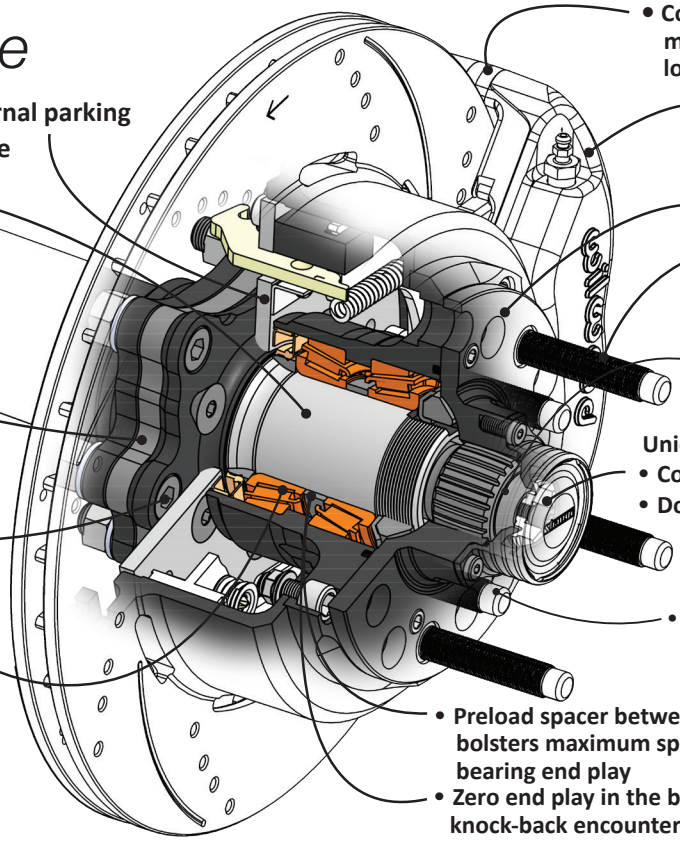
F5012
CAMBERED STREET FLOATER KIT

Installation to be performed by a qualified technician.

Optional Brake Kit

B2712WC	black calipers & 11.00" brake discs
B2711WC	black calipers & 12.19" brake discs
B2711WCR	red calipers & 12.19" brake discs
B2714WC	black calipers & 14.00" brake discs
B2714WCR	red calipers & 14.00" brake discs

