



Earnest Machine stocks the largest Plow Bolt product offering in the industry including Grade 8, #7 Head Plow Bolt, a.k.a. bucket tooth bolts, used to fasten the teeth onto a excavator bucket or shear blade of earthmoving equipment. **Guaranteed to get to you the right part, in the right quantity, on time, every time.**

PRODUCT ATTRIBUTES

Lower profile ensures proper clearance in shear blade applications

Truncated key makes for easy locating without sacrificing shear strength in 5/8" and 3/4" lengths

The special design is compatible with all applications calling for a #7 Bucket tooth or Plow Bolt
Diameter sizes range from 5/8" to 1 1/2"
Based on ANSI B18.9 standards

MARKETS FOR #7 HEAD PLOW BOLTS

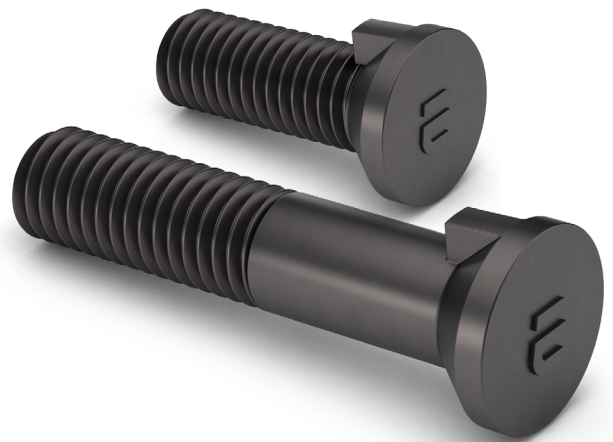
Earthmoving equipment
Mining
Agricultural Equipment

THIS PRODUCT IS OFTEN CALLED...

Bucket Tooth Bolt
Reverse Keyway Bolt
Nib Head Bolt

AVAILABLE VALUE ADDED SERVICES

Broken & full case quantities
Custom sizes and lengths from blank stock
Secondary & rework services available
Custom plating



ADDITIONAL PLOW BOLT LINES WE SUPPLY:

#3 Flat Head Plow Bolts
#3 Domed Head Plow Bolts
#3 Oversized Flat Head Plow Bolts
Clipped Head Plow Bolts
Carriage Bolts

ADDITIONAL CONSTRUCTION EQUIPMENT FASTENERS

| | |
|------------------------|------------------------|
| Hex Cap Screws | Hex Nuts |
| Hex Tap Bolts | Heavy Hex Nuts |
| Flange Screws | Jam Nuts |
| Flat Head Cap Screws | Slotted Nuts |
| Socket Head Cap Screws | Heavy Slotted Nuts |
| Clips and Clamps | All Metal Lock Nuts |
| Hardened Washers | Nylon Insert Lock Nuts |

BACKED BY THE EARNEST
Service
GUARANTEE

**The right part.
The right quantity.
On time.
Every time.**

GRADE 8 #7 HEAD PLOW BOLTS

#7 Head Plow Bolts are manufactured in accordance with the latest revision of the following industry standards:

- ASME B18.9** Dimensional Requirements
- SAE J429** Material and Physical Properties
- ASME B1.1** Thread Requirements
- ASTM F788** Surface Discontinuities
- ASME 18.18** Inspection and Quality Assurance

THREADS

Threads are to the requirements of ANSI B1.1 Unified Threads, 2A Fit.
Thread acceptance per ASME B1.3, System 21.

