Ovalformer LLC 1018 Ovalformer

Operation Manual

PREFACE

This manual has been especially prepared for those persons responsible for the SAFE operation of the Ovalformer LLC 1018 Ovalformer. The information contained in this manual has been correlated, where possible, into related sections.

Throughout the manual, WARNINGS are included as a part of operating procedures. It should be noted that some WARNINGS refer to functions other than those required for direct operation of the 1018 Ovalformer. WARNING signs are also mounted at strategic points on the equipment to remind personnel of hazards that may not be obvious when, and if, improper procedures are followed. The objective here is to establish SAFE operating procedures for all personnel associated with the equipment – and to PREVENT ACCIDENTS.

Make every effort to keep all equipment in good working condition and SAFE FOR PRODUCTION. It is imperative that the user establish and follow a program of periodic and regular inspections to make certain the equipment and its auxiliary components are in SAFE operating condition. Employers must keep records of those inspections and of the maintenance work performed.

REGARDING WARRANTY

TERMS OF THE WARRANTY ARE FULLY DOCUMENTED IN THE OVALFORMER LLC WARRANTY.

A COPY OF THAT WARRANTY IS INCLUDED IN THE COMPOSITE SERVICE MANUAL; ADDITIONAL COPIES ARE AVAILABLE UPON REQUEST.

Table of Contents

Ovalformer Identification

TERMS & DEFINITIONS

The following terms are used throughout the manual in reference to Ovalformer components and/or operating procedures. It is suggested that the user(s) read and familiarize themselves with the terminology before proceeding further into manual.

OPERATOR CONTROL PANEL: This panel contains all the necessary push buttons and touch screen panels for machine operation.

HYDRAULIC CONTROL VALVE: This hydraulic valve controls the flow that is sent to the cylinder.

HYDRAULIC FLOW CONTROL VALVE: This flow valve regulates the amount of oil flow that is sent to each cylinder. All cylinders are timed to operate together.

DIES (Upper and Lower): These aluminum semi-circle dies are in diameters that coincide with the ductwork minor axis. These dies can be changed to make different minor diameter sizes.

SPACER: These aluminum spacers are used to expand the machines capacity for various major diameter dimensions. Multiple spacers will be used in many of the larger sizes.

CYLINDER MOUNT (Left and Right); Structural members supporting hydraulic cylinders. HYDRAULIC POWER UNIT: Hydraulic reservoir, motor and pump assembly located inside the main cabinet.

PREPARATION FOR USE

NOTE: The 1018 Ovalformer is not ready for production until the following conditions have been observed and all installation work performed in the order listed

CAREFULLY PERFORM SYSTEM INSTALLATION PER INSTRUCTIONS

Install the Ovalformer according to instructions given in the "Installation" section of the Service Manual (furnished). Make certain that electrical services are properly connected and that the Ovalformer has been properly lubricated.

UNDERSTAND OPERATING PROCEDURES

The Ovalformer operator must read and understand all operator's control and indicators information. Learn the function of (and related action associated with) each of the controls and indicators. Know how to properly operate the Ovalformer.

CHECK ALL OPERATING ADJUSTMENTS

Make certain that all operating adjustment procedures have been satisfactorily performed. Make certain that factory settings were not disturbed during shipment. Learn to properly adjust system pressures, if applicable.

Hydraulic solenoid and proportional valves may have a tendency to stick when they are new or have not been used for a long period of time. If a hydraulic function fails to work properly, remove the upper cylinder tube and then manually shuttle the valve to free the valve.

THEN...

Read and understand the section entitled "Material Handling Safety." Then follow the procedures listed under "Sequence of Operations."

OBSERVE ALL SAFETY PRECAUTIONS

Check point-of-operation safeguarding being used to make certain that it is appropriate for the operation being undertaken.

AND DON'T FORGET ...

It is the user-management's responsibility to make certain that all point-of-operation guards or devices are used, checked, maintained, and where applicable, adjusted on every operation performed on a production system for every individual exposed to a point-of-operation hazard.

OPERATOR'S CONTROLS AND INDICATORS

Ovalformer LLC Ovalformers are controlled by the operator's intelligent use of standard devices, including push buttons, selector switches, and indicators.

The controls and indicators that are illustrated and described in this manual represent Ovalformer LLC's interpretation of controls and indicators that comply with standards applicable at the time of publication. Although considerable effort has been taken to assure that all requirements have been met, interpretations may change as future decisions are handed down by the interpretation committee, or as the need of change becomes apparent.