RaceStrange

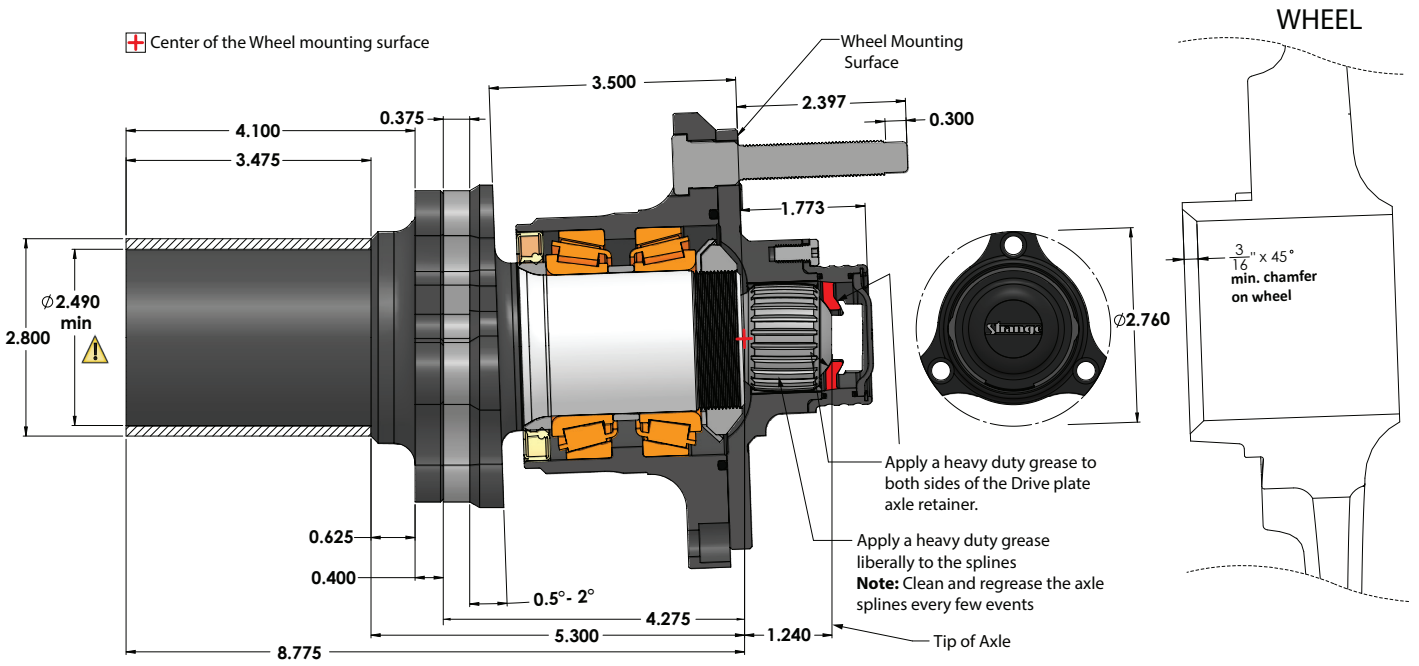


- Compact brake gap (3.50") clears most suspension components located near original housing ends.
- internal parking brake
- 2" O.D. spindle 0.5°, 1.0°, 1.5°, & 2.0° Negative camber options
- 4 piston calipers
- 4-½", 4-¾ or 5" bolt circles
- 5/8"-18 or 1/2"-20 press-in wheel studs
- Interchangeable Aluminum toe plates 0",1/8",1/4" Total toe
- 24 Tooth crowned spline axle allows for alignment angles
- Unique spherical axle retention device
  - Controls axle end play
  - Does not require axle shimming
- Six 1/2" bolts fasten spindle & toe plate to housing end
- 24 spline drive plate
- Floater spindle supports vehicle weight and resists cornering, braking, and accelerating loads leaving the floater axle solely responsible for transmitting torque
- Preload spacer between the tapered bearings bolsters maximum spindle nut torque eliminating bearing end play
- Zero end play in the bearings eliminates piston knock-back encountered during hard cornering

F5012 Kit Contents

ITEM#	PART#	QTY	DESCRIPTION
1	F5060W	2	Spirolock
2	F5060S	2	Drive plate cap
3	F5056L	4	10-24 x 1/2" SHCS
4	F5060TT	2	Axle retaining bolt
5	F5060R	2	Drive plate axle retainer
6	A1050E	4	O-Ring #30
7	A1050DL	6	1/4-28 x 5/8" SHCS
8	F5060A	2	Drive plate
9	A1024B	2	-237 O-ring
10	F5056C	2	Spindle nut
11	F5056D	2	Spindle nut retainer
12	N1948	4	Timkin LM104949
13	F5056E	2	Preload Spacer
14	F5056H	2	Hub
15	N1949	4	Timkin LM104911
16a	A3164A	10	1/2"-20 Press-in Wheel Stud
16b	A3166A	10	5/8"-20 Press-in Wheel Stud
17	F5056K	10	3/8-24 x 3/4 SHCS
18	S3402N	10	3/8 AN Washer
19	F1282	10	3/8-24 Jet Nut
20	F5056J	2	Oil Seal
21	F5056B	2	Spindle ring
22	F1237D	10	FHSCS
23	F5060X	12	1/2-20 X 2" FHSCS 0.700" OD
24a	F5060G20	2	*2.0 degree Cambered Spindle*
24b	F5060G15	2	*1.5 degree Cambered Spindle*
24c	F5060G10	2	*1.0 degree Cambered Spindle*
24d	F5060G05	2	*0.5 degree Cambered Spindle*
25a	F5060P	2	*Toe plate - Zero toe*
25b	F5060P16	2	*Toe plate - 1/16" Individual toe (1/8" - Total toe)*
25c	F5060P18	2	*Toe Plate - 1/8" Individual toe (1/4" - Total toe)*
26	A1023R	4	O-ring #144
27	F5060V	12	*Self aligning washer*
28	F5060Y	12	*1/2-20 Locknut*
29	F5060Q	2	Cambered spindle housing flange
30	F5056W	1	*Spindle Wrench*
31	F5056O	2	ABS sensor screw *(optional)*
32	F5056N	2	ABS sensor spacer *(optional)*
33	F5056M	2	Reluctor ring *(optional) (not shown)*
-	A1027C	10	Axle stud sleeve for 5/8" studs

