

**GIVES FASTEST, ACCURATE**  
professional rail spiking in up  
to 1 10 of the usual time.

**EASILY CONVERTIBLE** with  
available accessories for other  
rail codes.

**SPIKES RAIL** on BOTH SIDES  
at once with speed, uniformity,  
accuracy, and economy. (Ideal  
for TRU-SCALE roadbed, individ-  
ual wood, plastic pre-cored, or  
prepunched fiber ties.

**IMPROVES** appearance and  
running quality to your road-  
bed.

**SAVES** your time for other  
railroad activities.

Exclusive patented process  
especially designed for spik-  
ing rail to ties and roadbed.



**MOD. NO.:**

**PRICE:**

PAT. NO.  
2,741,764

**Kadee®**

*twin "Rail Spiker"*

# SPIKER OWNERS:

For those who use Code 83 rail, better spiking operation can be achieved by converting your present spiker to a Code 83 spiker. A Code 83 spiker consists of the following parts in addition to the basic spiker.

1. Cutter blade -- Code 83
2. Cutter head -- Code 100
3. Cutter retaining cap -- Code 83
4. Staple guide -- Code 70

A. If you own a Code 70 spiker, you can convert it to a Code 83 spiker by changing the following parts and using Code 70 spikes:

1. Cutter blade -- Code 83
2. Cutter head -- Code 100
3. Cutter retaining cap -- Code 83

B. If you own a Code 100 spiker, you can convert it to a Code 83 spiker by changing the following parts and using Code 70 spikes:

1. Cutter blade -- Code 83
2. Staple guide -- Code 70
3. Cutter retaining cap -- Code 83

C. If you own a Code 70 spiker and a conversion kit to a Code 100, or a Code 100 spiker and a conversion kit to a Code 70, you can convert to a Code 83 spiker by changing the following parts and using Code 70 spikes:

1. Cutter blade -- Code 83
2. Cutter retaining cap -- Code 83

(This will allow you to spike Codes 70, 83, and 100 rail)

The following Code 83 spiker conversion kits are available direct from KADEE, Mail Order Trains Department:

- 700-83A For converting Code 100 spiker to Code 83  
700-83B For converting Code 70 spiker to Code 83

In addition to the above respective conversion parts, the Code 83 conversion kits include:

- 2 boxes of Code 70 spikes
- 3 rubber cushion seats
- Code 83 track gauge
- Chip magnet and shield
- Instruction sheet

## Kadee Twin RAIL SPIKER

### SPIKES PER FOOT CHART



This chart will help you determine how many spikes you will need.

PROTOTYPE: — 1 mile = 5,280 feet  
— ties laced on 21 inch centers  
= 31 ties per mile

O-SCALE: — .250" (1/4") = 1 scale foot  
— 1 scale mile = 110 feet  
with ties at 5.250" centers: (scale 21")  
= 24 ties per foot  
= 96 spikes per foot  
1 box (4,000) will spike 41 1/2 feet\*

HO-SCALE: — .138" = 1 scale foot  
— 1 scale mile = 60.68 feet  
with ties on .242" centers: (scale 21")  
= 48 ties per foot  
= 192 spikes per foot  
1 box (4,000) will spike 21 feet\*

N-GAUGE: — .075 = 1 scale foot  
— 1 scale mile = 33 feet  
with ties on .131" centers: (scale 21")  
= 98 ties per foot  
= 368 spikes per foot  
1 box (4,000) will spike 10 feet\*

\*Both rails, 4 spikes to a tie. Footage based on spiking every tie - if spiking every other tie - multiply feet by two, or every fourth tie - multiply by four

©Kadee Quality Products-1971

## NOTE!!

**SPRING TENSION SCREW AND LOCK HAVE BEEN FOUND TO BE UNNECESSARY AND ARE NOW OMITTED, THUS ELIMINATING THE CHANCE OF DAMAGING THE HAMMER SPRING.**

## INSTRUCTIONS FOR KADEE "TWIN-SPIKER"

Your Kadее "Twin-Spiker" is a precision tool, designed along the lines of heavy-duty industrial guns, but much more complicated and intricate, especially made for the purpose of driving SCALE model railroad spikes... a job previously too delicate and precise for even hand-held tools. Your Kadее "Twin-Spiker" will place a pair of spikes, one on each side of the rail base web, with every push. The tool automatically spaces the spikes near the center of the ties and drives them vertically and tightly into the tie. For the "Twin-Spiker" to perform these 'automatic' functions with every push, you must become familiar with its correct use and maintainance. The only way to achieve a familiarity with a tool is to use it. We would, therefore, recommend that you practice the use of your Kadее "Twin-Spiker" on a section of scrap track, or a little-used spur... save work on the mainline and delicate switches until the tool is a comfortable piece of equipment that offers no 'surprise performances'... with practice, you will be able to 'lay spikes' as fast as you can push and release the handle of your Kadее "Twin-Spiker", reducing the amount of time spent in track-laying to as little as one-tenth that of hand-spiked rail-laying and, best of all, eliminating the really tedious part of track laying.