Every control should be checked periodically for proper response and subsequent correct operation. A control that does not function properly is not safe and must be replaced immediately.

!! WARNING !!

THE OPERATOR AND ALL PERSONNEL INVOLVED WITH THE OPERATION OF THE MATERIAL HANDLING EQUIPMENT MUST READ AND THOROUGHLY UNDERSTAND THE PROCEDURES AND SAFETY PRECAUTIONS IN THE "MATERIAL HANDLING SAFETY" SECTION FOUND WITHIN THIS MANUAL.

For detailed information concerning the interconnection of controls and electrical components for a specific Ovalformer, please refer to the wiring diagram and floor plan supplied with the system.

LOCATION OF CONTROL DEVICES

The push buttons, selector switches, and indicator lights used for Ovalformer control are normally located in the operator's panel which is mounted on the Ovalformer cabinet. This location may vary due to special arrangements contracted at the time of purchase.

OVALFORMER MOTOR

START (Illuminated push button)

This push button is used to start the Ovalformer hydraulic system. Push the button to start the Ovalformer hydraulic pump motor. The Green pilot light will illuminate when the motor is running.

STOP CONTROL (Mushroom Head Push Button)

This palm button is used to disconnect power to the Ovalformer control. In addition, pressing this button will cause an immediate stop of the entire hydraulic system.

OVALFORMER MOTOR STOP

(Illuminated Push)

This button is used to stop the Ovalformer hydraulic pump motor.

TOUCH SCREEN CONTROLS

Many of the machine's functions are controlled via the touch screen. Duct sizing and stretch selections are located here.

SAFETY IN THE FABRICATION SHOP

Safety procedures pertaining to the use of the Ovalformer equipment should include related tasks of material handling, coil unbanding, and scrap disposal. The total production operation, from start to finish, must be accompanied efficiently and safely. The responsibility for providing and enforcing this type of operation, by law, rests with the equipment user management.

OPERATION

During machine operation, guards and/or covers must enclose all potentially hazardous areas of the equipment. Machine user must also install point-of-operation safeguarding applicable to their tooling and method of operation that will – if properly mounted, adjusted, and used – prevent the injury of a operator's hands or any other part of his body.

There is no one specific means of safeguarding the point-ofoperation that will best (or even adequately) safeguard every conceivable operation in which a machine component can be used. Only the user can make the proper selection of point-ofoperation safeguarding for the protection of the operator, and other persons for their specific use of the equipment at the moment. Only the user can supervise and control the use of that safeguarding.

TRAINING

Machine operators, as well as setup and maintenance personnel, are expected to perform their duties in a safe, intelligent manner. One of the first orders of business, then, is to make certain that these employees are carefully trained to fulfill their job functions safely and with competence. Regardless of his, or her, prior experience, each employee performing press related work should be given thorough job instruction.

Training objectives should be planned carefully and written down so that the trainee will know what is expected of him or her. Instructions should emphasize the safety aspects of the job as well as the production phases. Employers should also remember that differences in language and educational background make it more difficult for some people to understand instructions. Follow through to make certain the employees have learned, and that they know their jobs. Supervisors should also perform frequent evaluation checks during production operation to make certain the system is providing maximum protection. Careful observation from a discreet distance may disclose unsafe situations in which the operator, or maintenance personnel, may unknowingly be engaging. These situations can then easily be corrected.

SAFETY ANALYSIS REQUIRED

Safety instructions and WARNINGS are included in this manual. But, due to the multitude of applications, it is impossible to foresee all of the circumstances or occurrences that could cause an accident or injury. Accordingly, it must be understood that every operating condition cannot be ascertained – and the equipment user should never assume that all necessary safety measures are included in this manual.

Under certain conditions or circumstances, additional safety measures may be required. The equipment user-management know and understands his own application best, and is responsible for determining the need and providing all necessary safeguarding appropriate for the particular operation. Equipment user-management is strongly urged to promote a planned safety program. That program should relate to safety in the use and maintenance of all equipment and any associated auxiliary equipment.

