



Available in bore sizes from 2" through 4" and stroke sizes from 4" to 60". Individual pressure testing to 3750 PSI and durable materials such as high-tensile steel help Grizzly Cylinders withstand the toughest of conditions. Custom sizes are available via special order. Please contact Dick Jones & Associates for more information

## **Benefits of the Grizzly<sup>®</sup> Cylinder**

- Pins are high tensile steel and zinc plated
- Clevis bolts are grade 5 for extra strength
- O-Rings are high standard to eliminate leakage
- Rods are 1045 high strength steel and hard chrome plated
- Dual NPT ports in line with the clevis pins for greater flexibility
- Piston seal is a Nitrile 90 durometer "O" ring with an anti extrusion back up washer
- Tie rods are high tensile steel to prevent failure under high pressure
- Wiper seal is a Nitrile rubber
- Rod cap and end clevis are made of ductile Iron
- Split backup ring to protect "O" ring for lasting operation
- 3,000 PSI cylinders w/ SAE ports available via special order

## **2,500 PSI Tie-Rod Cylinders**

**Certified independent lab testing verifies the Grizzly Brand Cylinder meets or exceeds industry standards for salt spray, pressure, burst and dimensional specifications for 2500 PSI tie rod cylinders**



## **2 Year Limited Warranty**

All Grizzly cylinders, being used within normal agricultural standards, shall be warranted against failure caused by defective materials or workmanship within the first 2 years from the date of purchase. If a cylinder is determined to be defective it will be repaired, replaced, or credited to the customer. Repair parts are available for all Grizzly cylinders.

## How to Identify a Cylinder by Measuring

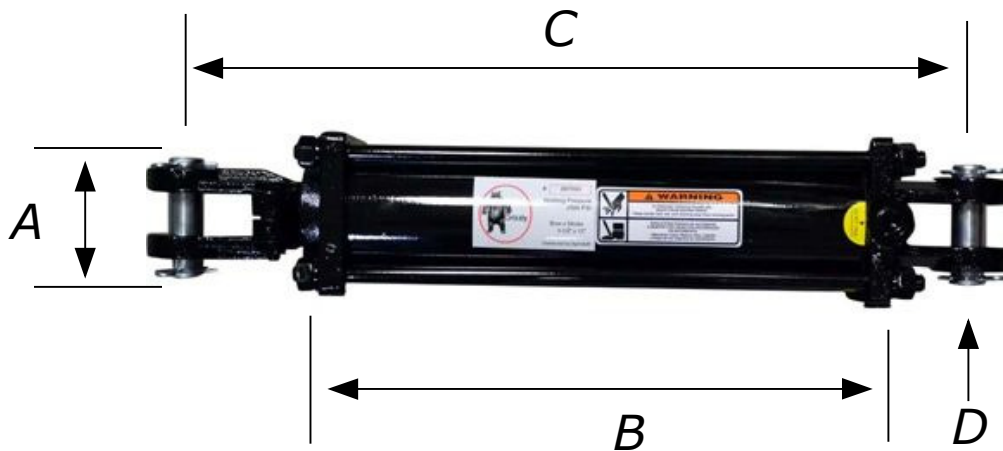
**A** To get the bore or diameter of the cylinder: Measure from the center of one tie rod to the center of the other. See A in the picture below. In our example, the bore or diameter is 4".

**B** To get the stroke distance of the cylinder: Measure the distance between the two end caps along the barrel shaped portion, then deduct 2". See B in the picture below. In our example, the distance between the two end caps is 10". Since 10" minus 2" equals 8 inches, then the stroke distance is 8".

**C** To get the retracted length: With the cylinder closed, measure the distance from the center of one attaching pin to the center of the attaching pin on the other end. See C in the picture below. In our example, this measurement is 20-1/4".

To determine the extended length, add the distance of the stroke to the retracted length.

