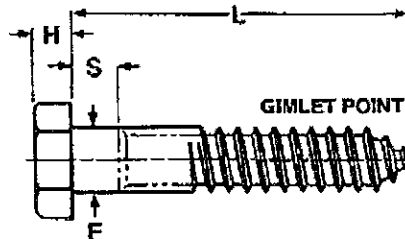
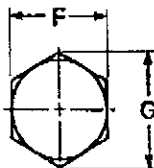
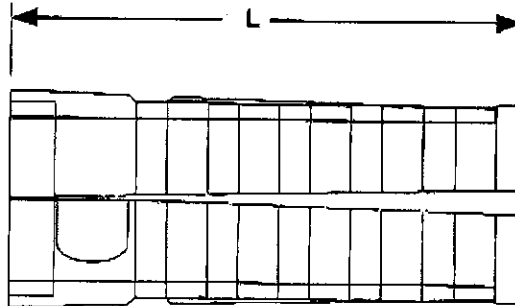


LAG SCREWS

HEX HEAD



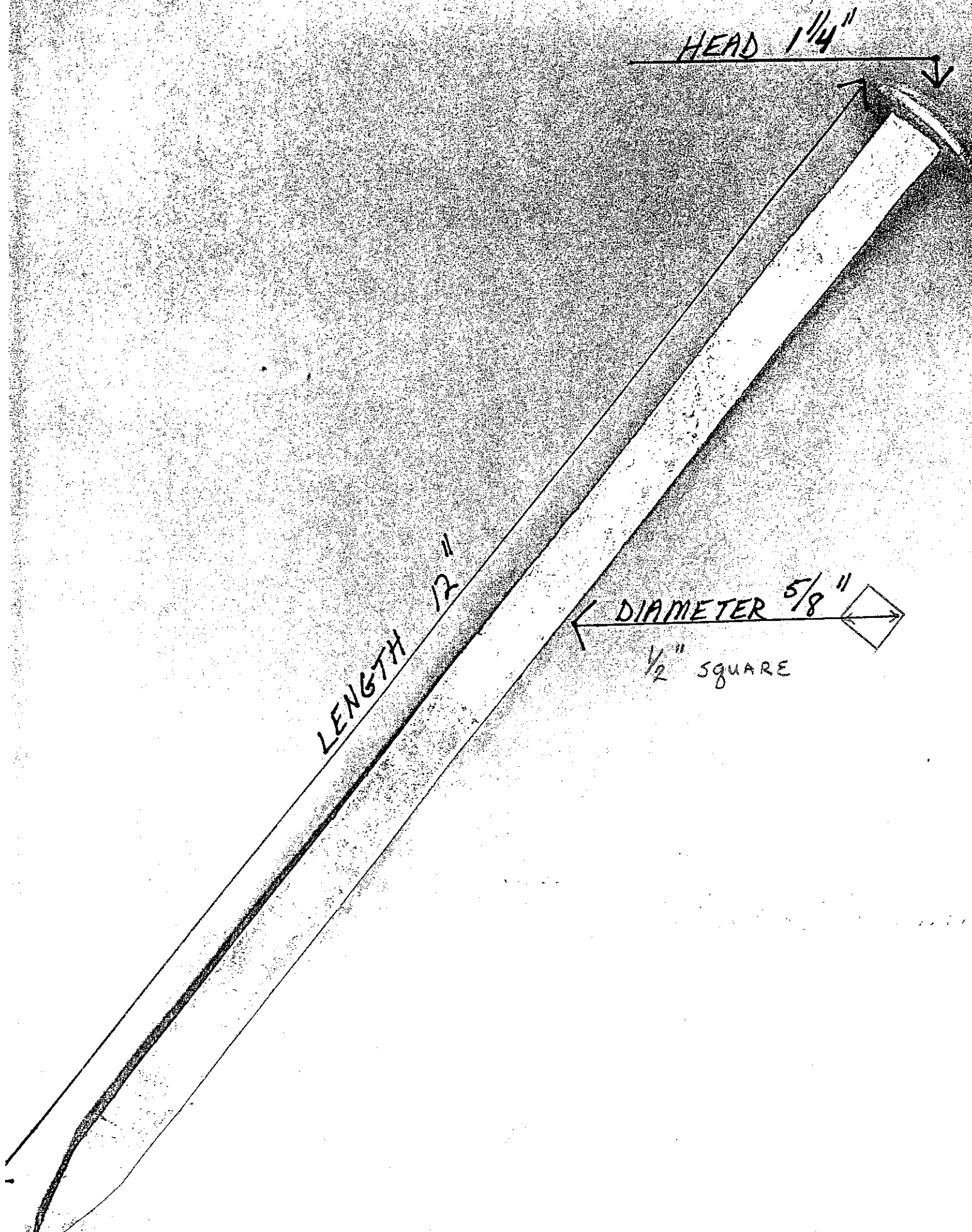
Basic Product Diameter	Threads per Inch	E		F			G		H			S	
		Body or Shoulder Dia.		Width Across Flats			Hex Lag Screws		Shoulder Length				
		Max.	Min.	Basic	Max.	Min.	Width Across Corners		Head Height			Shoulder Length	
1/4	0.2500	10	0.280	0.237	7/18	0.438	0.425	0.505	0.484	11/64	0.188	0.150	0.094
5/16	0.3125	9	0.324	0.298	1/2	0.500	0.484	0.577	0.552	7/32	0.235	0.195	0.125
3/8	0.3750	7	0.388	0.360	9/16	0.562	0.544	0.650	0.620	1/4	0.268	0.225	0.125
7/16	0.4375	7	0.452	0.421	5/8	0.625	0.603	0.722	0.687	19/64	0.316	0.272	0.156
1/2	0.5000	6	0.515	0.482	3/4	0.750	0.725	0.866	0.826	11/32	0.364	0.302	0.156
5/8	0.5250	5	0.642	0.605	15/16	0.938	0.906	1.083	1.033	27/64	0.444	0.378	0.312
3/4	0.7500	4-1/2	0.768	0.729	1-1/8	1.125	1.088	1.299	1.240	1/2	0.524	0.455	0.375