SAFETY TIPS

- When the Ovalformer has been inoperative or left unattended, even for a brief moment, check the setting of all selector switches before resuming operation.
- Make certain that all material handling equipment, including cranes and hoists, are in a safe operating condition and that they are not overloaded. NEVER attempt to load a picce of stock with a worn or damaged sling.
- NEVER stand, walk or drive under a suspended load. Caution others to keep away from under the load.
- Take precautions to protect hands and body from sharp edges. Wear safety helmet (hard hat type), gloves, safety glasses and safety shoes.
- 5. NEVER place your hands near moving member or into other areas where stock is in motion.
- Report any questionable operation, unusual action, oil leaks, unsafe condition, or improper maintenance of machine to the proper person.
- Improper material handling methods cause accidents. Plan ahead and arrange a safe method of transferring materials. Use mechanical handling methods (instead of manual) whenever possible.
- Shut OFF power to the equipment when it is not in use. Lock the disconnect switch in the OFF position to prevent unauthorized use of the equipment and unintentional start.
- Develop a sense of personal safety awareness.
 Observe all safety regulations. Be on the lookout for hazardous conditions and discuss the control of them with your supervisor.
- 10. Keep the workplace clean of all scrap and debri.

OPERATION

This Manual has been prepared to furnish the Ovalformer operator with sufficient information to set-up and operate the equipment without outside assistance. It contains information on the controls and indicators used on the 1018 Ovalformer. In addition, an inspection checklist is also included in this manual.

Should operational assistance be required, please contact the Ovalformer LLC Service Department. Personnel in this department are prepared to aid users in obtaining optimum performance from their Ovalformer equipment. Your inquiry will receive prompt and courteous attention.

DESIGN CHANGES

Instructions are provided for the standard 1018 Ovalformer. Ovalformer LLC reserves the right to discontinue or change specifications, designs, and materials, without notice, consistent with sound engineering principles and recognized modern practices.

IMPORTANT

All Covers and protective devices must be closed and/or installed in the correct position before operating the 1018 Ovalformer. Failure to follow these instructions could result in personal injury or damage to the equipment.

SERIAL NUMBER

When contacting Ovalformer LLC for repair parts or for information concerning your 1018 Ovalformer, please furnish the serial number. The serial number is stamped on the Ovalformer Identification Plate. Manufacturing records, technical data, and special information (in our possession) can be located quickly when the serial number is known.

Ovalformer LLC Arden NC 28704

Printed in the United States of America

Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited.

Programming

The PLC Controls on the Ovalformer 1018 provide the user with a powerful database of stretch destination values to make forming oval ductwork much more consistent and simple. However, each spiral machine produces slightly different duct, and the material properties of steel vary. Due to these variables, the Ovalformer 1018 has factory set values of destination stretch points for each duct size set to .5% of stock perimeter distance (see Oval Size & Initial Stretch Chart). In most cases, these values are below the necessary distances to produce flat oval duct. Each individual machine, therefore, is capable of being programmed from the control panel touch screen. The following is a sequence which will set the stretch dimension for one particular oval size.

NOTE: When the program is modified, the new value will be the default distance of stretch for the particular duct size until changed.

!!WARNING!!: Setting the stretch distance value to high may cause product damage.

- 1. Press the "Select" tab at the top of the screen
- 2. Select the Minor then the Major dimensions of the ductwork to be modified
- 3. Press "Accept Selection" on the "Run" screen, but do NOT press "Stretch"
- 4. Press the "Programming" tab on the top of the screen
- 5. The Programming Screen will appear, on this screen the duct size that will be modified will show on the bottom on the screen, the current value for the stretch destination will appear on the right hand side of the screen and the New value will be displayed on the bottom right.
- 6. Touch the "Enter New" and a numeric keypad will appear
- 7. Enter the new stretch dimension on the key pad then press enter (¬) (Because of the sensitivity of the distance of stretch, small increments of change should be applied, typically .0500 inches at a time)
- 8. If the number shown under "Enter New" is correct press "Accept Selection" (This replaces the stretch destination in the database for the particular size duct with a new value, and this value will be the default distance each time the "Stretch" button is pressed). If the number under "Enter New" is not correct repeat step (6).
- 9. Press the "Run" tab at the top of the screen
- 10. Now the Ovalformer is ready to stretch to the new dimension

SETUP INSTRUCTION

OPERATING THE OVALFORMER FOR THE FIRST TIME

Before operating the Ovalformer for the first time, make certain that the following precautions and procedures have been performed:

- Installed and leveled. Make certain the Ovalformer has been properly installed, leveled, and anchored to a suitable foundation.
- Electrical service connected. Make certain
 that the electrical service connected to the
 Ovalformer is correct for the motor and controls

 – and that the equipment is permanently
 connected to earth ground.