**D** Determine the pin diameter



**ASAE is the American Society of Agricultural Engineers. If the cylinder has these markings on it, it is an industry standard, which means that whatever brand it is, the dimensions are the same**

## 2,500 PSI Tie Rod Cylinders



- Double-acting application
- 2,500 PSI model is designed to withstand shock loads of up to 5,000 PSI
- Durable cast ductile iron components
- Ideal for Ag and industrial applications
- Special order sizes available upon request
- Black standard. Red available upon request
- NPTF Ports. SAE-8 available upon request

### ASAE Tie-Rod Cylinders

Part #	Bore	Stroke	Rod Dia.	Retracted Length	Pin Dia.	Ports
87058	2"	8"	1-1/8"	20-1/4"	1"	3/8" NPTF
87068	2-1/2"	8"	1-1/8"	20-1/4"	1"	3/8" NPTF
87078	3"	8"	1-1/4"	20-1/4"	1"	1/2" NPTF
87083	3"	16"	1-1/2"	31-1/2"	1-1/4"	1/2" NPTF
87091	3-1/2"	8"	1-1/4"	20-1/4"	1"	1/2" NPTF
87094	3-1/2"	16"	1-1/2"	31-1/2"	1-1/4"	1/2" NPTF
87101	4"	8"	1-1/4"	20-1/4"	1"	1/2" NPTF
87104	4"	16"	1-3/4"	31-1/2"	1-1/4"	1/2" NPTF

### Standard Tie-Rod Cylinders

Part #	Bore	Stroke	Rod Dia.	Retracted Length	Pin Dia.	Ports
88440	2"	4"	1-1/8"	14-1/4"	1"	3/8" NPTF
87057	2"	6"	1-1/8"	16-1/4"	1"	3/8" NPTF
87059	2"	8"	1-1/8"	18-1/4"	1"	3/8" NPTF
87060	2"	10"	1-1/8"	20-1/4"	1"	3/8" NPTF
87061	2"	12"	1-1/8"	22-1/4"	1"	3/8" NPTF
90345	2"	14"	1-1/8"	24-1/4"	1"	3/8" NPTF
87063	2"	16"	1-1/8"	26-1/4"	1"	3/8" NPTF
89817	2"	20"	1-1/8"	30-1/4"	1"	3/8" NPTF
87064	2"	24"	1-1/8"	34-1/4"	1"	3/8" NPTF
87066	2"	30"	1-1/8"	40-1/4"	1"	3/8" NPTF
90503	2-1/2"	5"	1-1/8"	15-1/4"	1"	3/8" NPTF
89439	2-1/2"	8"	1-1/8"	18-1/4"	1"	3/8" NPTF
87069	2-1/2"	10"	1-1/8"	20-1/4"	1"	3/8" NPTF
87070	2-1/2"	12"	1-1/8"	22-1/4"	1"	3/8" NPTF
87101	2-1/2"	14"	1-1/8"	24-1/4"	1"	3/8" NPTF
87072	2-1/2"	16"	1-1/8"	26-1/4"	1"	3/8" NPTF
87073	2-1/2"	20"	1-1/4"	30-1/4"	1"	3/8" NPTF
87074	2-1/2"	24"	1-1/4"	34-1/4"	1"	3/8" NPTF
87076	2-1/2"	36"	1-1/4"	46-1/4"	1"	3/8" NPTF

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## 2 Year Limited Warranty

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## 2,500 PSI Tie Rod Cylinders



- Double-acting application
- 2,500 PSI model is designed to withstand shock loads of up to 5,000 PSI
- Durable cast ductile iron components
- Ideal for Ag and industrial applications
- Special order sizes available upon request
- Black standard. Red available upon request
- NPTF Ports. SAE-8 available upon request

