

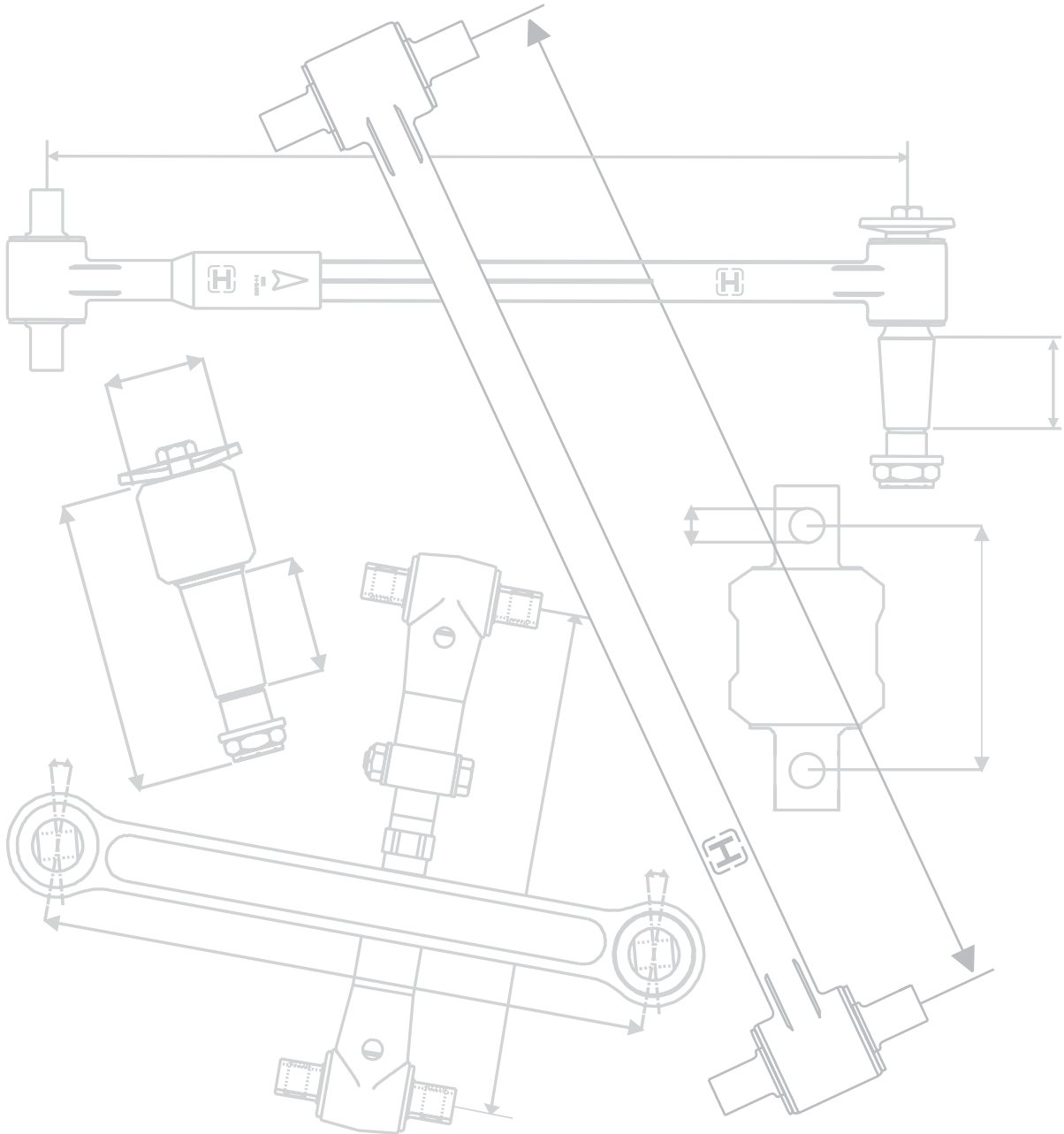
H SELECTION GUIDE

One and Two-piece Torque Rods and Replacement Bushings

LIT NO: 45745-148

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REVISION: B



For The Road Ahead™

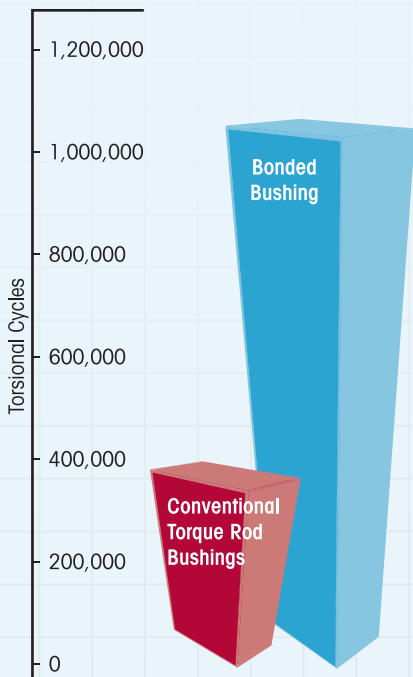
H HENDRICKSON

HENDRICKSON ULTRA ROD® PLUS™ Torque Rod Bonded Bushing Provides Longer Life

Bonding makes a better bushing. Hendrickson's bonded bushings utilize specialized chemical reactions during the in-mold curing process to physically bond the inner metal to the rubber. Bonding the rubber to the inner metal extends the bushing's service life by eliminating the detrimental effects caused by rubber-to-metal slip exhibited in conventional bushing construction. Rebushing a torque rod with a bonded bushing is simple — clean and inspect hub, lubricate rubber and hub inner diameter, press and center rubber bushing into hub.



Torque Rod Bushing Fatigue Life Test



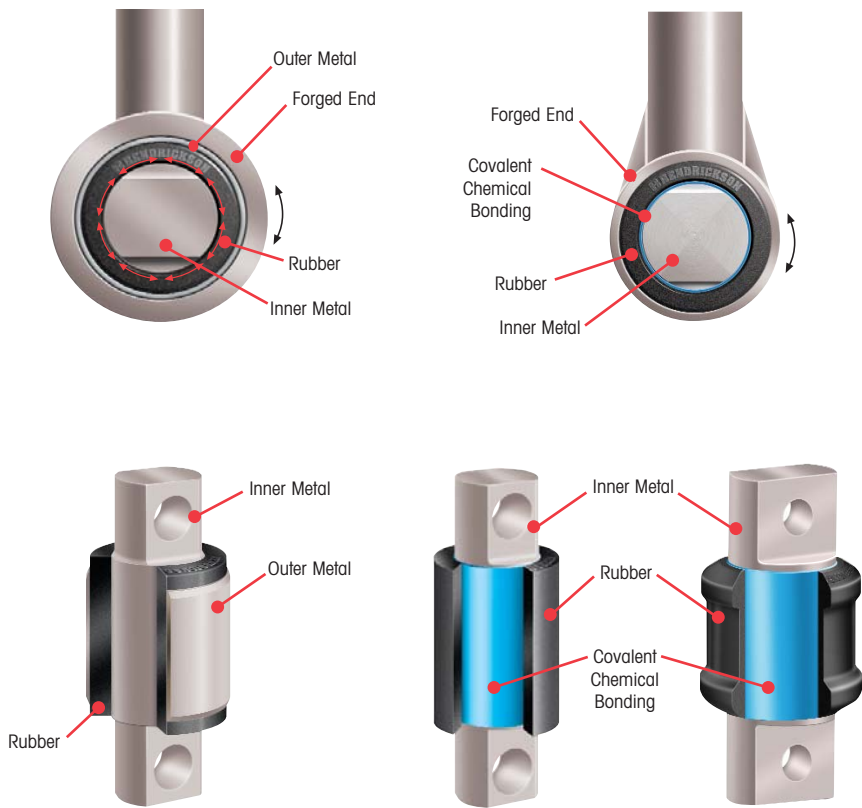
Laboratory tests* prove that the new Hendrickson ULTRA ROD® PLUS™ torque rod bonded bushing lasts longer than conventional torque rod cartridge bushings.

