

INSTALLATION, OPERATION AND MAINTENANCE MANUAL



MODEL NO(S). D-36 SOFT SHELL CRACKER

**BEELER
INDUSTRIES**

P.O. Box 380
4664 Kiernan Court,
Salida, CA 95368
Phone: 209-545-0740
Fax 209-545-0768
www.beelerindustries.com

IMPORTANT SAFETY INFORMATION

Before installing, operating or maintaining this machine you must ***read*** and ***understand*** the contents of this manual. Failure to do so may result in equipment damage, injury or death.

Antes de la instalación, funcionamiento o mantenimiento de este equipo debe leer y comprender el contenido de este manual. El no hacerlo puede resultar en daño al equipo, lesiones o la muerte.

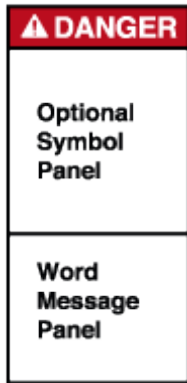
Safety Labels

Throughout this manual and on the machine, safety labels have been placed to bring attention to characteristics of this equipment that warrant particular awareness. There are potential hazards on any device and care should be exercised whenever installing, operating or maintaining any equipment.

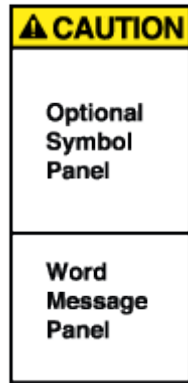
Ensure that all original labels are maintained in good condition. In the event that labels are rendered illegible contact Beeler Industries for replacement labels.

Lock Out / Tag Out

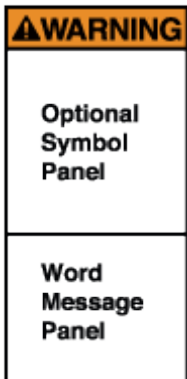
It is the user's responsibility to ensure that proper LOCK OUT / TAG OUT procedures are implemented throughout the facility. **Follow your facilities Lock Out/Tag Out procedures.** Prior to any maintenance, service or cleaning of any equipment it should be locked out and tagged out from all potential sources of energy (electrical, pneumatic, hydraulic, mechanical, etc.) Failure to do so will endanger the user and others and may lead to damage, severe injury or even death.



Danger: Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.



Caution: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



Warning: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

Take the time to
be safe!

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SECTION 1

GENERAL INFORMATION

1-1 Introduction

Thank you for purchasing Beeler Industries D-36 Soft Shell Cracker. Your new cracker is built to the highest industry standards. Great care has been taken to design and manufacture a high quality, low maintenance product that is economical to use and maintain.

This manual is intended to assist in the installation, operation and maintenance of your cracker. The instructions in this manual are general in nature and apply to a variety of models. Each situation dictates the need for any special precautions, and it is the user's responsibility to ensure that adequate safety measures are employed in installation, operation and maintenance. As always, follow good safety practices around all equipment.

1-2 Contacting Beeler Industries

Beeler Industries, Incorporated

Mail: P.O. Box 380

Physical: 4664 Kiernan Court
Salida CA 95368

Main Office: (209) 545-0740

Sales: (209) 613-0407

Parts: (209) 545-0740

Service: (209) 613-0407

Fax: (209) 545-0768

email: customer@beelerindustries.com

Website: www.beelerindustries.com

1-3 Purpose and Scope

This manual provides installation, operation and maintenance procedures for standard soft shell crackers. Due to variations in design and manufacture for unique customer needs, not all crackers might be covered. For special assistance, please contact Beeler Industries Service for additional information.

SECTION 2

OPERATION & MAINTENANCE

1-4 Receipt of Product

All shipments should be immediately checked for proper product and quantity upon receipt and inspected for any visible defects or damage. Any discrepancies should immediately be reported to Beeler Industries and the freight provider. If installation is provided by Beeler Industries, this inspection may be performed by Beeler personnel.

1-5 Precautions of Use and Installation

1. Use only qualified personnel for installation and wiring of the cracker. Personnel are required to be familiar with the general use of required tools for installation of this unit. Should you require assistance in the installation, Beeler Industries offers such a service. Please contact our Service Department for estimates and scheduling.
2. Lifting/moving/positioning: The cracker assembly may be lifted with a fork truck under the support angles. Secure cracker to forks to prevent tipping. Move slowly and descend grades in reverse. Alternately lift straps can be used by attaching clevis to the mount hole on at the end of the side mount angles.
3. The standard motors specifications provided are listed in table 1.1 unless otherwise specified in the purchase contract. All wiring must be run in conduit and installed per local and state code by a qualified electrician. A manual electrical lock-out for maintenance must be provided by the owner prior to operation. A variable frequency drive is factory installed and prewired to the motor for 460V operation. See figure 3.3. Prior to starting the D-36 ensure that the connections in the motor and drive are set for your source voltage. Refer to the VFD manufacturer's manual supplied with the cracker for information on wiring and operation of the VFD