### Standard Tie-Rod Cylinders

Part #	Bore	Stroke	Rod Dia.	Retracted Length	Pin Dia.	Ports
101070	3"	4"	1-1/4"	14-1/4"	1"	1/2" NPTF
87077	3"	6"	1-1/4"	16-1/4"	1"	1/2" NPTF
87079	3"	8"	1-1/4"	18-1/4"	1"	1/2" NPTF
87080	3"	10"	1-1/4"	20-1/4"	1"	1/2" NPTF
87081	3"	12"	1-1/4"	22-1/4"	1"	1/2" NPTF
87082	3"	14"	1-1/4"	24-1/4"	1"	1/2" NPTF
87084	3"	16"	1-1/4"	26-1/4"	1"	1/2" NPTF
88427	3"	17"	1-1/4"	27-1/4"	1"	1/2" NPTF
87086	3"	18"	1-1/4"	28-1/4"	1"	1/2" NPTF
87087	3"	20"	1-1/2"	30-1/4"	1"	1/2" NPTF
87088	3"	24"	1-1/2"	34-1/4"	1"	1/2" NPTF
87089	3"	30"	1-1/2"	40-1/4"	1"	1/2" NPTF
87090	3"	36"	1-1/2"	46-1/4"	1"	1/2" NPTF
87092	3-1/2"	10"	1-1/4"	20-1/4"	1"	1/2" NPTF
87093	3-1/2"	12"	1-1/4"	22-1/4"	1"	1/2" NPTF
87095	3-1/2"	16"	1-1/4"	26-1/4"	1"	1/2" NPTF
87097	3-1/2"	24"	1-1/2"	34-1/4"	1"	1/2" NPTF
101095	3-1/2"	30"	1-1/2"	40-1/4"	1"	1/2" NPTF
87099	3-1/2"	36"	1-1/2"	58-1/4"	1"	1/2" NPTF
87102	4"	10"	1-1/2"	20-1/4"	1"	1/2" NPTF
90346	4"	12"	1-1/2"	22-1/4"	1"	1/2" NPTF
87105	4"	16"	1-1/2"	26-1/4"	1"	1/2" NPTF
88420 (Red)	4"	24"	1-1/2"	26-1/4"	1"	1/2" NPTF
88442	4"	24"	2"	34-1/4"	1"	1/2" NPTF
87106	4"	24"	2"	40-3/8"	1"	1/2" NPTF
87107	4"	30"	2"	40-1/4"	1"	1/2" NPTF
87108	4"	36"	2"	46-1/4"	1"	1/2" NPTF

### 2 Year Limited Warranty

All Grizzly cylinders, being used within normal agricultural standards, shall be warranted against failure caused by defective materials or workmanship within the first 2 years from the date of purchase. If a cylinder is determined to be defective it will be repaired, replaced, or credited to the customer.

Repair parts are available for all Grizzly cylinders.

## Rod Clevises

Part #	Cylinder Bore	Fits Rod Size	Rod Thread	Pin Hole Size
102105	2"	1-1/8"	12-UNF	1"
102106	2-1/2"	1-1/8"	12-UNF	1"
102107	2-1/2"	1-1/4"	12-UNF	1"
102108	3"	1-1/4"	12-UNF	1"
102109	3"	1-1/2"	12-UNF	1"
102110	3-1/2"	1-1/2"	12-UNF	1"
102111	4"	1-1/2"	12-UNF	1"
102112	4"	1-3/4"	12-UNF	1"
102113	4"	2"	12-UNF	1"



## Base Clevises

Part #	Fits Bore Size	Pin Hole Size
102128	2"	1"
102129	2.5"	1"
102130	3"	1"
102131	3.5"	1"
102132	4"	1"



## Rod Caps

Part #	Fits Bore Size	Fits Rod Size
102114	2"	1-1/8"
102115	2-1/2"	1-1/8"
102116	2-1/2"	1-1/4"
102117	3"	1-1/4"
102118	3"	1-1/2"
102119	3-1/2"	1-1/4"
102120	3-1/2"	1-1/2"
102121	4"	1-1/2"
102122	4"	1-3/4"
102123	4"	2"



## Repair Seal Kits

Part #	Fits Bore Size	Fits Rod Size
102089	2"	1-1/8"
102090	2-1/2"	1-1/8"
102091	2-1/2"	1-1/4"
102092	3"	1-1/4"
102093	3"	1-1/2"
102094	3-1/2"	1-1/4"
102095	3-1/2"	1-1/2"
102096	4"	1-1/4"
102097	4"	1-1/2"
102098	4"	1-3/4"
102099	4"	2"



# Grizzly® Hydraulic Cylinders



## Clevis Pins

Part #	Description	Overall	Usable	Used On
102170	1" clevis pin w/ 2 clips	3.39"	2.64"	All Grizzly Tie Rod 2,500 PSI Cylinders w/ 1" pins
102171	1-1/4" clevis pin w/ 2 clips	3.39"	2.64"	All Grizzly Tie Rod 2,500 PSI Cylinders w/ 1-1/4" pins
63512	Replacement "R" clip			