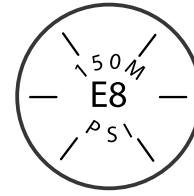
PLATING

Plain
Custom plating available

*The specifications shown on this sheet are not intended to be used in the production of parts. Earnest Machine is not responsible or liable in any manner for any production errors and we certify the information present on this specification sheet is correct to the best of our knowledge. ©2022 Earnest Machine Products

MATERIAL AND PHYSICAL PROPERTIES

Grade 8



Chemical Composition

| CARBON (C) | | PHOSPHORUS (P) | SULFUR (S) |
|------------|------|----------------|------------|
| Max | Min | Max | Max |
| 0.55 | 0.28 | 0.025 | 0.025 |

Alloy

CONTAINS ONE OF THE FOLLOWING ALLOYS PER SAE J404

Mn, Cr, Mo, Ni, V

Hardness Level

GRADE 8

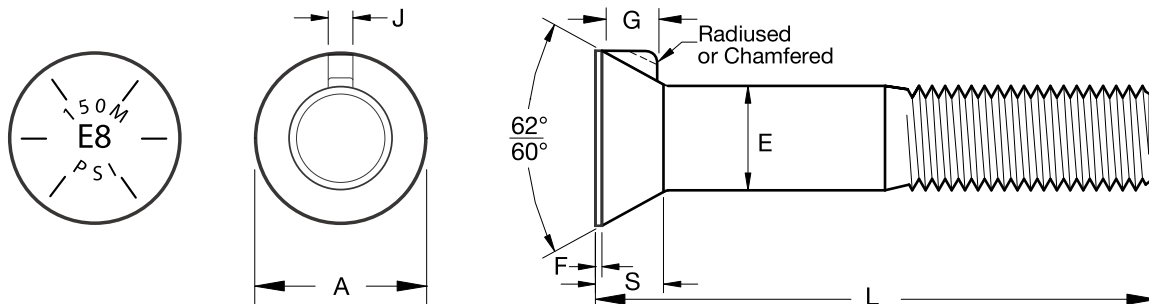
Rc 33/39

Tensile Strength

GRADE 8 PER SAE J429

150,000 psi min

DIMENSIONS FOR GRADE 8 #7 BUCKET TOOTH PLOW BOLT (ASME B18.9)



| SIZE | HEAD DIAMETER (A) | | BODY DIAMETER (E) | | FEED THICKNESS (F) | | HEAD HEIGHT (S) | | KEY LENGTH (G) | | KEY WIDTH (J) | |
|-----------|-------------------|-------|-------------------|-------|--------------------|------|-----------------|------|----------------|------|---------------|------|
| | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MAX | MAX | MAX | MAX | |
| 5/8 - 11 | 1.121 | 1.063 | .657 | .606 | .050 | .038 | .414 | .364 | .363 | .348 | .170 | .135 |
| 3/4 - 10 | 1.277 | 1.219 | .782 | .729 | .050 | .038 | .440 | .390 | .390 | .375 | .170 | .135 |
| 7/8 - 9 | 1.516 | 1.457 | .906 | .853 | .830 | .043 | .616 | .566 | .473 | .453 | .190 | .155 |
| 1 - 8 | 1.634 | 1.575 | 1.031 | .976 | .830 | .043 | .616 | .566 | .473 | .453 | .190 | .155 |
| 1 1/8 - 7 | 1.792 | 1.733 | 1.160 | 1.105 | .830 | .043 | .655 | .605 | .512 | .492 | .225 | .190 |
| 1 1/4 - 7 | 1.949 | 1.890 | 1.292 | 1.220 | .091 | .051 | .694 | .644 | .552 | .532 | .250 | .215 |
| 1 3/8 - 6 | 2.226 | 2.165 | 1.421 | 1.335 | .103 | .063 | .810 | .760 | .595 | .575 | .250 | .215 |
| 1 1/2 - 6 | 2.420 | 2.361 | 1.559 | 1.465 | .118 | .078 | .852 | .802 | .669 | .649 | .270 | .235 |

#7 Head Plow Bolt

| SIZE | DESCRIPTION | GRADE | FINISH | PART # |
|--------------|-----------------|-------|--------------|--------|
| 5/8-11x2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 221138 |
| 5/8-11x2 1/4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 221148 |
| 5/8-11x2 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 221158 |
| 5/8-11x2 3/4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 221168 |
| 5/8-11x3 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 221178 |
| 5/8-11x3 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 221198 |
| 5/8-11x4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 221218 |
| 5/8-11x5 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 221258 |

