

SERVICE BULLETIN



M-1181

November 17, 2005

2006 SERVICE LITERATURE UPDATE

Purpose

To communicate updates and corrections to 2006 model year service and owner's literature.

Motorcycles Affected

2006 Sportster, V-Rod, Dyna Glide and Touring models.

Required Dealer Action

Notify service personnel of service bulletin. Update affected manuals.

2006 Sportster Models Service Manual P.N. 99484-06

1. See Table 1-4, "Critical Fasteners". Correct Steering stem bolt torque to read "23-27 ft-lbs, loosen, 72-96 **in-lbs**" / "31.2-36.6 Nm, loosen, 8.1-10.9 Nm".
2. See INSTALLATION step 9 under 2.29 REAR FENDER. Change ICM lock nut torque specification from 12-20 **in-lbs** (1.4-2.3 Nm) to 12-15 **in-lbs** (1.4-1.7 Nm).
3. See INSTALLATION step 6 UNDER 3.25 OIL TANK. Change ICM lock nut torque specification from 12-20 **in-lbs** (1.4-2.3 Nm) to 12-15 **in-lbs** (1.4-1.7 Nm)".
4. See Figure 4-11. Correct item 11 to read: "Console (XL 1200C)".
5. See Figure 4-15. Correct legend to read: "Replacing Console-XL 1200C".
6. Replace Table 6-3, "Transmission" with Table 6-3 on the next page.
7. See the table under 6.2 TORQUE VALUES. Change Engine sprocket nut torque from 190-210 ft-lbs/258-285 Nm to 240-260 ft-lbs/326-353 Nm.
8. See INSTALLATION under 6.5 PRIMARY DRIVE/CLUTCH. Correct step 5 to read, "Install engine sprocket nut. Tighten to 240-260 ft-lbs (326-353 Nm)."
9. See ASSEMBLY under 6.11 MAIN DRIVE GEAR AND BEARING. Correct the second sentence in step 3 to read, "The surface of the needle bearing will be at a depth of 0.418 in. (10.617 mm) from the face of the shifter dogs on the main drive gear."
10. See REAR HOUSING REPLACEMENT under 7.19 TURN SIGNALS. Correct the first sentence in step 5 to read, "Remove the corresponding socket terminals from left connector [18B] and right connector [19B]."
11. See CONNECTORS under 7.21 HANDLEBAR SWITCHES. Correct the second sentence in step 1 to read, "Under the fuel tank, locate the right handlebar switch connector [22] (black) (5) and the left handlebar switch connector [24] (gray) (4) in the right hand back-bone clip hung from the frame tube."

IMPORTANT NOTE

In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO. 1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	TECHNICIAN NO. 4	RETURN THIS TO
INITIAL HERE									

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Table 6-3. Transmission

PRIMARY DRIVE/TRANSMISSION LUBRICANT		AMOUNT (ALL MODELS)		
Capacity		32 U.S. fl oz. (946 ml)		
OVERALL GEAR RATIOS*	U.S. MODELS		WORLD MODELS	
	883 CC	1200 CC	883 CC	1200 CC
First gear (low)	10.782	9.315	9.647	9.004
Second gear	7.702	6.653	6.891	6.432
Third gear	5.728	4.948	5.125	4.783
Fourth gear	4.748	4.102	4.248	3.965
Fifth gear (high)	4.071	3.517	3.643	3.400
* Overall gear ratios indicate number of engine revolutions required to drive rear wheel one revolution.				

2006 Sportster Models Electrical Diagnostic Manual P.N. 99495-06

1. See Table 3-1, "TSSM Key Fob Assignment". In the third row of the table, under "WAIT FOR CONFIRMATION", change the sentence from "1-3 flashes turn signals and indicators..." to "1-4 flashes turn signals and indicators..."
2. Repeat the previous step for Table 3-2, "Programming a TSSM Personal code (Example: 3-1-3-1-3) With No Code Previously Installed".
3. See Table 3-3, "TSSM Alarm Sensitivity". In the third row of the table, under "WAIT FOR CONFIRMATION", change the sentence from "2 or 3 flashes turn signals and indicators..." to "2-4 flashes turn signals and indicators..."
4. Repeat the previous step for Table 3-5, "Selecting TSSM Auto-arming Function (Not Available on The Netherlands Vehicles)" and Table 3-6, "TSSM Storage Mode Preferences".

