
FILTER-REG-LUBRICATOR
61973

200-0043
POWER CYLINDER
64028

VENT

200-0022
PRESSURE SENSOR
64006

AAS6066
AAS6031
AAS6021
AAS6006
AAS6005
AAS5568
AAS5566

64007

200-0020
4-WAY VALVE

65862
MUFFLER

200-0038-025
3-WAY FOOT VALVE
64013

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65862
MUFFLER

200-0024-050
FILTER-REG-LUBRICATOR
61973

200-0043
POWER CYLINDER
64028

VENT

200-0022
PRESSURE SENSOR
64006

AAS6066
AAS6031
AAS6021
AAS6006
AAS6005
AAS5568
AAS5566
DO NOT SCALE

NOTE:

PRESS ES5 ITEM 15 (18) DOWN ONE FULL DEGREE OF FREEDOM. IF ES5 ITEM 15 IS NOT 0, DUILD TWO FULL DEGREE OF FREEDOM.

FOR ITEM 7B (95) REVERSE AT DED MOUNTING ITEM 14.

Press ES5 Item 15 is 18 ° oz. Should be 0.0005 mm.