The Kadее "Twin-Spiker" was designed for use in laying individual pieces of model railroad rail over wood or cardboard ties, previously laid in place by the modeler. The July 1966 issue of Model Railroad magazine contained two articles; "Simple Jigs for Speedy Tielaying" on page 38, and "Bonded Ballast for Natural Appearance" on page 42 that are superb descriptions of how to lay ties and ballast in preparation for rail laying with the Kadее "Twin-Spiker". Both of these articles were prepared several years before the "Twin-Spiker" was offered to the public, but the never-before-available speed with which such well-detailed trackwork can be laid with this new tool makes these techniques of tie and ballast work all the more valuable to you. When you are ready to lay the rail, it is best to at least position BOTH rails over the ties so that the rails can be centered by eye between the ends of the ties. Two or three of the Kadее three-point track gauges will hold both of the rails the correct distance from one another (i.e. space the correct track gauge) for HO or HO3 gauge. These Kadее gauges are also made with tie length indicators for gauging the rail in the center of the ties. There are other brands of similar track gauges for N, TT, S, and O scales. While both rails are temporarily in place, one of the rails can be quickly spiked down with the "Twin-Spiker". The second (and as yet unspiked) rail will serve as a support for the rear foot of the "Twin-Spiker". The Kadее three point track gauges will have to be moved along the rail at the head of the "Twin-Spiker". After the first rail is spiked down, the process is repeated on the second rail, being sure to use the Kadее three point track gauge or its equivalent to maintain the correct rail spacing.

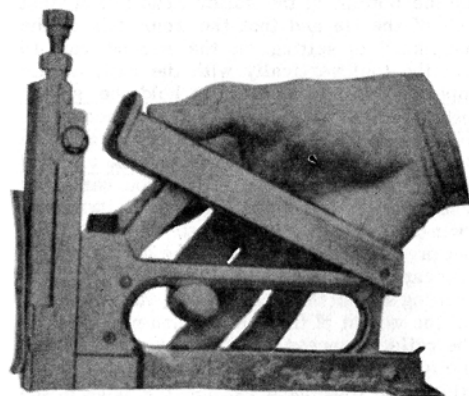
The Kadее "Twin-Spiker" can be used just as effectively on Tru-Scale's milled wood roadbed and integral tie pieces... a big advantage between laying rail on the Tru-Scale tie/roadbed and laying it on individual ties is that Tru-Scale provides simulated, raised, "tie plates" that will automatically space the rail (although the use of at least one three point track gauge tool is still recommended to keep the rail heads correctly spaced). The Tru-Scale roadbed does eliminate the need to lay individual ties and it provides a 'built-in' banked ballast base. It is much faster to lay trackwork with individual rails using the Tru-Scale roadbed/tie strips.

The Kadее "Twin-Spiker" is recommended for use with ANY brand of pre-punched plastic or fiber track or tie strip. The plastic or fiber is too hard for the Kadее spike/staples to penetrate and non-uniform spiking will result.

The following photos and captions tell you how to use the Kadее "Twin-Spiker" with either individual ties, Tru-Scale ties/roadbed, or pre-punched plastic and fiber tie strips, as well as how to disassemble the tool for lubrication, changes in rail size (the spike/staples, cutter blade, cutter head, staple guide, and cutter blade guide MUST match the size of the rail being 'spiked'... select them when you buy the tool... extra sets of these parts can be purchased to allow the use of the same "Twin-Spiker" on other sizes of rail), or repair of the tool's internal parts. Again, remember that the spike/staples MUST match the size of rail being 'spiked' down AND that the cutter blade guide, cutter blade, cutter head, staple guide, and cutter blade must ALSO match the size of rail being used.

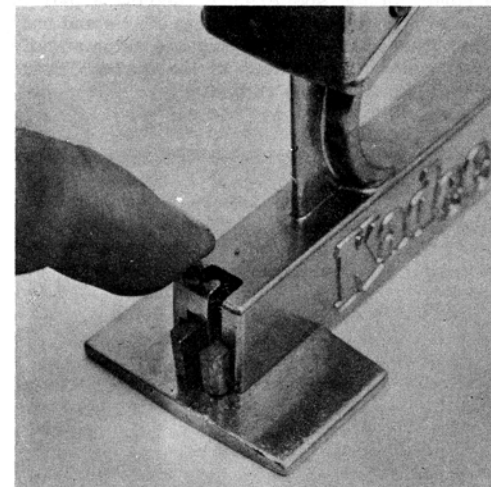
#K-1

Your Kadее "Twin-Spiker" is a precision tool designed to industrial standards. To obtain maximum effective use from it, you must become proficient in the correct use of the tool. Double check to be sure that the tool and staple/spikes match the size of the rail you are spiking down.



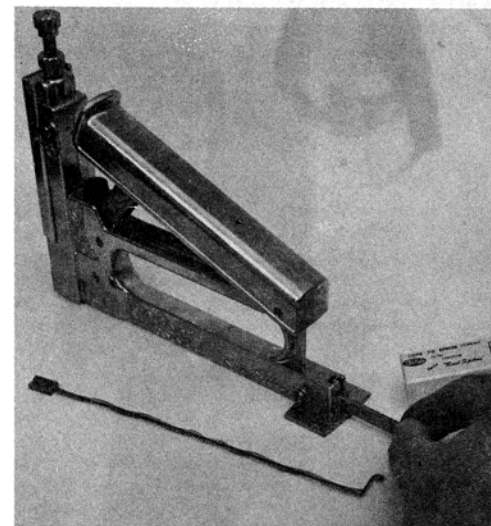
#K-2

To load the staples into the "Twin-Spiker", the wire loop of the staple pusher must be pushed down and forward and to the right to disengage it from its holding notches.



#K-3

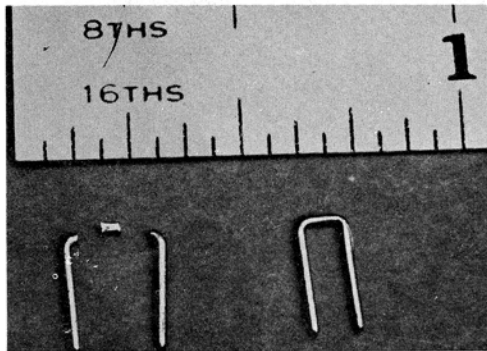
Coil spring-wrapped staple pusher can then be withdrawn from rear of "Twin-Spiker", a row of staple/spikes inserted, and the staple pusher replaced with its wire loop pushed forward and to the left to lock it into the tool. If the staple track is dirty, disassemble staple guide track (refer to K-21), clean with solvent and reassemble.





