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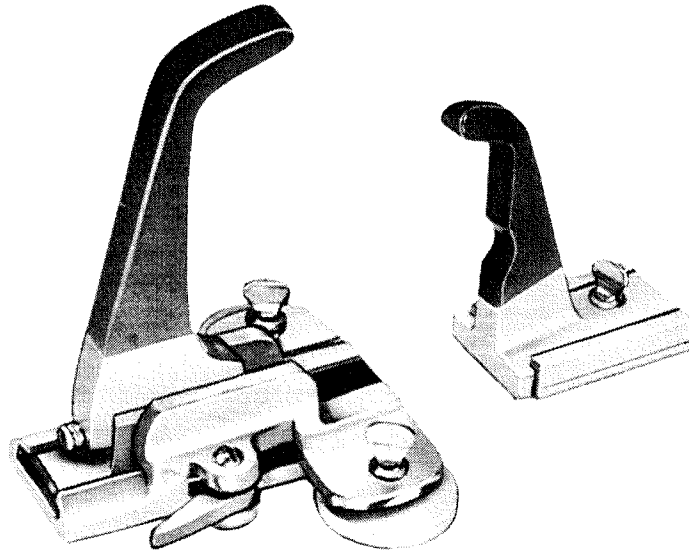
SUPERSEDES: 234-0009-02

# owner / user instructions

## COT & STRETCHER FASTENER

MODEL

**5**



### IMPORTANT

THIS FASTENER FITS FERNO COT MODELS 22, 23, 24, AND 24-H. IT ALSO FITS FERNO STRETCHER MODELS 104, 104-S4, AND 104-S6. IT IS DESIGNED ONLY TO LIMIT FORWARD/BACKWARD MOVEMENT OF THE COT OR STRETCHER UNDER NORMAL TRANSPORT CONDITIONS.

THIS FASTENER IS NOT A "CRASH STABLE" DEVICE, AND NO CLAIMS ARE MADE FOR ITS PERFORMANCE UNDER SEVERE OR UNUSUAL OPERATING CONDITIONS.

INSTALL AND USE THIS FASTENER ONLY AS DESCRIBED IN THESE INSTRUCTIONS. FAMILIARIZE EACH USER WITH PROPER OPERATING PROCEDURES.

THERE IS A MUTUAL DEPENDENCE BETWEEN THE FASTENER AND ITS ANCHORAGE. INSPECTION AND MAINTENANCE PROCEDURES FOR BOTH SHOULD BE INCLUDED ON A REGULARLY CHECKED VEHICLE EQUIPMENT LIST.

RETAIN THIS MANUAL FOR FUTURE REFERENCE. INCLUDE IT WITH THE FASTENER IN THE EVENT OF TRANSFER TO NEW OWNERS OR USERS.