MODEL	HP	V/F/PH	QTY
D-36	1.5	230/460/60/3	1

TABLE 1.1 MOTOR SPECIFICATIONS

2-1 Operation and Adjustment

Principle of Operation

The BI D-36 cracks nut shells by centrifugally propelling the nuts from the in-feed at the top center of the machine against the perimeter liner. The nuts and shells then fall down and out of one the two hopper discharges at the bottom of the machine. The force level is proportional to the square of the rotational speed. The speed is controlled with variable frequency drive.

Adjustment

There are two operational characteristics that can be adjusted. The speed as mentioned above and the in-feed sleeve gap. This is the gap between the leading edge of the in feed sleeve inside the machine and the surface of the impeller. Adjusting this sleeve up or down will increase or decrease product flow rate respectively. The sleeve is adjusted by loosening the screw clamp at the neck of the in-feed and moving the sleeve to desired position. Hash marks are provided on the sleeve as a depth guide. Utilizing these two adjustment throughput and crack efficiency can be optimized for the product.

2-2 Maintenance

The BI D36 requires minimal regular maintenance. The unit should be cleaned and inspected for structural integrity periodically. Electrical should be inspected to ensure all connections are secure. Motor should be inspected for build up of debris that may impede cooling. See figure 3.2. Refer to the accompanying variable frequency drive manual provided by the drive manufacturer for maintenance of the drive .

2-3 Cleaning

The interior of BI D36 can be accessed cleaning or service by removing the top lid. The lid is held in place with socket head cap screws. Prior to any servicing or cleaning make sure you follow your companies LOCK OUT TAG OUT procedure.



2-4 Lubrication

The motor on the d-36 is permanently lubricated and requires no additional lubrication

2-5 Model Variation

Units for export may be ordered with appropriate voltage and frequency.

Contact Beeler Industries Customer Service with any questions resulting from machine variations.

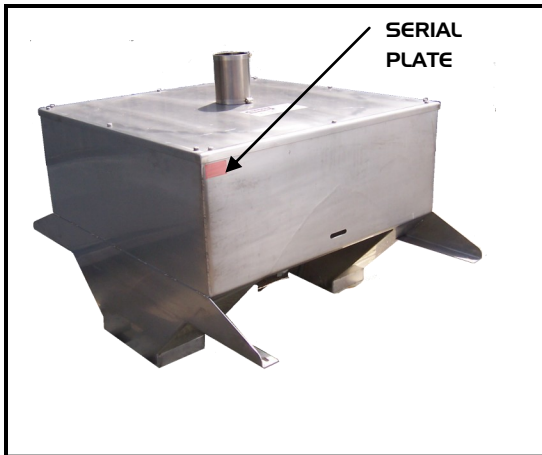
3-1 SERIAL NUMBER LOCATION

It is important to have the serial number information when contacting Beeler Industries regarding service information or parts ordering. The number is stamped on the identification plate located per the illustration below.

and for common part listing and order identification number. Contact our service department for required parts not identified on those pages.