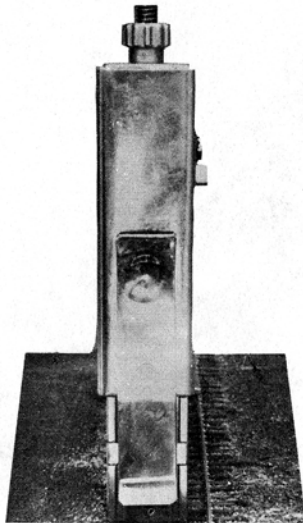
#K-4

The Kadee "Twin-Spiker" performs an extra function, not normally performed by other staple guns. The staple/spike (right) is pushed into the model railroad tie just like a 'normal' staple, however as the staple/spike passes down near the rail head, the "Twin-Spiker" cuts a neat little segment from the center of the staple/spike, leaving a pair of 'spikes' (left) to be driven on into the tie and snug against the rail...all of this happens automatically as you squeeze the handle of the Kadee "Twin-Spiker"! Its as simple as that.



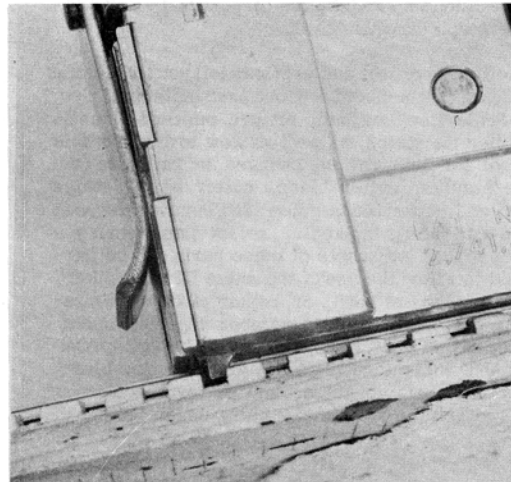
#K-5

The extended rear tabs on the spiker are just wide enough to allow the tool to rest on the rail opposite the one being spiked for 'automatic' vertical alignment of the tool so necessary for a snug fit of any spike against the rail. These rear tabs are wide enough to rest on the opposite rail for HO standard and smaller gauges rail spacing, however greater speed and accuracy will result in learning to hold the spiker erect and vertical to the roadbed.



#K-6

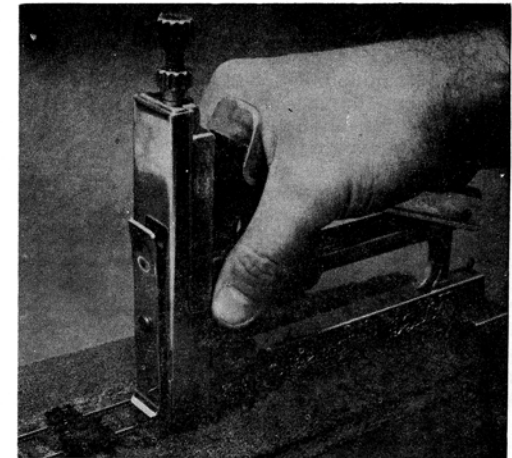
The small tabs protruding from the bottom of the cutter head are designed to space the spikes near the center of the tie when seen from the side as in this view. The "Twin-Spiker" should be pulled along the rails as work progresses, with the as yet unspiked rails trailing out behind the spiker (to the right in the photo). The small angle on the back of the extended tabs of the cutter head will allow you to pull the spiker along the rail without lifting it.. just be sure front of these tabs are up tight against the side of the tie when you squeeze the handle so that the staple/spikes are driven into the center of the tie.



#K-7

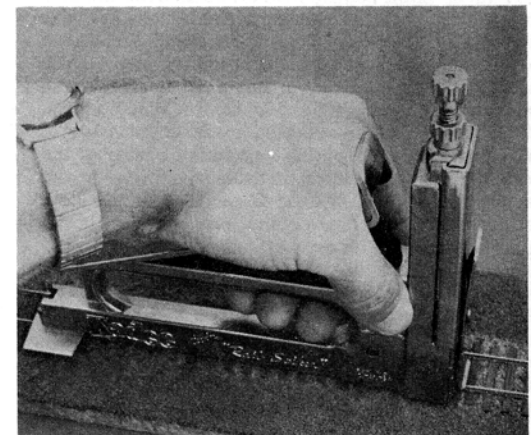
Two or more Kadee three point track gauges (or their equivalent) should be used to center BOTH unspiked rails over the previously laid ties. The gauges and second rail should be left in place while the first rail is being spiked. Check to be sure the tabs on the bottom of the cutter head are against the side of the tie and that the rear tab of the "Twin-Spiker" is setting on the second rail to 'square' the tool vertically with the rail. Again we emphasize training oneself to hold the spiker perfectly vertical to gain speed and accuracy. 'Square' the tool horizontally (with the rail at a 90° right angle to the tool) by viewing the rail and tool from directly overhead. Now you can learn the first lesson in the critical method of 'tripping' the "Twin-Spiker". The best way to 'trip' the spiker is to put pressure on the front of the handle, gripping the rear by wrapping the fingers around spiker's body casting so that the little and ring fingers carry most of the weight of the spiker when moving it along the rails. Depress the handle by pushing down with the forward palm web between the thumb and first finger of your hand against the front of the handle until the handle contacts the rubber bumper.