Spindle Dimensions, Welding Instructions & wheel clearance



Note: 2.490"minimum outside diameter. Please refer to step # 2 for instructions.
The dimensions above apply to all kits with either ½" or ⅝" wheel studs.
Ensure wheels will fit this kit.
The wheel bore must be greater than 2.760 as shown. In addition, the chamfer shown must be 3/16 or greater.

Welding Guidelines

A professional and qualified chassis shop MUST perform the welding of the flanges to the housing tubes. This is very important due to the fact that if care is not taken in this crucial step leaks can occur, the axles could bind, and erratic handling could result from misaligned flanges.
For flange weld orientation go to page 4.

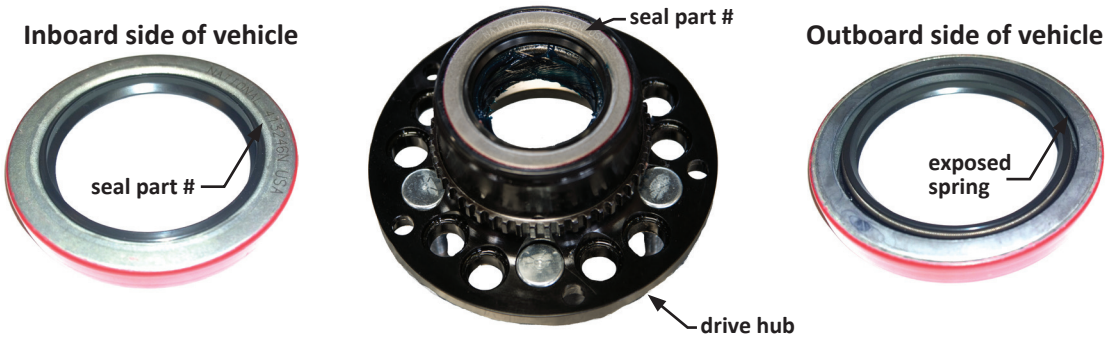
1. The housing flanges are constructed from normalized aircraft quality 4130 hot rolled steel. The spindles are black oxided for cosmetic purposes which does not effect the welding process.
2. The housing flanges have a 2.800" outside diameter that must be turned down to fit the specific housing tube inside diameter. The minimum recommended outside diameter is 2.490". This covers common housing tubing sizes of 3.000" OD x 0.250" wall and 3.250" OD x 0.250" wall. A suggested starting point is to turn the flange down 0.001" smaller than the measured housing tube inside diameter for a slip fit leaving 0.625" un-machined from the backside of the flange as shown. This will provide a stop against the housing tube and give sufficient clearance to weld the flange to the housing tube. Once both flanges fit into the housing, a line up bar must be used to verify straightness. Special tooling is required for the line up bar to locate the housing flanges. If the line up bar does not freely pass through both flanges, then the outside of the housing flanges must be turned down further and checked again with the line up bar. Do not turn down the diameter more than necessary.
3. Drill Ø0.375" to Ø0.500" holes in the housing tube only (**not the spindle**) to facilitate plug welding. Drill two holes 180 degrees to each other in two locations (four holes per spindle) where feasible.
4. Weld the spindle 360 degrees to the end of the housing tube. The weld must be leak free.

Installation Notes

- Clevis and cable kit which attach to the parking brake assembly are not included in Wilwood parking brake kit. Contact Wilwood to order cable kit separately.
- Use the assembly diagram shown on page 5 to install the components. If you have any questions, concerns or comments please feel free to contact Strange Engineering.
- For specific brake information including wheel clearance and brake testing please refer to Wilwood instructions on their website.
- Prior to installing the bearings (12), ensure to pack the bearings with a high quality wheel bearing grease (NLGI #1 or NLGI #2). A bearing packer is recommended. Otherwise, work as much grease as possible by hand around the rollers.
- Apply a heavy duty grease to the drive plate axle retainer (5) and librally onto the axle splines
- After installation rotate the hub and ensure all the components have seated properly.