Use Hendrickson's improved technology and experience the bonded bushing difference.

* Bushings tested for end hubs
2.75" ID x 2.2" Wide

Torsional Cycles-to-Failure is the total number of torsional fatigue cycles imparted to a bushing specimen at the point of significant performance degradation. Torsional cycles-to-failure is a relative fatigue performance measure that can be used to compare the performance of similar bushings

The above data is based upon internal testing. Actual product performance may vary depending upon torque rod, suspension, vehicle types, configurations, operation, service and other factors.



CONVENTIONAL BUSHING

BONDED BUSHINGS

Hendrickson's bonded bushing molecularly bonds the rubber bushing to a metal shaft creating a stronger more robust bushing.

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How to Measure Two-piece Torque Rods

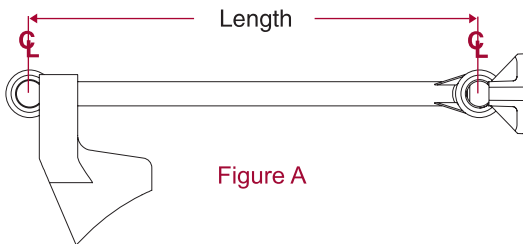


To ensure proper measurement for torque rod replacement, check for the following:

- If the torque rod being replaced is an ULTRA ROD, measure center of end hub to center of end hub of the old torque rod. Make the new torque rod the same length.
- If the old torque rod is not an ULTRA ROD, it is important to verify how the torque rod is mounted and then measure as shown in Figures A, B, and C.

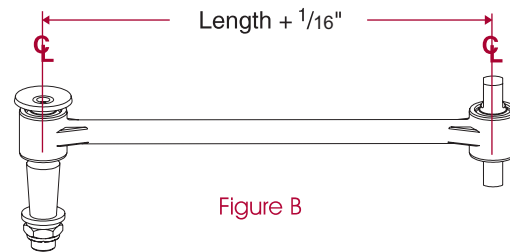
OUTSIDE MOUNT

Measure center to center of old torque rod. Make the new torque rod the same length.



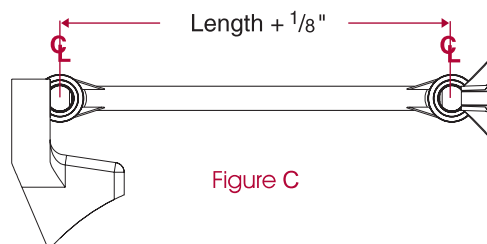
TAPER PIN TO STRADDLE PIN MOUNT

Measure center to center of old torque rod and add $\frac{1}{16}$ " to make new torque rod.



INSIDE TO INSIDE MOUNT

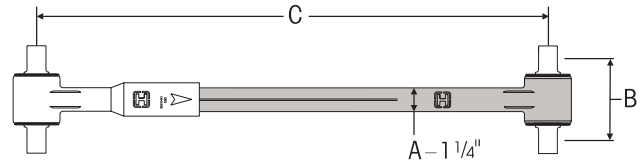
Measure from the center of old torque rod and add $\frac{1}{8}$ " to make new torque rod.



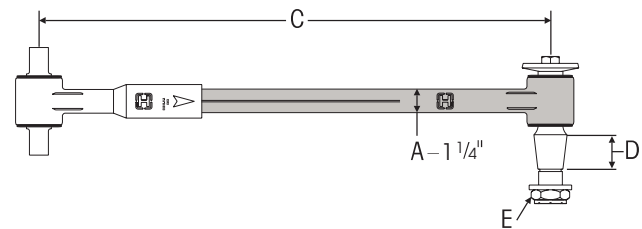


ULTRA ROD® Two-piece Torque Rods

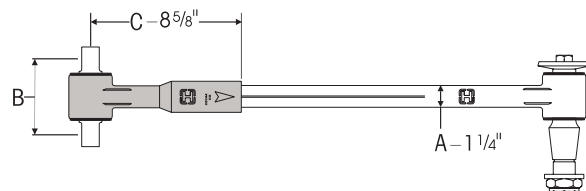
The old torque rod part numbers were in effect until 1999, at that time, Hendrickson redesigned the torque rod to incorporate the bonded bushing technology, creating current torque rod part numbers that supersede the old part numbers.



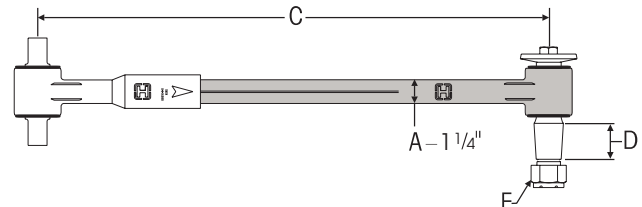
SPACER END		"B" MTG. CTRS	"C" LENGTH	REPLACEMENT BUSHING & HOLE DIA.	
CURRENT END	OLD END				
66661-000H	46661-000	4 ³ / ₈ "	27"	47691-000H	5/8"
66768-000H	56768-000	5 ¹¹ / ₁₆ "	27"	66734-000H	3/4"
67047-000H	57047-000	4 ³ / ₈ "	27"	69210-000H	3/4"
67048-000H	57048-000	4 ³ / ₈ "	27"	67746-000H	7/8"
66660-000H	46660-000	4 ³ / ₈ "	35"	47691-000H	5/8"
67046-000H	57046-000	4 ³ / ₈ "	35"	69210-000H	3/4"



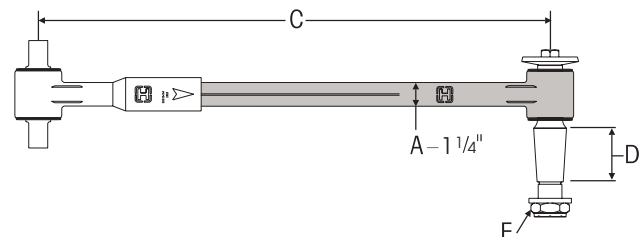
SPACER END		"D" x "E" THD TAPER	"C" LENGTH	REPLACEMENT BUSHING
CURRENT END	OLD END			
66691-000H	46691-000	1 ⁷ / ₈ " x 1 ¹ / ₄ "	27"	66735-000H
66690-000H	46690-000	1 ⁷ / ₈ " x 1 ¹ / ₄ "	35"	66735-000H



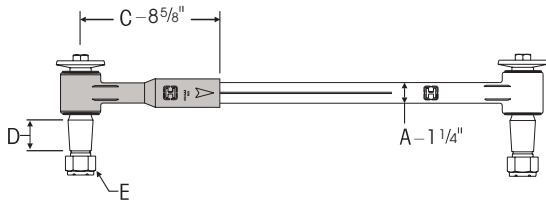
TUBE END		"B" MTG. CTRS	REPLACEMENT BUSHING & HOLE DIA.	
CURRENT END	OLD END			
66610-000H	46610-000	4 ³ / ₈ "	47691-000H	5/8"
66766-000H	56766-000	4 ³ / ₈ "	67746-000H	7/8"
66767-000H	56767-000	4 ³ / ₈ "	69210-000H	3/4"