The remaining handle travel will trip the spiker.. the bumper assures a continued downward pressure of the spiker against the rail, preventing it from lifting away from the rails when the tripped spiker hammer recoils through the tool. The final tripping of the spiker is, then, a cross between a squeezing action and a pushing down of the whole spiker assembly, holding it to the rail to prevent the spiker from recoiling off of the rail, leaving 'spikes' loose and not uniformly set.



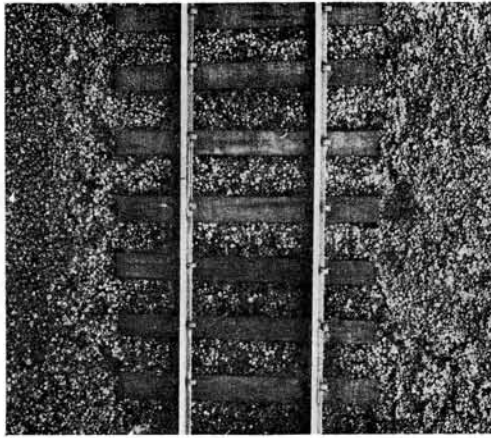
#K-8

Here, the spiker handle has been pressed down and a staple/spike is about to be 'fired' or 'hammered' into the tie. With a bit of practice a 'rhythm' can be established in depressing the spiker handle, 'firing' the staple/spike, and pulling the tool along to the next tie. Usually only about every fourth or fifth tie will need to be spiked. More frequent spiking is needed at rail joints, switches, and to correct any misalignment in the rails.



#K-9

This section of track has been spiked at every tie to match the practice followed by the full-size railroads. While on a model railroad this frequent spiking is not necessary, it does add a super-detailed touch to the track. The speed with which the Kadee "Twin-Spiker" can staple/spike the rail makes such detail relatively quick to attain, but it is best reserved for 'foreground' tracks where such detail can be seen and appreciated.



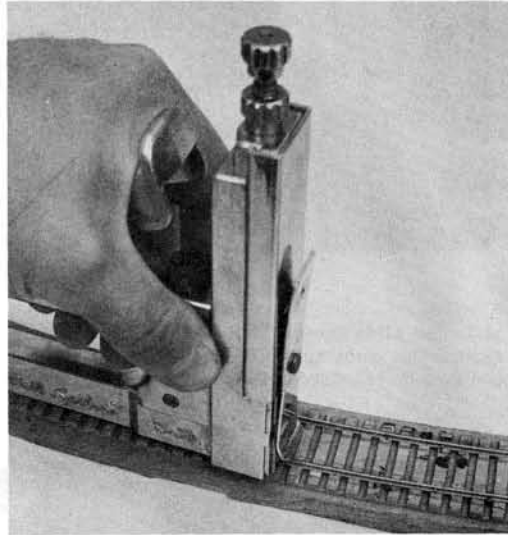
#K-10

Penny gives size comparison of code 70 rail with Kadee staple/spikes in place and the previous standard HO spike (that big black blob second tie away from the penny). The spikes driven with the "Twin-Spiker" are not only quicker to drive, but far closer to scale.



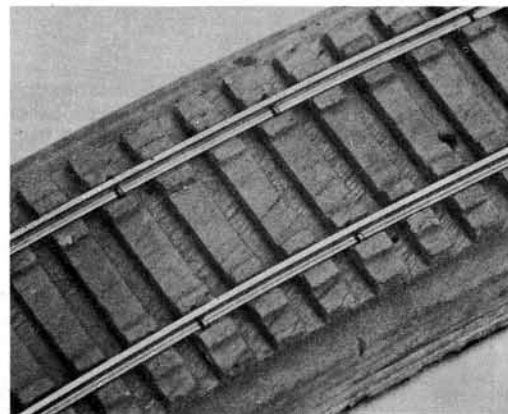
#K-11

The "Twin-Spiker" is also used to lay rail on Tru-Scale brand combination milled roadbed and ties for even faster track-laying. Spiker is operated in same manner, but only a single three-point track gauge is needed since Tru-Scale has milled-in tie plates to space rails.



#K-12

Tru-Scale milled roadbed/tie section with rail spiked in place with "Twin-Spiker." Ties need to be stained and ballast glued in place to improve realism and complete detailing. If the cutter blade interferes with the mills of the tie plates of the Tru-Scale type roadbed, squeeze the handle slightly to pre-withdraw the cutter blade.

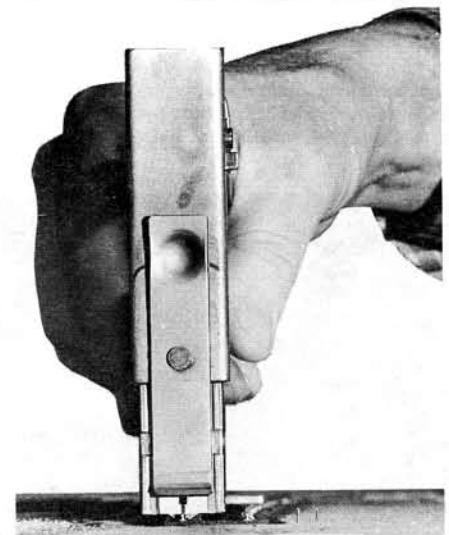


#K-13

Hand pressure on the spiker handle, added to the spring pressure from the spiker itself, must be just enough to sink staple/spike into tie, tight against the rail but not so strong as to dent the tie with the rail base or the spiker cutter head. It is possible to do this by bearing down too heavily without even tripping the spiker. Some tie and roadbed materials have a better backup quality and/or harder than others, giving much better penetration to the spike. This spiker will not spike through the glue barrier of plywood, nor will conventional spikes. Avoid this type of damage to your spiker. To determine whether more or less hand pressure is required, the action of the "Twin-Spiker" can be observed from the side while one or two ties are "spiked." Do NOT watch the spiker in action at rail level from the front as the tiny sheared section of the staple/spike often pops out the front of the spiker with dangerous velocity. It could fly into your eye.