LAG SCREW EXPANSION SHIELDS				
Anchor Size	L	Recommended Size of Hole		Proof Test Loads*
	Anchor Length	Diameter	Depth	Lbs.
1/4 Short	1	1/2	1	400
1/4 Long	1-1/2	1/2	1-1/2	500
5/16 Short	1-1/4	1/2	1-1/4	800
5/16 Long	1-3/4	1/2	1-3/4	1000
3/8 Short	1-3/4	5/8	1-3/4	1300
3/8 Long	2-1/2	5/8	2-1/2	1600
1/2 Short	2	3/4	2	2100
1/2 Long	3	3/4	3	2800

* Recommended safe working load is one-fourth of the proof test load.

Description	A two-piece assembly made of two semi-cylindrical hollow sections interlocked at the top, allowing the shield to expand when in place. The bore of the shield is tapered, has an internal thread for about 2/3 of the length from the bottom, and a ribbed outer surface which resists "backing out" of the hole into which it is inserted.
Applications/Advantages	Lag Shields are medium-duty anchors which expand to fill the area of the pre-drilled hole when a lag screw is tightened into the shield. Extra-long sizes are for use in mortar or brick. Standard lengths are intended for use in concrete. They can be used in solid or hollow base materials and are more resistant to temperature fluctuations and rust than other light-duty anchors.
Material	Die-cast zinc
Pullout Values	Shields shall meet the proof test loads as noted in the above table. When tested, they shall not be removable when set in concrete of 3000 p.s.i. comprehensive strength and subjected to these specific test loads in an axial direction.
Plating	Lag shields are usually supplied without any additional finishes.



LENGTH 12"

HEAD 1 1/4"

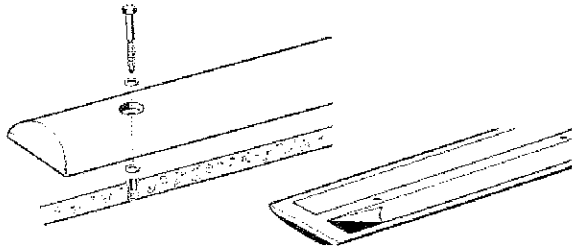
DIAMETER 5/8"

1/2" SQUARE

SOLID PLASTIC SPEED BUMP INSTALLATION INSTRUCTIONS

LAG BOLT METHOD: Recommended for Asphalt or Concrete Traffic Lanes where drilling holes are permitted.

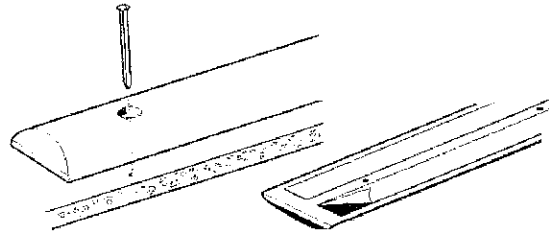
Required: Solid Plastic Speed Bump...one ½" x 5 ½" lag bolt for each hole in the speed bump...two ½" washers for each lag bolt...½" lag anchor for each lag bolt... two 4" strips of butyl adhesive tape...trimming knife...high-speed hammer drill with a ¾" masonry bit...impact wrench or heavy ratchet with ¾" socket.



