
TECHNICAL BULLETIN**INSTALLATION INSTRUCTIONS FOR****MAST AB-1386/U
(NSN 5985-01-381-6341) (EIC: N/A)****ON****Utility Truck: Cargo/Troop Carrier, 1-1/4 Ton, 4x4, M998
Utility Truck: Cargo/Troop Carrier, 1-1/4 Ton, 4x4, w/Winch, M1038
Utility Truck: Heavy Variant, 4x4, M1097
Utility Truck: S250 Shelter Carrier, 4x4, M1037
Utility Truck: S250 Shelter Carrier, 4x4, w/Winch, M1042
Armored Full-Track Personnel Carrier M113A2
Light Tracked Command Post Carrier M577A2**

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DEPARTMENT OF THE ARMY
Washington, DC, 1 November 2000

INSTALLATION INSTRUCTIONS FOR

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HEADQUARTERS
 DEPARTMENT OF THE ARMY
 Washington, DC, 1 July 1996

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 (NSN 5985-01-381-6341) (EIC: N/A)
 ON
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 ARMORED FULL-TRACKED PERSONNEL CARRIER M113A2
 LIGHT TRACKED COMMAND POST CARRIER M577A2**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help Improve this bulletin. If you find any mistakes, or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms) or DA Form 2028-2 located in back of this manual direct to Commander, US Army Communications Electronics Command and Fort Monmouth, ATTN. AMSEL-LC-LEO-P-MM-T, Fort Monmouth, New Jersey 07703-5007. The fax number is 908-532-3421, DSN 992-3421. You may also e-mail your recommendations to AMSEL-LC-LEO-PUBS-CHG@cecom3.monmouth.army.rml. In either case a reply will be furnished direct to you.

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SECTION 1

GENERAL INFORMATION

1-1. SCOPE

This technical bulletin provides installation instructions for the mounting kits necessary to install Mast AB-1386/U on the following vehicles. The purpose of the installation is to provide a vehicle-mounted mast capable of being quickly deployed and retrieved during tactical operations.

- Utility Truck: Cargo/Troop Carrier, 1-1/4 Ton, 4x4, M998
- Utility Truck: Cargo/Troop Carrier, 1-1/4 Ton, 4x4, w/Winch, M1038
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- Light Tracked Command Post Carrier M577A2

The information contained in this technical bulletin is the official authorization to perform the installation at the unit level.

NOTE

Any modification to the equipment to accommodate installation of the mounting kits on vehicle configurations not covered in this technical bulletin should be submitted to Commander, CECOM, ATTN: AMSEL-LC-COM-C-JS, Fort Monmouth, NJ 07703-5000 for approval.

This technical bulletin does not contain information on the maintenance or replacement of the mounting kits or mast. This information is contained in TM 11-5985-426-12&P.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS

a. Reports of Maintenance and Unsatisfactory Equipment

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, as contained in Maintenance Management Update.

b. Reporting of Item and Packaging Discrepancies

Fill out and forward SF 364 [Report of Discrepancy (ROD)] as prescribed in AR 735-11-2/DLAR 4140.55/SECNAVINST 4355.18/AFR 400-54/MCO 4430.3J.

c. Transportation Discrepancy Report

Fill out and forward SF 361 [Transportation Discrepancy Report (TDR)] as prescribed in AR 55-38/NAVSUPINST 4610.33C/AFR 75-18/MCO P4610.19D/DLAR 4500.15.

1-3. CONSOLIDATED INDEX OF ARMY PUBLICATIONS

Refer to the latest issue of DA Pam 25-30 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

1-4. NOMENCLATURE CROSS-REFERENCE LIST

The following list gives common names used in this bulletin for equipment nomenclature. Use official nomenclature when completing report forms.

COMMON NAME	NOMENCLATURE
Universal HMMWV Mount	Electrical Equipment Mounting Base MT-6967/G
Tracked Vehicle Mount	Electrical Equipment Mounting Base MT-6968/G

SECTION 2**INSTALLATION PROCEDURES FOR UNIVERSAL HMMWV MOUNT****NOTE**

The following procedures may need to be modified when preparing for and installing the mounting kit on unique vehicle configurations. Equipment variations from those documented in the procedures may be encountered. Standard mechanical practices should be followed. Examples of equipment variations encountered may be items such as additional brackets mounted on the vehicle which will need to be removed and reinstalled after installation of the mounting kit.

2-1. PREPARATION FOR INSTALLATION**NOTE**

Two people are required for kit installation.

a. Site Requirements

Ensure that the site includes adequate lighting and an electrical power source since drilling will be required. Inspect the vehicle for damage that could affect installation. Have any such damage repaired before installing mounting kit.

b. Preparation of Mounting Kit

- (1) Unpack and inventory mounting kit. Use Table 2-1 to inventory kit contents. If any item is missing, fill out and forward SF 361.
- (2) Examine each item for damage. If any item is damaged, fill out and forward SF 364.
- (3) Keep mounting hardware covered and protected until needed.
- (4) When exposed to moisture, rain, or salt water, keep all parts dry to prevent corrosion.

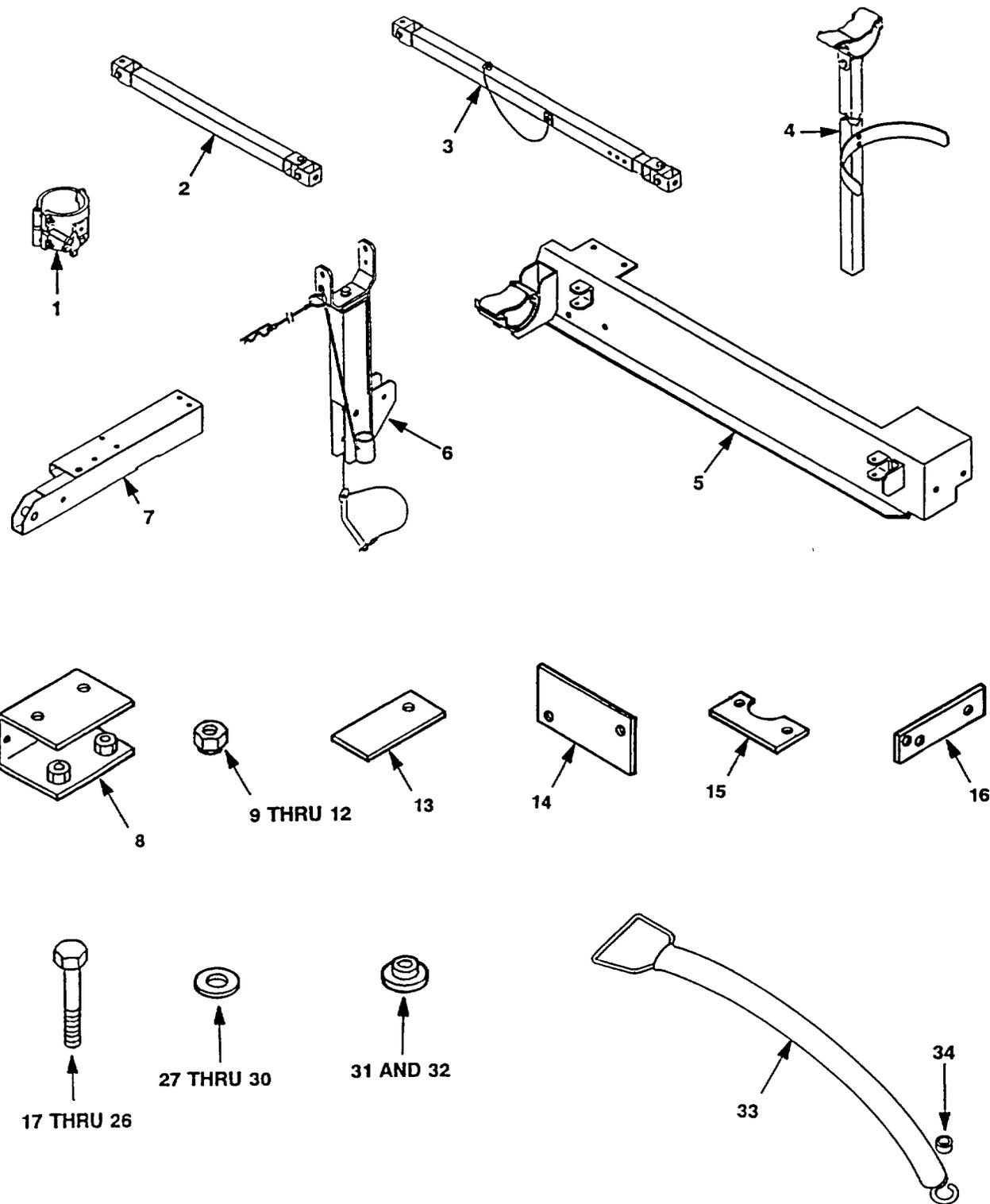


Figure 2-1. Universal HMMWV Mounting Kit Illustrated Parts

Table 2-1. Universal HMMWV Mounting Kit Parts List

FIG. 2-1 ITEM NO	NSN	ITEM DESCRIPTION AND PART NUMBER	QTY
1	5340-01-424-1516	Clamp Assembly (A3209994)	3
2		Short Strut (A3210005)	1
3		Long Strut (A3210006)	1
4		Antenna Loading Strut (A3210014)	1
5		Strut Support (A3210018)	1
6		Hinged Mast Support (A3210020)	1
7		Mast Support (A3210032)	1
8		Wiring Channel (A3210001)	1
9	5310-01-421-1853	Nut, Self-Locking, 1/4-20 (A3210098-1)	4
10	5310-01-421-1848	Nut, Self-Locking, 5/16-18 (A3210098-2)	4
11	5310-01-421-1857	Nut, Self-Locking, 3/8-16 (A3210099-1)	2
12	5310-01-421-1851	Nut, Self-Locking, 5/8-11 (A3210098-5)	1
13		Plate Spacer (A3210004)	1
14		Reinforcing Plate (A3210027)	1
15		Reinforcing Plate (A3210026)	1
16		Reinforcing Plate (A3210028)	1
17	5305-01-422-5964	Screw, Hexagon Head, 5/16-18, 3/4 in. long (A3210060-1)	3
18	5305-01-422-4349	Screw, Hexagon Head, 5/16-18, 1-3/8 in. long (A3210060-2)	3