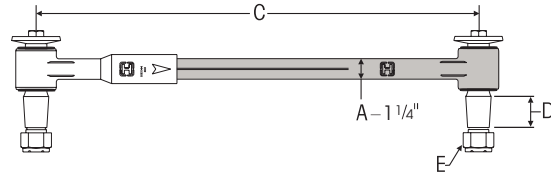
SPACER END		"D" x "E" THD TAPER	"C" LENGTH	REPLACEMENT BUSHING
CURRENT END	OLD END			
66671-000H	46671-000	2" x 1 ¹ / ₈ "	27"	64809-000H
66670-000H	46670-000	2" x 1 ¹ / ₈ "	35"	64809-000H



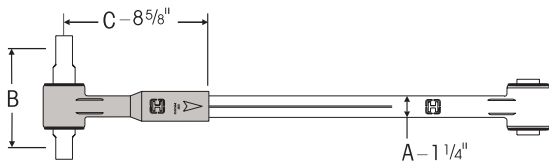
SPACER END		"D" x "E" THD TAPER	"C" LENGTH	REPLACEMENT BUSHING
CURRENT END	OLD END			
66681-000H	46681-000	3" x 1 ¹ / ₄ "	27"	64697-000H
66680-000H	46680-000	3" x 1 ¹ / ₄ "	35"	64697-000H



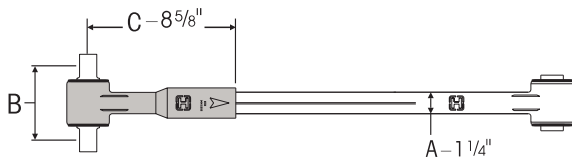
TUBE END		"D" x "E" THD	REPLACEMENT BUSHING
CURRENT END	OLD END	TAPER	
66620-000H	46620-000	2" x 1 1/8"	64809-000H
66769-000H	56769-000	1 7/8" x 1 1/4"	66735-000H
66630-000H	46630-000	3" x 1 1/4"	64697-000H



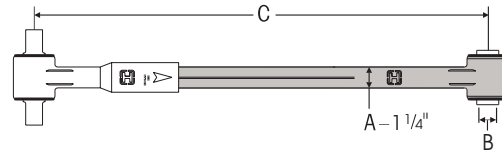
SPACER END		"D" x "E" THD	"C" LENGTH	REPLACEMENT BUSHING
CURRENT END	OLD END	TAPER		
66671-000H	46671-000	2" x 1 1/8"	27"	64809-000H
66670-000H	46670-000	2" x 1 1/8"	35"	64809-000H
66681-000H	46681-000	3" x 1 1/4"	24"	64697-000H
66680-000H	46680-000	3" x 1 1/4"	35"	64697-000H



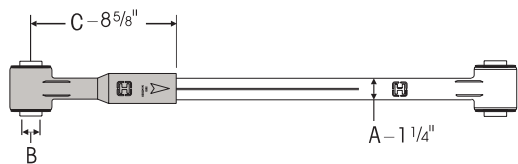
TUBE END		"B" MTG. CTRS	REPLACEMENT BUSHING & HOLE DIA.
CURRENT END	OLD END		
66640-000H	46640-000	5 11/16"	66734-000H 3/4"



TUBE END		"B" MTG. CTRS	REPLACEMENT BUSHING & HOLE DIA.
CURRENT END	OLD END		
66610-000H	46610-000	4 3/8"	47691-000 5/8"



SPACER END		"B" DIA.	"C" LENGTH	REPLACEMENT BUSHING
CURRENT END	OLD END			
66701-000H	46701-000	1 1/8"	27"	65477-000H
66700-000H	46700-000	1 1/8"	35"	65477-000H



TUBE END		"B" DIA.	REPLACEMENT BUSHING & HOLE DIA.
CURRENT END	OLD END		
66650-000H	46650-000	1 1/8"	65477-000H 1 1/8"



ULTRA ROD Two-piece Kits

Hendrickson ULTRA ROD two-piece torque rods are an excellent replacement option for one-piece torque rods for both the on-highway and vocational applications of most trucks up to 52,000 pound capacity. The two-piece design requires minimal part number stocking that will allow coverage of the multiple one-piece configurations providing for a full range of suspension applications. ULTRA RODS are designed for up to 27 inch centers for most applications and 35 inch for widespread tandem. Two-piece kits contain both the spacer and tube end in one convenient box. The chart below outlines the available kits and the different configurations. For dimension information of individual torque rod ends, please reference pages 5 and 6.



KIT NUMBER	TUBE END	SPACER END
60214-000	66610-000H	66671-000H
60215-000	66610-000H	66681-000H
60216-000	66620-000H	66671-000H
60217-000	66610-000H	66701-000H
60218-000	66610-000H	66661-000H
60219-000	66630-000H	66681-000H
60220-000	66610-000H	66691-000H
60221-000	66640-000H	66701-000H
60222-000	66650-000H	66701-000H
60223-000	66610-000H	66660-000H
60224-000	66610-000H	66680-000H
60225-000	66630-000H	66680-000H
60226-000	66610-000H	66670-000H
60227-000	66610-000H	66690-000H
60228-000	66640-000H	66700-000H
60229-000	66650-000H	66700-000H
60230-000	66767-000H	66681-000H
60231-000	66767-000H	66680-000H
60232-000	66767-000H	67047-000H
60233-000	66767-000H	67046-000H

ULTRA ROD PLUS Two-piece Torque Rods

Hendrickson ULTRA ROD PLUS two-piece torque rods include all the benefits of the ULTRA ROD, but they also offer added versatility by featuring empty end hubs. Empty end hubs allow the use of any cartridge configuration from existing Hendrickson torque rod cartridge offering. The

two-piece design requires stocking only two part numbers, eliminating multiple torque rod inventory to help manage fewer part numbers and increase inventory turns. Reference the chart below to identify what Hendrickson torque rod cartridges can be used with ULTRA ROD PLUS.