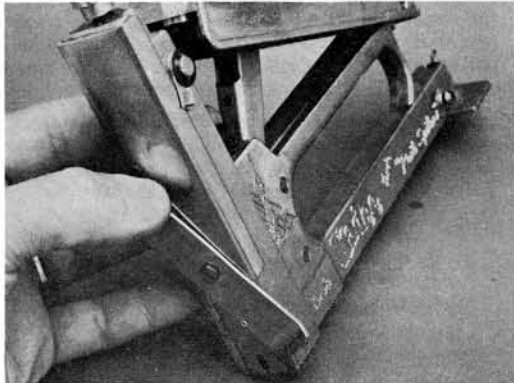
If sufficient hand pressure cannot be maintained to seat spikes properly without denting ties, check the cutter blade length with a piece of rail in place on cutter head. If the blade length does not equal the thickness of the spike above the rail base, take out a thin shim from under the rubber seat.

To prevent the spiker from recoiling off the track while spiking, you may wish to hold the front of the spiker down with a finger of your other hand. Avoid excessive pressure that dents the ties.



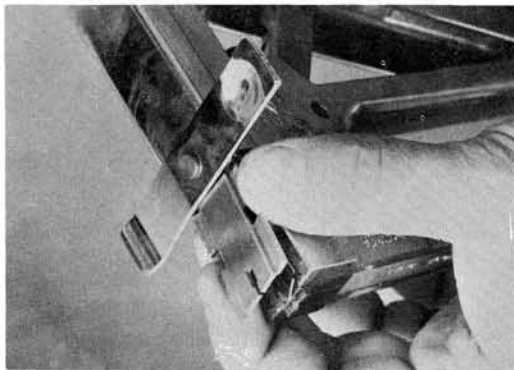
#K-14

The spiker should be disassembled after four or five BOXES of staple/spikes have been driven to lubricate its sliding and pivoting surfaces. The spiker will also have to be partially disassembled if a different size rail is to be spiked. Replace the staple pusher, cutter blade, cutter head, staple guide, and cutter blade guide with ones that will match the rail and staple size being spiked. The first step in disassembly is to remove the staple pusher just as though you were adding staples. Next, the large flat spring on the slide cover must be rotated by pivoting it to the side (as shown in this photo) and on over to lie at a right angle to the stapler. **NOTICE:** Never trigger the spiker when this spring, and the cutter blade guide it retains, are not in place. With these pieces loose, or removed, the cutter blade has nothing to guide it over the cutter extension bar on the cutter head, causing blade and/or head to shear away and dull its cutting edge.



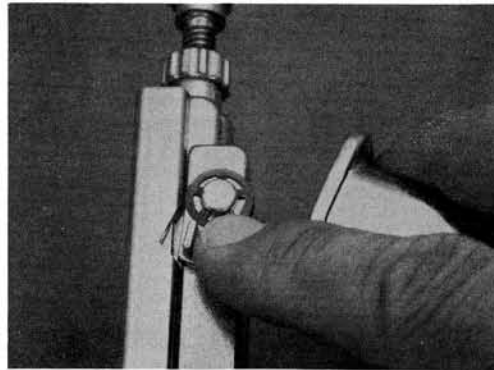
#K-15

With the large, flat, spring rotated 90°, the cutter blade guide can be lifted free by pulling it out from its aligning tabs and up from beneath the flat spring.



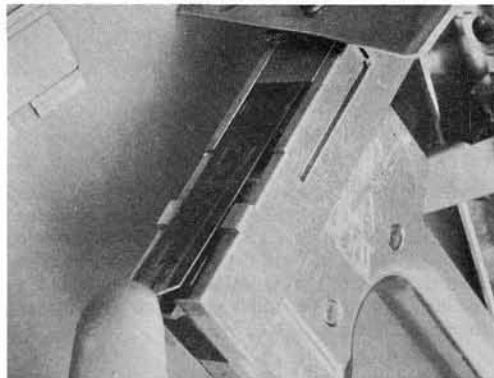
#K-16

Rotate the slide cover lock 90° from its locked position against notch in slide cover.



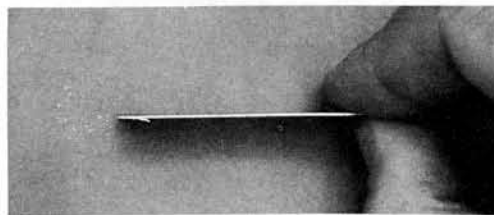
#K-17

Slide the slide cover about 1/2" up the handle to expose the steel cutter blade. The cutter can then be lifted free with the flick of a fingernail.



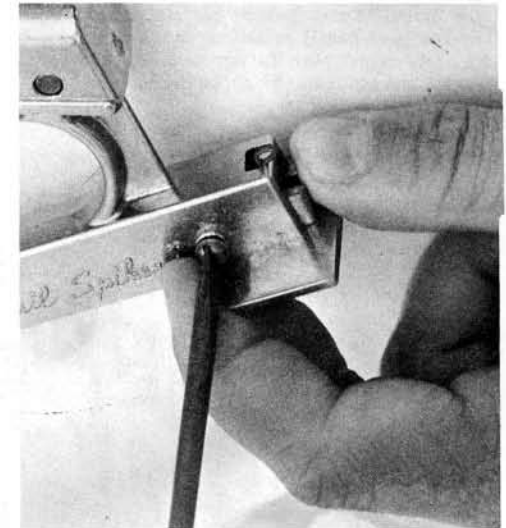
#K-18

Note that the cutter blade has a small cleat stamped into it and that this cleat faces in toward the handle to engage the bottom edge of the notch on the hammer block.