Table 2-1. Universal HMMWV Mounting Kit Parts List - Continued

FIG. 2-1 ITEM NO	NSN	ITEM DESCRIPTION AND PART NUMBER	QTY
19	5305-01-085-4877	Screw, Hexagon Head, 5/16-18, 4 in. long (MS51109-32)	3
20	5305-00-943-2092	Screw, Hexagon Head, 5/8-11, 3 in. long (A3210061-1)	1
21	5305-01-422-1814	Screw, Hexagon Head, 1/4-20, 1-1/4 in. long (A3210094-2)	2
22	5305-01-422-1810	Screw, Hexagon Head, 1/4-20, 1-1/2 in. long (A3210094-3)	2
23	5305-00-127-5692	Screw, Hexagon Head, 1/4-20, 1 in. long (WTVB23019)	1
24	5305-00-632-2777	Screw, Hexagon Head, 3/8-16, 3/4 in. long (A3210095-1)	2
25	5305-00-576-5417	Screw, Hexagon Head, 3/8-16, 1 in. long (A3210095-3)	2
26	5305-00-720-8491	Screw, Hexagon Head, 3/8-16, 2-1/4 in. long (A3210095-5)	2
27	5310-01-391-7504	Washer, Flat, 1/4-IN. (MS15795-810)	16
28	5310-00-625-5756	Washer, Flat, 5/16-IN. (MS 15795-812)	19
29	5305-01422-5878	Washer, Flat, 5/8-IN. (A3210097-7)	2
30	5310-01-425-2436	Washer, Flat, 1/4-IN. (A3210097-8)	2
31	5310-01-421-2006	Washer, Shoulder, Short (A3209992)	2
32	5310-01-423-0887	Washer, Shoulder, Long (A3210078)	2
33		Brush Guard (A3210124)	1
34		Insert (A3210130)	1

c. Tools Required

Nomenclature		NSN	Quantity
Electric Drill		5130-00-889-8994	1
Drill Bits:	5/16-in	5133-00-227-9662	1
	1/32-in	5133-00-227-9664	1
	9/32-in.	5133-00-222-9374	1
	13/64-in	5133-00-243-9612	1
	13/32-in.	5133-00-227-9668	1
	3/16-in.	5133-00-227-9654	1
Extension, 5-in long, 1/2-In. square drive		5120-00-243-7326	1
File, Hand		5110-00-234-6551	1
Hammer		5120-00-061-8543	1
Handle, Wrench, 1/2-In. square drive		5120-00-230-6385	1
Punch, Center, Solid	5/32-1n dia	5120-00-293-3509	1
Scale, 12-In. long			1
Screwdriver, 1/4-in Flat-tip, 4-in.	5120-00-222-8852	1	
Screwdriver, No. 2 Point Cross-tip, 4-in		5120-00-234-8913	1
Scribe, Machinist's		5120-00-221-7063	1
Socket, 12 point			
1/2-in square drive	3/8-in	5120-00-237-0982	1
	7/16-in	5120-00-189-7924	1
	1/2-in	5120-00-2374-984	1
	9/16-in	512000-189-7932	1
Tape Measure, 16-ft long		5120-00-150-2920	1
Torque Wrench, 1/2-in square drive	0-50 lb ft	512000-228-9506	2 1
Wrench, Open/Box	5/16-in	5120-00-228-9503	1
	3/8-in	5120-00-228-9504	1
	7/16-in	5120-00-228-9505	2
	1/2-in.	5120-00-228-9506	2
	9/16-in	5120-00-228-9507	2
	15/16-in.	5120-00-228-9513	2

d. Safety Information

Safety goggles must be worn when drilling or deburring to prevent eye injury.

e. HMMWV Modification

ITEM	ACTION	REMARKS
NOTE		
See Figure 2-2 for location of items		
a. Knock out plugs (1, 2, 3, and 7).	Remove two smaller knock out plugs (1) and two larger knock out plugs (2) located in left rear wheel well, two plugs (7) at rear of vehicle, and two plugs (3) on top of cargo box	Tools Screwdriver, Flat-tip 1/4-in.
NOTE		
If modifying a soft-top M988 HMMWV, perform step b, otherwise skip to step c		
b. Seven bolts (5), flatwashers (4), and nuts (6) on top of cargo box in open/box wrenches.	If present, remove seven bolts (5), flatwashers (4), and nuts (6) on top of cargo box starting from left rear corner	Tools: Wrench handle with 7/16-in. socket and 7/16-in. of cargo box and working
NOTE		
If modifying a soft-top M988 HMMWV, the tiedown brackets removed in step c from the side of the vehicle must be reinstalled on top of strut support (5, Figure 2-1).		
c. Four tiedown brackets (18), screws (19), and nuts (17) Remove one	If present, remove three nuts (17), screws (19), and tiedown brackets (18) along left 5/16-in. open/box tiedown bracket at rear of cargo box	Tools Cross-tip screwdriver and rear side of cargo box wrench
d. Two bolts (11) and lockwashers (12) and wiring channel (16) hardware.	Remove two bolts (11) and lockwashers (12) securing wiring channel (16) to lower cargo box frame member Discard	Tools 7/16-in open/box wrench
e. Two wiring harness clamps (14) and attaching hardware	Turn wiring channel (16) over and remove screws (15) and nuts (13) securing two harness clamps (14) to wiring channel (16). Retain both harness clamps (14) and attaching hardware Then discard wiring channel (16)	Tools 5/16 and 3/8-in open/box wrenches

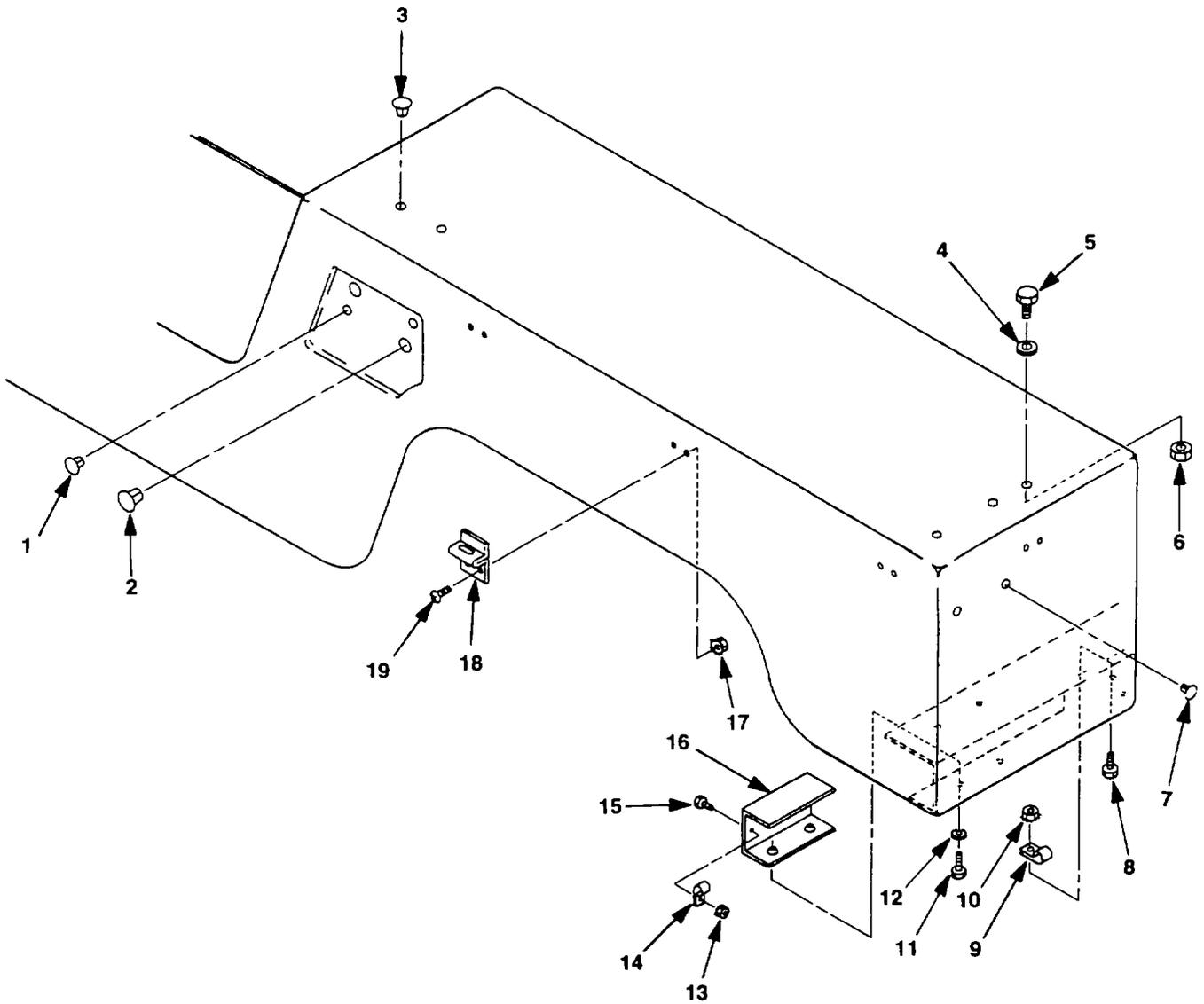


Figure 2-2. Modification of HMMWV for Mounting Universal Kit and Mast Installation
2-7

