






UNIVERSAL BRAKE SAFE[®] KITS

BRAKE CHAMBER IDENTIFICATION & BRAKE STROKE RE-ADJUSTMENT LIMITS

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.

NOTE: Each UNIVERSAL kit contains 3 goalposts (pre-measured reference units). These are stamped 175; 200; 250. The proper goalpost to use depends on the brake chamber type. Use this chart to determine the correct goalpost to install on the mounting bracket.

TYPE SIZE	CHAMBER MARKING	OUTSIDE DIAMETER	MAXIMUM STROKE Manufacturer	(DOT) ADJUSTMENT LIMIT	BRAKE SAFE [®] GOALPOST REFERENCE UNIT	PRE-MEASURED REFERENCE UNIT (GOALPOST)	
16	None	6 3/8" (162 mm)	2 1/4"	1 3/4" (45 mm)	1.75	 1.75"	
16L	'L' and Stroke Tag	6 3/8" (162 mm)	2 1/2"	2" (51 mm)	2.00		
20	None	6 25/32" (172 mm)	2 1/4"	1 3/4" (45 mm)	1.75		
20L	'L' and Stroke Tag	6 25/32" (172 mm)	2 1/2"	2" (51 mm)	2.00		
24	None	7 7/32" (183 mm)	2 1/4"	1 3/4" (45 mm)	1.75		
24L	'L' and Stroke Tag	7 7/32" (183 mm)	2 1/2"	2" (51 mm)	2.00		
24LS	Square Ports, Tag & Marking	7 7/32" (183 mm)	3"	2 1/2" (64 mm)	2.50		 2"
30/30	None	8 3/32" (205 mm)	2 1/2"	2" (51 mm)	2.00		
30	'DD3' (Bus/Coach)	8 1/8" (206 mm)	2 3/4"	2 1/4" (57 mm)	2.00 ⁽¹⁾		
30LS	Square Ports, Tag & Marking	8 3/32" (205 mm)	3"	2 1/2" (64 mm)	2.50		 2.5"
30/36	None	8 3/32" (205 mm)	2 1/2"	2" (51 mm)	2.00		
36	None	9" (228 mm)	2 3/4"	2 1/4" (57 mm)	2.00 ⁽¹⁾		

⁽¹⁾No kit is available for this very limited application. However the 2.00 GOALPOST can be used as a visual alert. Align clevis pin with 1st arm of goal post and at 2nd goalpost arm (2.00"), brakes will have 1/4" safety margin before DOT limit.