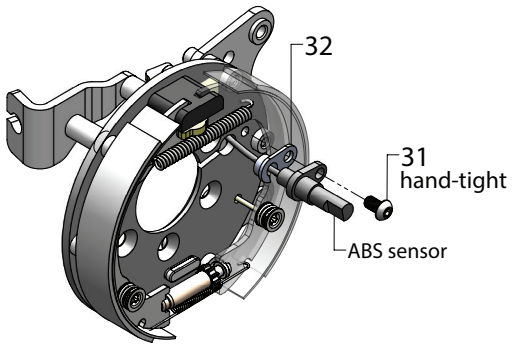
Note: Axle splines need to be cleaned and re-greased every few events.

Hub Seal Installation



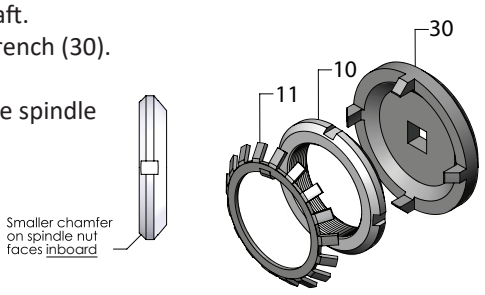
Ford Mustang ABS Sensor Information

- ABS sensor must be installed before mounting the parking brake assembly on the spindle
- Parking brake assembly will have to be disassembled to install the sensor.
- 2011- 2014 Mustang rear ABS sensor will use sensor spacer (32)
- 2005- 2010 rear Mustang ABS sensor will not use sensor spacer.
- 2005-2010 rear Mustang ABS sensor must be clearanced to fit See page 4

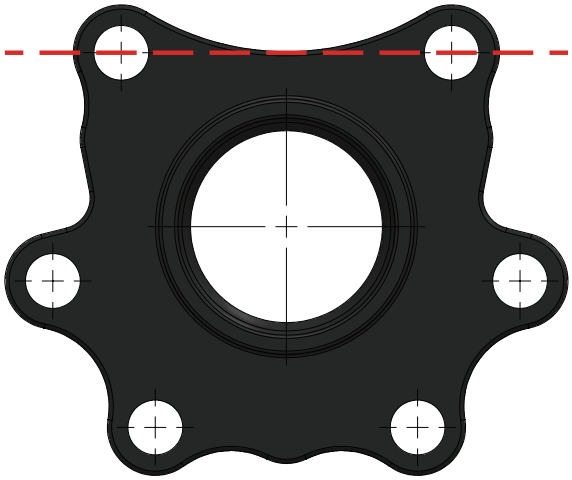


Axle Nut Installation

1. Ensure the tab on the inside diameter of the spindle nut retainer (11) slides into the grove of the spindle shaft.
2. The spindle nut is installed using the spindle nut wrench (30). Torque the spindle nut to 50-60 ft-lbs.
3. Bend one of the tabs on the outside diameter of the spindle nut retainer (11) into the slots on the spindle nut.