e .HIMWV Modification - Continued

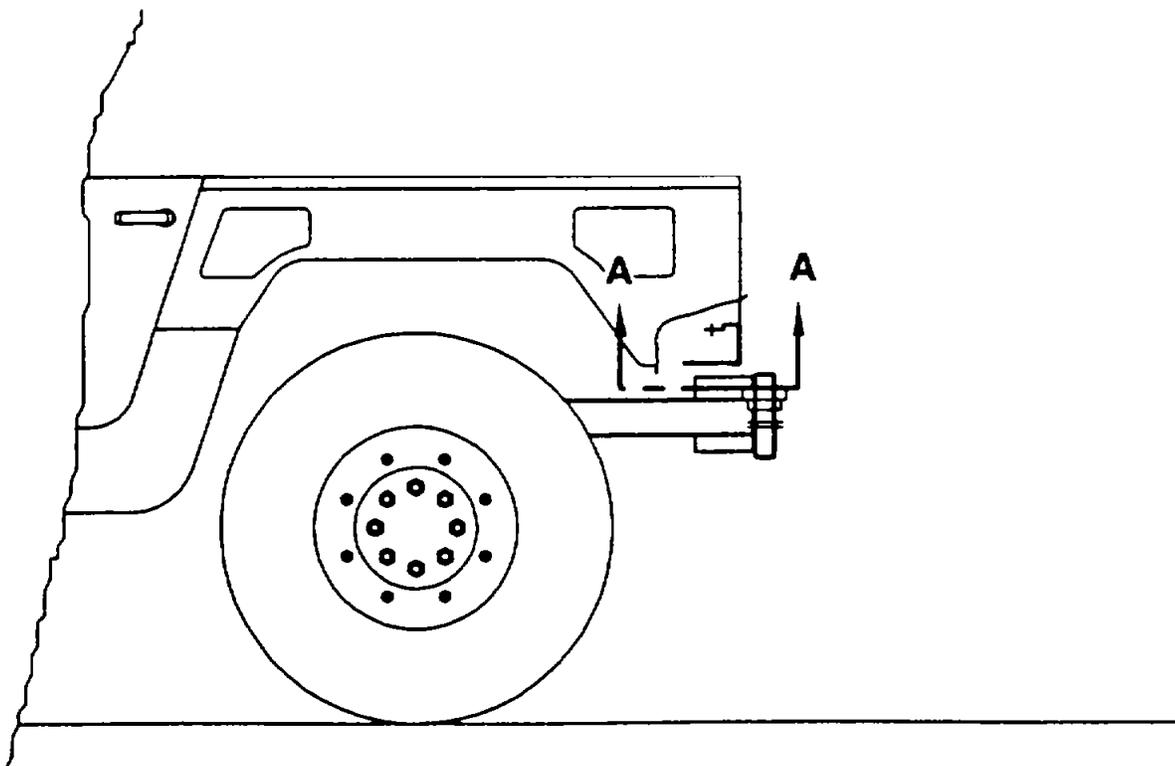
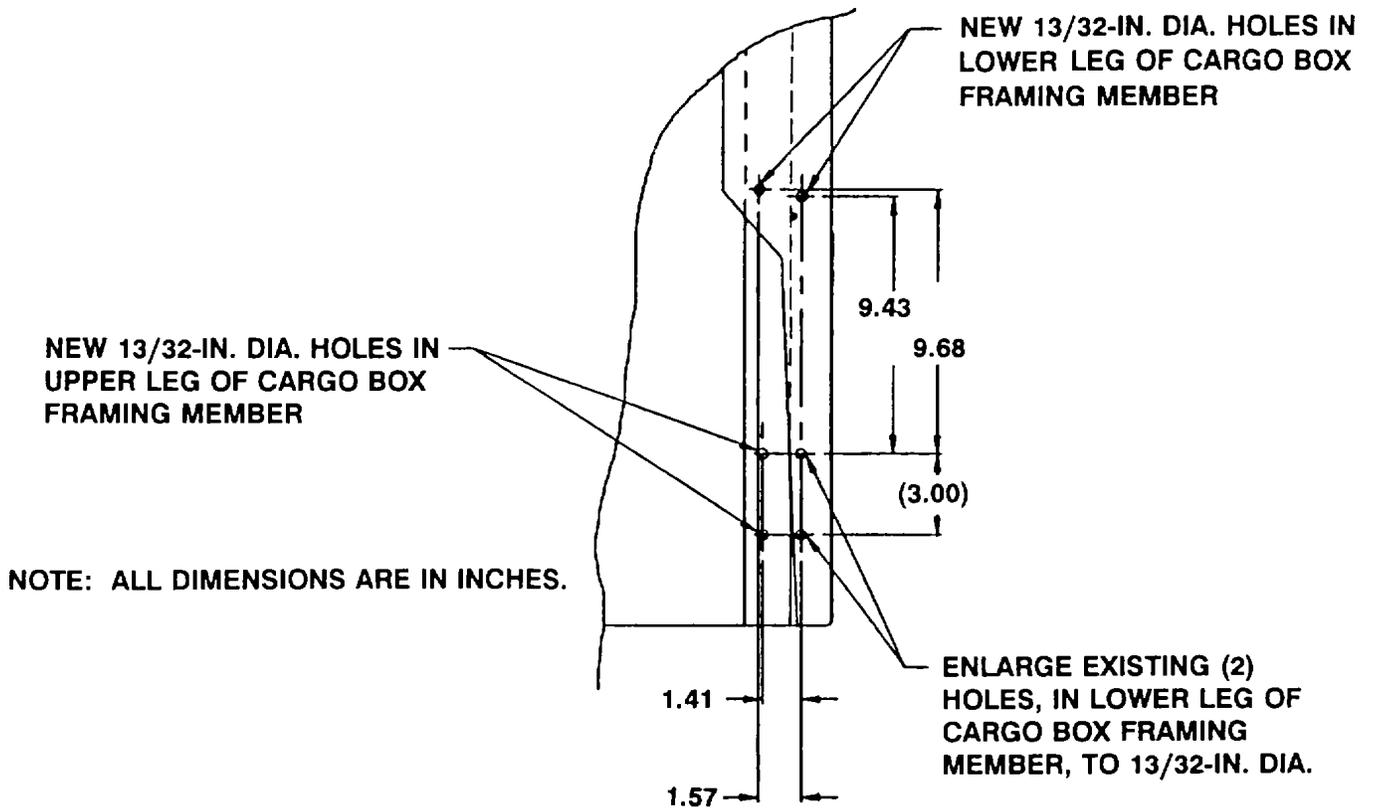
ITEM	ACTION	REMARKS
f. Wire harness clamp (9) and attaching hardware.	Remove screw (8) and nut (10) securing wire harness clamp (9) to cargo box frame member. Reattach hardware at upper leg of cargo box framing member	Tools: 5/16 and 3/8-in. open/box wrenches.
g. Existing mounting holes.	Enlarge and deburr two existing holes in cargo box frame member used previously to attach wiring harness channel (16).	Tools Electric drill with 13/32-in drill bit and file.
h. New mounting holes		

NOTE

Use mast support (7, Figure 2-1) and wiring channel (8) from mounting kit, as templates to establish the locations for new mounting holes Refer to Figure 2-3 for hole pattern information

Temporarily install mast support (7) and wiring channel (8) with two hex head screws (19) and flatwashers (28) installed in two mounting holes enlarged in step g, above. Then using remaining mounting holes in mast support (7) and wiring channel (8), mark locations for two new holes in upper leg of cargo box framing member and two new holes in lower leg of cargo box framing member. Remove hex head screws (19), flatwashers (28), mast support (7), and wiring channel (8) and drill four 11/64 to 13/64-in pilot holes at marked locations Enlarge and deburr each hole to 13/32-in

Tools' Wrench handle with 1/2-in socket and 5-in. extension; hammer and punch; and electric drill with 11/64 to 13/64-in. and 13/32-in drill bits; and file.



Hole Pattern for Universal HMMWV Mounting Kit
2-9

Figure 2-3.

2-2. INSTALLATION OF UNIVERSAL HMMWV MOUNTING KIT AND MAST

ITEM	ACTION	REMARKS
NOTE		
See Figure 24 for location of items.		
a. Two harness clamps (35).	Capture rear lights wiring harness in two previously removed harness clamps (35).	Tools: 5/16 and 3/8-in. open/box
b. Wiring channel (8), two harness clamps (35) and attaching hardware.	Install two previously removed harness clamps (35) to replacement wiring channel (8) and secure with screws (37) and nuts (36). Torque nuts to 4 lb-ft (5.4 Nm)	Tools 5/16 and 3/8-in. open/box wrenches and torque wrench with 3/8-in. socket.
c. Mast support (7), replacement wiring channel (8), two hex head screws (19), two flatwashers (28)	Position mast support (7) under cargo box frame and wiring channel (8) inside cargo box frame channel. Line up enlarged 13/32-in holes on cargo box with welded self-locking nuts on lower leg of wiring channel (8) and 13/32-in holes in mast support (7). Then loosely install two hex head screws (19) with flatwashers (28).	Tools: Wrench handle with 1/2-in. socket and 5-in. extension
d. Spacer (13), hex head screw (18), and flatwasher (28).	Position spacer (13) between wiring channel (8) and mast support (7), lining up single hole in spacer (13), front hole in lower leg of wiring channel (8), and welded self-locking nut in mast support (7). Then loosely install one hex head screw (18) with flatwasher (28).	Tools. Wrench handle with 1/2-in. socket.
e. Wiring channel (8), two hex head screws (17), two flatwashers (28) and into welded self-locking nuts in	Loosely install two hex head screws (17) with flatwashers (28) thru 13/32-in holes in upper leg of cargo box frame channel wiring channel (8).	Tools. Wrench handle with 1/2-in. socket
f. Mast support (7), hex head screw (19), two flatwashers (28), self-locking nut (10)	Enlarge hole to 13/32-in. in upper leg of cargo box frame channel. Loosely install one hex head screw (19), two flatwashers (28), and self-locking nut (10) thru hole on extreme inside end of mast support (7).	Tools Wrench handle with 1/2-in. socket and 5-in. extension, 1/2-m. open/box wrenches.

2-2. INSTALLATION OF UNIVERSAL HMMWV MOUNTING KIT AND MAST - Continued

ITEM	ACTION	REMARKS
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NOTE

The hex head screws (18 and 21) shall be installed with the screw heads on the outside for those vehicles without shelters. On vehicles with shelters, the screws must be installed from inside the wheel well. Use extra flatwashers (27 and 28) as required to keep screw thread extension beyond the nut (minimum two threads) and to ensure that components do not touch adjacent shelter surfaces.

If installing kit on a soft-top M988 HMMWV, remove four bolts holding seat belt bracket, so that strut support (5) can slide under the seat belt bracket. Then insert washers or spacer under the seat belt bracket in order to clear the strut support.

i. Strut support (5), two hex head screws (18), four flatwashers (28), two self-locking nuts (10), and reinforcing plate (16).	Position strut support (5) on cargo box. Then line up holes and install two hex head screws (18) with flatwashers (28) outside and two self-locking nuts (10) with flatwashers (28) and reinforcing plate (16) inside. Do not tighten hardware at this time. See Note.	Tools: 1/2-in. open/box wrenches.
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NOTE

If necessary, enlarge holes before installing hardware in step j.

j. Two hex head screws (22), four flatwashers (27), two self-locking nuts (9), and reinforcing plate (14).	Install two hex head screws (22), flatwashers (27) outside and two self-locking nuts (9) with flatwashers (27) and reinforcing plate (14) inside. Do not tighten hardware at this time.	Tools: Wrench handle with 7/16-in. socket and 7/16-in. open/box wrenches.
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**2-2. INSTALLATION OF UNIVERSAL HMMWV MOUNTING KIT AND MAST -
Continued**

ITEM	ACTION	REMARKS
k. Two hex head screws (21), four flatwashers (27), two self-locking nuts (9), and reinforcing plate (15)	Install two hex head screws (21) with flatwashers (27) outside and two self-locking nuts (9) with flatwashers (27) and reinforcing plate (15) inside, with notch in reinforcing plate toward inside of vehicle. Do not tighten hardware at this time	Tools: Wrench handle with 7/16-in socket and 7/16-in. open/box wrenches
l. Strut support (5) attaching hardware	Tighten all hardware (six places) securing strut support (5) Torque 5/16-in hardware to 9 lb-ft (12.2 Nm) and 1/4-in hardware to 5 lb-ft (6.8 Nm) and 1/2-in sockets.	Tools 7/16 and 1/2-in open/box wrenches and torque wrench with 7/16