2006 VRSCR Model Service Manual P.N. 99501-06

1. See INSTALLATION step 52 under 2.9 ENGINE REPLACEMENT. Correct the first sentence to read, "With ignition coils disconnected, use starter to turn the engine over to prime the engine with oil."
2. Correct VRSCR handlebar screw torque as follows:
 - a. See torque table under 2.2 TORQUE VALUES. Change torque specification for "Handlebar bolts" from 41-47 Nm/31-35 ft-lbs to 16-20 Nm/12-15 ft-lbs.
 - b. See INSTALLATION step 1 under 2.22 HANDLEBARS. Change the handlebar fastener torque specification from 41-47 Nm (31-35 ft-lbs) to 16-20 Nm (12-15 ft-lbs).

3. See DISASSEMBLY under 3.14 UPPER AND LOWER CRANKCASE SERVICE. Correct step 11 to read: "It is not necessary to remove the counterbalancer for this procedure, however if removing the counterbalancer fastener at this point, hold crankshaft with 1/2 in. drive extension and wrench to loosen counterbalancer drive gear fastener. Remove fastener and gear. If not servicing counterbalancer, skip to step 12."
4. See ASSEMBLY under 3.14 UPPER AND LOWER CRANKCASE SERVICE. Add the following text to the end of step 31: "If counterbalancer was removed, proceed to step 12 of Installation under 3.15 COUNTERBALANCER BEARING REPLACEMENT and follow steps until end of installation procedure to ensure counterbalancer is correctly installed."

2006 VRSC Models Service Manual P.N. 99501-06A

1. See INSTALLATION step 52 under 2.10 ENGINE REPLACEMENT. Correct the first sentence to read, "With ignition coils disconnected, use starter to turn the engine over to prime the engine with oil."
2. Correct VRSCR handlebar screw torque as follows:
 - a. See torque table under 2.2 TORQUE VALUES. Change torque specification in third "Handlebar bolts" row from 41-47 Nm/31-35 ft-lbs to 16-20 Nm/12-15 ft-lbs.
 - b. See INSTALLATION step 1 under 2.28 HANDLEBARS (VRSCR). Change the handlebar fastener torque specification from 41-47 Nm (31-35 ft-lbs) to 16-20 Nm (12-15 ft-lbs).

3. See DISASSEMBLY under 3.14 UPPER AND LOWER CRANKCASE SERVICE. Correct step 11 to read: "It is not necessary to remove the counterbalancer for this procedure, however if removing the counterbalancer fastener at this point, hold crankshaft with 1/2 in. drive extension and wrench to loosen counterbalancer drive gear fastener. Remove fastener and gear. If not servicing counterbalancer, skip to step 12."
4. See ASSEMBLY under 3.14 UPPER AND LOWER CRANKCASE SERVICE. Add the following text to the end of step 32: "If counterbalancer was removed, proceed to step 12 of Installation under 3.15 COUNTERBALANCER BEARING REPLACEMENT and follow steps until end of installation procedure to ensure counterbalancer is correctly installed."

2006 Dyna Models Service Manual P.N. 99481-06

1. Change the rear axle nut torque specification at the following manual locations, to 72-78 ft-lbs (97.6-105.7 Nm):
 - a. ADJUSTMENT step 4 under 1.14 REAR BELT DEFLECTION.
 - b. Table 1-7, "Critical Fasteners".
 - c. The table under 2.2 TORQUE VALUES.
 - d. INSTALLATION step 7.a. under 2.5 REAR WHEEL.
2. See the TORQUE VALUES table under 4.1 SPECIFICATIONS. Change the breather bolt torque specification from 120-144 **in-lbs**/13.6-16.3 Nm to 22-24 ft-lbs/29.8-32.5 Nm.
3. See INSTALLATION step 1 under 4.4 AIR CLEANER. Change the breather bolt torque specification in that step from 120-144 **in-lbs**/13.6-16.3 Nm to 22-24 ft-lbs (29.8-32.5 Nm).
4. See the TORQUE VALUES table under 6.1 SPECIFICATIONS. Change the transmission sprocket nut torque specification from 35 ft-lbs/47.4 Nm to 100 ft-lbs/135.6 Nm.
5. See INSTALLATION step 5 under 6.5 TRANSMISSION SPROCKET. Change the sprocket nut torque specification conversion from 81.4 Nm to 135.6 Nm.