## Breather Plugs

Part Number	Description	Size
90614	Breather Plug	3/8" NPT
90501	Breather Plug	1/2" NPT



## Cylinder Rods

Part #	Description	Rod Diameter	Cylinder Stroke
102138	ASAE- Rod	1-1/8"	8"
102147	ASAE- Rod	1-1/4"	8"
102152	ASAE- Rod	1-1/4"	16"
102165	ASAE- Rod	2"	16"

Part #	Description	Rod Diameter	Cylinder Stroke
102137	Standard- Rod	1-1/8"	6"
102139	Standard- Rod	1-1/4"	8"
102148	Standard- Rod	1-1/4"	8"
102140	Standard- Rod	1-1/8"	10"
102149	Standard- Rod	1-1/4"	10"
102157	Standard- Rod	1-1/2"	10"
102141	Standard- Rod	1-1/8"	12"
102150	Standard- Rod	1-1/4"	12"
102158	Standard- Rod	1-1/2"	12"
102142	Standard- Rod	1-1/8"	14"
102151	Standard- Rod	1-1/4"	14"
102143	Standard- Rod	1-1/8"	16"
102153	Standard- Rod	1-1/4"	16"
102159	Standard- Rod	1-1/2"	16"
102164	Standard- Rod	1-3/4"	16"
102144	Standard- Rod	1-1/8"	20"
102154	Standard- Rod	1-1/4"	20"
102160	Standard- Rod	1-1/2"	20"
102145	Standard- Rod	1-1/8"	24"
102155	Standard- Rod	1-1/4"	24"
102161	Standard- Rod	1-1/2"	24"
102166	Standard- Rod	2"	24"
102162	Standard- Rod	1-1/2"	30"
102167	Standard- Rod	2"	30"
102146	Standard- Rod	1-1/8"	30"
102156	Standard- Rod	1-1/4"	36"
102163	Standard- Rod	1-1/2"	36"
102168	Standard- Rod	2"	36"
102169	Standard- Rod	2"	48"



# Grizzly<sup>®</sup> Hydraulic Cylinders



## 3,000 PSI Tie Rod Cylinders



- Double-acting application
- 3,000 PSI model is designed to withstand shock loads of up to 6,000 PSI
- Durable cast ductile iron components
- Ideal for Ag and industrial applications
- Special order sizes available upon request
- Painted Black

### ASAE Tie-Rod Cylinders

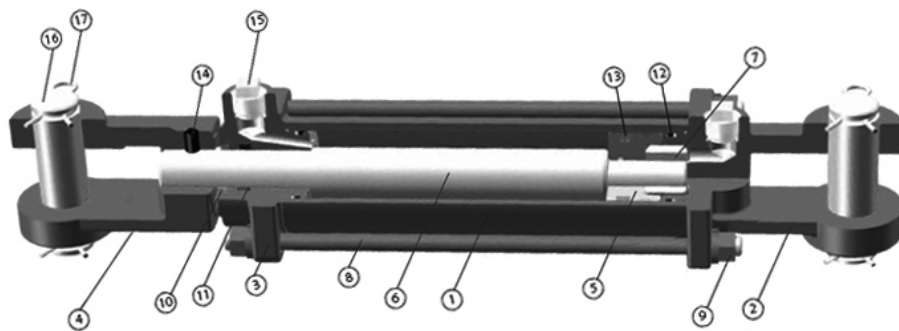
Bore	Stroke	Rod Dia.	Retracted Length	Ports	Pin Dia.
2"	8"	1-1/8"	20-1/4"	SAE-8	1"
2-1/2"	8"	1-1/8"	20-1/4"	SAE-8	1"
3"	8"	1-1/4"	20-1/4"	SAE-8	1"
3"	16"	1-1/2"	31-1/2"	SAE-8	1-1/4"
3-1/2"	8"	1-1/4"	20-1/4"	SAE-8	1"
3-1/2"	16"	1-1/2"	31-1/2"	SAE-8	1-1/4"
4"	8"	1-3/8"	20-1/4"	SAE-8	1"
4"	16"	1-3/4"	31-1/2"	SAE-8	1-1/4"