ULTRA ROD PLUS Bonded Bushings

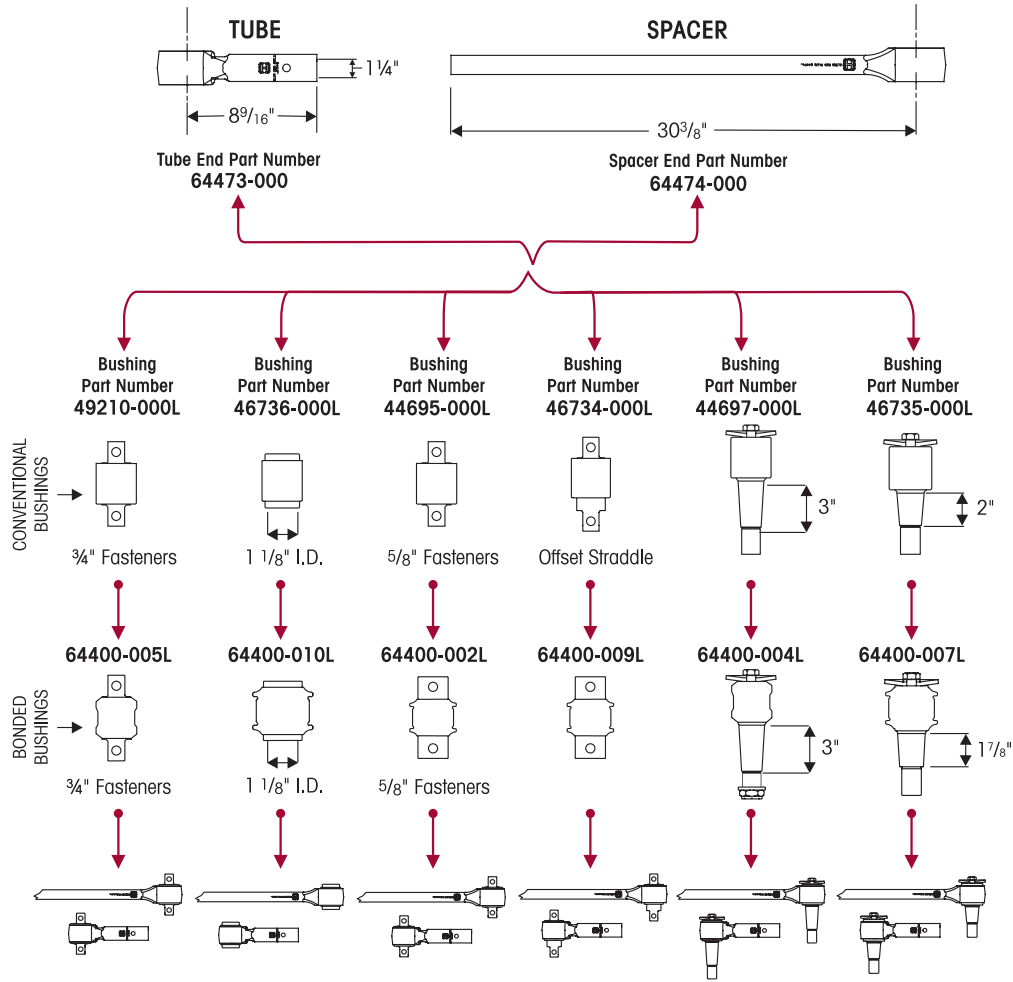


Bonded bushings have greater life expectancy and are interchangeable with most conventional Hendrickson bushings.

Rebushing a torque rod with a bonded bushing is now easier with the use of a new funnel tool. Contact your authorized Hendrickson distributor to order the **Funnel Tool**. Part No. **66086-000**

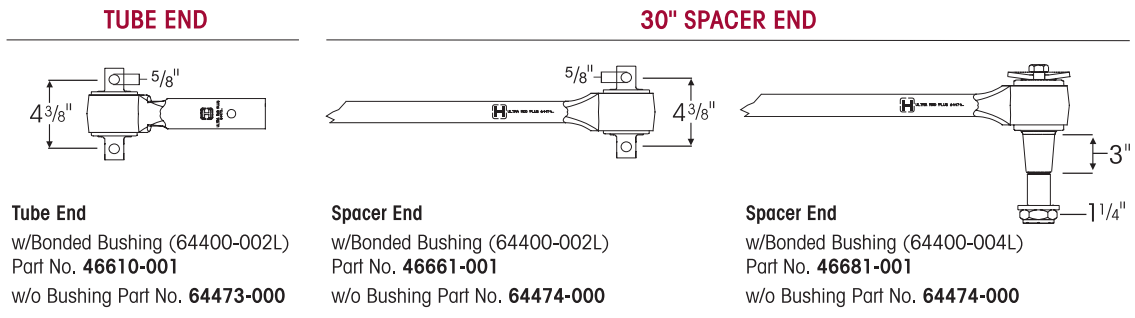


Promotional Kit No. 34013-113 includes **Eight Bonded Bushings** (Part No. 64400-002L) and **One Funnel Tool** (Part No. 66086-000)



ULTRA ROD PLUS Two-piece Torque Rods Pre-assembled with Bushings

Hendrickson offers ULTRA ROD PLUS two-piece torque rod assemblies in the most popular configurations. ULTRA ROD PLUS assemblies utilize bonded bushings for greater life expectancy.



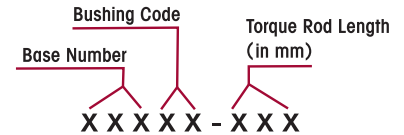


One-piece Torque Rod "SMART" Number Reference Information

Most Hendrickson one-piece torque rods follow a new "smart" number system. One-piece torque rods may have the same length and bushing configuration, but the torsional bushing position will differ creating a different part number.

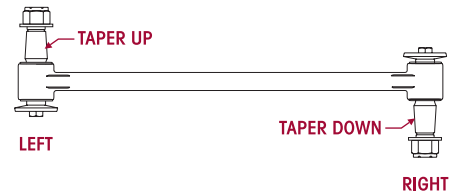
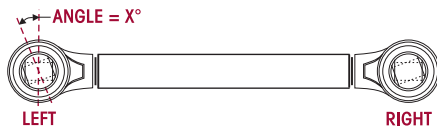
Torque Rods that are included in the "smart" numbering system have part numbers that begin with 62XXX-XXX or 72XXX-XXX. The first (3) positions of the part number indicate bushing types and part numbers. The fourth and fifth position of the part number indicates the code for bushing angle. The (3) numbers after the "dash" in the suffix indicate torque rod length, (center to center), in millimeters. See example below on how to read the torsional bushing position and torque rod part number.

EXAMPLE:



ULTRA ROD		
BASE NUMBER	BUSHING	
	Left	Right
620	47691-000	47691-000
621	68304-000H	68304-000H
622	47691-000	64809-000H
623	47691-000	64697-000H
624	64809-000H	64809-000H
625	64697-000H	64697-000H
626	69210-000H	64697-000H
627	69210-000H	69210-000H
628	47691-000	66735-000H
629	67746-000H	66735-000H

ULTRA ROD PLUS		
BASE NUMBER	BUSHING	
	Left	Right
720	64400-002	64400-002
721	64400-003	64400-003
723	64400-002	64400-004
725	64400-004	64400-004
727	64400-005	64400-005
728	64400-003	64400-006

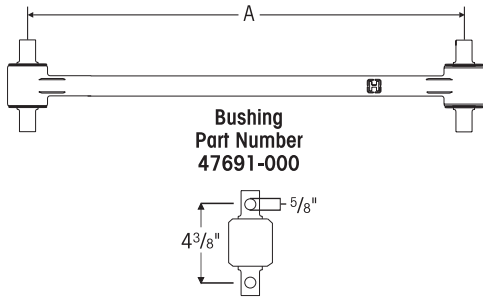


BUSHING CODE	BUSHING USED		ANGLE INSTALLED	
	Left	Right	Left	Right
00	Straddle	Straddle	0°	0°
01	Straddle	Straddle	0°	10°
02	Straddle	Straddle	10°	0°
03	Straddle	Straddle	0°	15°
04	Straddle	Straddle	0°	30°
05	Straddle	Straddle	20°	20°
06	Straddle	Straddle	10°	15°
07	Straddle	Straddle	10°	10°
08	Straddle	Straddle	7.5°	90°
09	Straddle	Straddle	15°	10°
10	Straddle	Straddle	1°	1°
11	Straddle	Straddle	5°	5°
12	Straddle	Straddle	9°	9°
13	Straddle	Straddle	20°	10°
14	Straddle	Straddle	7°	7°
15	Straddle	Straddle	4°	8°
16	Straddle	Straddle	9°	13°
17	Straddle	Straddle	3°	0°
18	Straddle	Straddle	4°	0°
19	Straddle	Straddle	5°	0°

BUSHING CODE	BUSHING USED		ANGLE INSTALLED	
	Left	Right	Left	Right
20	Straddle	Straddle	7°	0°
21	Straddle	Straddle	10°	5°
22	Straddle	Straddle	0°	50°
23	Straddle	Straddle	0°	4°
24	Straddle	Straddle	0°	5°
25	Straddle	Straddle	4°	10°
26	Straddle	Straddle	0°	35°
27	Straddle	Straddle	8°	5°
28	Straddle	Straddle	-5°	5°
29	Straddle	Straddle	20°	-10°
50	Straddle	Taper	0°	Taper Down
51	Straddle	Taper	2°	Taper Down
52	Straddle	Taper	5°	Taper Down
53	Straddle	Taper	16°	Taper Down
54	Straddle	Taper	11°	Taper Down
55	Straddle	Taper	-4°	Taper Down
56	Straddle	Taper	10°	Taper Down
98	Taper	Taper	Taper Up	Taper Down
99	Taper	Taper	Taper Down	Taper Down



