

## Steering Rack Overview

Oct 8, 2025

### Important notes

- S3448 Steering rack to be used for Drag racing **ONLY**
- Designed as a front steer rack (steering arms face towards the front)
- See page 3 for pinion and clevis end adjustment
- If after reading, you have any questions or comments, please do not hesitate to call us.

### Features

#### Steering rack and Pinion

- 1.34" of travel per pinion revolution
- 24.5" tie rod centers
- 20° horizontal pinion angle
- 9/16"-26 spline pinion - Same spline as Mustang/Pinto and fits steering U-joint made by Sweet Manufacturing Part #401-50613.
- 0° vertical pinion angle as shipped
- Pinion angle can be adjusted to 20° to 40°
- 4.25" total rack travel (3.17 turns lock to lock)
- Mounting clamp centers -11.60"

#### Clevis Ends

- 6061-T6511 billet aluminum
- Accepts 3/8" high misalignment rod ends HXAM-16T (RH threads) HXAB-16T (LH threads)
- Black anodized finish

#### Mounting clamp - Pinion side

- 6061-T6511 billet aluminum
- 7/16"-14 bolt holes on 1.25" centers
- Black anodized finish

#### Mounting clamp - Opposing Side

- 6061-T6511 billet aluminum
- 3/8-16 bolt holes on 1.375" centers
- Black anodized finish