### Standard Tie-Rod Cylinders

Bore	Stroke	Rod Diameter	Retracted Length	Ports	Pin Dia.
2"	6"	1-1/8"	16-1/4"	SAE-8	1"
2"	8"	1-1/8"	18-1/4"	SAE-8	1"
2"	10"	1-1/8"	20-1/4"	SAE-8	1"
2"	12"	1-1/8"	22-1/4"	SAE-8	1"
2"	14"	1-1/8"	24-1/4"	SAE-8	1"
2"	16"	1-1/8"	26-1/4"	SAE-8	1"
2"	18"	1-1/8"	28-1/4"	SAE-8	1"
2"	20"	1-1/8"	30-1/4"	SAE-8	1"
2"	24"	1-1/8"	34-1/4"	SAE-8	1"
2"	30"	1-1/8"	40-1/4"	SAE-8	1"
2"	36"	1-1/8"	46-1/4"	SAE-8	1"
2"	60"	1-1/4"	70-1/4"	SAE-8	1"
2-1/2"	6"	1-1/8"	16-1/4"	SAE-8	1"
2-1/2"	8"	1-1/8"	18-1/4"	SAE-8	1"
2-1/2"	10"	1-1/8"	20-1/4"	SAE-8	1"
2-1/2"	12"	1-1/8"	22-1/4"	SAE-8	1"
2-1/2"	16"	1-1/4"	26-1/4"	SAE-8	1"
2-1/2"	18"	1-1/4"	28-1/4"	SAE-8	1"
2-1/2"	20"	1-1/4"	30-1/4"	SAE-8	1"
2-1/2"	24"	1-1/4"	34-1/4"	SAE-8	1"
2-1/2"	30"	1-1/4"	40-1/4"	SAE-8	1"
2-1/2"	36"	1-1/4"	46-1/4"	SAE-8	1"
3"	6"	1-1/4"	16-1/4"	SAE-8	1"
3"	8"	1-1/4"	18-1/4"	SAE-8	1"
3"	10"	1-1/4"	20-1/4"	SAE-8	1"
3"	12"	1-1/4"	22-1/4"	SAE-8	1"
3"	16"	1-1/2"	26-1/4"	SAE-8	1"
3"	18"	1-1/2"	28-1/4"	SAE-8	1"
3"	20"	1-1/2"	30-1/4"	SAE-8	1"
3"	24"	1-1/2"	34-1/4"	SAE-8	1"
3"	30"	1-1/2"	40-1/4"	SAE-8	1"
3"	36"	1-1/2"	46-1/4"	SAE-8	1"

### Standard Tie-Rod Cylinders

Bore	Stroke	Rod Dia.	Retracted Length	Ports	Pin Dia.
3-1/2"	6"	1-1/4"	16-1/4"	SAE-8	1"
3-1/2"	8"	1-1/4"	18-1/4"	SAE-8	1"
3-1/2"	10"	1-1/4"	20-1/4"	SAE-8	1"
3-1/2"	12"	1-1/4"	22-1/4"	SAE-8	1"
3-1/2"	16"	1-1/2"	26-1/4"	SAE-8	1"
3-1/2"	18"	1-1/2"	28-1/4"	SAE-8	1"
3-1/2"	20"	1-1/2"	30-1/4"	SAE-8	1"
3-1/2"	24"	1-1/2"	34-1/4"	SAE-8	1"
3-1/2"	30"	1-1/2"	40-1/4"	SAE-8	1"
3-1/2"	36"	1-1/2"	46-1/4"	SAE-8	1"
4"	6"	1-3/8"	16-1/4"	SAE-8	1"
4"	8"	1-3/8"	18-1/4"	SAE-8	1"
4"	10"	1-3/8"	20-1/4"	SAE-8	1"
4"	12"	1-3/8"	22-1/4"	SAE-8	1"
4"	16"	1-3/4"	26-1/4"	SAE-8	1"
4"	18"	1-3/4"	28-1/4"	SAE-8	1"
4"	20"	1-3/4"	30-1/4"	SAE-8	1"
4"	24"	1-3/4"	34-1/4"	SAE-8	1"
4"	30"	2"	40-1/4"	SAE-8	1"
4"	36"	2"	46-1/4"	SAE-8	1"