SERIAL NUMBER

DATE RECEIVED

PURCHASED FROM

PRACTICE COMPLETION DATE

USED ON VEHICLE NUMBER

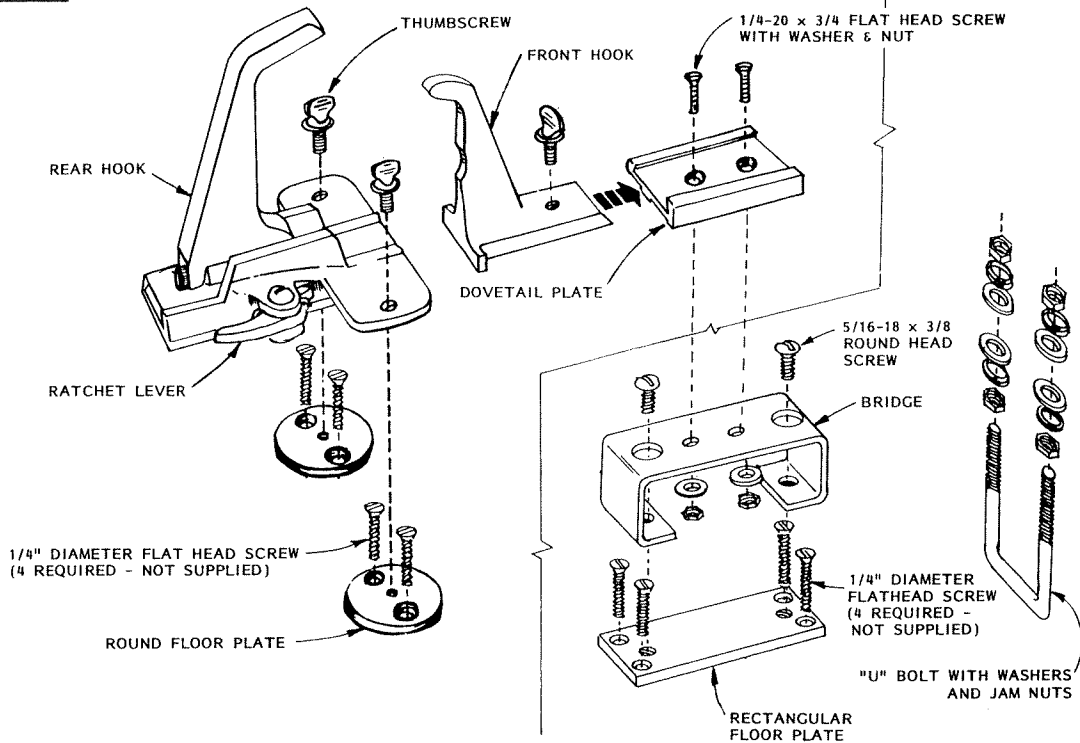


EC REP

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## COMPONENTS



## SPECIFICATIONS

The policy of Ferno-Washington, Inc., is one of continual improvement in design and manufacture. Therefore, specifications are subject to change without notice.

## MOUNTING CONSIDERATIONS

The mounting plates for this fastener attach directly to the vehicle floor. That surface must be flat and have sufficient rigidity to retain the fastener, cot, and patient UNDER ALL TRANSPORT CONDITIONS THE VEHICLE IS DESIGNED TO WITHSTAND.

The strength of any fastener installation should be confirmed by the installer's own test procedures before placing the vehicle in service.

Note that each installation fits only one model of cot or the 104 series of stretchers. ATTEMPTS TO INTERCHANGE MODELS MAY RESULT IN IMPROPER FASTENER OPERATIONS.

## MOUNTING HARDWARE

Due to variations in vehicle structure, hardware for attaching the fastener mounting plates is not supplied.

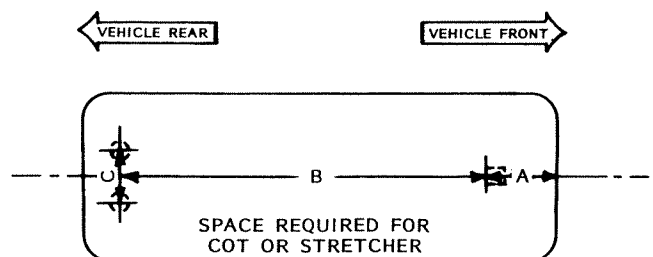
IT IS INTENDED THE INSTALLER FURNISH MACHINE SCREWS IN THE HEAD STYLE AND BODY DIAMETER SPECIFIED IN THESE INSTRUCTIONS, AND IN A LENGTH SUFFICIENT TO PROPERLY ENGAGE THE FLOOR AND ANY SUPPORTS TO WHICH THE MOUNTING PLATES ARE BEING ATTACHED.

## POSITIONING

Roll the cot or stretcher onto the vehicle floor. Position it to allow adequate clearance for access to the patient if necessary.

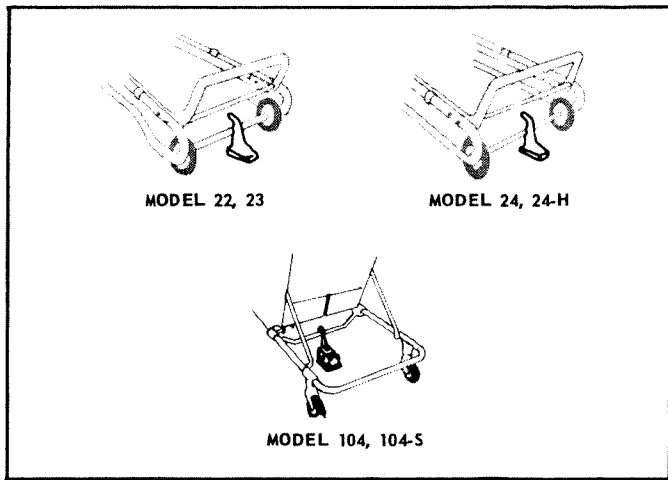
If the cot or stretcher is not available, the following dimensions can be used to complete the fastener installation.