2006 Touring Models Service Manual P.N. 99483-06

1. See TORQUE VALUES table under 2.1 SPECIFICATIONS. Change the torque specification for "handlebar upper clamp screws" from 12-16 ft-lbs/16.3-21.7 Nm to 16-20 ft-lbs/21.7-27.1 Nm.
2. See HANDLEBAR ADJUSTMENT under 2.23 HANDLEBARS. Change the torque specification in step 8 from 12-16 ft-lbs (16.3-21.7 Nm) to 16-20 ft-lbs (21.7-27.1 Nm).
3. See HANDLEBAR INSTALLATION under 2.23 HANDLEBARS. Change the torque specification in steps 5-b. and 5-c. from 12-16 ft-lbs (16.3-21.7 Nm) to 16-20 ft-lbs (21.7-27.1 Nm).

2006 Harley-Davidson Predelivery and Setup Manual P.N. 99947-06

1. See DYNA GLIDE MODELS under 1.2 ADJUSTING HANDLEBARS—ALL MODELS.
 - a. Step 5 should begin: "See Figure 1-15. FXDLI and..."
 - b. Step 5-b, change "Tighten rear screws (4)..." to "Tighten rear screws (1)..."
 - c. Step 6-b, change "Tighten front screws (4)..." to "Tighten front screws (1)..."
2. See FLHT, FLHTC, FLHTCU, FLHTCUSE, FLHX AND FLHTP under 1.2 ADJUSTING HANDLEBARS—ALL MODELS. Change the handlebar clamp torque specifications in steps 5 and 6 from 12-16 ft-lbs (16.3-21.7 Nm) to 16-20 ft-lbs (21.7-27.1 Nm).
3. See FLTR under 1.2 ADJUSTING HANDLEBARS—ALL MODELS. Change the handlebar clamp torque specifications in step 4 from 12-16 ft-lbs (16.3-21.7 Nm) to 16-20 ft-lbs (21.7-27.1 Nm).
4. See Table 2-1, "Torque Values". Change the torque specification for "Handlebar clamp screws (front and rear)" from 12-16 ft-lbs/16.3-21.7 Nm to 16-20 ft-lbs/21.7-27.1 Nm.
5. See INSTALLING TOUR-PAK® under 7.2 FLHTCUSE MODEL.
 - a. Change step 10 to read as follows: "From inside Tour-Pak, install right rear bolt (1) and large O.D. flat washer (14) through bottom of Tour-Pak (12), hole in top support tube (6), spacer (7), hole in license plate bracket (8) and amplifier (13) flange."
 - b. Change step 12 to read as follows: "Install rear bolt (2) from bottom, through spacer, hole in top support tube, bottom of Tour-Pak, flat washer and antenna ground lead (9) ring terminal. Secure with lock nut (5), finger-tight."
6. Update Figure 7-12 with the figure on page 5 of this document.

2006 FLHTCUSE Model Service Manual Supplement P.N. 99500-06

1. See the table under 2.2 TORQUE VALUES. Change the torque specification for "handlebar top clamp fasteners" from 12-16 ft-lbs/16.3-20.3 Nm to 16-20 ft-lbs/21.7-27.1 Nm.
2. See INSTALLATION under 2.8 HANDLEBARS. Change the torque specification in steps 6-a. and 6-b. from 12-16 ft-lbs (16.3-20.3 Nm) to 16-20 ft-lbs (21.7-27.1 Nm).
3. See HEATED HANDGRIPS, Initial Disassembly under 2.8 HANDLEBARS. Change the beginning of step 8 to read as follows, "See Figure 2-9. Note location of heated handgrip power connector [189] (3) and interconnect harness connector [206] (4). ..."
4. Update Figure 2-51 with the figure on page 5 of this document.