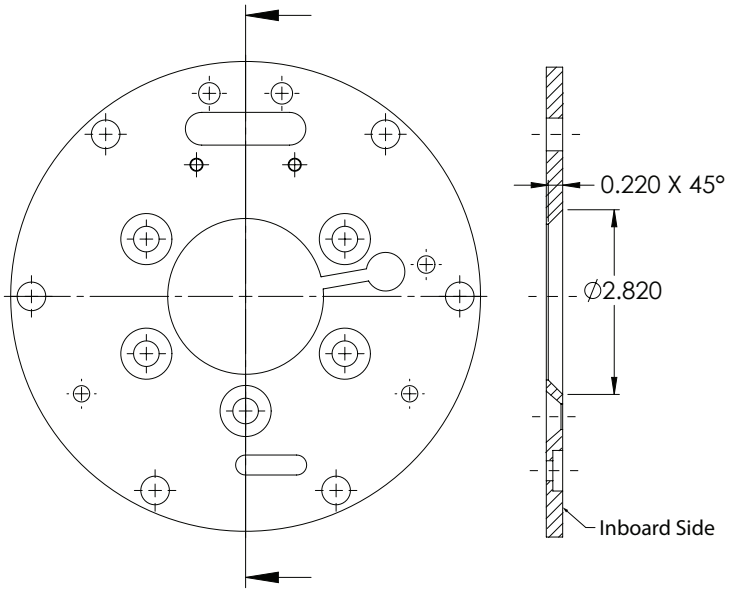


Flange welding Orientation



• Position and weld the flange horizontal to the ground, independent of pinion angle at ride height.

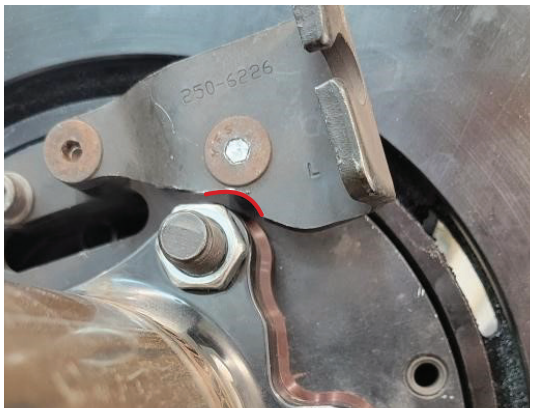
Backing plate modification F5060Z



• Modification is required for the backing plate to clear the radius on the cambered spindle face

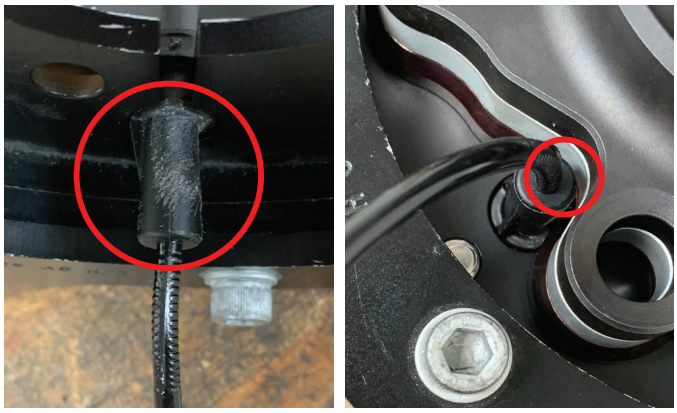
Note: Only needed for parts purchased prior to 8/23