One-piece Torque Rods



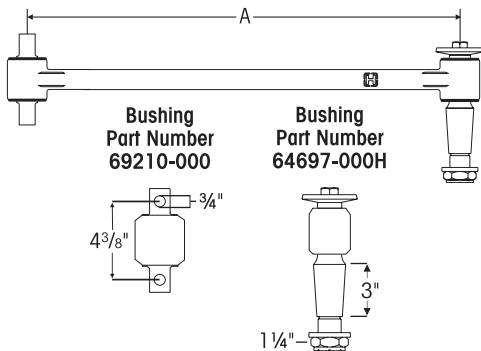
PART NO.	DIM. "A" INCH CONV.
49681-001	14 7/16"
62000-365	14 5/16"
62000-375	14 3/4"
62000-390	15 5/16"
62000-420	16 5/16"
62000-430	16 5/16"
62000-485	19 1/16"
62000-505	19 7/8"
62000-510	20 1/16"
62000-520	20 1/2"
62000-525	20 1 1/16"
62000-530	20 7/16"
62000-535	21 1/16"
62000-540	21 1/4"
62000-545	21 1/16"
62000-550	21 5/16"
62000-555	21 7/8"
62000-560	22 1/16"
62000-565	22 1/4"
62000-570	22 7/16"

PART NO.	DIM. "A" INCH CONV.
62000-575	22 5/8"
62000-580	22 13/16"
62000-590	23 1/4"
62000-595	23 1/16"
62000-600	23 5/16"
62000-605	23 3/16"
62000-610	24"
62000-615	24 3/16"
62000-620	24 7/16"
62000-630	24 13/16"
62000-635	25"
62000-640	25 5/16"
62000-645	25 3/16"
62000-650	25 5/16"
62000-660	26"
62000-665	26 3/16"
62000-670	26 3/16"
62000-675	26 3/16"
62000-700	27 1/16"
62000-705	27 3/4"

PART NO.	DIM. "A" INCH CONV.
62000-710	27 15/16"
62000-715	28 3/8"
62000-720	28 3/8"
62000-725	28 9/16"
62000-735	28 15/16"
62000-740	29 1/8"
62000-745	29 5/16"
62000-750	29 1/2"
62000-760	29 15/16"
62000-775	30 1/2"
62000-785	30 7/8"
62000-795	31 5/16"
62000-830	32 1 1/16"
62000-885	34 13/16"
62000-895	35 1/4"
62001-420	16 9/16"
62001-440	17 5/16"
62001-455	17 15/16"
62001-460	18 1/8"
62001-465	18 3/16"
62001-485	19 1/16"
62001-495	19 1/4"
62001-500	19 1 1/16"
62001-510	20 1/16"
62001-515	20 1/4"
62001-520	20 1/2"
62001-525	20 1 1/16"
62001-530	20 7/8"

PART NO.	DIM. "A" INCH CONV.
62001-535	21 1/16"
62001-540	21 1/4"
62001-545	21 1/16"
62001-550	21 5/16"
62001-555	21 7/16"
62001-560	22 1/16"
62001-565	22 1/4"
62001-570	22 1/16"
62001-575	22 5/16"
62001-580	22 13/16"
62001-585	23"
62001-590	23 1/4"
62001-595	23 7/16"
62001-605	23 13/16"
62001-610	24"
62001-615	24 3/16"
62001-620	24 7/16"
62001-625	24 5/16"
62001-630	24 13/16"
62001-635	25"
62001-640	25 3/16"
62001-645	25 3/16"
62001-650	25 5/16"
62001-655	25 13/16"
62001-660	26"
62001-665	26 3/16"
62001-670	26 3/16"
62001-675	26 5/16"

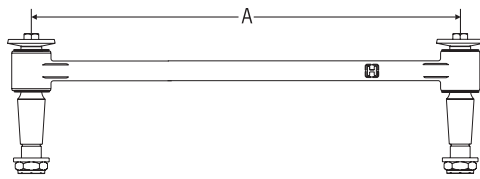
PART NO.	DIM. "A" INCH CONV.
62001-680	26 3/4"
62001-685	27"
62001-690	27 1/16"
62001-725	28 3/16"
62001-735	28 15/16"
62001-740	29 1/8"
62001-745	29 5/16"
62005-420	16 1/2"
62007-365	14 3/8"
62008-620	24 7/16"
62009-375	14 3/4"
62009-400	15 3/4"
62010-455	17 15/16"
62011-360	14 3/16"
62011-565	22 1/4"
62011-620	24 7/16"
62011-720	28 3/8"
62012-360	14 3/16"
62012-465	18 3/16"
62013-385	15 5/16"
62013-790	31 1/8"
62014-720	28 3/8"
62014-755	29 3/4"
62015-735	28 15/16"
62016-815	32 1/16"
62017-720	28 3/8"
62022-580	22 13/16"
62029-385	15 5/16"



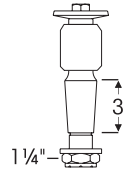
PART NO.	DIM. "A" INCH CONV.
62650-495	19 1/2"
62650-500	19 1 1/16"
62650-505	19 7/8"
62650-520	20 1/2"
62650-525	20 1 1/16"

PART NO.	DIM. "A" INCH CONV.
62650-535	21 1/16"
62650-605	23 13/16"
62650-610	24"
62650-615	24 3/16"

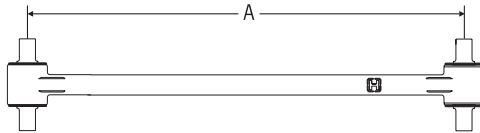
PART NO.	DIM. "A" INCH CONV.
62650-630	24 13/16"
62650-635	25"
62650-640	25 5/16"
62650-645	25 5/16"



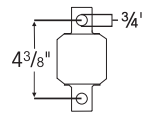
Bushing Part Number
64697-000H



PART NO.	DIM. "A" INCH CONV.
62599-560	22 ¹ / ₁₆ "
62599-585	23"
62599-650	25 ¹ / ₁₆ "

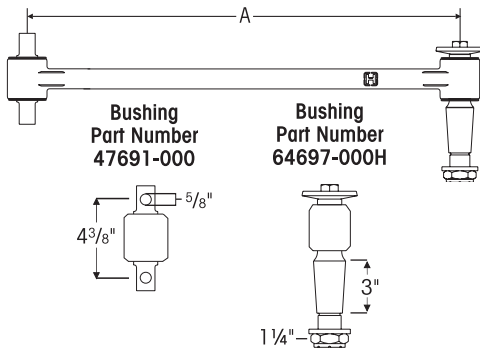


Bushing Part Number
69210-000H



PART NO.	DIM. "A" INCH CONV.
62700-540	21 ¹ / ₄ "
62700-570	22 ⁷ / ₁₆ "

PART NO.	DIM. "A" INCH CONV.
62700-610	24"
62700-620	24 ⁷ / ₁₆ "



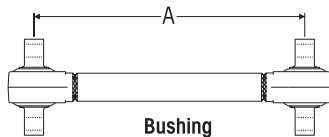
Bushing
Part Number
47691-000

Bushing
Part Number
64697-000H

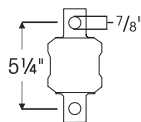
PART NO.	DIM. "A" INCH CONV.
62350-450	17 ³ / ₄ "
62350-470	18 ¹ / ₂ "
62350-505	19 ⁷ / ₁₆ "
62350-520	20 ¹ / ₂ "
62350-525	20 ¹ / ₁₆ "
62350-535	21 ¹ / ₁₆ "
62350-545	21 ¹ / ₁₆ "
62350-550	21 ⁵ / ₁₆ "