1. Position speed bump in its installation position and using its pre-drilled holes as templates, mark the location of each hole on the roadway's surface.
2. Remove the speed bump. Using a high-speed hammer drill with a ¾" masonry bit, drill a hole each marked location to a depth of 3 ½" below the parking surface.
3. Place speed bump, bottom up, on a firm surface. Apply a strip of the butyl tape on each side of the holes. (See picture)
4. Smooth and adhere the tape to the bottom of the speed bump by hand or with a roller. Remove the protective paper.
5. Insert lag anchor into each hole (large anchor opening on top). Tap the anchor into the hole with a hammer so that the anchors are set flush with the surface. Place a washer over each anchor hole.
6. Make sure the substrate is thoroughly clean and dry. Reposition the speed bump in its installation position. Apply firm hand pressure. Slip a washer onto a lag bolt, insert the bolt through a pre-drilled hole in the speed bump and tighten the bolt about three quarters of the way with the ¾" socket. Repeat for each hole in the speed bump. Finish tightening each bolt until just snug. **DO NOT OVER TIGHTEN!** Excessive tightening may damage the bump and void the product warranty.

STEEL SPIKE METHOD: Recommended for use on Asphalt or Wood Block Surfaces only.

Required: Solid Plastic Speed Bump...½" x 12" plated steel spike for each hole in the speed bump...two 4" strips of butyl adhesive tape...trimming knife...high-speed hammer drill with a ⅜" masonry bit...sledge hammer for driving spikes.

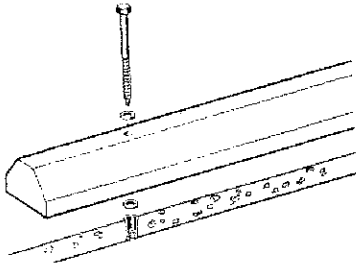


1. Position the speed bump in its installation position and, using its pre-drilled holes as templates, mark the location for each hole on the parking surface.
2. Remove the speed bump. Using a high-speed hammer drill and a ⅜" masonry bit, drill a hole through the roadway surface of each marked location to avoid fracturing the asphalt with the spike.
3. Place the speed bump, bottom up, on a firm surface. Apply a strip of the butyl tape on each side of the holes. (See picture)
4. Smooth and adhere the tape to the bottom of the speed bump by hand or with a roller. Remove the protective paper.
5. Make sure the substrate is thoroughly clean and dry. Reposition the speed bump in its installation position. Apply firm hand pressure. Drive the spike through the speed bump and into the drilled hole until the spike is snug against the counter bored surface of the speed bump's pre-drilled hole. **DO NOT DRIVE BEYOND "SNUG"**. If driven too far the spike may damage the speed bump and void the warranty.

SOLID PLASTIC PARKING BLOCK INSTALLATION INSTRUCTIONS

LAG BOLT METHOD: Recommended for Asphalt or Concrete Traffic Lanes where drilling holes are permitted.

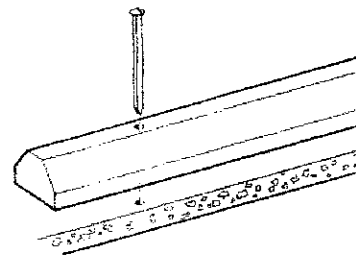
Required: Solid Plastic Parking Block...one 1/2" x 8" lag bolt for each hole in the parking block...two 1/2" washers for each lag bolt...1/2" lag anchor for each lag bolt...high-speed hammer drill with a 3/4" masonry bit...impact wrench or heavy ratchet with 3/4" socket.



1. Position parking block in its installation position and using its pre-drilled holes as templates mark the location of each hole on the parking surface.
2. Remove the parking block. Using a high-speed hammer drill with a 3/4" masonry bit, drill a hole at each marked location to a depth of 3 1/2" below the parking surface.
3. Insert lag anchor into each hole (large anchor opening on top). Tap the anchor into the hole with a hammer so that the anchors are set flush with the surface. Place a washer over each anchor hole.
6. Reposition the parking block in its installation position. Slip a washer onto a lag bolt, insert the bolt through a pre-drilled hole in the parking block and tighten the bolt about three quarters of the way with the 3/4" socket. Repeat for each hole in the parking block. Finish tightening each bolt until just snug. **DO NOT OVER TIGHTEN!** Excessive tightening may damage the block and void the product warranty.

STEEL SPIKE METHOD: Recommended for use on Asphalt or Wood Block Surfaces only.

Required: Solid Plastic Parking Block...1/2" x 12" plated steel spike for each hole in the parking block...high-speed hammer drill with a 3/8" masonry bit...sledge hammer for driving spikes.



1. Position the parking block in its installation position, and using its pre-drilled holes as templates, mark the location for each hole on the parking surface.
2. Remove the parking block. Using a high-speed hammer drill and a 3/8" masonry bit, drill a hole through the parking surface of each marked location to avoid fracturing the asphalt with the spike.
3. Reposition the parking block in its installation position. Drive the spike through the parking block and into the drilled hole until the spike is snug against the counter-bored surface of the parking block's pre-drilled hole. **DO NOT DRIVE BEYOND "SNUG"**. If driven too far spike may damage the parking block and void the product warranty.