5. See INSTALLATION under 2.14 TOUR-PAK.
 - a. Remove the last sentence from step 3.
 - b. Change step 4 to read as follows: "From inside Tour-Pak, install right rear bolt (1) and large O.D. flat washer (14) through bottom of Tour-Pak (12), hole in top support tube (6), spacer (7), hole in license plate bracket (8) and amplifier (13) flange."
6. See INSTALLATION under 8.6 SOUND SYSTEM AMPLIFIER. Change the last sentence of step 1 to read as follows: "Make certain license plate bracket (7) is between spacer (6) and amplifier mounting flange."
7. Update Figure 8-19 with Figure 8-19 on page 6 of this document.

2006 VRSC Models Owners Manual P.N. 99736-06A

The clock-display/setting procedure was inadvertently left out of the 2006 VRSC Models Owner's Manual.

In 2006 VRSC Owner's Manuals with print dates on or before 06/05, insert the following procedure just after the end of "INSTRUMENTS: VRSC MODELS" in the CONTROLS AND INDICATORS section:

TIME DISPLAY: 2006 VRSC MODELS

General

See Figure 13. The time is displayed in the odometer/trip odometer/fuel range display (4) of the speedometer (2) face.

Repeatedly press and release the odometer reset switch (5) to cycle through the odometer, the trip odometer, and the fuel range display to the time display.

Set the Clock

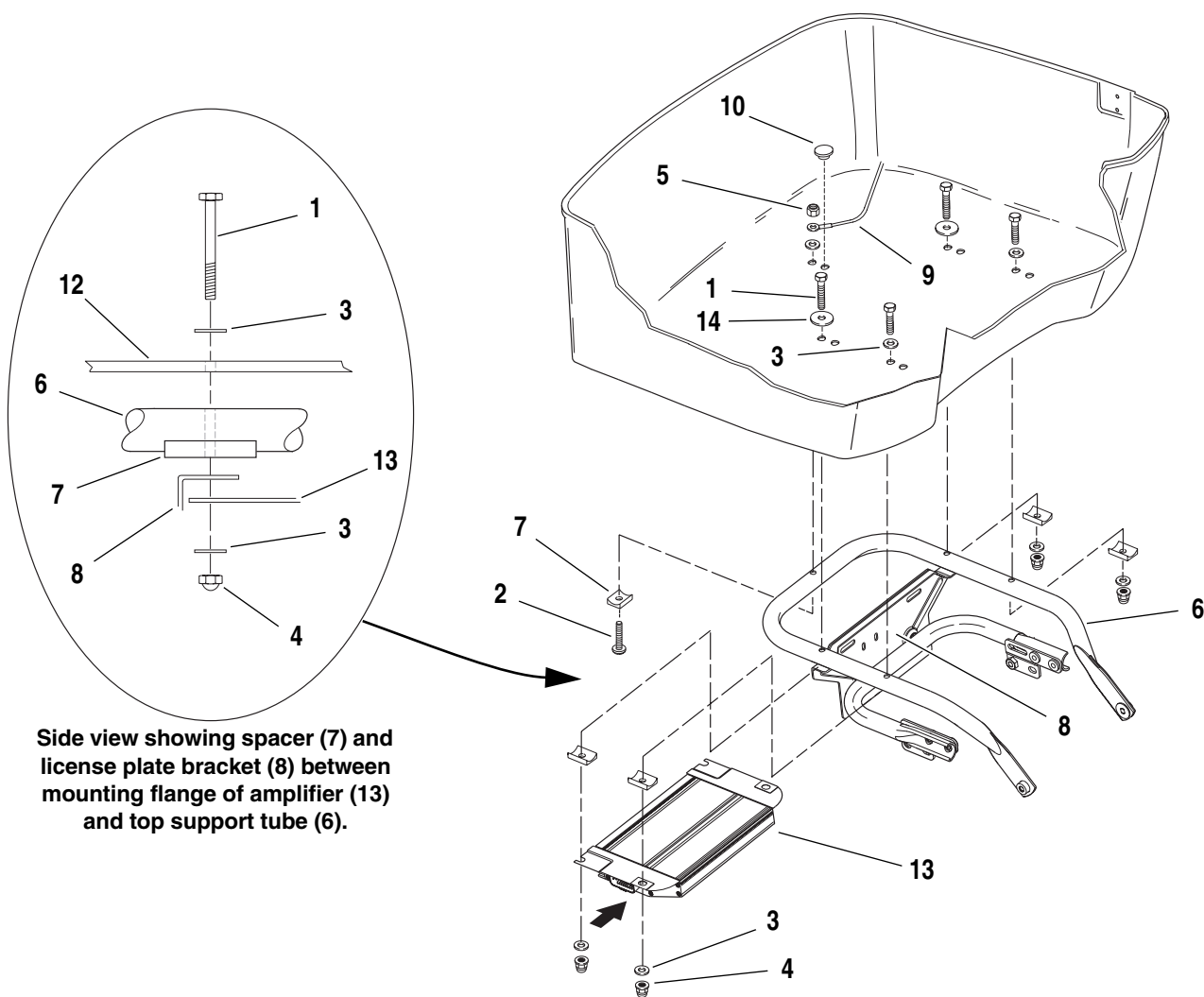
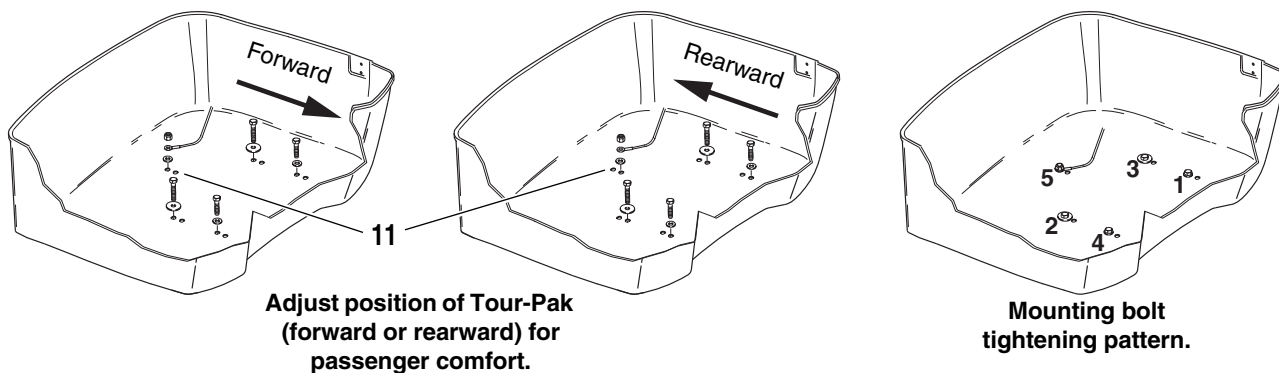
1. Turn the ignition/headlamp key switch to IGN or ACC.