MODEL	SIZE	A	B	C
22	20 5/8 x 75 5/8	2 1/4	64 3/4	3 3/4
23				
24, 24-H	20 1/4 x 78 1/4	1 3/8	67 3/4	
104	20 1/2 x 72 1/2	32 1/2	37	
104-S	21 5/8 x 73			



**INSTALLATION**

Slide the front fastener hook into its dovetail plate (for a 104 installation the bridge and rectangular floor plate should also be attached). Then place the hook on the vehicle floor, centered against the cot or stretcher crosstube shown. Dimension "A" compares to this placement.



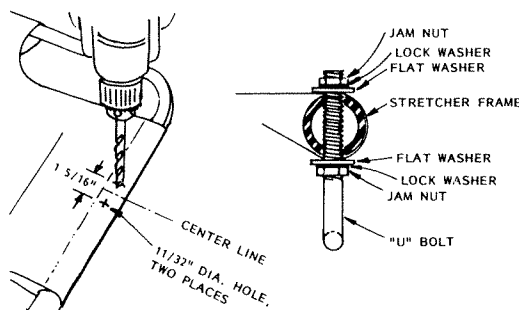
Mark the outline of the dovetail plate (or rectangular floor plate) on the floor.

Move the cot or stretcher aside. Remove the dovetail plate (or rectangular floor plate) from the front hook, place it on the location marked previously; and use it as a template to mark and drill 9/32" diameter screw holes.

Fasten the plate to the floor using a 1/4" diameter flat head machine screw through each of the countersunk holes in the plate.

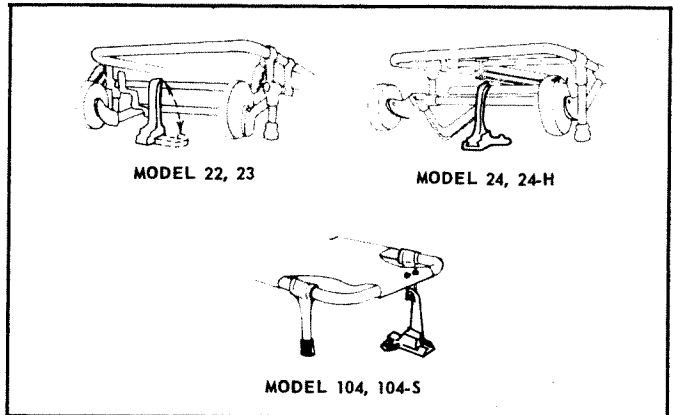
Complete this part of the installation by sliding the front hook into the dovetail plate and tightening the thumbscrew (for 104 installation, the bridge will first have to be attached to the floor plate with the two 5/16-18 x 3/8 round head screws provided).

**FOR 104 INSTALLATION:** It will be necessary to modify the stretcher slightly by the addition of a "U" bolt (supplied) to the foot end frame. This is done by drilling two 11/32" diameter holes through the cover and the frame tube, then positioning the "U" bolt as shown.



Now move the cot or stretcher back into position with the crosstube against the fastener front hook. Place the rear fastener assembly, with hook upright and round floor plates attached, on the vehicle floor behind the cot or stretcher. Slide it forward until the hook engages the crosstube or U bolt as shown. Dimensions B and C compare to this placement.

Note: When turning the rear hook upright, it should be ratcheted forward only until the slide casting is flush with the rear of the base casting. This will allow sufficient remaining forward travel for snug fit.



Mark the outline of the two round floor plates on the vehicle floor.

Again, move the cot or stretcher aside. Remove the floor plates from the rear hook assembly, place them on the locations marked previously, and use them as templates to mark and drill 9/32" diameter screw holes.

Fasten the plates to the floor using a 1/4" diameter flat head machine screw through each of the countersunk holes in each plate.

Complete the installation by fastening the rear hook assembly to the floor plates with the two thumbscrews (supplied).

**OPERATION**

Squeeze and hold the ratchet lever while sliding the rear hook back and folding it down.

Roll the cot or stretcher onto the vehicle floor, centering as much as possible on the fastener. Cot or stretcher wheels will pass to either side of the rear hook assembly. Continue rolling until the cot or stretcher crosstube contacts the front fastener hook.

Swing the rear fastener hook upright and slide it forward until it engages the rear crosstube of the cot or "U" bolt of the stretcher. Press firmly on the hook for a snug fit.

**ALWAYS CHECK TO MAKE SURE COT OR STRETCHER IS SECURE IN THE FASTENER BY GRASPING FRAME AND EXERTING FRONT/REAR/SIDE PRESSURE.**

To disengage the fastener, squeeze and hold the ratchet lever while sliding the rear hook back and folding it down.