Emergency brake tab modification



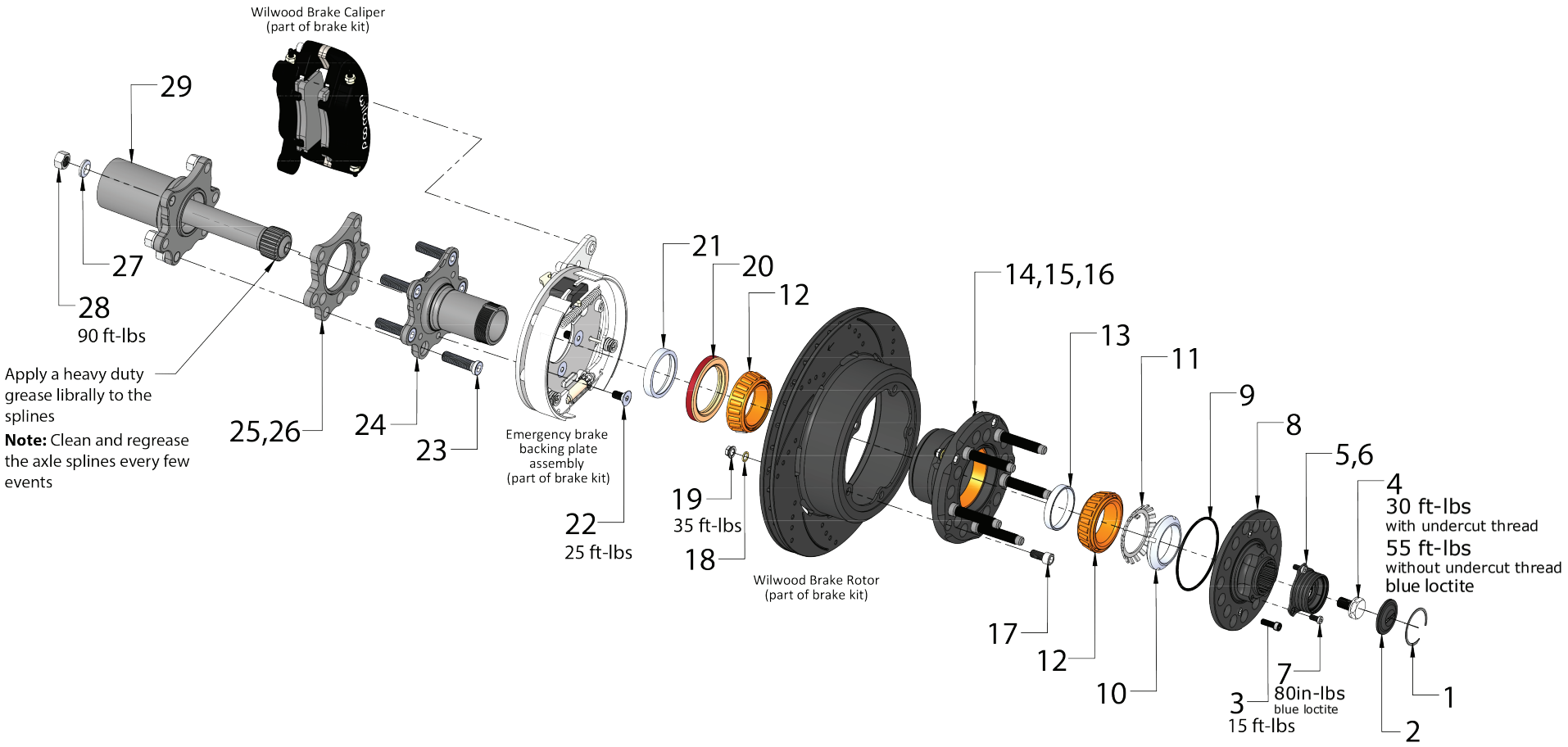
• Clearance the bracket as shown in the picture above

2005-2010 Rear Mustang ABS Sensor modification

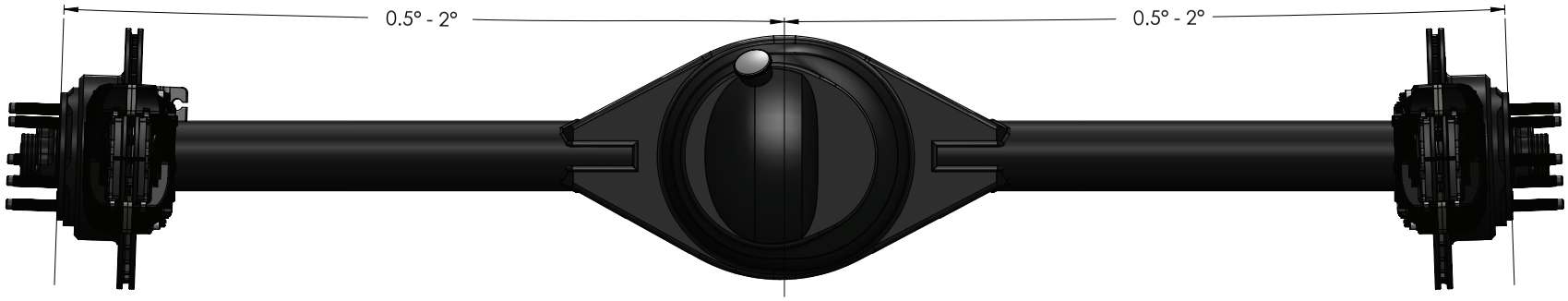


• Sensor ribs and body in contact with the spindle flange must be ground away for clearance

Exploded View of Cambered Street Floater Assembly



Camber Angle Range



Determining Total and Individual Toe