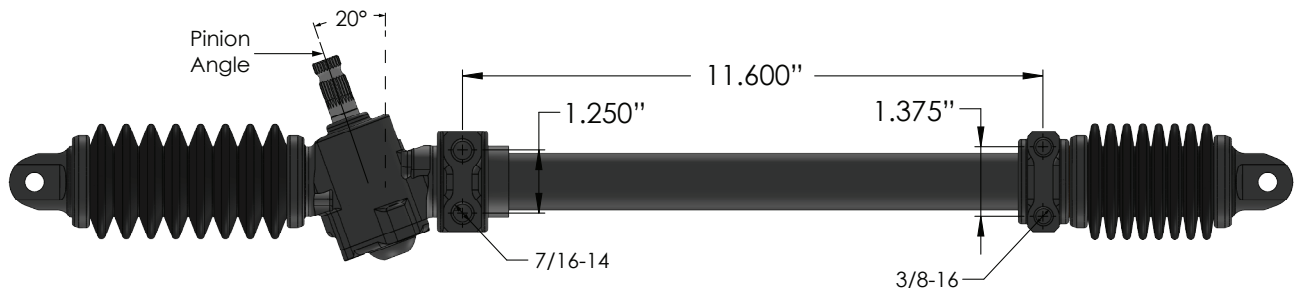
#### Housing Tube

- 6061-T6511 billet aluminum
- Black anodized finish

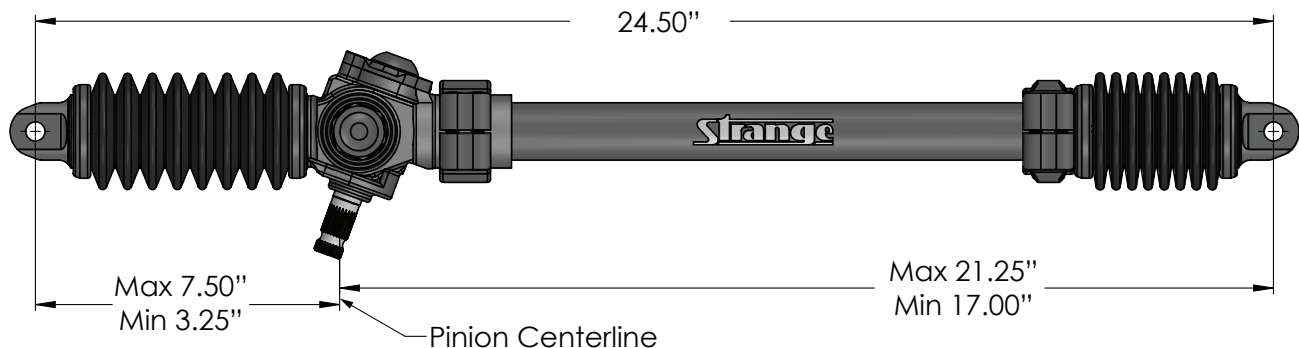
#### Pinion

- 4140 premium alloy steel
- Heat treated for hardness

### S3448 Steering rack mounting dimensions



### S3448 Steering rack total travel



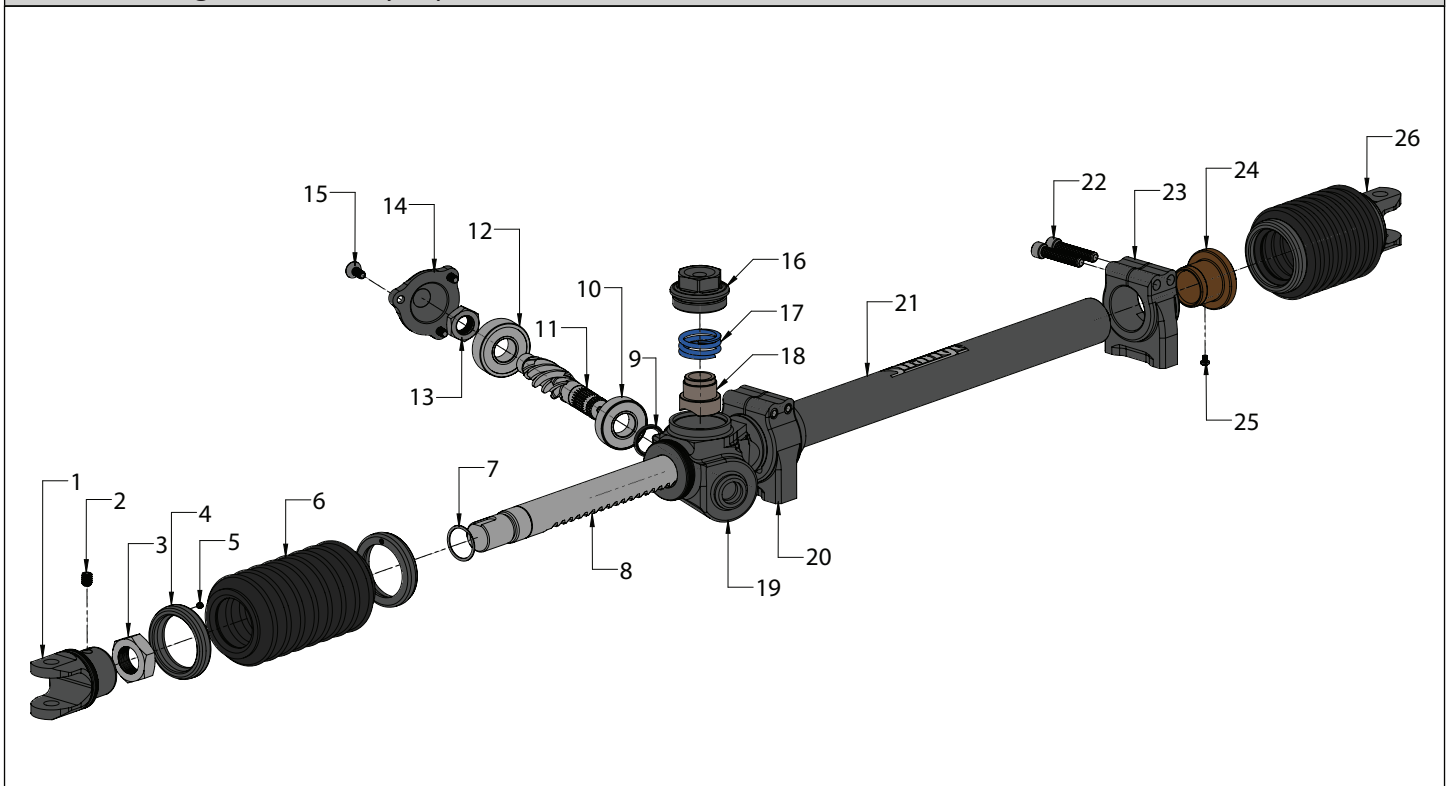
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## Steering Rack Parts List

### S3448 KIT CONTENTS

ITEM#	PART#	QTY	DESCRIPTION	ITEM#	PART#	QTY	DESCRIPTION
1	S3448K	1	End Clevis- St. Rack L	14	S3448F	1	Pinion Retainer Cap
2	S3448N	2	1/4-20 X 5/16 Set Screw SS	15	S3448O	3	10-24 x 1/2" FHS SS
3	S3400H	2	3/4-16 Nut - Clevis	16	S3448G	1	Preload Retainer Cap
4	S3448Q	4	Retainer Nut- Boot	17	S510E20	1	Preload Spring
5	SST158	4	6-32 X 1/8" Set Screw	18	S3448H	1	Preload Bushing
6	S3448U	2	2.18 OD x 6" Long Boot	19	S3448A	1	Steering Rack Housing
7	S3448T	2	VS-81 Smalley retainer	20	S3448I	1	Mounting Clamp "A"
8	S3448B	1	22.25" Round Rack	21	S3448D	1	Rack Housing Tube
9	S3441O	1	O-ring #114	22	S3448M	4	1/4-20 X 1.25 SHCS SS (Locking)
10	S3448R	1	Bearing- 6002JEM SKF	23	S3448J	1	Mounting Clamp "B"
11	S3448C	1	4.125" x.750 OD Pinion Shaft	24	S3448E	1	Housing Bushing
12	S3448S	1	Bearing- 6202JEM SKF	25	S3448P	2	M3 x 4mm Stainless Steel Screw
13	H1135C	1	1/2-20 Flexlock Nut	26	S3448KR	1	End Clevis- St. Rack R