## MAINTENANCE

IF THE FASTENER OPERATES IMPROPERLY, IS BENT OR BROKEN, OR HAS BEEN SUBJECTED TO UNUSUAL STRESS, REMOVE FROM SERVICE IMMEDIATELY.

The fastener should definitely be included with those items inspected regularly by a person responsible for the vehicle and its contents. As part of this procedure, a record of each inspection noting condition, corrections if needed, and follow-up should be retained.

Points to be checked should include moving parts for smooth positive operation, screws and bolts to insure they are all in place and properly tightened, etc.

Moving parts have been lubricated during assembly. Under some conditions, it may be necessary to periodically add lubricant. First clean the area to be lubricated, then apply an appropriate amount of light oil or waterproof grease. Cycle mechanism several times to spread lubricant. Wipe off any excess.

Exposed metal parts are polished, plated, or otherwise treated for easy care and attractive appearance. Clean as needed with water and soap or mild detergent. Follow cleaning with a coat of good wax such as is used on cars.

## CUSTOMER SERVICE

The serial number is printed on a label attached to the product. It should be recorded with other pertinent information in the space provided on the front cover of this manual.

If it becomes necessary to order a replacement part, a reference to both model number and serial number will help us supply the proper parts.

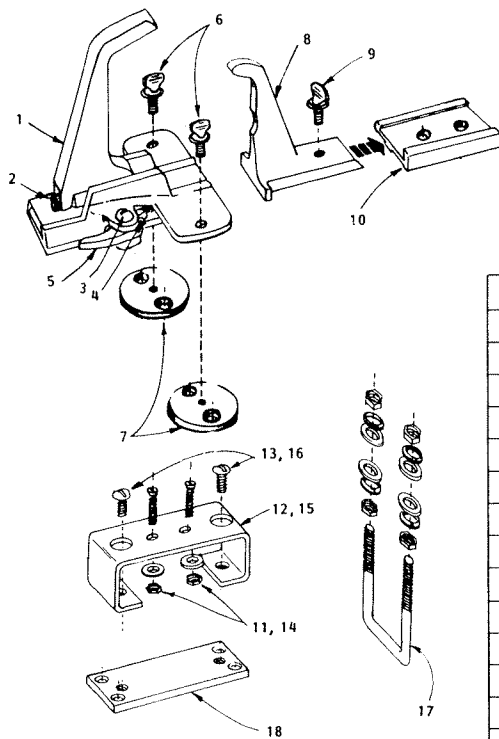
Should questions arise regarding the use or care of this product that are not covered clearly in this manual, our customer service representatives will be happy to assist you. They can be reached directly at Ferno Division of Ferno-Washington, Inc., 70 Weil Way, Wilmington, Ohio 45177-9371. Phone: 513/382-1451.

## LIMITED WARRANTY

Any product claimed defective and caused by material or workmanship within one year after date of purchase will receive prompt investigation and a fair adjustment.

Obligation is limited to replacement or repair of defective components.

## REPLACEMENT PARTS



ITEM	DESCRIPTION	QTY.	PART NUMBER
1	REAR HOOK	1	090-0270-00
2	1/4 - 20 x 2 1/4 SOCKET HEAD BOLT	1	
3	RATCHET LEVER	1	090-0280-00
4	RATCHET LEVER SPRING	1	
5	1/4 - 20 x 3/4 ROUND HEAD SCREW	1	090-0137-00
6	5/16 - 18 x 1/2 THUMBSCREW	2	
7	FLOOR PLATE, ROUND	2	090-0290-00
8	FRONT HOOK	1	090-0300-00
9	5/16 - 18 x 1/2 THUMBSCREW	1	
10	DOVETAIL PLATE	1	090-0310-00
11	1/4-20 x 3/4 FLAT HEAD SCREW, LOCK WASHER, & NUT	2	090-0142-00
12	BRIDGE, LOW, FOR 104 & 104-S4	1	
13	5/16-18 x 3/8 ROUND HEAD SCREW	2	090-0143-00
14	1/4-20 x 3/4 FLAT HEAD SCREW, LOCK WASHER & NUT	2	
15	BRIDGE, HIGH, FOR 104-S6	1	090-0144-00
16	5/16-18 x 3/8 ROUND HEAD SCREW	2	
17	"U" BOLT, WITH FLAT WASHERS, LOCK WASHERS, & JAM NUTS	1	090-0144-00
18	RECTANCULAR FLOOR PLATE	1	090-0145-00