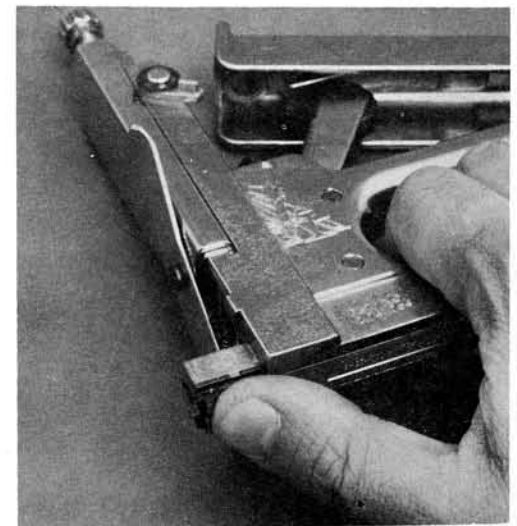
#K-19

The set screw at the rear of the body casting must be loosened to allow removal of the cutter head, staple guide, and staple cover plate assembly.



#K-20

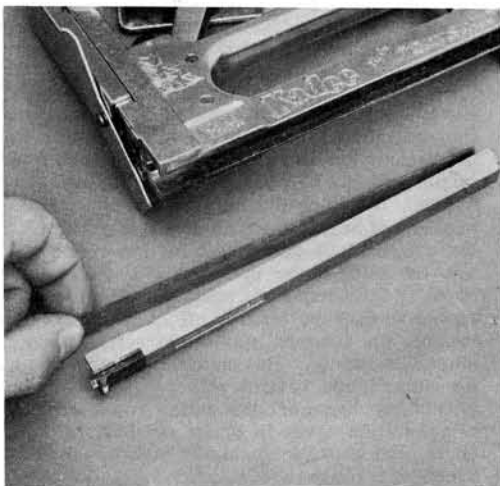
Grip the body casting as shown, and with thumb pressure on the tabs at the bottom of the cutter head, slide the entire cutter head, staple guide, and staple cover plate assembly forward and out of the body casting.





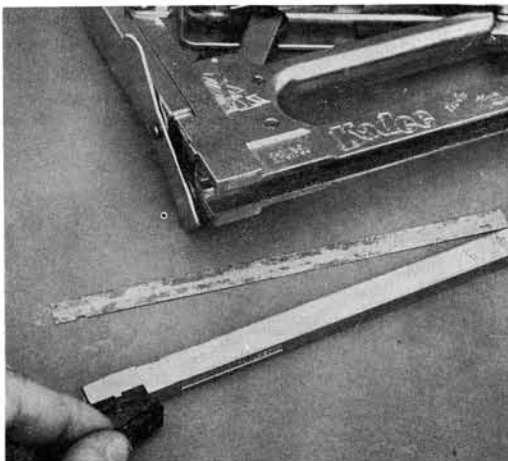
#K-21

Lift the staple cover plate from the cutter head and staple guide assembly, noting that one end of the staple cover plate is notched on each side to match the cleats on the top of the staple guide.



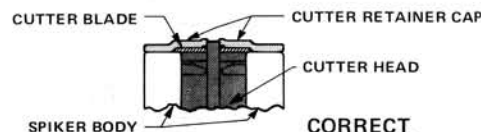
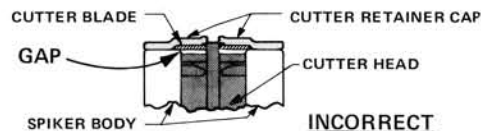
#K-22

Lift off the cutter head and note that it too has notches that correspond with cleats on the BOTTOM of the staple guide. The interior channel of the staple guide should be cleaned periodically with a pipecleaner dipped in solvent and dried with a rag before reassembly to prevent the staples from becoming jammed in the staple guide.



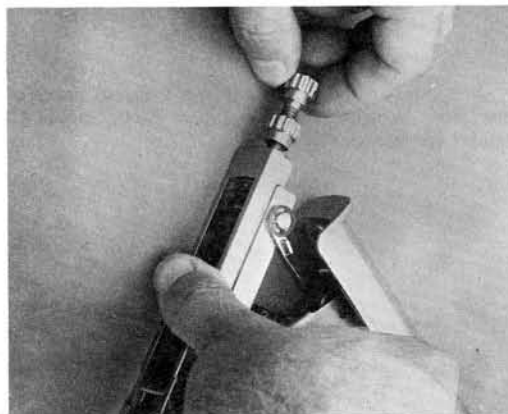
#K-23

Further disassembly of the "Twin-Spiker" is not normally necessary. The assembly sequence is merely a reversal of the steps followed for disassembly, except that the staple guide MUST be adjusted so that it holds the cutter head snug against the cutter blade and the cutter blade snug against the cutter blade guide as shown in this bottom view of these parts assembled and adjusted properly in the body casting. After ALL parts (EXCEPT the staple pusher and any staples) are assembled, push the staple guide, cutter head, and staple cover plate assembly up snug against the cutter blade and cutter blade guide by pushing against its open or 'loading' end with your thumb while the set screw is tightened with a screwdriver.



