



MANUFACTURER'S RATED STROKE -VS- DOT LEGAL STROKE LIMIT

THE MANUFACTURER'S RATED STROKE IS A DESIGN FEATURE AND IS ONE HALF INCH GREATER THAN THE BRAKE ADJUSTMENT LIMIT OF A CHAMBER. THIS RATED STROKE DISTANCE IS IDENTIFIED BY A TRAPEZOID TAG SHOWING THE RATED STROKE OF THE CHAMBER OR EMBOSSED OR STAMPED ONTO THE CHAMBER. AT THE RATED STROKE THERE IS NO BRAKE FORCE LEFT WHICH CREATES A VERY DANGEROUS CONDITION. THE LEGAL STROKE LIMIT IS BASED ON THE BRAKE CHAMBER SIZE AND IS THE DISTANCE THE PUSHROD IS ALLOWED TO TRAVEL BEFORE AN OUT OF ADJUSTMENT CONDITION OCCURS. THE LEGAL STROKE LIMIT IS ONE HALF INCH LESS THAN THE MANUFACTURER RATED STROKE. THIS ENSURES THAT SUFFICIENT BRAKE FORCE IS AVAILABLE UNDER ALL OPERATING CONDITIONS.

The Reference Chart provides a guide for selecting the right Brake Safe® kit to match the chamber type and the DOT adjustment limit.

Brake Safe® Reference Chart

TYPE SIZE	CHAMBER MARKING	OUTSIDE DIAMETER	OEM LIMIT (Manufacturer)	(DOT) ADJUSTMENT LIMIT	BRAKE SAFE® KIT	
					TRUCK	TRAILER
16	None	6 3/8" (162 mm)	2 1/4"	1 3/4" (45 mm)	PU242	N/A
16L	'L' and Stroke Tag	6 3/8" (162 mm)	2 1/2"	2" (51 mm)	PU302	N/A
20	None	6 25/32" (172 mm)	2 1/4"	1 3/4" (45 mm)	PU242	N/A
20L	'L' and Stroke Tag	6 25/32" (172 mm)	2 1/2"	2" (51 mm)	PU302	N/A
24	None	7 7/32" (183 mm)	2 1/4"	1 3/4" (45 mm)	PU242	N/A
24L	'L' and Stroke Tag	7 7/32" (183 mm)	2 1/2"	2" (51 mm)	PU302	N/A
24LS	Square Ports, Tag & Marking	7 7/32" (183 mm)	3"	2 1/2" (64 mm)	PU250LS	N/A
30/30	None	8 3/32" (205 mm)	2 1/2"	2" (51 mm)	PU302	TL302*
30	'DD3' (Bus /Coach)	8 1/8" (206 mm)	2 3/4"	2 1/4" (57 mm)	PU302 ⁽¹⁾	N/A
30LS	Square Ports, Tag & Marking	8 3/32" (205 mm)	3"	2 1/2" (64 mm)	PU250LS	TL250LS*
30/36	None	8 3/32" (205 mm)	2 1/2"	2" (51 mm)	PU302	TL302
36	None	9" (228 mm)	2 3/4"	2 1/4" (57 mm)	PU302 ⁽¹⁾	TL302 ⁽¹⁾

*** VANTRAAX OR INTRAAX TRAILER APPLICATIONS USE TL302-CP OR TL250LS-CP**

*** FLATBED, LOWBOY, AUTO-HAULER AND "SUPER SINGLE" WHEEL APPLICATIONS USE TL302S OR TL250LSS**

(1) No kit is available for this very limited application. However the PU302 or TL302 kit can be used as a visual alert. Align clevis pin with 1st arm of goalpost and at 2nd goalpost arm (2.0"), brakes will have 1/4" safety margin before DOT limit