### Parts List

Ref #	Component	Material and feature
1	Cylinder tube	honed tube provides better ductility
2	Clevis base end	ductile iron provides excellent ductility and higher impact
3	Rod cap	ductile iron provides excellent ductility and higher impact
4	Clevis rod end	ductile iron provides excellent ductility and higher impact
5	Piston	precision machined ductile iron providing a malleable bearing surface for extended cylinder life
6	Piston rod	C1045 high strength steel with hard chrome plated and precision ground & polished, 100hr salt spray tested
7	Piston nut	Heavy duty and high tensile steel holds piston in place under high cycle loading
8	Tie-rod	C1045 high tensile steel prevent failure under high pressure
9	Tie-rod nuts	C1045 high tensile steel prevent failure under high pressure
10	Rod wiper	heavy duty metal encased nitrile preventing contaminants from entering cylinder
11	Rod seal	Polyurethane u-cup double lip provides positive seal
12	Tube seal	90 durometer polyurethane "o" ring prevents leakage from cylinder
13	Piston seal	90 durometer polyurethane "o" ring provides excellent sealing under high pressure
14	Plug	metal plug
15	Pins	high tensile steel with zinc plated finish
16	Pin clips	high tensile steel with zinc plated finish



# Grizzly® Hydraulic Cylinders



## 3,000 PSI Welded TEE Cylinders

- Double-acting application
- 3,000 PSI model is designed to withstand shock loads of up to 6,000 PSI
- Cross tube mounting end
- Durable cast ductile iron components
- Ideal for Ag and industrial applications
- Special order sizes available upon request
- Painted Black

## Standard Welded Cylinders

Bore	Stroke	Rod Diameter	Retracted Length	Ports	Pin Dia.
1-1/2"	8"	1"	16"	SAE-6	3/4"
1-1/2"	10"	1"	18"	SAE-6	3/4"
1-1/2"	12"	1"	20"	SAE-6	3/4"
1-1/2"	14"	1"	22"	SAE-6	3/4"
1-1/2"	16"	1"	24"	SAE-6	3/4"
1-1/2"	18"	1"	26"	SAE-6	3/4"
1-1/2"	20"	1"	28"	SAE-6	3/4"
1-1/2"	24"	1"	32"	SAE-6	3/4"
2"	8"	1-1/8"	16"	SAE-6	1"
2"	10"	1-1/8"	18"	SAE-6	1"
2"	12"	1-1/8"	20"	SAE-6	1"
2"	14"	1-1/8"	22"	SAE-6	1"
2"	16"	1-1/8"	24"	SAE-6	1"
2"	18"	1-1/8"	26"	SAE-6	1"
2"	20"	1-1/8"	28"	SAE-6	1"
2"	24"	1-1/8"	32"	SAE-6	1"
2"	30"	1-1/4"	38"	SAE-6	1"
2"	36"	1-1/4"	44"	SAE-6	1"
2"	40"	1-1/4"	48"	SAE-6	1"
2"	48"	1-1/4"	56"	SAE-6	1"
2-1/2"	8"	1-1/4"	16"	SAE-8	1"
2-1/2"	10"	1-1/4"	18"	SAE-8	1"
2-1/2"	12"	1-1/4"	20"	SAE-8	1"
2-1/2"	14"	1-1/4"	22"	SAE-8	1"
2-1/2"	16"	1-1/4"	24"	SAE-8	1"
2-1/2"	18"	1-1/4"	26"	SAE-8	1"
2-1/2"	20"	1-1/4"	28"	SAE-8	1"
2-1/2"	24"	1-1/4"	32"	SAE-8	1"
2-1/2"	30"	1-1/2"	38"	SAE-8	1"
2-1/2"	36"	1-1/2"	44"	SAE-8	1"
2-1/2"	40"	1-1/2"	48"	SAE-8	1"
2-1/2"	48"	1-1/2"	56"	SAE-8	1"
3"	8"	1-1/2"	16"	SAE-8	1"
3"	10"	1-1/2"	18"	SAE-8	1"
3"	12"	1-1/2"	20"	SAE-8	1"
3"	14"	1-1/2"	22"	SAE-8	1"
3"	16"	1-1/2"	24"	SAE-8	1"
3"	18"	1-1/2"	26"	SAE-8	1"
3"	20"	1-1/2"	28"	SAE-8	1"
3"	24"	1-1/2"	32"	SAE-8	1"