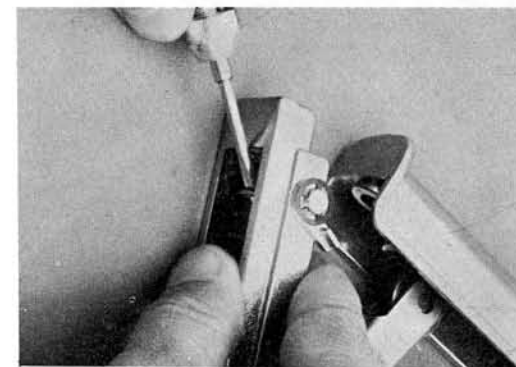
#K-24

If further disassembly is desired for lubrication or parts replacement, the next step after removal and disassembly of the staple guide, cutter head, cutter blade, cutter blade guide assembly is to remove the slide cover completely. The tension adjusting screw can then be backed off until it is free of the spring. Keep your thumb pressed tightly against the hammer block to keep it and the hammer spring and hammer spring bearing seat from flipping out of the hammer slot.



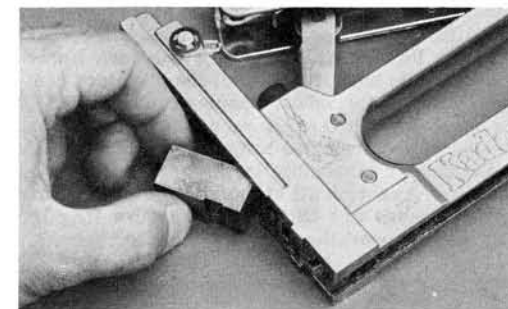
#K-25

Maintain thumb pressure against the hammer block while you carefully pry out the top of the spring with a small screwdriver. The hammer spring and its bearing shim can then be lifted from the hammer block.



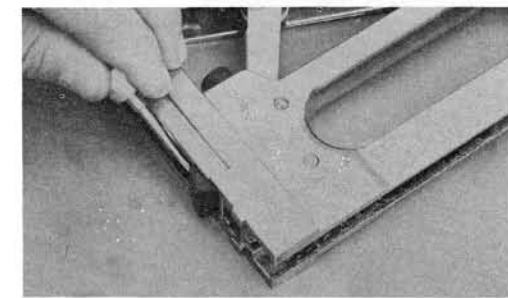
#K-26

The hammer block can now be tilted out from the hammer slot.



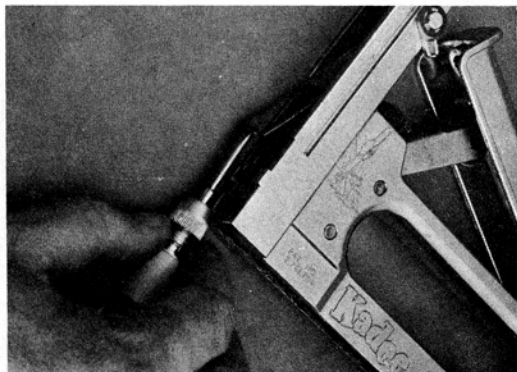
#K-27

Pry out the rubber cushion and the few steel spacers beneath it, noting that the thickest spacer is at the bottom of the opening.



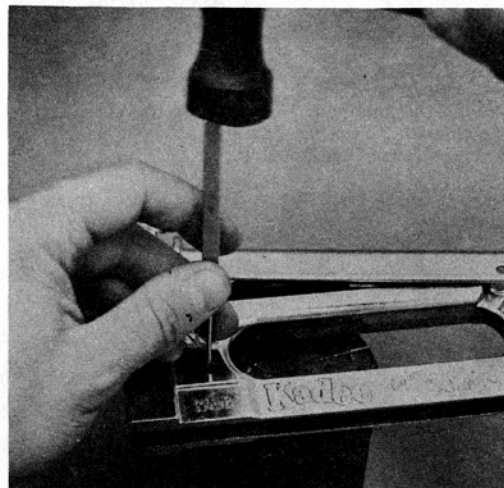
#K-28

The flat steel wear plate in the back of the hammer opening can be pried out with the tip of a screw-driver.



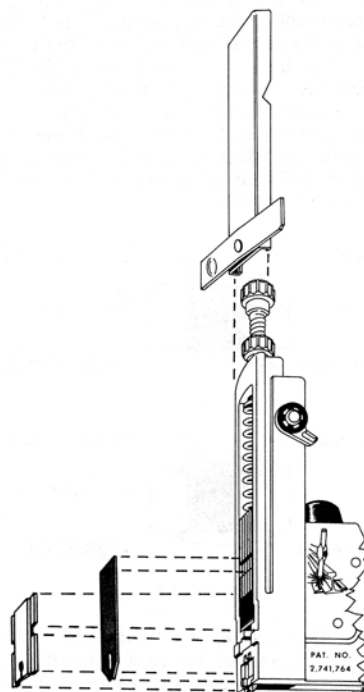
#K-29

The steel pins which pivot and retain the trip lever, trip lever spring, and handle can be driven out by tapping with a punch from the slide lock side of the body casting. The pins that retain the trip lever spring and the roller on the trip lever can be driven out in the same manner if necessary. We don't recommend removing the keeper washer over the slide lock, but if necessary, lift each leg of the keeper a little at a time until it has been worked free from its boss, then lift off the slide lock casting. Finally, the rubber bumper can be pulled off its boss, and the tension screw and lock nut can be unscrewed from the body casting to complete disassembly. Assembly is the reverse process, but make sure that all of the sliding, rolling, and pivoting areas are **GREASED** to insure long life and reliable operation.