NOTE: Failure to have the equipment controls properly grounded may result in nuisance faults, damaged solid state devices, etc., due to electrical noise and voltage spikes.

- Hydraulic power unit filled and primed.
 The power unit reservoir must be filled and primed, and the pump motor direction checked.
- Hydraulic solenoid and proportional valves.
 Valves may have a tendency to stick when they are new or have not been used for a long period of time. Check for proper response from each designated hydraulic function by operating the appropriate selector switch and observing operation.
- Auxiliary equipment cleaned and lubricated.
 The auxiliary equipment (if any) should be cleaned, lubricated, and ready to operate Follow directions on tags attached to the equipment and read the instruction manual supplied by the manufacturer.
- Remove all packing materials and foreign objects from the Ovalformer. Make certain that any packing materials, installation tools, or other foreign objects are removed.

Understand the controls and indicators. All personnel associated with the operation of the Ovalformer must thoroughly read and understand the section of this manual entitled "Operator's Controls and Indicators."

SEQUENCE OF OPERATIONS

When the Ovalformer is ready for operation and when the operator has become familiar with the controls, safety requirements, and material handling precautions, a typical operating sequence consists of the following tasks.

OPERATING INSTRUCTIONS

- (A) Go to Select screen by selecting the "Select" button along the top of the screen.
- (B) After pressing the Select screen, the following screen will appear. That displays the Minor Diameter.
- (C) Select the Minor Diameter of the ductwork that you want to fabricate. After you select the Minor Diameter, the next screen will appear displaying the available Major Dimensions.
- (D) Once the Major Dimension has been selected, the "Run" screen will appear.
- (E) Check the dimensions of the duct and press "Accept Selection" if they are correct or go back to step (A) if the displayed dimensions are incorrect.
 - * WHILE AT THIS RUN SCREEN, IT IS **YERY** IMPORTANT THAT YOU CONFIRM THE SELECTIONS YOU HAVE MADE. CONFIRM THE MINOR AND MAJOR AXIS, STOCK SIZE, AND REQUIRED SPACER. *

Next step, confirm the Die, and Spacer for this stretch.

- The Upper and Lower Dies must match each other and be the same size as is displayed on the screen. The Die size is stamped on the end of the Die.
- Confirm proper Spacer height. NOTE: Several Spacers may have to be stacked upon each other to reach desired height. Refer to Spacer Chart for the stack configuration.
- Confirm size of stock available is the same as screen size required.
- Tack weld the spiral lockseam on each end of the ductwork to prevent the spiral from unraveling.
- 5.) Deform the ductwork by pushing into a rough oval shape.
- 6.) Load semi-flattened ductwork on to the

Boom – smaller sizes can be loaded manually while larger sizes may require the use of overhead cranes or fork trucks.

- Return to Operator's Panel and reconfirm the diameters, stock size, and spacer selection.
- 8.) Select the "Stretch" button and be sure to keep all fingers, hands, loose clothing, and all other body parts clear from the ductwork and upper and lower dies while the dies are in motion. Once the cylinders have extended to the predetermined set point, they will automatically return home.
- After the cylinders have returned home, remove the flat oval ductwork from the machine.
- 10.) Repeat steps 1-8 for the next piece of ductwork.

NOTE: If ductwork has not assumed flat oval shape after step (7), select the "Restretch" button before removing ductwork. This will add additional stroke length to the cylinders to overcome spiral duct inconsistencies. If at this point the ductwork is still not properly stretched, refer to "Programming" to set up new default stretch dimensions.

NOTE: If ductwork appears to be tearing or if other errors appear to be occurring while stretching, <u>IMMEDIATELY</u> press "Cancel Stretch" and the machine will return cylinders to the home position.

Inspect ductwork for imperfections and inspect machine. Repeat steps 1-8 if all aspects of machine and stock metal appear normal.