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|--------------|-----------------|------|--------------|--------|
| 3/4-10x2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223138 |
| 3/4-10x2 1/4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223148 |
| 3/4-10x2 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223158 |
| 3/4-10x2 3/4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223168 |
| 3/4-10x3 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223178 |
| 3/4-10x3 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223198 |
| 3/4-10x4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223218 |
| 3/4-10x4 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223238 |
| 3/4-10x4 3/4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223248 |
| 3/4-10x5 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223258 |
| 3/4-10x6 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223298 |
| 3/4-10x11 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223498 |
| 3/4-10x17 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 223658 |

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|-------------|-----------------|------|--------------|--------|
| 7/8-9x3 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 225178 |
| 7/8-9x3 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 225198 |
| 7/8-9x4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 225218 |
| 7/8-9x4 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 225238 |
| 7/8-9x5 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 225278 |
| 7/8-9x6 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 225298 |
| 7/8-9x7 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 225338 |

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|-----------|-----------------|------|--------------|--------|
| 1-8x3 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227178 |
| 1-8x3 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227198 |
| 1-8x3 3/4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227208 |
| 1-8x4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227218 |
| 1-8x4 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227238 |
| 1-8x4 3/4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227248 |

| SIZE | DESCRIPTION | GRADE | FINISH | PART # |
|-----------|-----------------|-------|--------------|--------|
| 1-8x5 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227258 |
| 1-8x5 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227278 |
| 1-8x6 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227298 |
| 1-8x6 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227318 |
| 1-8x7 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227358 |
| 1-8x8 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227378 |
| 1-8x9 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227418 |
| 1-8x12 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227538 |
| 1-8x13 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 227578 |

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|-----------|-----------------|------|--------------|--------|
| 1 1/8-7x4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 229218 |
| 1 1/8-7x5 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 229258 |
| 1 1/8-7x6 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 229298 |
| 1 1/8-7x7 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 229338 |
| 1 1/8-7x8 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 229378 |
| 1 1/4-7x4 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 231218 |

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|---------------|-----------------|------|--------------|--------|
| 1 1/4-7x4 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 231238 |
| 1 1/4-7x6 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 231298 |
| 1 1/4-7x6 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 231318 |
| 1 1/4-7x7 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 231338 |
| 1 1/4-7x7 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 231358 |
| 1 1/4-7x8 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 231378 |
| 1 1/4-7x10 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 231510 |

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|---------------|-----------------|------|--------------|--------|
| 1 3/8-6x6 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 235298 |
| 1 3/8-6x7 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 235338 |
| 1 3/8-6x7 1/2 | #7 Hd Plow Bolt | GR 8 | Plain Finish | 235358 |

#7 Head Plow Bolt - Blanks

| SIZE | DESCRIPTION | GRADE | FINISH | PART # |
|----------|-----------------------|-------|--------------|--------|
| 5/8x10 | #7 Hd Plow Bolt Blank | GR 8 | Plain Finish | 221000 |
| 3/4x17 | #7 Hd Plow Bolt Blank | GR 8 | Plain Finish | 222658 |
| 7/8x17 | #7 Hd Plow Bolt Blank | GR 8 | Plain Finish | 224658 |
| 1x17 | #7 Hd Plow Bolt Blank | GR 8 | Plain Finish | 226658 |
| 1 1/4x17 | #7 Hd Plow Bolt Blank | GR 8 | Plain Finish | 230658 |
| 1 3/8x8 | #7 Hd Plow Bolt Blank | GR 8 | Plain Finish | 232338 |
| 1 1/2x12 | #7 Hd Plow Bolt Blank | GR 8 | Plain Finish | 232538 |

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