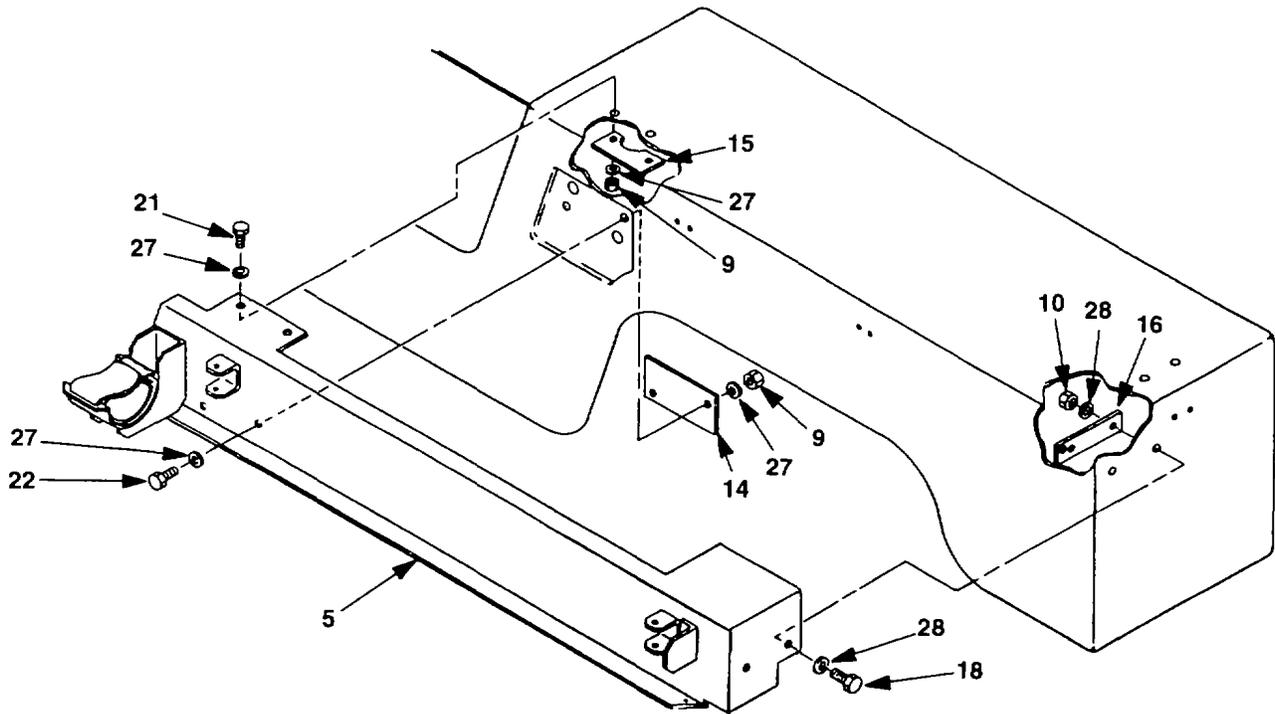


Figure 2-4. Universal HMMWV Mounting Kit and Mast Installation (Sheet 2 of 4)

**22. INSTALLATION OF UNIVERSAL HMMWV MOUNTING KIT AND MAST -
Continued**

ITEM	ACTION	REMARKS
m. Hinged mast support (6), mast support (7), hex head screw (20), two flatwashers (29), and self-locking nut (12)	Install hinged mast support (6) to mast support (7) with hex head screw (20), two flatwashers (29), and self-locking nut (12). Ensure hinged mast support (6) swings up and down.	Tools: 15/16-in. open/box wrenches.
n. Short strut (2), hex head screw (26), and self-locking nut (11)	Install short strut (2) onto rear strut bracket of strut support as shown with hex head screw (26) and self-locking nut (11) with hex head screw on top. Torque hardware only enough to take up clearance between strut bracket and block while still allowing strut to move freely	Tools: 9/16-in. open/box wrenches.
o. Long strut (3), hex head screw (26), and self-locking nut (11)	Install long strut (3) onto front strut bracket of strut support as shown with hex head screw (26) and self-locking nut (11) Torque hardware only enough to take up clearance between strut bracket and block while still allowing strut to move freely.	Tools: 9/16 open/box wrenches.
p. Clamp assemblies (1), two hex head screws (24), and two short shoulder washers (31) (31).	Install clamp assemblies (1), one each to long strut (3) and short strut (2). Attach one clamp (1) to each strut with hex head screw (24) and short shoulder washer	Tools: 9/16-in. open/box wrench.
q. Mast	Place mast in transport cradle [part of strut support (5)] with bubble level on mast gear box facing up.	Tools: None

WARNING

Clamp assemblies (1) present a hazardous pinch point Use care to avoid personal injury when installing and tightening the clamps

r. Clamp assembly (1)	Open remaining clamp assembly and install on base section of mast assembly. Do not tighten tensioning knob at this time.	Tools: None.
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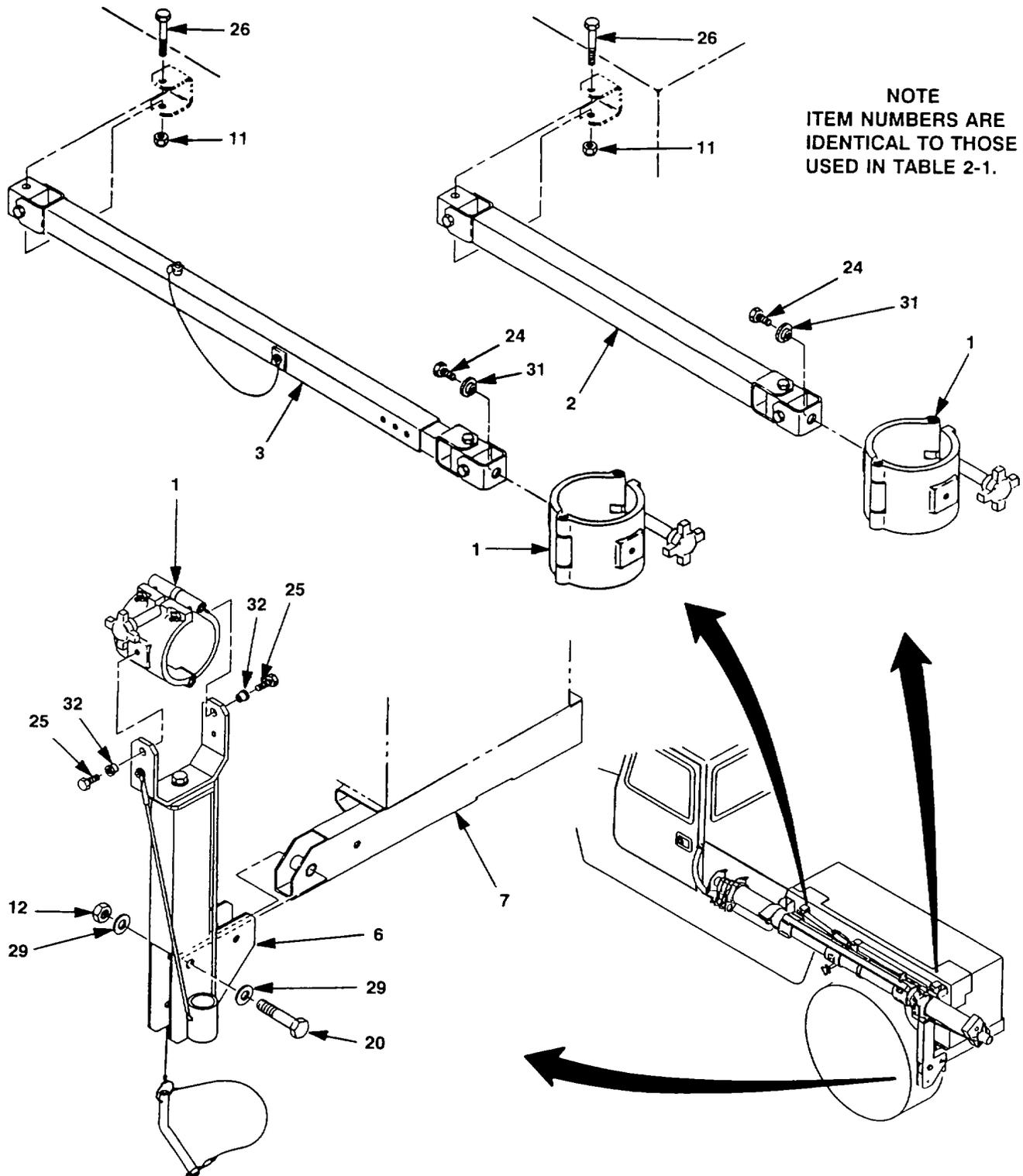


Figure 2-4. Universal; HMMWV Mounting Kit and Mast Installation (Sheet 3 of \$)
2-15

**2-2. INSTALLATION OF UNIVERSAL HMMWV MOUNTING KIT AND MAST -
Continued**

ITEM	ACTION	REMARKS
s. Clamp assembly (1), two hex head screws (25), and two long shoulder washers (32)	While holding mast assembly, slide clamp assembly (1) into yoke bracket of hinged mast support (6) Line up holes in yoke bracket with threaded holes in clamp assembly (1) and install hex head screws (25) and long shoulder washers (32). Torque screws to 15 lb ft (20.3 Nm)	Tools 9/16-in. open/box wrenches and torque wrench with 9/16-in. socket
t. Clamp assembly (1)	Place socket attached to end of hinged mast support (6) over socket on bottom of mast gear box as shown on Figure 2-5. Then slide mast rearward until cable retaining socket is taut	Tools None.
u. Clamp assembly (1)	Standing at rear of vehicle, rotate mast counterclockwise until one edge of lower guy ring assembly is parallel with side of vehicle. Then tighten clamp assembly (1) tensioning knob.	Tools None
<p style="text-align: center;">NOTE</p> <p>It will be necessary for one operator to lift the mast from the cradle and move it slightly away from the vehicle to enable installation of the clamps by the second operator.</p> <p>The clamp assemblies attached to the short and long struts must not be fully tensioned (tightened) until instructed to do so. Keeping them loosely installed will allow them to slide up and down the mast during the following installation procedure</p> <p>Make final adjustment of clamp assembly before tightening, refer to Chapter 3 of TM 11-5985426-12&P.</p>		
v. Short strut (2).	Open clamp assembly (1) attached to short strut (2) then place clamp around mast. Orient clamp with its tensioning knob below the mast and pointing away from vehicle.	Tools: None
w. Long strut (3).	Open clamp assembly (1) attached to long strut (3) and then place clamp around mast Orient clamp with its tensioning knob above mast and pointing away from vehicle.	Tools: None.

2-2. INSTALLATION OF UNIVERSAL HMMWV MOUNTING KIT AND MAST -
Continued

ITEM	ACTION	REMARKS
x. Mast, long strut (3), and short strut (2).	Slide and rotate clamp assemblies (1) attached to short strut (2) and long strut (3) as shown on Figure 2-5 Insert locking pin through hinged mast support (6) and mast support (7) to secure hinged mast support in its "up" position. Install hairpin to retain locking pin Then slide clamp assembly (1) attached to long strut (3) until hole in long strut telescoping sections line up and install quick-release pin. Tighten clamp assemblies (1) attached to long and short struts (2 and 3) by turning tensioning knobs	Tools None
y. Antenna loading strut (4)	Install antenna loading strut (4, Figure 2-1) on mast so that support leg end rests on mast clamp (Figure 2-5) Then secure strut to mast with velcro straps.	Tools. None.
z. Brush guard (33), hex head screw (23), two flatwashers (30), and insert (34).	Remove lower 4olt securing upper hinge of vehicle rear door. Then secure brush guard (33) by installing hex head screw (23) with a flatwasher (30), insert (34), and second flatwasher (30) through bottom half of upper hinge. Secure loose end of brush guard (33) by hooking its D-ring over lower guy ring (black) on mast base section as shown in Figure 2-5 Ensure brush guard is not slack	Tools: 7/16-in. open/box wrenches.