FIG. 3.2 MOTOR



3-2

FIG. 3.1 SERIAL PLATE LOCATIONS

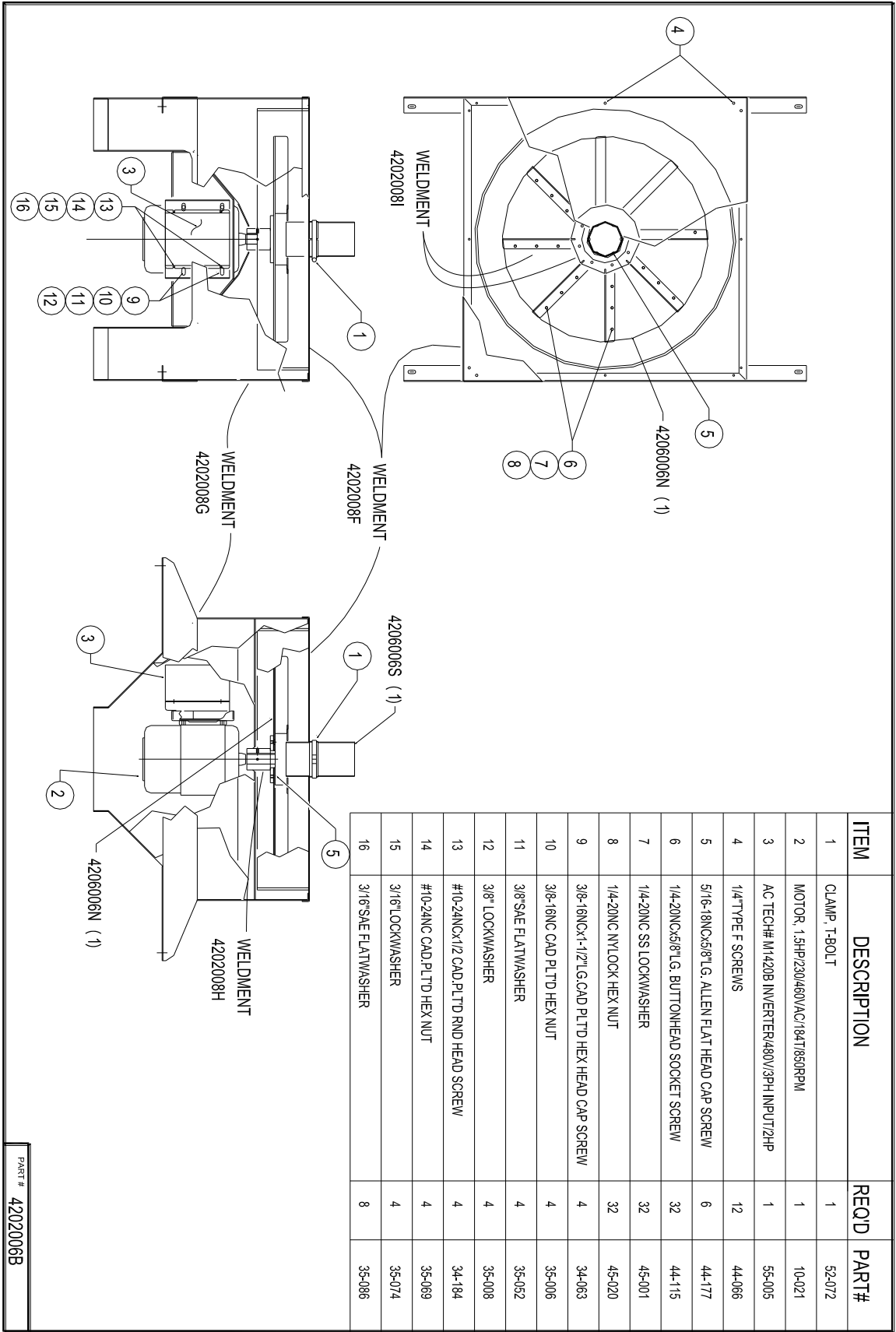


FIG. 3.3 VARIABLE FREQUENCY DRIVE

Repair Parts

Necessary repair and maintenance parts can be obtained through Beeler Industries directly by contacting our Parts Department at (209) 545-0740 or through your Beeler Sales representative. When ordering, please supply the nameplate serial number information located on the Beeler red tag secured to the frame of the cracker.

Refer to Figure 3-4 for part identifying / locating



PART # 4202006B

FIG. 3.4 D-36 ASSEMBLY

Non-Liability

The information contained in this manual has been compiled by Beeler Industries with high diligence to ensure correct information.

Beeler Industries does not assume liability for eventually wrong conclusions and results arising from this. The notes given in the manual describe the most common fault reasons. But often there are further reasons for existing faults, which cannot be listed here, or there are further sources of error, which are unknown yet. Beeler Industries does not assume liability for failed or unnecessary repair work. Beeler Industries does not assume liability for appliance of data and information, which either turn out as wrong, were incorrectly described or faults, which by mistake appeared during data compilation. Without restriction of the above mentioned facts, Beeler Industries does not assume liability for any loss regarding profits, company value or any other, also economic, loss arising from this.

No matter which legal justifications are present, Beeler Industries is liable for compensation only in case of intention, gross negligence and in warranty of assured quality. Warranties of assured qualities require the explicit written statement.

Liability according to product liability law shall remain unaffected. Beeler Industries reserves the right of user's contributory negligence argument. Beeler Industries is not liable to pay compensation for damages, which arise from misuse of the subject matter of the contract, even if Beeler Industries has been informed on the possibility of this damage. The liability of Beeler Industries is confined to the real price paid for the product. Beeler Industries takes no liability for damage or operating troubles arising from non-compliance of this user manual and the special safety precautions mentioned there. The burden of proof is on the user of the device, that he has paid attention to technical explanations, notes on operation, equipment care as well as maintenance and safety without exception. This non-liability does not hold, if any damage from

injuries of body or health is based on deliberate or careless delinquency of Beeler Industries.