

Parts List and  
Operating Instructions for:



HNS225

## NUT SPLITTER

Max. Capacity: 25 Ton

**NOTE:**

- For a detailed parts list or to locate a Power Team Authorized Hydraulic Service Center, contact your nearest Power Team facility. A list of all Power Team facilities is located at the end of this document.
- Carefully inspect the press upon arrival. The carrier, not the manufacturer, is responsible for any damage resulting from shipment.

## SAFETY DEFINITIONS

Safety symbols are used to identify any action or lack of action that can cause personal injury. Your reading and understanding of these safety symbols is very important.



**DANGER** - Danger is used only when your action or lack of action will cause serious human injury or death.



**WARNING** - Warning is used to describe any action or lack of action where a serious injury can occur.

**IMPORTANT** - Important is used when action or lack of action can cause equipment failure, either immediate or over a long period of time.

## SAFETY PRECAUTIONS

These instructions are intended for end-user application needs. Many problems with new equipment are caused by improper operation or installation. For a detailed parts list or to locate a Power Team Authorized Hydraulic Service Center contact your nearest Power Team facility. A list of all Power Team facilities is located at the end of this document.



**WARNING:** It is the operator's responsibility to read and understand the following safety statements,

- Only qualified operators should install, operate, adjust, maintain, clean, repair, or transport this machinery.
- These components are designed for general use in normal environments. These components are not specifically designed for lifting and moving people, agri-food machinery, certain types of mobile machinery or special work environments such as: explosive, flammable or corrosive. Only the user can decide the suitability of this machinery in these conditions or extreme environments. Power Team will supply information necessary to help make these decisions.

## SAFETY PRECAUTIONS - CONTINUED



**WARNING:** To help prevent personal injury,

### GENERAL

- ALWAYS read and carefully follow the operating instructions and safety precautions before assembling or using this nut splitter. Most problems with new equipment are caused by incorrect operation or assembly.
- Read and carefully follow the operating instructions and safety precautions for the pump and cylinder used with this nut splitter.
- Nut splitters can exert extremely high forces at moderate hydraulic pump pressures. If you have any questions concerning how much force is exerted at a given pressure, contact your nearest Power Team facility (see listing at the end of this document).

### SET-UP

- The owner/operator of this nut splitter must see that it is installed and operated according to federal (OSHA), state, local European (EU), and other safety standards where applicable.
- Install or use the nut splitter in an isolated area, or shield the press to minimize danger to others. Hydraulic pressure can cause materials to break, possibly resulting in personal injury due to flying objects, falling objects, shifting loads and other hazards.
- Guards, enclosures, monitors, interlocks, controls, restraints, and other devices must be used by the owner/operator when this nut splitter is used for specific applications with hazards best known by the owner/operator. For information regarding other applications, contact your nearest Power Team facility (see listing at the end of this document).
- Additions of specific safety equipment, such as permanent enclosures, guards or shields, light curtains, etc., to the nut splitter must be on separate, free-standing structures, or clamped to the nut splitter frame without cutting, drilling, welding or otherwise modifying the nut splitter structure or affecting its function. Such modifications can cause equipment damage and/or personal injury.
- Modifications to the structure and function of this nut splitter are not permitted, voids the warranty, may cause personal injury, and voids the Declaration of Incorporation.
- The owner/operator of the nut splitter must ensure that all safety-related decals are installed, maintained, and replaced if they become hard to read.

### OPERATION

- The nut splitter operator and anyone within sight of the nut splitter must wear protective eyewear that meets the requirements of OSHA, ANSI Z87.1, or applicable EU standards.
- It is the owner/operator's responsibility to use appropriate guarding to contain any pieces that might break or fly apart when applying force. For added protection, always wrap the workpiece in a protective blanket before applying force. Contact your nearest Power Team facility (see listing at the end of this document) for more information about protective blankets.
- Keep hands out of the work area during operation.
- Workpieces must be well supported and aligned so that cylinder/ram force is straight, and parts being cut cannot slip out or break.
- Use caution when loading and unloading the nut splitter.

## OPERATING INSTRUCTIONS



**WARNING:** To help prevent personal injury:

- Safety glasses must be worn at all times to help prevent eye injury.
- Never exceed the rated capacity of the Nut Splitter. Do not attempt to split nuts having a hex size greater than 2-1/4" or smaller than 1-1/8". Maximum square nut capacity is 1-1/2" sq; minimum is 1-1/8" sq.
- The blade must be positioned to insure that the entire thickness of the nut is cut in a single stroke.

**IMPORTANT:** To avoid possible equipment damage, do not use the Nut Splitter to cut flanged nuts.

1. Place the ring of the Nut Splitter around the nut to be removed. A flat of the nut must be against the flat side of the Nut Splitter ring. The blade must be centered and must span the entire thickness of the nut.
2. Advance the blade against a flat of the nut until the nut cracks. This will expand the threads of the nut to allow removal.
3. Retract the blade. In some cases, it may be possible to make a second cut directly opposite the first cut to completely separate the nut into halves for removal.

## REPLACING THE BLADE IN THE NUT SPLITTER

1. Pull pin (#3) from the sleeve.
2. Loosen the set screws (#1 & #4). Remove the frame (#5) from the sleeve (#7), and remove the blade from the cylinder (#8).
3. Clean and lubricate all threads with general purpose lithium grease before reassembling.
4. Thread the new blade into the cylinder piston until the threads bottom out.
5. Thread the sleeve over the cylinder body until the threads bottom out.
6. Thread the frame into the sleeve until the frame bottoms out on the cylinder body.
7. Unscrew the frame (up to one turn) until the hole for the set screw (#4) lines up with the keyway in the blade. Tighten the set screw (#4) until it bottoms out on the blade and then back it out 1/4 turn.
8. Hold the cylinder, frame and blade while rotating the sleeve counterclockwise (as viewed from the frame end) until the hole for the roll pin (#3) is located just clockwise from the roll pin in the frame. Reassemble the roll pin into the sleeve.
9. Tighten set screw (#1) securely.