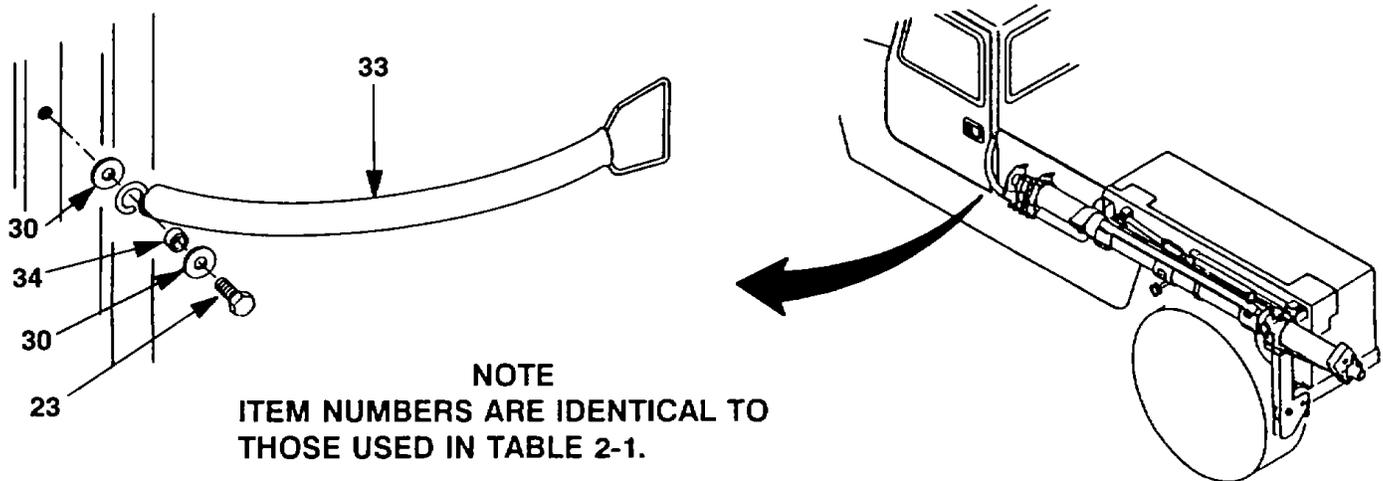


Figure 2-4. Universal HMMWV Mounting Kit and Mast Installation (Sheet 4 of 4)

2-3. POST-INSTALLATION AND CHECKOUT

After equipment is installed, perform the following steps

ITEM	ACTION	REMARKS
a. Equipment.	Check for secure mounting. Check for loose parts and mounting hardware. Ensure hairpin is installed in hole in gearbox drive.	
b. Clamp assemblies.	Check that all clamps have been installed properly. See Figure 2-5 for proper position of the clamp assembly knobs	
c. Mounting kit line replaceable units.	See TM 11-5985426-12&P for Repair Parts and Special Tools List (RPSTL) information.	

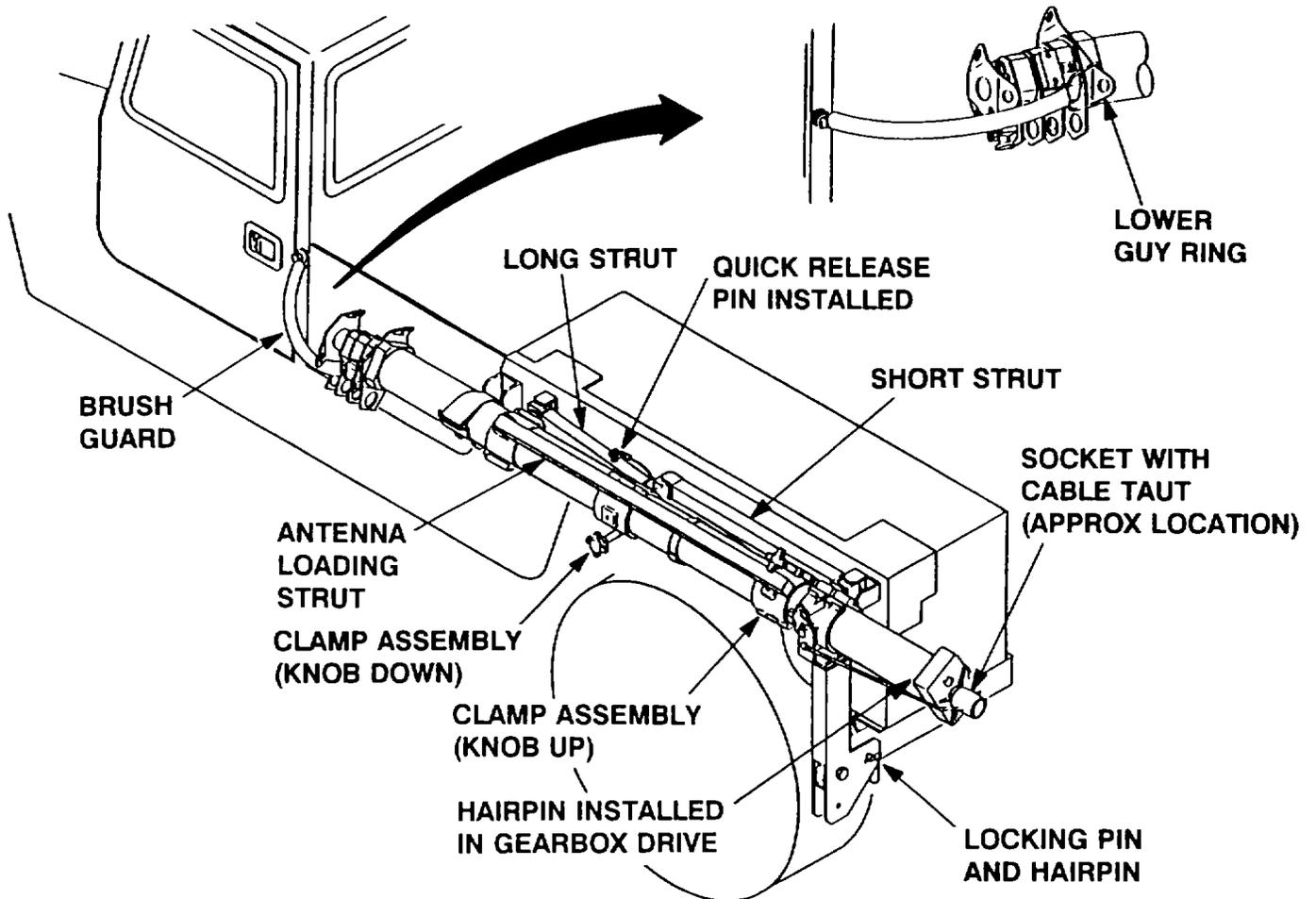


Figure 2-5. Final Orientation of Struts and Clamps
2-18

SECTION 3

INSTALLATION PROCEDURES FOR TRACKED VEHICLE

NOTE

The following procedures may need to be modified when preparing for and installing the mounting kit on unique vehicle configurations. Equipment variations from those documented in the procedures may be encountered. Standard mechanical practices should be followed.

3-1. PREPARATION FOR INSTALLATION

NOTE

Two people are required for installation.

a. Site Requirements

Ensure that the site includes adequate lighting and an electrical power source since drilling will be required. Inspect the vehicle for damage that could affect installation. Have any such damage repaired before installing mounting kit.

b. Preparation of Mounting Kit

- (1) Unpack and inventory mounting kit. Use Table 3-1 to inventory kit contents. If any item is missing, fill out and forward SF 361.
- (2) Examine each item for damage. If any damage, fill out and forward SF 364.
- (3) Keep mounting hardware covered and protected until needed.
- (4) When exposed to moisture, rain, or salt water, keep all parts dry to prevent corrosion.

c. Tools Required

NOMENCLATURE		NSN	QUANTITY
Electric Drill		5130-00-889-8994	1
Drill Bit:	5/16-in.	5133-00-227-9662	1
File, Hand		5110-00-234-6551	1
Hammer		5120-00-061-8543	1
Handle, Wrench, 1/2-in. sq dr		5120-00-230-6385	1
Punch, Center, Solid	5/32-in. dia	5120-00-293-3509	1
Scribe, Machinist's		5120-00-221-7063	1
Socket, 12 pt., 1/2-in. sq dr	9/16-in.	5120-00-189-7932	1
Tape Measure, 16-ft long		5120-00-150-2920	1
Tap Set		5136-00-918-2619	1
Torque Wrench, 1/2-in. sq dr	0-50 lb ft	-	1
Wrench, Open/Box:	9/16-IN.	5120-00-228-9507	2