Ovalformer 1018 Spacer Chart

Spacer Required	;	Spacer Bu	uild* Load	Sequenc	е
Spacer Required	1st	2nd	3rd	4th	5th
2	2				
4	4				
6	2	4			
8	8				
10	2	8			
12	8	4			
14	2	8	4		
16	12	4			
18	2	12	4		
20	16	4			
22	2	16	4		
24	20	4			
26	2	20	4		
28	24	4			
30	2	24	4		
32	20	8	4		
34	2	20	8	4	
36	20	12	4		
38	2	20	12	4	
40	20	16	4		
42	2	20	16	4	
44	24	16	4		
46	2	24	16	4	
48	24	20	4		
50	2	24	20	4	
52	24	16	8	4	
54	2	24	16	8	4
56	24	20	8	4	
58	2	24	20	8	4
60	24	20	12	4	

^{*} The spacer build consists of a combination of individual spacers stacked to form a different size. The first spacer loaded will be closest to the upper tube of the boom.

Programming

The PLC Controls on the Ovalformer 1018 provide the user with a powerful database of stretch destination values to make forming oval ductwork much more consistent and simple. However, each spiral machine produces slightly different duct, and the material properties of steel vary. Due to these variables, the Ovalformer 1018 has factory set values of destination stretch points for each duct size set to .5% of stock perimeter distance (see Oval Size & Initial Stretch Chart). In most cases, these values are below the necessary distances to produce flat oval duct. Each individual machine, therefore, is capable of being programmed from the control panel touch screen. The following is a sequence which will set the stretch dimension for one particular oval size.

NOTE: When the program is modified, the new value will be the default distance of stretch for the particular duct size until changed.

!!WARNING!!: Setting the stretch distance value to high may cause product damage.

- 1. Press the "Select" tab at the top of the screen
- 2. Select the Minor then the Major dimensions of the ductwork to be modified
- 3. Press "Accept Selection" on the "Run" screen, but do NOT press "Stretch"
- 4. Press the "Programming" tab on the top of the screen
- 5. The Programming Screen will appear, on this screen the duct size that will be modified will show on the bottom on the screen, the current value for the stretch destination will appear on the right hand side of the screen and the New value will be displayed on the bottom right.
- 6. Touch the "Enter New" and a numeric keypad will appear
- 7. Enter the new stretch dimension on the key pad then press enter () (Because of the sensitivity of the distance of stretch, small increments of change should be applied, typically .0500 inches at a time)
- 8. If the number shown under "Enter New" is correct press "Accept Selection" (This replaces the stretch destination in the database for the particular size duct with a new value, and this value will be the default distance each time the "Stretch" button is pressed). If the number under "Enter New" is not correct repeat step (6).
- 9. Press the "Run" tab at the top of the screen
- 10. Now the Ovalformer is ready to stretch to the new dimension

INSPECTION AND MAINTENANCE

An active program of regular inspection and preventative maintenance must be developed by the Ovalformer user management. Such a program is vital to the safety of operators and necessary for continuous, efficient production of the equipment. The complete maintenance program should be set up as an organized procedure of routine inspection, preventative maintenance, repair or replacement of component parts as required, and complete checkout after repair. Regulations require records to be kept of equipment inspections, and of the maintenance work performed.

Ovalformer inspection should be arranged to be performed in varying degrees at predetermined intervals. For example, daily inspections of a routine nature may be handled by operators, die setters, or foremen during the course of their normal duties. This inspection should include obvious items such as point-of-operation guards, loose bolts, unusual noises, unusual vibrations, and operation of controls.

More thorough inspections should be made on a weekly basis, usually with reference to a check list. These inspections should include such items as cracked or broken oil lines in concealed areas of the Ovalformer, and function of all electrical control circuits. In addition to daily and weekly inspections, a scheduled inspection should be performed each month. Intensity of the monthly inspection will depend, to a great degree, on how thoroughly the weekly inspections are conducted. There is little to be gained by duplicating checks of certain items while others go unnoticed. Inspect such items as solenoid valves and limit switches. Also, make certain that all protective shields are in place.

A semi-annual inspection should also be performed to reveal general condition of the Ovalformer. At this time, check for cracks and broken sections, and for levelness. Parts needing replacement should be ordered, and time to perform repairs should be scheduled.

As mentioned previously, a checklist should be made to cover each individual Ovalformer installation. It should include check points recommended by Ovalformer LLC, plus others that are special or applicable to the particular equipment. The list

should be arranged so that positive, step-by-step inspections will be performed on specific parts of the Ovalformer at prescribed dates. Copies of the list should be made so that the inspector can check off or note the result of each check as it is made. The inspection reports may then be filed as part of the complete system record.