NOTE

The engine RUN/OFF switch can be in either position.

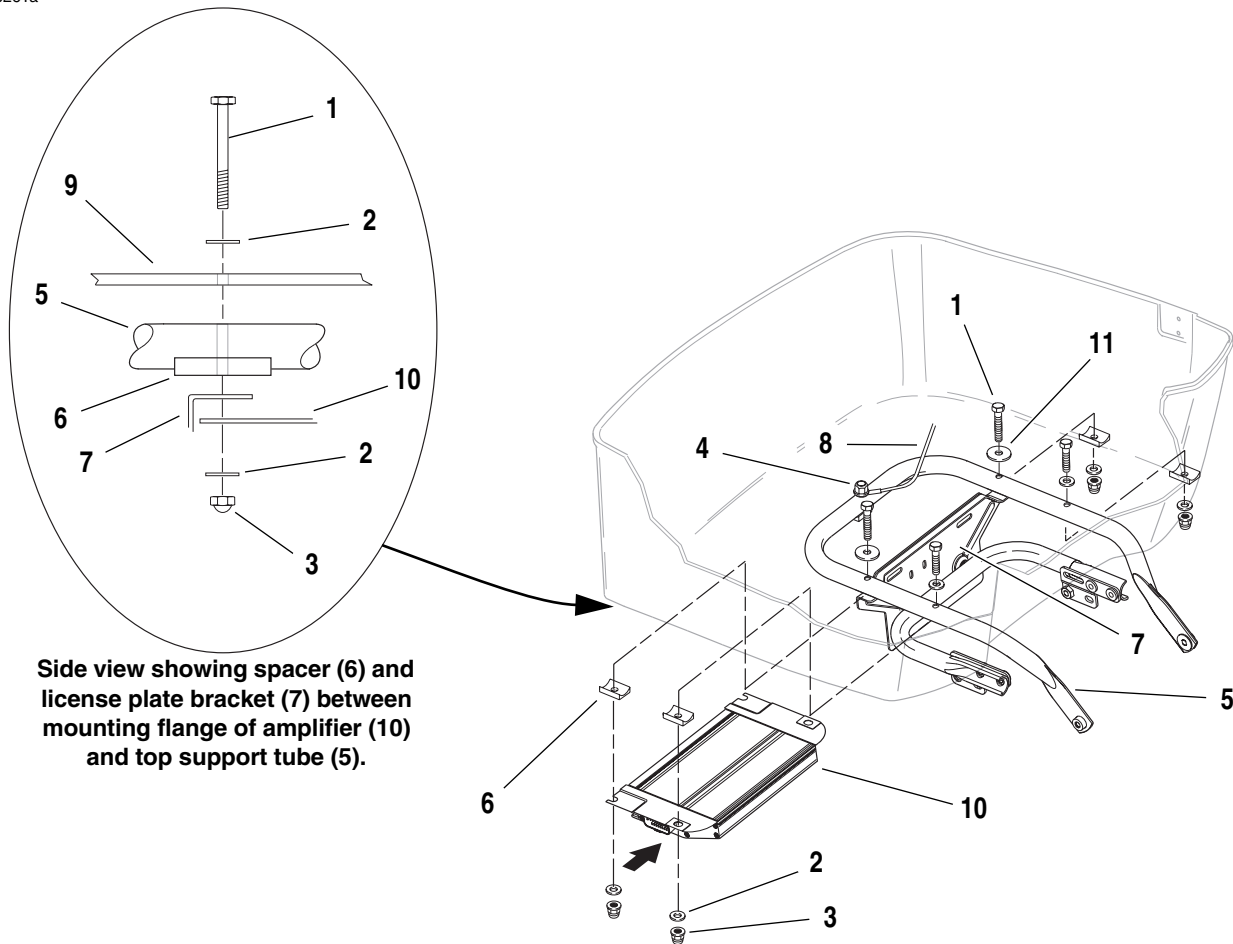
2. Repeatedly press and release the odometer reset switch to cycle through the odometer, the trip odometer, and the fuel range display to the time display.
3. Press and hold the odometer reset switch for five seconds until the twelve (12) hour time display begins to blink. Release the switch.

4. Press and release the odometer reset switch one time to advance to the twenty-four (24) hour or military time display. Each time you press and release the switch, the display will switch between the twelve and twenty-four hour display. Select either the twelve or the twenty-four hour display.
5. Press and hold the odometer reset switch for five seconds until the hour time display begins to blink. Release the switch.
6. Press and release the odometer reset switch to advance the hour. Each time you press and release the switch, the display will advance one hour.
7. With the desired hour displayed, press and hold the odometer reset switch for five seconds, the minutes will begin blinking.
8. Press and release the odometer reset switch to advance the minutes. Each time you press and release the switch, the minutes will advance by one.
9. With the desired minute displayed, press and hold the odometer reset switch for five seconds. The clock is set when the minutes display stops blinking.



1. Bolt, 1/4-20, long (4)
2. Bolt, 1/4-20, short
3. Washer 1/4 in. inside dia. (7)
4. Locknut, nylon cap, 1/4-20 (4)
5. Lock nut, 1/4-20
6. Top support tube
7. Spacer (5)

8. License plate bracket
9. Antenna ground lead
10. Plug
11. Rear-most unused hole
12. Tour-Pak bottom
13. Amplifier
14. Large washer, 1/4 in. I.D. (2)



- | | |
|---|------------------------------------|
| 1. Bolt, 1/4-20, long (4) | 6. Spacer (4) |
| 2. Washer 1/4 in. inside dia. (6) | 7. License plate bracket |
| 3. Locknut, nylon cap, 1/4-20 (4) | 8. Antenna ground lead |
| 4. Locknut, 1/4-20 (part of bolt, 1/4-20, short/spacer/flat washer/locknut assembly: do not remove) | 9. Tour-Pak bottom |
| 5. Top support tube | 10. Amplifier |
| | 11. Large washer, 1/4 in. I.D. (2) |

Figure 8-19. Amplifier Mounting