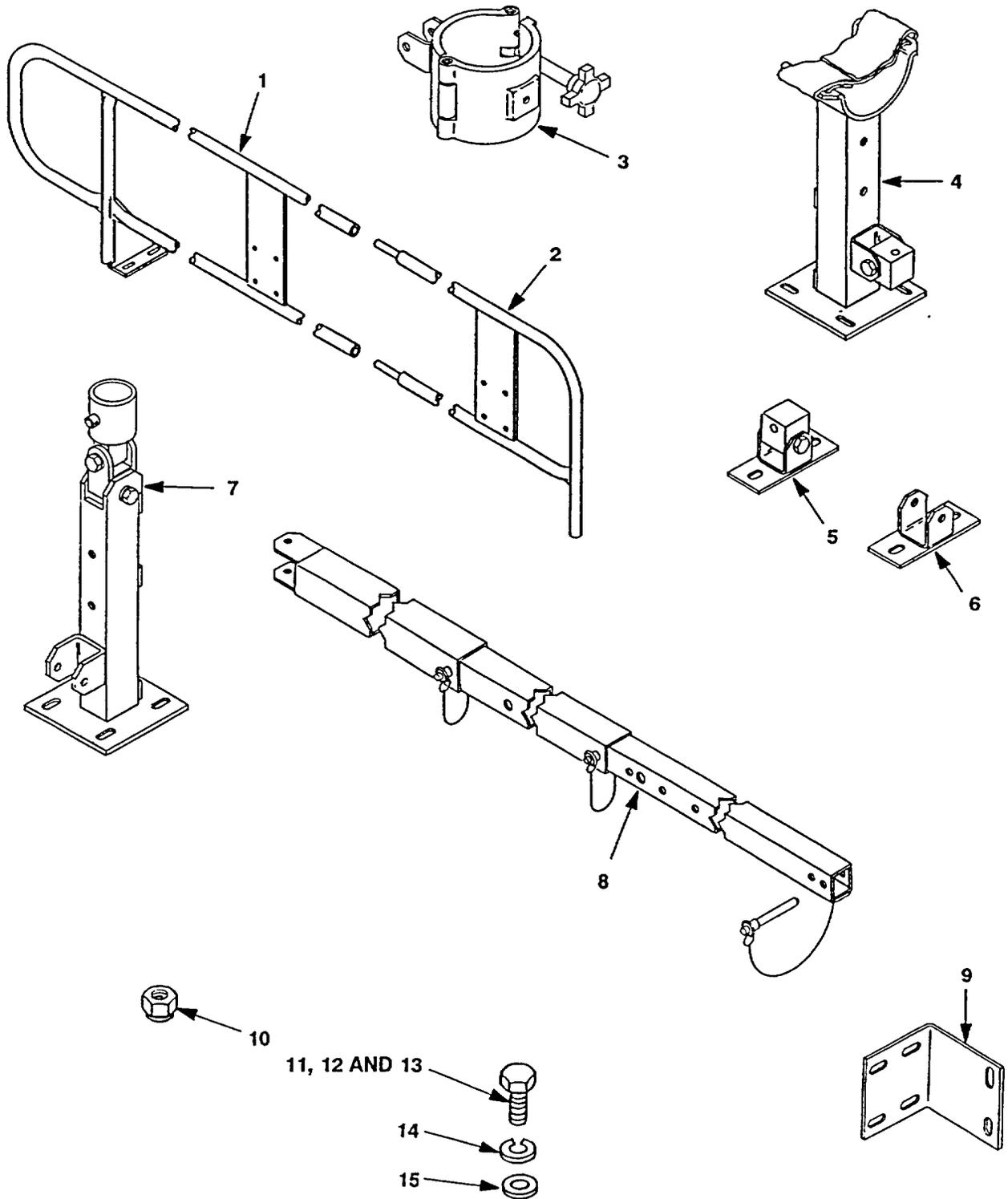


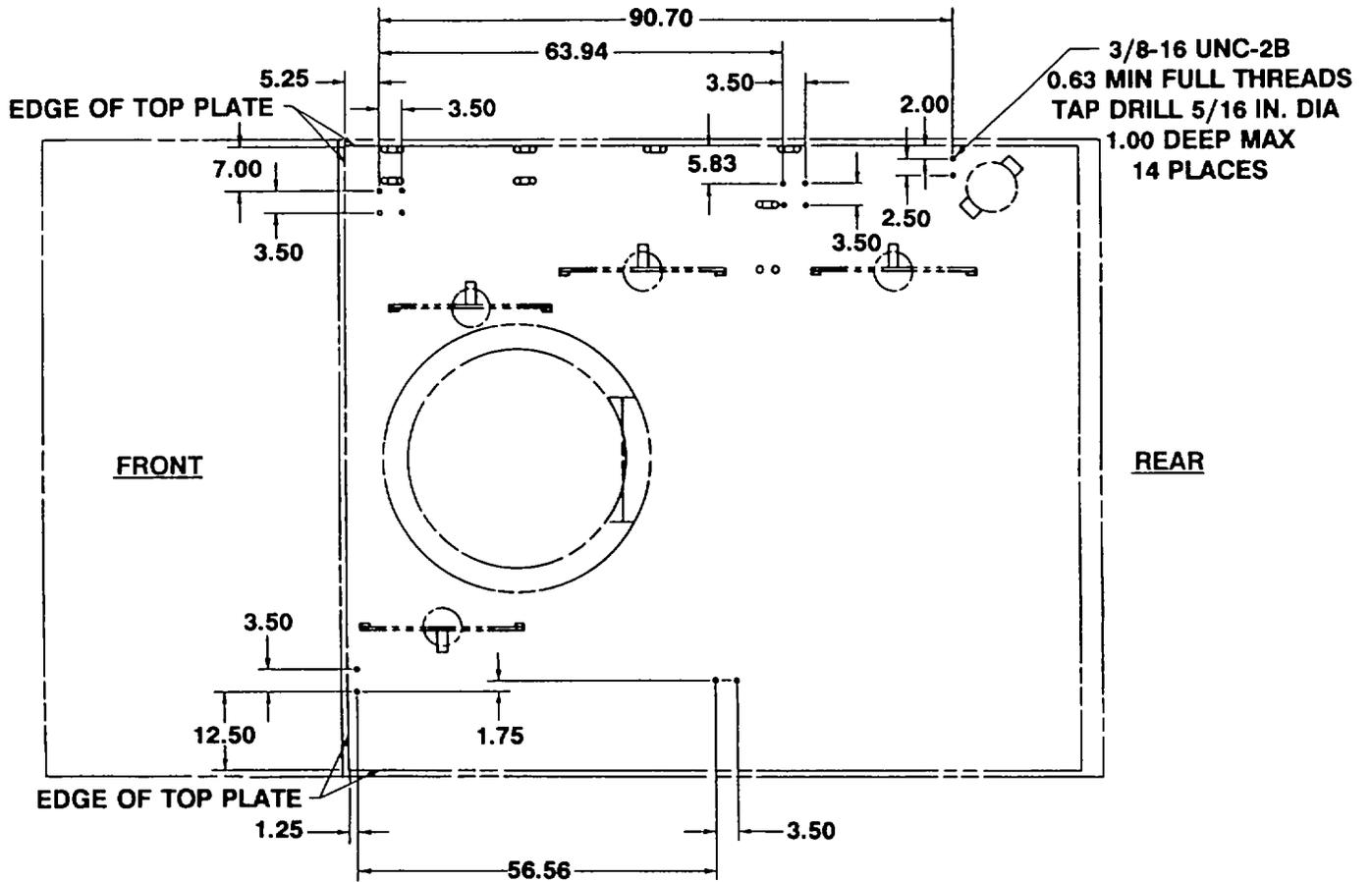
Figure 3-1. Tracked Vehicle Mounting Kit Illustrated Parts

Table 3-1. Tracked Vehicle Mounting Kit Parts List

FIG.3-1 ITEM NO	NSN	ITEM DESCRIPTION AND PART NUMBER	QTY
1		Brush Guard (A3210091)	1
2		Brush Guard (A3210092)	1
3		Clamp Assy (A3209971)	2
4		Cradle (A3209961)	1
5		Strut Mount (A3209957)	1
6		Strut Mount (A3209958)	1
7		Pedestal (A3209948)	1
8		Strut (A3209979)	2
9		Mounting Angle (A3209954)	2
10	5310-01421-1857	Nut, Self-Locking (A3210099-1)	14
11	5305-00-717-5460	Screw, Hexagon Head, 3/8-16, 7/8 in. long (MS35307-359)	14
12	5305-00-576-5417	Screw, Hexagon Head, 3/8-16, 1 in. long (A3210095-3)	12
13	5305-00-720-8491	Screw, Hexagon Head, 3/8-16, 2-1/4 in long (A3210095-5)	2
14	5310-01-421-2005	Washer, Lock (A3210100-2)	14
15	5310-00-773-7618	Washer, Flat (MS 15795-814)	26

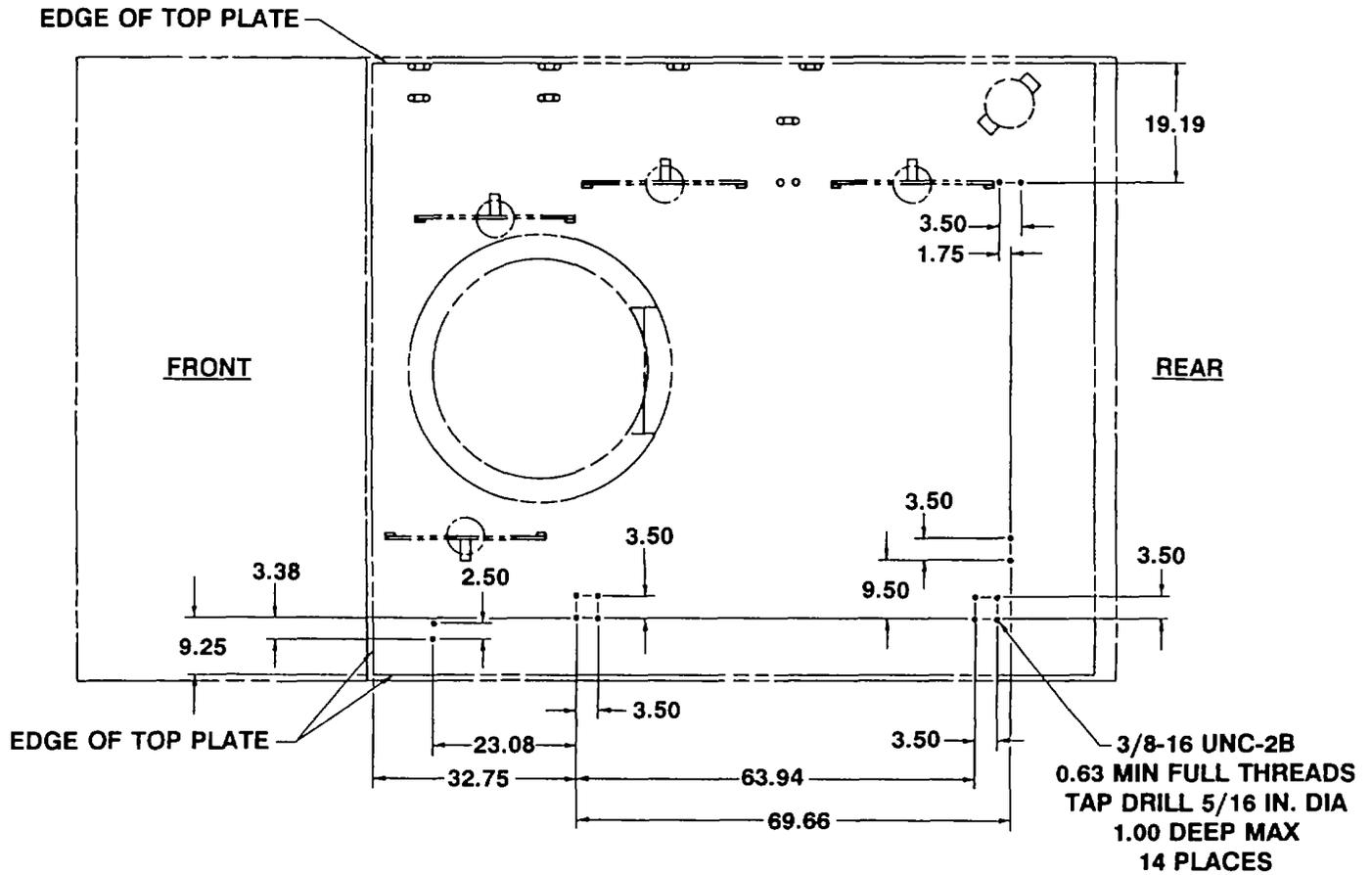
d. Safety Information

Safety goggles must be worn when drilling or deburring to prevent eye injury



NOTE: All DIMENSIONS ARE IN INCHES

Figure 3-2. Hole Pattern and Tapping Requirements for Tracked Vehicle Mounting Kit Curb-Side Installation



NOTE: All DIMENSIONS ARE IN INCHES

Figure 3-3. Hole Pattern and Tapping Requirements for Tracked Vehicle Mounting Kit Road-Side Installation