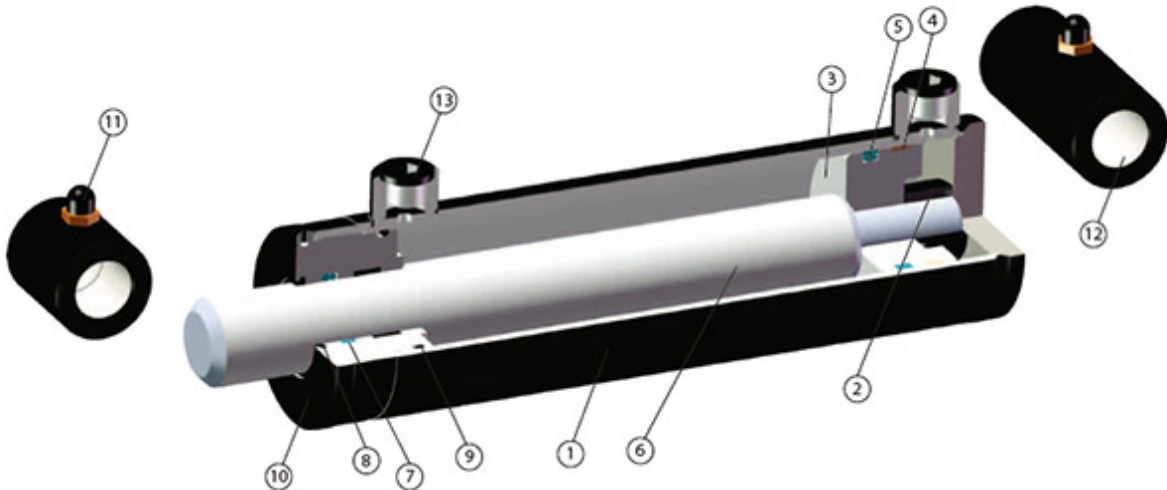
## 3,000 PSI Welded TEE Cylinders

- Double-acting application
- 3,000 PSI model is designed to withstand shock loads of up to 6,000 PSI
- Cross tube mounting end
- Durable cast ductile iron components
- Ideal for Ag and industrial applications
- Special order sizes available upon request
- Painted Black

## Standard Welded Cylinders

Bore	Stroke	Rod Dia.	Retracted Length	Ports	Pin Dia.
3"	30"	1-1/2"	38"	SAE-8	1"
3"	36"	1-1/2"	44"	SAE-8	1"
3"	40"	1-1/2"	48"	SAE-8	1"
3"	48"	1-1/2"	56"	SAE-8	1"
3-1/2"	8"	1-3/4"	16"	SAE-8	1"
3-1/2"	10"	1-3/4"	18"	SAE-8	1"
3-1/2"	12"	1-3/4"	20"	SAE-8	1"
3-1/2"	14"	1-3/4"	22"	SAE-8	1"
3-1/2"	16"	1-3/4"	24"	SAE-8	1"
3-1/2"	18"	1-3/4"	26"	SAE-8	1"
3-1/2"	20"	1-3/4"	28"	SAE-8	1"
3-1/2"	24"	1-3/4"	32"	SAE-8	1"
3-1/2"	30"	1-3/4"	36"	SAE-8	1"
3-1/2"	36"	1-3/4"	44"	SAE-8	1"
3-1/2"	40"	1-3/4"	50"	SAE-8	1"
3-1/2"	48"	1-3/4"	58"	SAE-8	1"
4"	8"	2"	16"	SAE-8	1"
4"	10"	2"	18"	SAE-8	1"
4"	12"	2"	20"	SAE-8	1"
4"	14"	2"	22"	SAE-8	1"
4"	16"	2"	24"	SAE-8	1"
4"	18"	2"	26"	SAE-8	1"
4"	20"	2"	28"	SAE-8	1"
4"	24"	2"	32"	SAE-8	1"
4"	30"	2"	38"	SAE-8	1"
4"	36"	2"	44"	SAE-8	1"
4"	40"	2"	50"	SAE-8	1"
4"	48"	2"	58"	SAE-8	1"
5"	8"	2-1/2"	18"	SAE-12	1-1/4"
5"	10"	2-1/2"	20"	SAE-12	1-1/4"
5"	12"	2-1/2"	22"	SAE-12	1-1/4"
5"	14"	2-1/2"	24"	SAE-12	1-1/4"
5"	16"	2-1/2"	26"	SAE-12	1-1/4"
5"	18"	2-1/2"	28"	SAE-12	1-1/4"
5"	20"	2-1/2"	30"	SAE-12	1-1/4"
5"	24"	2-1/2"	34"	SAE-12	1-1/4"
5"	30"	2-1/2"	40"	SAE-12	1-1/4"
5"	36"	2-1/2"	46"	SAE-12	1-1/4"
5"	40"	2-1/2"	52"	SAE-12	1-1/4"
5"	48"	2-1/2"	60"	SAE-12	1-1/4"