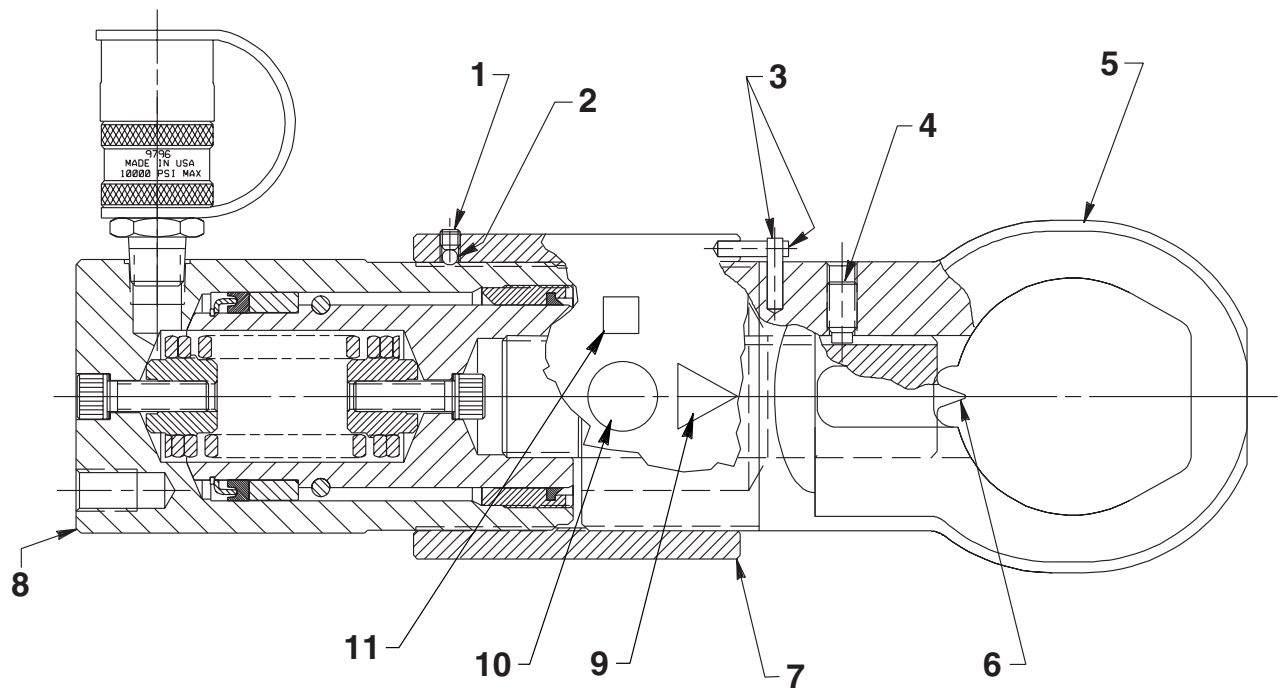
## MAXIMUM CAPACITY OF THE NUT SPLITTER

Due to the various sizes and types of nuts, it is not practical to list maximum nut sizes for all applications of this tool. The following chart lists general applications based on test results and is not intended to show the only ways to use the tool. Contact Power Team Technical Services Department for questions involving applications not shown.

| Nut Grade--English<br>(Nut Class--Metric) | 2 or A<br>(5)   | 5 or B<br>(9)   | 8 or C<br>(10)  | 2H<br>(12)      |
|-------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Hex Size                                  | 2-1/4<br>(55)   | 2-1/4<br>(55)   | 2-1/16<br>(46)  | 1-11/16<br>(36) |
| Bolt Size                                 | 1-1/2<br>(36)   | 1-1/2<br>(36)   | 1-3/8<br>(30)   | 1-1/8<br>(24)   |
| Nut Thickness                             | 1.500<br>(33.9) | 1.281<br>(30.2) | 1.171<br>(25.0) | .968<br>(20.9)  |

Maximum square nut capacity: 1-1/2" sq.  
(38) sq.

PARTS LIST



| Item No. | Part No. | No. Req'd | Description                                      |
|----------|----------|-----------|--------------------------------------------------|
| 1        | 10136    | 1         | Set Screw (1/4-20 UNC X 1/4 Lg.)                 |
| 2        | 15528    | 1         | Ball (3/16 dia.)                                 |
| 3        | 10549    | 2         | Roll Pin                                         |
| 4        | 214125   | 1         | Hex Socket Set Screw                             |
| 5        | 53032    | 1         | Frame                                            |
| 6        | 308022   | 1         | Blade                                            |
| 7        | 46962    | 1         | Sleeve                                           |
| 8        | C252C    | 1         | Hydraulic Cylinder (See forms #101486 & #102397) |
| 9        | 251057   | 1         | Warning Decal                                    |
| 10       | 253584   | 1         | Pictorial Decal (Read Instructions)              |
| 11       | 350988   | 1         | CE Decal                                         |

Note: Shaded areas reflect last revision(s) made to this form.

Refer to any operating instructions included with this product for detailed information about operation, testing, disassembly, reassembly, and preventive maintenance.

Items found in this parts list have been carefully tested and selected. **Therefore: Use only genuine Power Team replacement parts!**

Additional questions can be directed to our Technical Services Department.

## POWER TEAM FACILITIES



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