3-2 INSTALLATION OF TRACKED VEHICLE MOUNTING KIT AND MAST

ITEM	ACTION	REMARKS
NOTE		
See Figure 3-4 for location of items		
a. New mounting positions for tracked vehicle kit.	Using tape measure and scribe, locate and mark the location of each mounting hole on top of tracked vehicle as shown in Figure 3-2 for curb-side installation or Figure 3-3 for road-side Installation. Do not drill holes at this time	Tools Tape measure and scribe.
b. Two hex head screws (12), two flatwashers (15), two self-locking nuts (10), pedestal (7), and mounting angle (9).	Position mounting angle (9) on pedestal (7) lining up mounting holes Then loosely install two hex head screws (12), two flatwashers (15), and two self-locking nuts (10).	Tools Wrench handle with 9/16-in. socket and 9/16-open/box wrenches.
c. Two hex head screws (12), two flatwashers (15), two self-locking nuts (10), cradle (4), and mounting angle (9).	Position mounting angle (9) on cradle (4) lining up mounting holes Then loosely install two hex head screws (12), two flatwashers (15), and two self-locking nuts (10)	Tools. Wrench handle with 9/16-in. socket and 9/16-open/box wrenches
d. Brush guard halves (1 and 2), eight hex head screws (12), eight flatwashers (15), and eight self-locking nuts (10)	Assemble brush guard halves (1 and 2) and position assembled brush guard on mounting angles (9) installed on pedestal (7) and cradle (4), lining up mounting holes. Then loosely install eight hex head screws (12), eight flatwashers (15), and eight self-locking nuts	Tools Wrench handle with 9/16-in. socket and 9/16-open/box wrenches.
e. Strut (8), hex head screw (13), flatwasher (15), and self-locking nut (10).	Position strut (8) over strut mounting block attached to bottom of cradle (4) lining up hole in strut with hole in block Then loosely install one hex head screw (13) with one flatwasher (15), and self-locking nut (10). Secure other end of strut (8) to bracket attached to bottom of pedestal (7) by lining up mounting holes and inserting quick release pin (attached to strut)	Tools: Wrench handle with 9/16-in. socket and 9/16-open/box wrenches.

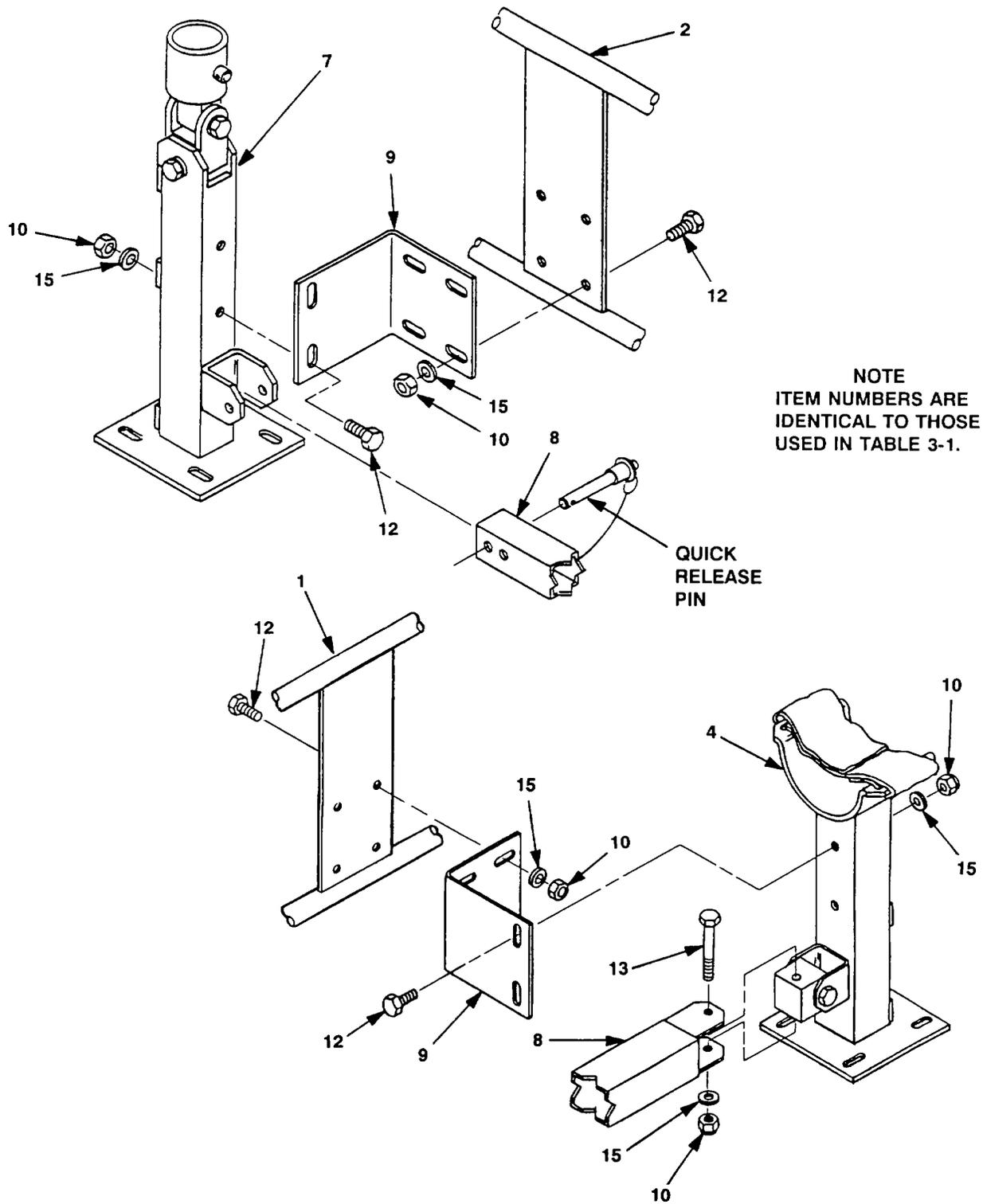


Figure 3-4. Tracked Vehicle Mounting Kit and Mast Installation (Sheet 1 of 3)

3-2. INSTALLATION OF TRACKED VEHICLE MOUNTING KIT AND MAST - Continued

ITEM	ACTION	REMARKS	
<u>WARNING</u>			
If pedestal/cradle/brush guard was assembled on the ground, use care when lifting the assembly onto the vehicle as the assembly could come apart and cause an injury to personnel			
f.	Prepare vehicle with new mounting holes	Place assembled pedestal/cradle/brush guard over marks on top of vehicle made in step a, and verify that mounting holes in pedestal (7), cradle (4) and brush guard half (1) line up with their respective marks. Erase and re-mark any hole locations that do not line up. Lift and place assembled pedestal/cradle/brush guard out of the way. Then punch and drill ten 5/16-in. diameter by 1.00 in. deep holes in vehicle at marked locations. Tap each hole 3/8-16 UNC-2B by 0.63-in minimum full threads.	Tools: Scribe, hammer and punch, electric drill with 5/16-in. bit, and tap set.
g.	Assembled pedestal (7), cradle (4), and brush guard (1 and 2), ten hex head screws (11), ten lockwashers (14), and ten flatwashers (15)	Reposition assembled pedestal/cradle/brush guard over drilled and tapped holes. Secure pedestal (7) to vehicle with four hex head screws (11), four lockwashers (14), and four flatwashers (14). Then secure cradle (4) to vehicle with four hex head screws (11), four lockwashers (14), and four flatwashers (14). Finally, secure brush guard half (1) to vehicle with two hex head screws (11), two lockwashers (15), and flatwashers (14). Torque all hardware to 15 lb. ft. (20.3 Nm).	Tools: Wrench handle with 9/16-in. socket, 9/16-open/box wrenches, and torque wrench with 9/16-in. socket.
h.	Strut (8), hex head screw (13), flatwasher (15) self-locking nut (10), strut mounts (5 and 6)	See Detail A and attach remaining strut (8) to strut mount (5) by lining up mounting holes. Install one hex head screw (13), flatwasher (15), and self-locking nut (10). Then attach other end of strut (8) to strut mount (6) by lining up mounting holes and inserting quick release pin (attached to strut).	Tools: Wrench handle with 9/16-in. socket and 9/16-open/box wrench.

NOTE
ITEM NUMBERS ARE IDENTICAL TO
THOSE USED IN TABLE 3-1.

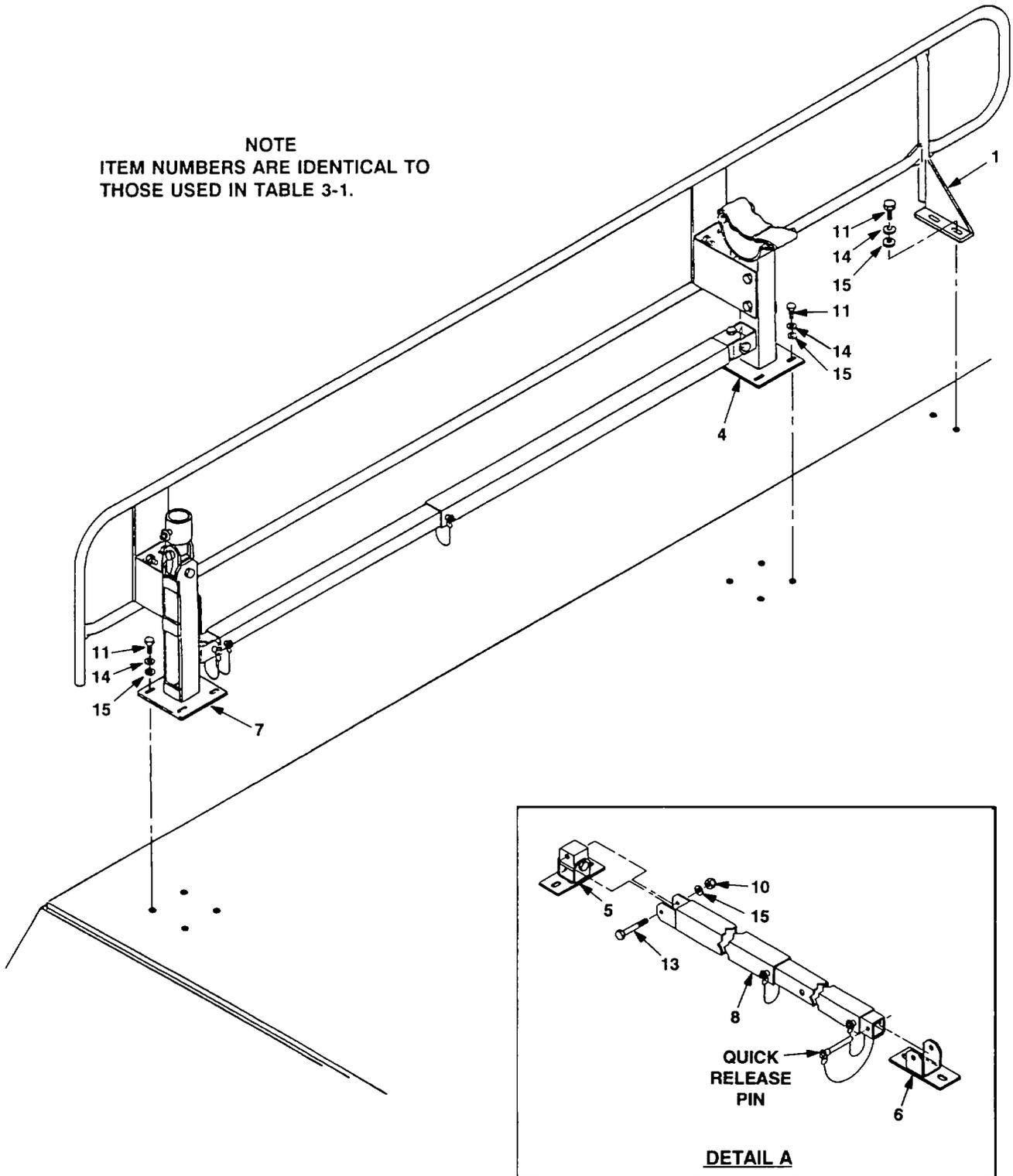


Figure 3-4. Tracked Vehicle Mounting Kit and Mast Installation (Sheet 2 of 3)