PART NO.	DIM. "A" INCH CONV.
62350-555	21 ¹ / ₁₆ "
62350-560	22 ¹ / ₁₆ "
62350-605	23 ¹³ / ₁₆ "
62350-610	24"
62350-615	24 ³ / ₁₆ "
62350-620	24 ⁷ / ₁₆ "
62350-625	24 ¹ / ₁₆ "
62350-630	24 ¹³ / ₁₆ "

PART NO.	DIM. "A" INCH CONV.
62350-635	25"
62350-640	25 ⁵ / ₁₆ "
62350-645	25 ⁹ / ₁₆ "
62350-655	25 ¹³ / ₁₆ "
62350-800	31 ¹ / ₂ "
62350-880	34 ⁵ / ₁₆ "
62350-910	35 ¹³ / ₁₆ "



Bushing
Part Number
64400-003



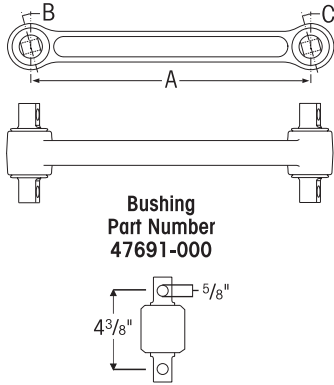
PART NO.	DIM. "A" INCH CONV.
72100-430	16 ¹⁵ / ₁₆ "
72100-490	19 ⁷ / ₁₆ "
72100-495	19 ¹ / ₂ "
72100-505	19 ⁹ / ₁₆ "
72100-510	20 ¹ / ₁₆ "
72100-535	21 ¹ / ₁₆ "
72100-540	21 ¹ / ₄ "

PART NO.	DIM. "A" INCH CONV.
72100-545	21 ¹ / ₁₆ "
72100-550	21 ⁵ / ₁₆ "
72100-560	22 ¹ / ₁₆ "
72100-565	22 ¹ / ₄ "
72100-570	22 ⁷ / ₁₆ "
72100-580	22 ⁷ / ₁₆ "
72100-585	23"

PART NO.	DIM. "A" INCH CONV.
72100-590	23 ¹ / ₄ "
72100-595	23 ³ / ₁₆ "
72100-605	23 ¹³ / ₁₆ "
72100-610	24"
72100-620	24 ³ / ₁₆ "
72100-630	24 ¹³ / ₁₆ "
72100-635	25"
72100-640	25 ⁵ / ₁₆ "
72100-650	25 ⁹ / ₁₆ "
72100-655	25 ³ / ₄ "
72100-660	26"
72100-665	26 ³ / ₁₆ "
72100-675	26 ⁹ / ₁₆ "
72100-680	26 ³ / ₄ "

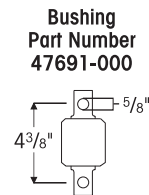
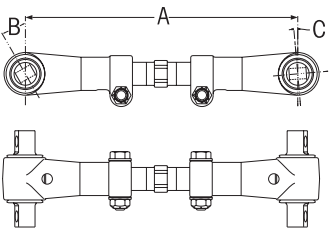
PART NO.	DIM. "A" INCH CONV.
72100-685	27"
72100-690	27 ¹ / ₁₆ "
72100-700	27 ⁷ / ₁₆ "
72100-705	27 ³ / ₄ "
72100-710	28"
72100-720	28 ³ / ₁₆ "
72100-725	28 ⁹ / ₁₆ "
72100-730	28 ³ / ₄ "
72100-735	28 ¹⁵ / ₁₆ "
72100-745	29 ³ / ₁₆ "
72100-750	29 ¹ / ₂ "
72100-755	29 ³ / ₄ "
72100-760	29 ¹⁵ / ₁₆ "
72100-770	30 ⁵ / ₁₆ "

PART NO.	DIM. "A" INCH CONV.
72100-775	30 ¹ / ₂ "
72100-785	30 ⁹ / ₁₆ "
72100-795	31 ¹ / ₁₆ "
72100-805	31 ¹ / ₁₆ "
72100-815	32 ¹ / ₁₆ "
72100-865	34 ¹ / ₁₆ "
72100-890	35"
72100-955	37 ⁷ / ₁₆ "
72100-015	40"
72102-635	25"
72121-615	24 ³ / ₁₆ "
72123-610	24"
72124-650	25 ⁵ / ₁₆ "
72125-555	21 ¹ / ₁₆ "

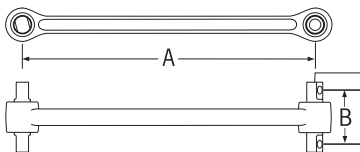


PART NO.	DIM. "A" INCH CONV.	"B" ± 2°	"C" ± 2°
48411-001	15 ¹³ / ₁₆ "	15°	10°
48411-002	21 ⁷ / ₈ "	15°	5°
48411-003	16 ¹ / ₂ "	20°	20°
48411-004	15 ¹³ / ₁₆ "	0°	175°
48411-005	15 ¹³ / ₁₆ "	10°	10°
48411-006	14 ³ / ₈ "	10°	10°
48411-007	20 ⁵ / ₁₆ "	5°	5°

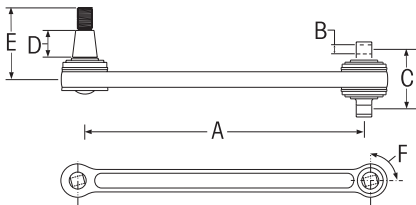
PART NO.	DIM. "A" INCH CONV.	"B" ± 2°	"C" ± 2°
48411-009	15 ¹³ / ₁₆ "	0°	0°
48411-010	14 ³ / ₄ "	0°	0°
48411-011	15 ¹³ / ₁₆ "	25°	5°
48411-013	14 ³ / ₈ "	0°	0°
48411-014	14 ³ / ₄ "	10°	10°
48411-015	15 ¹³ / ₁₆ "	5°	6°
48411-016	14 ³ / ₈ "	4°	4°



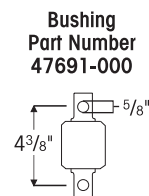
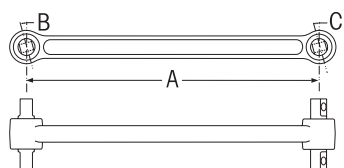
PART NO.	DIM. "A" INCH CONV.	"B" ± 2°	"C" ± 2°	"D" BOLT SIZE
57950-007	14 ⁷ / ₁₆ "	10°	10°	1/2"x3" Length
58519-007	14 ⁷ / ₁₆ "	10°	10°	M12-80mm



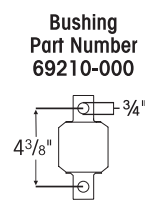
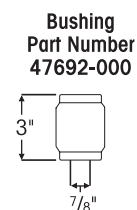
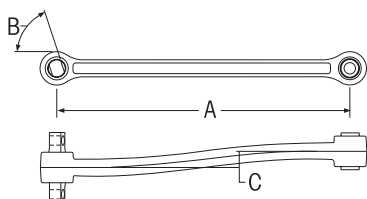
PART NO.	INCH CONVERSION	
	DIM. "A"	"B"
58745-001	24 ¹ / ₁₆ "	4 ³ / ₈ "
58745-003	23 ⁷ / ₈ "	4 ³ / ₈ "
58745-008	25 ¹ / ₄ "	4 ³ / ₈ "



PART NO.	INCH CONVERSION					"F"
	DIM. "A"	"B"	"C"	"D"	"E"	
58745-009	20 ¹ / ₄ "	5 ⁵ / ₈ "	4 ³ / ₈ "	11 ¹⁵ / ₁₆ "	5 ³ / ₁₆ "	90°