## 3,000 PSI Welded TEE Cylinders



### Parts List

Ref #	Component	Material and feature
1	Cylinder tube	Honed tube provides better ductility
2	Piston nut	heavy duty and high tensile steel holds piston in place under high cycle loading.
3	Piston	Precision machined ductile iron providing a malleable bearing surface for extended cylinder life.
4	Tube seal	90 durometer polyurethane "o" ring provides excellent sealing under high pressure
5	Piston seal	90 durometer polyurethane "o" ring provides excellent sealing under high pressure
6	Piston rod	C1045 high strength steel with hard chrome plated and precision ground & polished, 100hr salt spray tested.
7	Rod seal	Polyurethane u-cup double lip provides positive seal.
8	Rod wiper	Heavy duty metal encased nitrile preventing contaminants from entering cylinder.
9	Tube seal	90 durometer polyurethane "o" ring prevents leakage from cylinder
10	Rod cap	90 durometer polyurethane "o" ring prevents leakage from cylinder
11	Rod end	ductile iron provides excellent ductility and higher impact
12	Base end	ductile iron provides excellent ductility and higher impact
13	Plug	metal plug



# Grizzly® Hydraulic Cylinders



## Agmate® Hydraulic Reservoir

Part Number	Description	Length	Width	Height
103583	2.5 Gallon Capacity	9"	9"	8.86"
103219	5 Gallon Capacity	17.71"	8.66"	7.87"



## Cylinder Stroke Control Kits

Part Number	Fits Cylinder Rod Size	Spacer Sizes	Material
50535	7/8" to 1-1/16"	Four Spacers: 3/4", 1", 1-1/4", 1-1/2"	Aluminum
87334	1-1/8" & 1-1/4"	Five Spacers: 3/4", 1", 1-1/4", 1-1/2", 1-1/2"	Aluminum
84744	1-1/8" to 1-1/2"	Four Spacers: 3/4", 1", 1-1/4", 1-1/2"	Aluminum



## Agmate® Hydraulic Quick Coupler

Part Number	Description	Thread	Flow Rate	Working Pressure
86641	Hydraulic coupler with male ball valve	1/2-14 NPTF	8 gpm	3000 psi

# Hydraulic Top Links

Grizzly™



- Double Action
- Ports: SAE# 8
- Superior Quality
- Hard Chrome Plated Rod
- Working Pressure: 3000psi
- Both Ends Contain Swivel Eyes

Part #	Cat.	Bore x Stroke	Rod Dia.	Retracted	Pin Dia.
90599	1	2" x 8"	1-1/8"	19-7/8"	3/4"
84745	2	2.5" x 10"	1-1/4"	21-1/2"	1"
90571	2	3" x 8"	1-1/2"	21-7/8"	1"

## SAE to Pipe Adapter (For use on our hydraulic top links)

Part Number	Description
39539	SAE #8 to 1/2" NPTF Adapter