3-2. INSTALLATION OF TRACKED VEHICLE MOUNTING KIT AND MAST - Continued

ITEM	ACTION	REMARKS	
i.	Prepare vehicle with new mounting holes.	Place assembled strut (8) with strut mounts (5 and 6) over marks on top of vehicle made in step a, and verify that mounting holes in strut mounts line up with their respective marks. Erase and re-mark any hole locations that do not line up. Lift and place assembled strut with strut mounts out of the way. Then punch and drill four 5/16-in diameter by 1 00 in deep holes in vehicle at marked locations. Tap each hole 3/8-16 UNC-2B by 0.63-in. minimum full threads.	Tools: Scribe, hammer and punch, electric drill with 5/16-in. bit, and tap set.
j.	Assembled strut (8) with strut mounts (5 and 6), four hex head screws (11), four lockwashers (14), and four flatwashers (15).	Reposition assembled strut (8) with strut mounts (5 and 6) over drilled and tapped holes. Secure each strut mount with two hex head screws (11), lockwashers (14), and flatwashers (15). Torque all hardware to 15 lb. ft. (20.3 Nm).	Tools: Wrench handle with 9/16-in. socket, 9/16-open/box wrench, and torque wrench with 9/16-in. socket.
k.	Mast.	Place knob on bottom of mast gearbox into socket on top of pedestal (7) and insert quick-release pin (attached to leg of pedestal) through socket to retain mast in place. Then lay upper end of mast in cradle (4) and wrap velcro strap (part of cradle) around mast to secure it in place.	Tools: None.
l.	Clamp assemblies (3).	Loosen knob on each clamp assembly (3), open clamps and place each around the mast as shown on Figure 3-5. Tighten knob on each clamp assembly.	Tools: None.

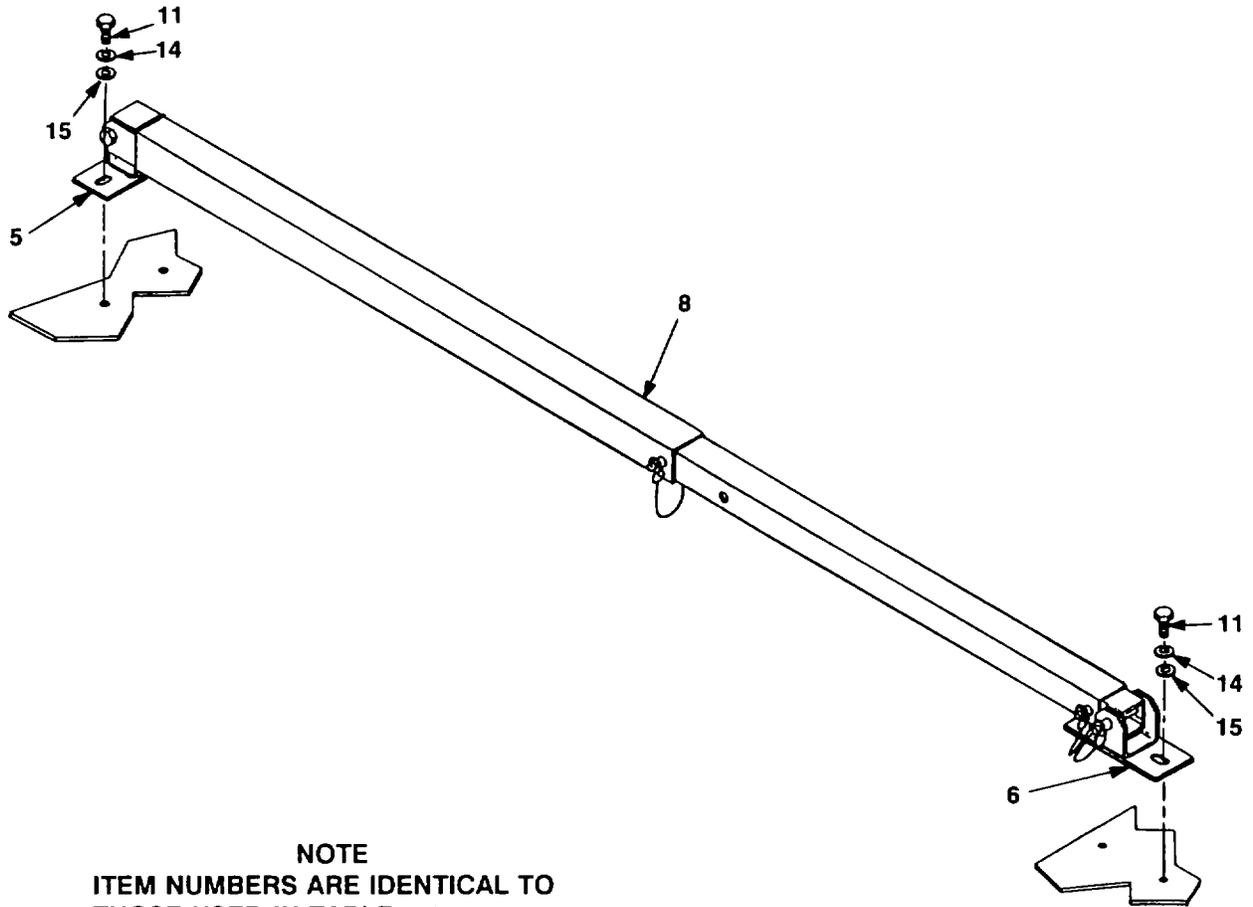


Figure 3-4. Tracked Vehicle Mounting Kit and Mast Installation (Sheet 3 of 3)

3-3. POST-INSTALLATION AND CHECKOUT

After equipment is installed, perform the following steps

ITEM	ACTION	REMARKS
a. Equipment.	Check for secure mounting. Check for loose parts and mounting hardware.	
B. Clamp assemblies.	Check that all clamps have been installed properly.	
c. Mounting kit line replaceable units information.	See TM 11-5985-426-12&P for Repair Parts and Special Tools List (RPSTL)	

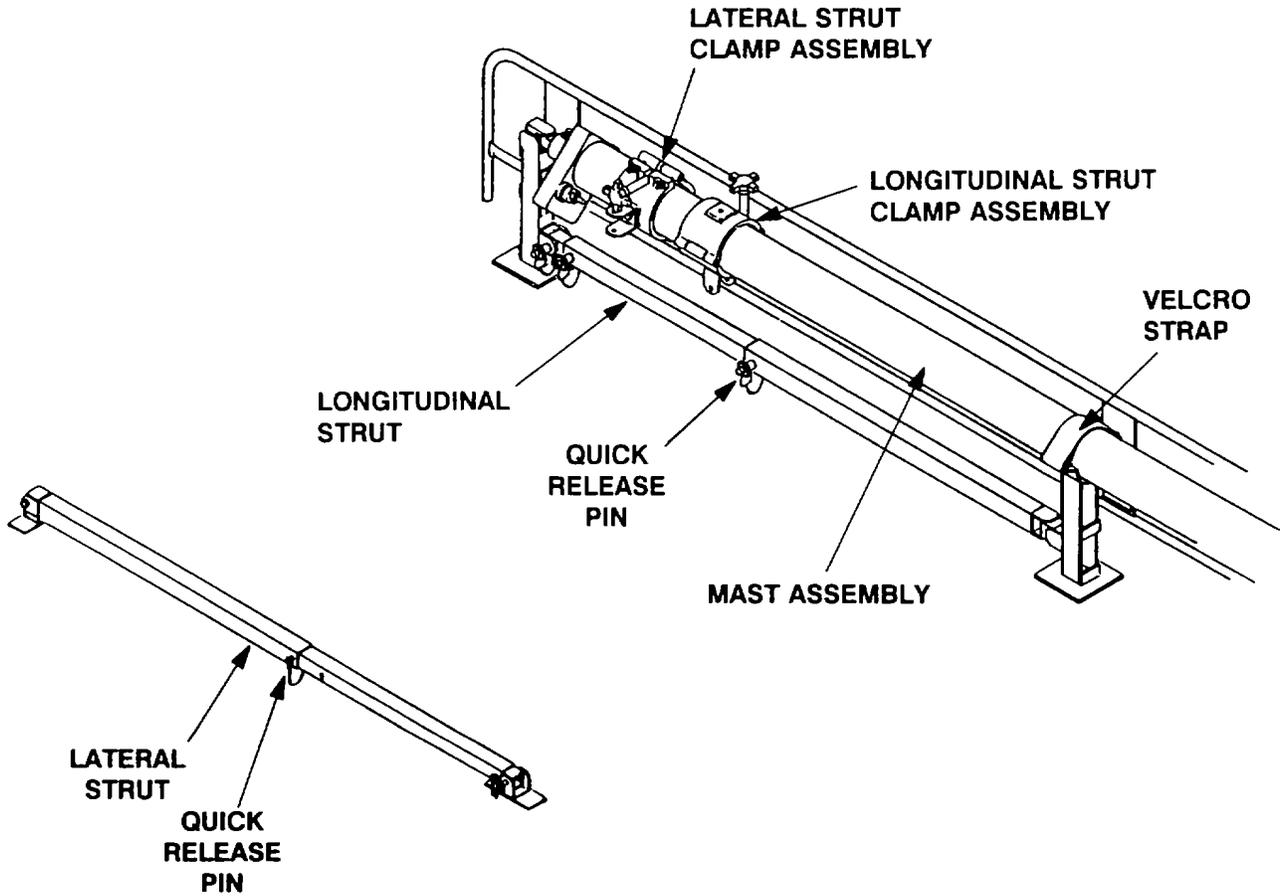


Figure 3-5. Typical Configuration of Mounting Kit Struts, Clamps, and Mast

APPENDIX A

REFERENCES

AMDF	Army Master Data File (Microfiche)
AR 710-2 Supply UPDATE	Supply Policy Below the Wholesale Level as Contained in Unit
AR 725-50	Requisitioning, Receipt and Issuing System in UPDATE
DA Pam 25-30	Consolidated Index of Army Publications (Microfiche)
DA Pam 710-2-1 Unit Supply UPDATE	Using Unit Supply System Manual Procedures as Contained in
TM 11-5985-426-12&P	Operator's and Unit Maintenance Manual Including Repair Parts and Special Tools List for Mast AB-1386/U with Electrical Equipment Mounting Bases MT-6967/G and MT-6968/G

TB 11-5985426-20

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