PERIODIC CLEANING

Equipment cleanliness is a very important part of good maintenance. Cleanliness contributes to safer and more pleasant work conditions. The actual removal of dirt, grime, oil, and grease may reveal items that require attention. Keeping cover plates in place may reduce the damaging effects of dirt and other foreign particles. Wiping up oil and grease spills as soon as they occur is a good practice.

When an inspection reveals the need for corrective maintenance, take action at once by notifying supervision. Many minor difficulties grow into major maintenance problems because of neglect.

OVALFORMER LLC OVALFORMER

Ovalformer Serial No.	
Ovalformer Model	
User's Equip. No.	

Ovalformer Operator's Inspection Checklist & Maintenance Record

Installation Date	
Inspection Date	
Type of Point of Operation Guarding	

Location			

!! WARNING!!

USE EXTREME CAUTION WHEN PERFORMING INSPECTIONPROCEDURES. DISCONNECT POWER TO THE PRESS AND AUXILIARY EQUIPMENT. LOCK THE ELECTRICAL AND PNEUMATIC DISCONNECT SWITCHES FOR THE OVALFORMER IN THE OFF POSITION, FOLLOWING PROPER LOCK-OUT, TAG-OUT PROCEDURES. ATTACH WARNING TAGS TO THE DISCONNECTS TO PREVENT ACCIDENTAL STARTING. IF NECESSARY TO MOMENTARILY RESTORE ELECTRICAL POWER, MAKE CERTAIN THAT ALL PERSONS AVOID PINCHING POINTS THAT ARE ASSOCIATED WITH THE EQUIPMENT. INSPECTIONS SHOULD BE PERFORMED ONLY BY AUTHORIZED, EXPERIENCED PERSONNEL.

Sat.	Unsat.		Weekly Checks
		Cleanliness	☐ Clean Ovalformer inside and out. Remove any foreign material, rags. Chips, scrap, etc. which may have accumulated.
			□ Clean up floor and area surrounding Ovalformer.
		Push Buttons & Selector Switches	☐ Check condition of each push button. Replace any push button that is worn damaged, or not functioning properly.
			☐ Check condition of each selector switch. Replace any switch that is worn, damaged, or not functioning properly.
			$\hfill\Box$ Check for proper response from each designated function of each selector switch.
		Indicators	☐ Inspect all indicator lights for broken, cracked, or loose sections. Replace any indicator light that is damaged or not functioning properly.
		Ovalformer Guarding	☐ Check condition and installation of all Ovalformer guards, protective covers, and shields. Make certain they are in goood condition, properly installed, and tightened securely.
			☐ Check Ovalformer for loose bolts, and/or brackets. Tighten or replace any bolts and/or brackets if necessary.
			☐ Check condition of all tools and personal protective equipment. Replace tools and or protective equipment if necessary.
		Hydraulic System	☐ Inspect all hydraulic lines, fittings, hoses, valves and bracket clamps making certain no leaks are present.
		Hydraulic Solenoid and Proportional Valves	☐ Check for proper response from each designated hydraulic function by operating the appropriate selector switch and observing operation.

COMMENTS:

Ovalfori	ner approved ner NOT app	for operation. proved for operat	ion.

CORRECTIVE STEPS TAKEN:

Inspected by: _

CUSTOMER COMMENTS

The Technical Publications Department of Ovalformer LLC takes pride in its manuals. We are certain that our manuals will meet your needs when performing operating, maintenance or servicing procedures. However, if you find there should be a change, addition, or deletion to the manual, please let us know. We will review all requests for changes, additions, or deletions to the manuals and incorporate those requests deemed appropriate.

If you see something in the manual that you like or dislike, please let us know. Your comments will help us improve our manuals.

If an error is found, please list the page and paragraph in which the error was found along with a brief description of what the error is. If the correction to the error is known, please include that information also. If a change, addition, or deletion is being requested, please list the page, paragraph, or illustration needing the change and include a brief description of how you feel the paragraph or illustration should be changed.

Thank You

Manual No./Name:		
Page	Paragraph/Illustration	Description

Please fax or mail a copy of this completed comment sheet to: Ovalformer LLC A division of Price & Price Mechanical of NC, Inc. PO Box 793 Arden, NC 28704

Fax: (828) 687-993