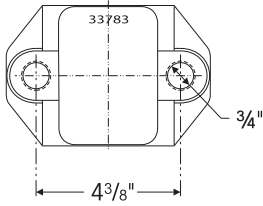
PART NO.	DIM. "A" IN. CONV.	"B"	"C"
58757-005	21 ¹ / ₂ "	90°	90°
58757-006	22"	90°	90°
58757-605	23 ¹³ / ₁₆ "	0°	37°
58757-615	24 ¹ / ₄ "	0°	37°
58757-660	26"	0°	10°



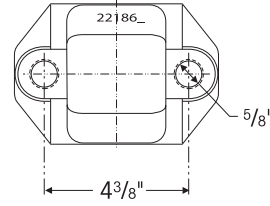
PART NO.	DIM. "A" INCH CONV.	"B" ± 2°	"C" INCH CONV.
60827-605A	23 ¹³ / ₁₆ "	71.7°	1 ⁵ / ₁₆ "
60827-605B	23 ¹³ / ₁₆ "	108.3°	1 ⁵ / ₁₆ "
60827-645A	25 ³ / ₈ "	72.7°	1 ⁵ / ₁₆ "
60827-645B	25 ³ / ₈ "	107.3°	1 ⁵ / ₁₆ "



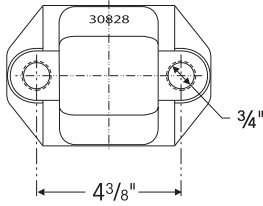
Torque Rod Straddle Mount Frame Brackets



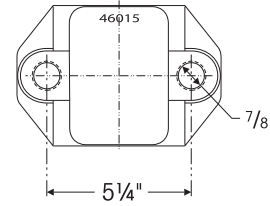
PART NO.	DESCRIPTION
33783-000	Straddle Mount, 3/4" Bolt Mounting (Heavy Duty)



PART NO.	DESCRIPTION
22186-000	Straddle Mount, 5/8" Bolt Mounting

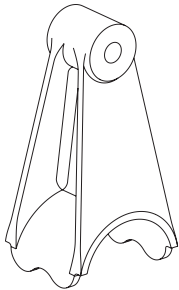


PART NO.	DESCRIPTION
30828-000	Straddle Mount, 3/4" Bolt Mounting

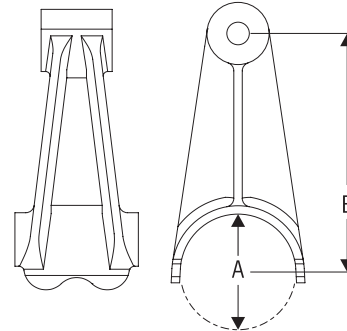


PART NO.	DESCRIPTION
46015-000	Straddle Mount, 7/8" Bolt Mounting (Heavy Duty)

Trailer Torque Rod Axle Brackets



PART NO.	INCH CONVERSION	
	"A"	"B"
08122-003	5"	10 1/2"
08122-005	5 1/2"	10 3/4"
08122-006	5 3/4"	10 7/8"





Replacing Torque Rods and Torque Rod Bushings

All torque rods need to be inspected during preventive maintenance and service for looseness by one of the following methods.

- **Method 1 — FOR TRACTOR APPLICATIONS ONLY**
with brakes applied, slowly rock the empty vehicle with power while a mechanic visually checks the action at both ends.
- **Method 2** — with the vehicle shut down, a lever check can be made with a long pry bar placed under each rod end and pressure applied.

Visually inspect torque rod bushings for torn or shredded rubber, inspect for bent, cracked, or broken torque rods and also for end hubs that have an elongated "oval" shape. Any of these conditions require component replacement.

The length of the torque rods is determined by the truck manufacturer for optimum drive line angles. The longitudinal torque rods control these angles and also absorb acceleration and braking forces. The mounting brackets at the axle ends of the torque rods are furnished and welded

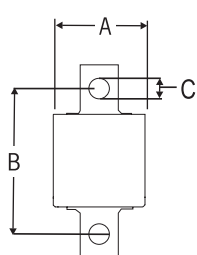
into position on the axle housings by the axle manufacturer. A two-piece torque rod is also available to cut and weld to the desired length, if a one-piece torque rod is not available, see pages 5 through 8.

Straddle mount torque rod end attaching fasteners are furnished by the vehicle manufacturer. It is important that the tightening torque of the locknuts be checked during preventive maintenance and service. Follow the tightening torque specifications and all other applicable preventive maintenance and service instructions issued by the vehicle manufacturer.

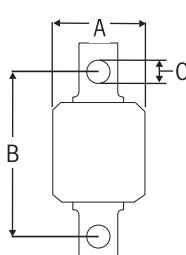
NOTE: Grade 8 bolts and Grade C locknuts must be used for all straddle mount torque rod attachments.

Whether the bushings are straddle mount, thru bolt or tapered stud, they can be replaced by pressing out the worn bushing and installing a new genuine Hendrickson bushing. Refer to the technical procedure for the proper replacement instructions for your specific suspension system.

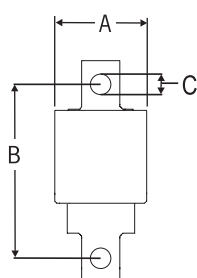
Torque Rod Bushings



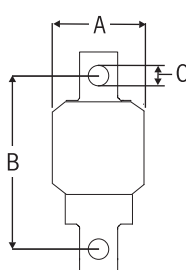
PART NO.	INCHES		
	"A"	"B"	"C"
44694-000L	2 1/2"	4 3/8"	5/8"
44695-000L*	2 3/4"	4 3/8"	5/8"
48304-000L	3 1/2"	5 1/4"	7/8"
49210-000L*	2 3/4"	4 3/8"	3/4"
57256-000L	2 1/2"	4 3/8"	5/8"



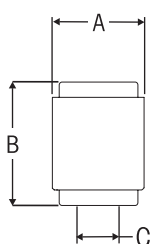
PART NO.	INCHES		
	"A"	"B"	"C"
47691-000L	2"	4 3/8"	5/8"
69210-000H	2"	4 3/8"	3/4"
67746-000H	2"	4 3/8"	7/8"



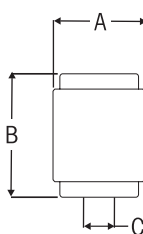
PART NO.	INCHES		
	"A"	"B"	"C"
46734-000L*	2 3/4"	5 11/16"	3/4"
47699-001L	3"	5 11/16"	3/4"



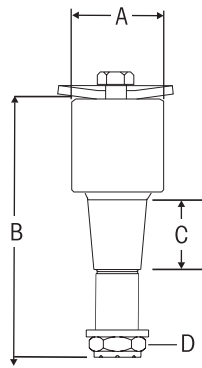
PART NO.	INCHES		
	"A"	"B"	"C"
66734-000H	2"	5 11/16"	3/4"



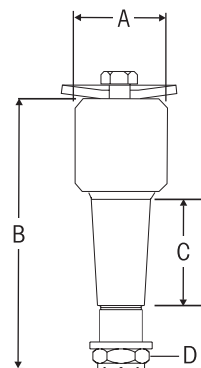
PART NO.	INCHES		
	"A"	"B"	"C"
47692-000L	2"	3"	7/8"
65477-000H	2"	3 1/4"	1 1/8"



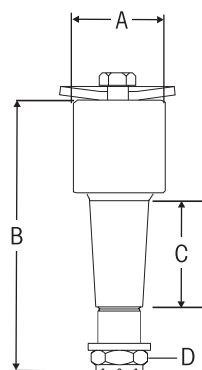
PART NO.	INCHES		
	"A"	"B"	"C"
24504-000L	2 7/8"	3 1/4"	1 1/8"
44993-000L	3 3/8"	3 1/4"	1 1/8"
45477-000L	3"	3 1/4"	1 1/8"
46736-000L*	2 3/4"	3 1/4"	1 1/8"