#K-30

This is an exploded view of the slide cover, cutter blade guide, and cutter blade and their relationship to the spiker body. When reassembling make certain parts go together in this fashion.

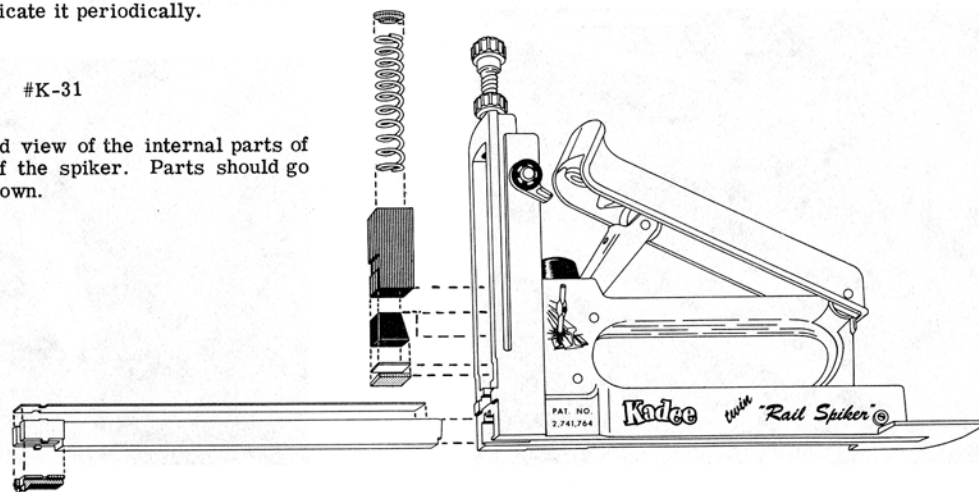


We have made this a sturdy tool, however, it is necessary to treat it with care in order to get the use it is best intended for.

Don't forget to lubricate it periodically.

#K-31

This is an exploded view of the internal parts of the front section of the spiker. Parts should go back together as shown.



**CAUTION: THIS IS NOT A TOY!** It is a precision tool used to install scale spikes into ties. Do not abuse it or use it for purposes it was not designed to handle. **WEAR EYE PROTECTION WHEN USING THIS TOOL.** The small staple chip is propelled out the front with considerable speed and may cause injury.

As with all fastening devices, do not trip against any part of the body or other surfaces where penetration of spikes could cause damage. Do not use near electrical wires that could cause shorts or electrical shock.

Never partially squeeze the handle down because this may release a staple into the spiking position, but because the hammer is not allowed to trip the staple will not be split in two and it will jam the spiker. If this should happen, remove the staple pusher and staples, swivel the spring that clamps the cutter blade guide, lift off the cutter guide, slip the slide cover up about 1/2" so the cutter blade is fully exposed, compress the handle just enough to take the tension off of the cutter blade, remove the jammed staple and cutter blade, release the handle. Reassemble the gun by laying the cutter blade in first with the projection in the slot of the hammer, the cutter cover guide next, slip the slide cover in place and lock, swivel the spring clip back, feed staples and pusher in place to complete the assembly.

**NEVER** actuate the spiker unless it is backed up against the rail and ties and **NEVER** trigger the cutter blade with the cutter blade cover off as it will result in considerable damage to the spiker.



# TWIN RAIL SPIKERS

## Replacement Parts List

PART NUMBER	PART OR ASSEMBLY NAME	FITS SPIKER * CODE NUMBER		
		70	83	100
700-1	BODY	●	●	●
700-2	HANDLE	●	●	●
700-3	HANDLE PIN	●	●	●
700-4	TRIP LEVER	●	●	●
700-4A-1	TRIP LEVER ASSEMBLY	●	●	●
700-5	TRIP LEVER PIN	●	●	●
700-6	ROLLER PIN	●	●	●
700-7	ROLLER	●	●	●
700-8	LEVER RETURN SPRING	●	●	●
700-9	SPRING PIN	●	●	●
700-10	WEAR PLATE	●	●	●
700-11	HAMMER BLOCK	●	●	●
700-12	HAMMER CUSHION (rubber)	●	●	●
700-13	HAMMER CUSHION SEATS	●	●	●
700-14	HAMMER SPRING	●	●	●
700-17	SPRING SHIM	●	●	●
700-18A-1	SLIDE COVER ASSEMBLY	●	●	●
700-24A-1	STAPLE PUSHER ASSEMBLY	●	●	●
700-28	BUMPER (rubber)	●	●	●
700-29	STAPLE GUIDE LOCK SCREW	●	●	●
700-30	STAPLE COVER PLATE	●	●	●
700-34	SLIDE COVER LOCK	●	●	●
700-37	RETAINING RING	●	●	●
700-39	CHIP MAGNET AND SHIELD	●	●	●
700-19	CUTTER BLADE	●		
700-20	CUTTER BLADE			
700-25	CUTTER BLADE		●	
700-21	CUTTER HEAD	●		
700-22	CUTTER HEAD		●	●
700-23-1	STAPLE GUIDE			●
700-23-3	STAPLE GUIDE	●		
700-31	SPIKES (4000/Box)	●		
700-32	SPIKES (4000/Box)		●	●
700-33	CUTTER RETAINING CAP	●		
700-35	CUTTER RETAINING CAP			●
700-40	CUTTER RETAINING CAP			●

When ordering, specify part no. - name - code\* - price. Send payment with orders -- Sorry, no COD orders. We pay return (surface) postage to zone 8. If order is to be sent air mail, include sufficient amount to cover additional postage. ALL ORDERS UNDER \$60.00, PLEASE ADD \$5.00 FOR HANDLING.

Replacement parts are available directly from the factory only.

041492

