Chapter 1

Section 2: Pre-Installation

Before getting started, double check that the MultiCyl meets the following:

1. What will be installed with a MultiCyl?
2. What will be required in a MultiCyl?
3. Safety features are included with a MultiCyl?
4. Can multiple MultiCyls be installed in one system?
5. Can Multiple MultiCyls be installed with a MultiCyl?
6. Critical to be included in Multiple MultiCyls?
7. Which features are important to include in Multiple MultiCyls?
8. Which volume is required to use a MultiCyl?
9. Which volume is required for operation?
10. How do I set up the volume for operation?

Section 1: Frequently Asked Questions

Using Multiple MultiCyl Products

Be sure to read the entire manual prior to
Section 8: Air Controls and Air Delivery

Multicuts uses only the simplest of air controls, a 3-way pitch valve.

Section 2: Punching Stainles and Other Hard Materials

(Example)

Excessive spring force may cause premature power stroke in the

Cylinder

(spring force) - minimal spring resistance
- controlled working forces
- self centered tool return
- built-in depth stops
- upgraded guide pins and
- load pins where possible
- with load pins.

When possible, all of the following features should also be included in

Applications where the tooling is attached to a double acting Multicut

are the recommended models. 500/600H should be used in all

the standard products. AVAC 1000 comes with a 600/600H to do so will

achieve the load on the double acting Multicut. It will be more

important to ensure the proper load. The Multicut have

If is possible to return tooling with a double acting Multicut. However, it

is used when the tooling weight is less than 2 pounds and an AD10 adapter

made when the tooling weight is less than 2 pounds. Exceptions may be

not be attached to the ram of a single acting Multicut. Tooling should

not be designed to return tooling. Tooling should

be designed to for Multicuts.

Section 9: Application Problems and Machine Damage

Failure to include these features in the design of the tooling may cause

in the ram of the Multicut. The tooling must have a centered load.

must be rigidly designed to prevent deflection and transverse forces acting

under heavy loads. The Multicut system is a common application

in the most maintenance problems and cause premature wear resulting in both

traditional presses which use grips and slides, the ram of the Multicut has to

When using a Multicut, tooling design features are very important. Unlike

available for all types of applications from Multicut.

12812 Multicuts

2 Cages (Machine Frames)

Section 5: Cages (Machine Frames)
Typical timed air packages delay and timed stroke length options are available. Shown below is a sample of the type of a timer which may be supplied by MultiJet. Time delay and stroke time length options are adjustable. In addition to the standard air control packages, some applications may require the use of a timer which may be supplied by MultiJet.}

**Section 2: Time Operation**

**ACPI-0X & ACPI-PX**

- ACPI-0X & ACPI-PX
- ACPI-0X & ACPI-PX
- ACPI-0X & ACPI-PX
- ACPI-0X & ACPI-PX

Within 10 ft of any MultiJet in operation, an FRL-50 filter-regulator lubricator unit is recommended to be in the air line. In addition, all control packages can be supplied from MultiJet. An air filter-regulator lubricator is also required. Standard foot control and double acting cylinders (for single acting cylinders) are available. Standard foot valve or a 4-way pilot valve (for...
Section 1A: Safety

SSU high-arc hydraulic oil

Multiplies use AW23 non-detergent hydraulic oil or an equivalent 150 viscosity oil.

Influence of equipment or service of one year or part of a preventive maintenance schedule, the seal material of the seal is required to be replaced when doing a seal maintenance. Occasionally, the Multipliers oil levels have to be topped up, but generally, the replacement process are not included with the seal kit.

Section 1B: Maintenance

Instruments for the replacement procedure are included with the seal kit.

The seal needs to be replaced when the equipment is switched off. Multipliers are available through the dealer which supplied the equipment. By 1/4" needle, fill each seal kit for all power devices. The seal kit for a new seal kit is padding periodic preventive maintenance. Should include 1/4" needle, fill each seal kit for a new seal kit.

Section 10: Cage Punching

Section II: Inverted or Horizontal Operation

When using the oil transfer system to work properly and to keep the position of the oil transfer system from the other crane's position, the hydraulic oil needs to be replaced. The position of the oil transfer system is shown in the figure.

When using the oil transfer system from a horizontal position, the hydraulic oil needs to be replaced. The position of the oil transfer system is shown in the figure.

Section 11: Inverted or Horizontal Operation

Inverted or Horizontal Operation

Section 12: Oil Supply

Section 13: Oil Supply

Section 14: Oil Supply

Section 15: Oil Supply

Section 16: Oil Supply

Section 17: Oil Supply

Section 18: Oil Supply

Section 19: Oil Supply

Section 20: Oil Supply

Section 21: Oil Supply

Section 22: Oil Supply

Section 23: Oil Supply

Section 24: Oil Supply

Section 25: Oil Supply

Section 26: Oil Supply

Section 27: Oil Supply

Section 28: Oil Supply

Section 29: Oil Supply

Section 30: Oil Supply

Section 31: Oil Supply

Section 32: Oil Supply

Section 33: Oil Supply

Section 34: Oil Supply

Section 35: Oil Supply

Section 36: Oil Supply

Section 37: Oil Supply

Section 38: Oil Supply

Section 39: Oil Supply

Section 40: Oil Supply

Section 41: Oil Supply

Section 42: Oil Supply

Section 43: Oil Supply

Section 44: Oil Supply

Section 45: Oil Supply

Section 46: Oil Supply

Section 47: Oil Supply

Section 48: Oil Supply

Section 49: Oil Supply

Section 50: Oil Supply

Section 51: Oil Supply

Section 52: Oil Supply

Section 53: Oil Supply

Section 54: Oil Supply

Section 55: Oil Supply

Section 56: Oil Supply

Section 57: Oil Supply

Section 58: Oil Supply

Section 59: Oil Supply

Section 60: Oil Supply
**Example:** A 3/4 inch hole in 16 GA mild steel requires 4.4 inches. However, if 1/16 inch thick, it would only take 2.2 inches (4.4 x 0.5).

**Table:**

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<tbody>
<tr>
<td>Stainless Steel</td>
<td>X 1.60</td>
<td>1.48</td>
<td>1.28</td>
<td>0.93</td>
<td>0.72</td>
<td>0.57</td>
<td>0.47</td>
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<tr>
<td>Aluminum</td>
<td>X 0.50</td>
<td>2.4</td>
<td>2.0</td>
<td>1.6</td>
<td>1.3</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Revised Tonnage Due to Punch Shear:**

- This chart is for structural steel, 50,000 PSI tensile strength only.
- Multiply the tons of punch force by the following factors:
  - Diaphragm: 2.0
  - Through: 1.0
  - Loose: 0.1

**Multiples for Punch Forces:**

- 0.5 x 3.0
- 0.7 x 2.0
- 0.9 x 1.0
- 1.0 x 0.5

**Note:** The table above is for reference only. For specific applications, consult with a professional to ensure accuracy.