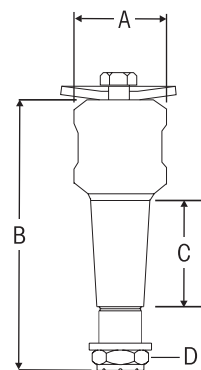
PART NO.	INCHES			
	"A"	"B"	"C"	"D" THD
46737-000L*	2 ³ / ₄ "	6 ⁵ / ₈ "	2"	1 ¹ / ₈ "
46735-000L*	2 ³ / ₄ "	7"	1 ⁷ / ₈ "	1 ¹ / ₄ "
44809-000	2 ¹ / ₄ "	6 ⁵ / ₈ "	2"	1 ¹ / ₈ "



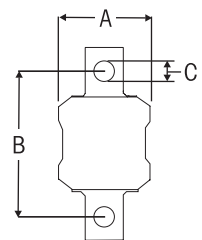
PART NO.	INCHES			
	"A"	"B"	"C"	"D" THD
64697-000H	2"	8"	3"	1 ¹ / ₄ "
64809-000H	2"	6 ⁵ / ₈ "	2"	1 ¹ / ₈ "
66735-000H	2"	7"	1 ⁷ / ₈ "	1 ¹ / ₄ "



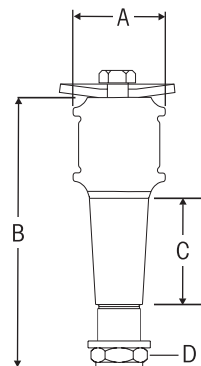
PART NO.	INCHES			
	"A"	"B"	"C"	"D" THD
44697-000L*	2 ³ / ₄ "	8"	3"	1 ¹ / ₄ "



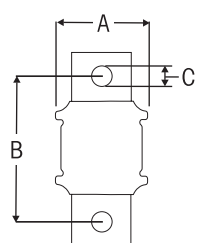
PART NO.	INCHES			
	"A"	"B"	"C"	"D" THD
64400-004L*	3 ¹ / ₄ "	8"	3"	1 ¹ / ₄ "
64400-006L	3 ¹ / ₄ "	8 ³ / ₄ "	3"	1 ³ / ₄ "



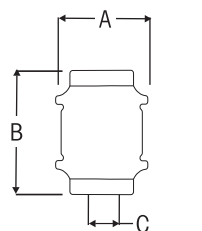
PART NO.	INCHES		
	"A"	"B"	"C"
64400-003L	3 ¹ / ₄ "	5 ¹ / ₄ "	7 ⁷ / ₈ "
64400-005L*	3 ¹ / ₄ "	4 ³ / ₈ "	3 ³ / ₄ "



PART NO.	INCHES			
	"A"	"B"	"C"	"D" THD
64400-007L*	3 ¹ / ₄ "	7"	1 ³ / ₄ "	1 ¹ / ₄ "
64400-008L*	3 ¹ / ₄ "	6 ⁵ / ₈ "	1 ⁷ / ₈ "	1 ¹ / ₈ "



PART NO.	INCHES		
	"A"	"B"	"C"
64400-002L*	3 ¹ / ₄ "	4 ³ / ₈ "	5 ⁵ / ₈ "
64400-009L*	3 ¹ / ₄ "	5 ¹ / ₁₆ "	3 ³ / ₄ "



PART NO.	INCHES		
	"A"	"B"	"C"
64400-010	3 ¹ / ₄ "	3 ¹ / ₄ "	1 ¹ / ₈ "

* The following parts are interchangeable, if a bonded bushing is desired.

CONVENTIONAL BUSHING	BONDED BUSHING	COMMENTS
44695-000L	64400-002L	Interchangeable
44697-000L	64400-004L	Interchangeable
46734-000L	64400-009L	Interchangeable
46735-000L	64400-007L	Interchangeable
46736-000L	64400-010L	Interchangeable
46737-000L	64400-008L	Interchangeable
49210-000	64400-005L	Interchangeable
NA	64400-003L	New Bushing
NA	64400-006L	New Bushing

Hendrickson Guidelines for Transverse Rods



REQUIREMENTS

Transverse rods are **MANDATORY** for the following Hendrickson rear suspensions:

- All Hendrickson walking beam series suspensions up to and including 52,000 lbs. capacity with axle spacing 60 inches or greater.
- All Hendrickson walking beam series suspensions up to and including 52,000 lbs. capacity when used on front-end loader refuse packers.
- All Hendrickson walking beam series suspensions up to and including 52,000 lbs. capacity when used in mining applications.
- All Hendrickson HN[®], HAULMAAX[®], HA[™], HAS[™], COMFORT AIR[®] and PRIMAAX[®] series suspensions.
- All Hendrickson walking beam series suspensions with capacities of 44,000 lbs. through 52,000 lbs. when using rubber equalizing beam center bushings, regardless of axle spacing.

TRANSVERSE RODS are also recommended where it is necessary to restrict the lateral movement of axles to prevent interference of tires, brakes, axle housings, etc. with the frame, body or suspension components. This must be determined by the vehicle manufacturer prior to vehicle assembly.

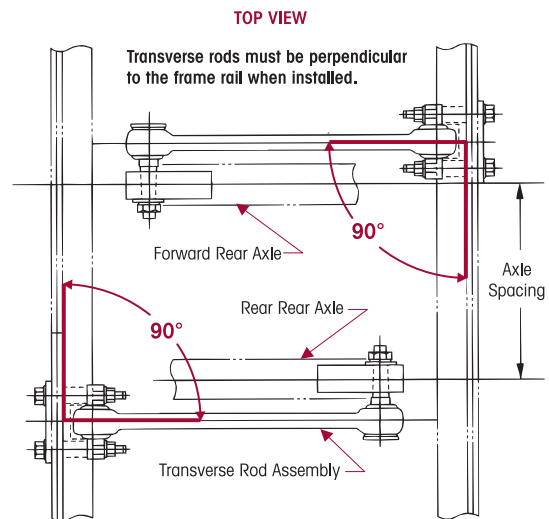
CAUTION WHEN TRANSVERSE RODS ARE USED ON WALKING BEAM SERIES SUSPENSIONS, THE EQUALIZING BEAM CENTER BUSHING MUST BE RUBBER. EQUALIZING BEAMS THAT CONTAIN A BRONZE CENTER BUSHING MUST BE CONVERTED TO A RUBBER CENTER BUSHING PRIOR TO INSTALLING TRANSVERSE RODS. FAILURE TO DO SO CAN CAUSE PREMATURE COMPONENT WEAR.

RECOMMENDED GUIDELINES FOR INSTALLING TRANSVERSE RODS

1. If possible, install transverse rods while the vehicle is set at its loaded ride height.
2. Install transverse rods perpendicular to the frame rails, see Figure below.
3. The transverse rod frame brackets are to be mounted on the web section and located as close as possible to either the bottom (preferably) or top flange of the frame.
4. Frame backup plates must be installed with transverse rod frame brackets without exception.
5. Transverse rods are to be installed as low as possible to the horizontal centerline of the axle, but high enough as not to interfere with axle components during articulation.

NOTE: A vehicle equipped with transverse rods may experience some reduction in suspension articulation, increased lateral stiffness or resistance to turning, especially with radial ply tires.

Hendrickson Truck Suspension Systems engineering does not set the guidelines with regard to transverse rod axle bracket heights or footprints, this is due to the many variables of axle combinations, frame widths, and suspension ride heights. Contact the applicable vehicle manufacturer for applicable guidelines, specifications, and instructions.



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