S3448 Steering rack assembly exploded view



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## Steering Rack Adjustments

FIGURE# 1: DISASSEMBLY

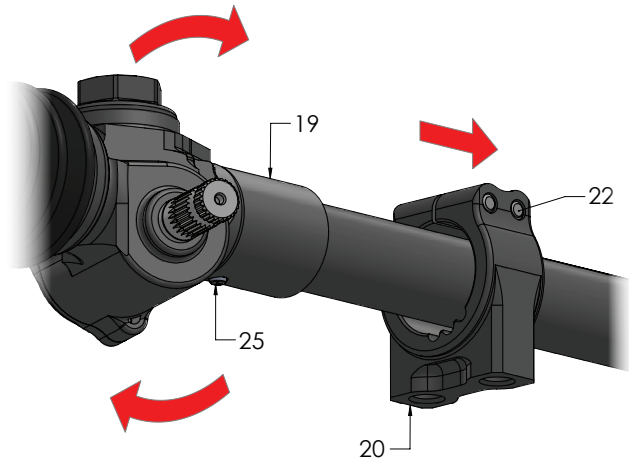
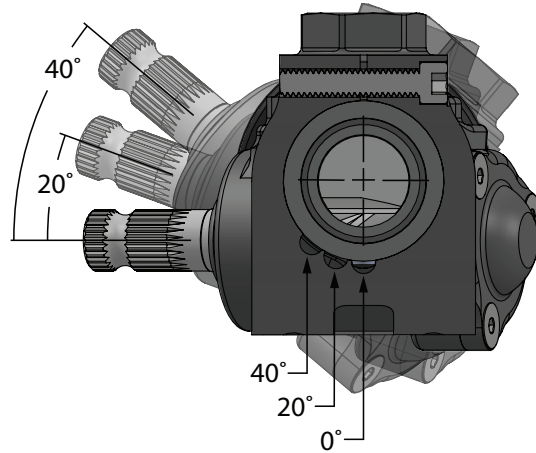


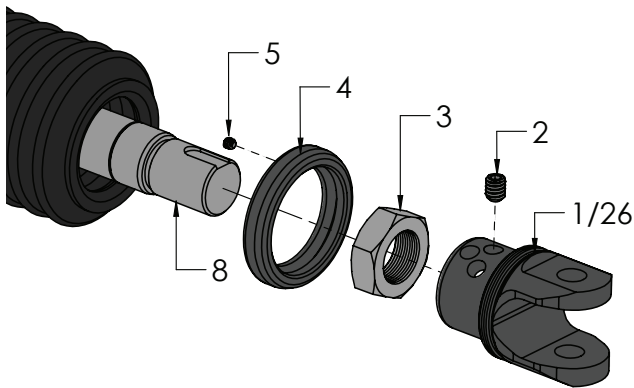
FIGURE #2: HOUSING POSITION



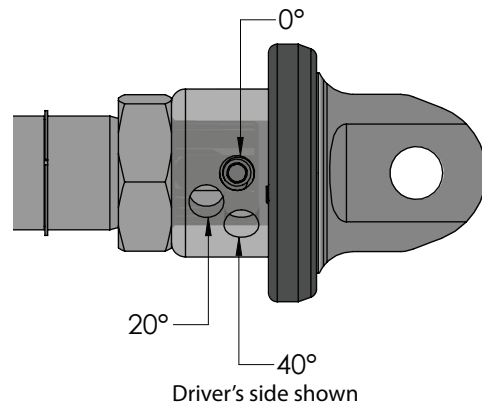
### Steering rack housing adjustment

1. Loosen the screws (22) that are holding the mounting clamp (20) on the steering rack housing (19).
2. Slide the mounting clamps off of the steering rack housing.
3. Rotate the steering rack housing (19) to either the 0°, 20° or 40° position. (Figure 2)
4. Slide the mounting clamp back onto the housing and button head screw (25).
5. Retighten the screw to secure the mounting clamp to the housing

FIGURE# 3: CLEVIS END DISASSEMBLY



FIGURE# 4: CLEVIS END POSITION



### End Clevis adjustment

1. Loosen the set screw (5) attaching the boot (6) to the boot retaining nut (4) and unscrew the boot retaining nut from the clevis end. Pull away the boot and loosen the nut (3) from the clevis face.
2. Remove the set screw (2) inside the clevis end (1/26) and rotate the clevis end so that one of the holes shown in Figure 4 lines up with the keyway face on the steering rack (8). Reinstall the set screw. Secure the clevis by tightening the nut (3) firmly against the clevis face.
3. Retighten the boot retaining nut (4) onto the clevis end.  
**Note:** Apply some grease to the boot lip to smooth the tightening of the boot retaining nut.
4. Retighten the set screw (5) to lock the boot retainer nut in place.  
**Note:** After securing the clevis, a little up and down play is expected. This is due to the OE spring preload design of our rack (8). When pushing up & down on the rack the preload spring (17) force is overcome, allowing the bushing (18) on the rack a little play.