

# INSTRUCTION SHEET

**Buell**  
AMERICAN MOTORCYCLES

-J01537

Kit Number Z0008.MA

REV. 10-10-02

## BUELL S3/S3T COOLING FAN KIT

### General

This Cooling Fan Kit is designed for installation on Buell S3 and S3T (Thunderbolt) Model Motorcycles.

### Kit Contents

Qty	Description	Part Number
2	Wire tie, large	Y0303.2B
1	Bracket, fuel filter	P0201.M
5	Wire tie	Y0305.8B
1	Switch, thermostat	Y0052.K
1	Harness, cooling fan	Y0051.K
1	Fan, cooling	Y0050.K
1	Fuse, 5 amp	Y0015.K
1	Bracket, thermostat	R0052.K
1	Bracket, fan	R0050.M
4	Nut, 8/32 nylock	DN0800.2CZ
3	Clamp, #17 rubber	C0529.KA
2	Screw, 3/8-16x3/16	C0217.K
2	Washer, flat 1/4x5/8 fiber	63858-49
2	Washer, flat 1/4x9/16	BA0409.1Z
4	Screw, button head #8-32x1	AN0808.3CBL
2	Screw, socket head 1/4-20x1	AA0408.2CZ
3	Screw, truss torx 1/4-20x3/4	AA0406.11CBL
1	Clamp, fuel line	Q0115.0

### Installation

#### ⚠ WARNING

To protect against shock and accidental start-up of vehicle, disconnect the negative battery cable before proceeding. Inadequate safety precautions could result in death or serious injury.

#### ⚠ WARNING

Always disconnect the negative battery cable first. If the positive battery cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

1. Disconnect battery cables, negative cable first.

#### NOTE

Prior to performing the following step, be sure to purge the pressure prior to removing fuel tank.

2. Follow instructions in applicable Service Manual and remove the fuel tank and seat. On S3T models, remove left fairing lower.

#### NOTE

The original plastic fuel filter present on 1999 model year vehicles was recalled as part of Recall Campaign 0819. If recall part (metal fuel filter as shown in Figure 2) is not present on vehicle being serviced, recall 0819 must be performed by an authorized Buell dealer using the fuel filter bracket provided with this kit.

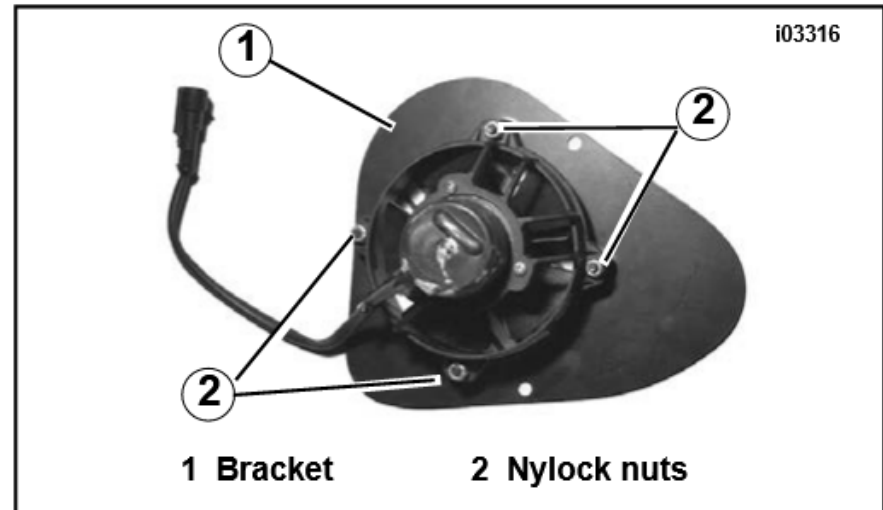


Figure 1. Install Fan Bracket

3. See Figure 2. Cut the two wire ties that hold the fuel filter to its bracket and remove the bracket from the rear cylinder head. Discard bracket.
4. Apply LOCTITE THREADLOCKER 262 (red) to the three bottom threads of the fuel filter bracket bolt. Install new fuel filter bracket to rear cylinder head. Tighten bolt to 30-33 ft-lbs (41-45 Nm).
5. Using two large wire ties provided in this kit, attach the fuel filter to the new bracket with the filter's ridge on the middle slot of the bracket.
6. See Figure 1. Install fan (part number Y0050.K) (oriented as shown) to fan bracket (part number R0050.M) using screws (part number AN0808.3CBL) and Nylock nuts (part number DN0800.2CZ). Tighten hardware to 12.4-15.4 in-lbs (1/4-1.7 Nm).
7. See Figure 2. Install the three rubber fan bracket clamps (part number C0529.KA), oriented as shown, to frame members. The clamps will be slid into position during the next step.

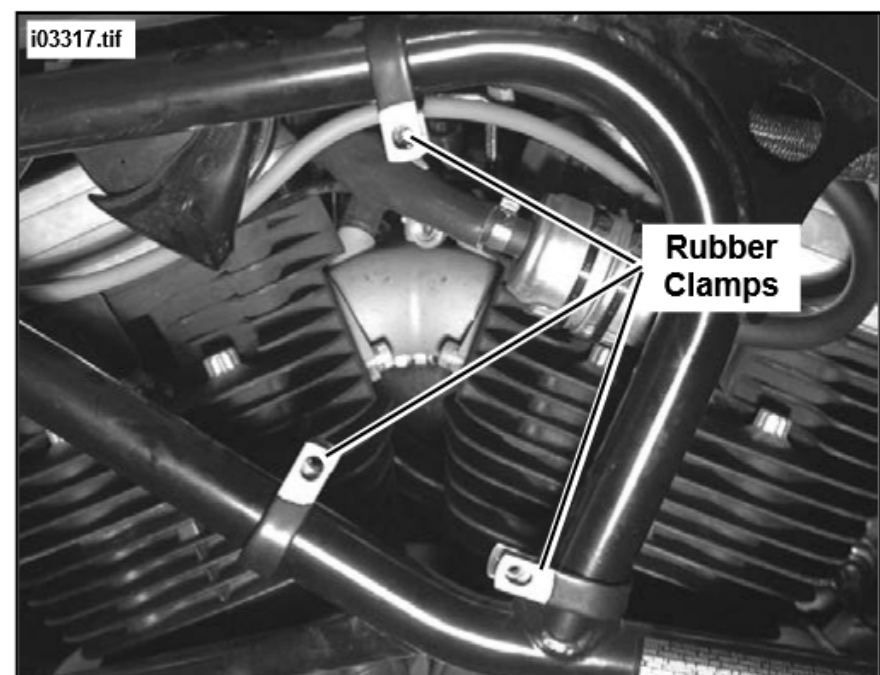
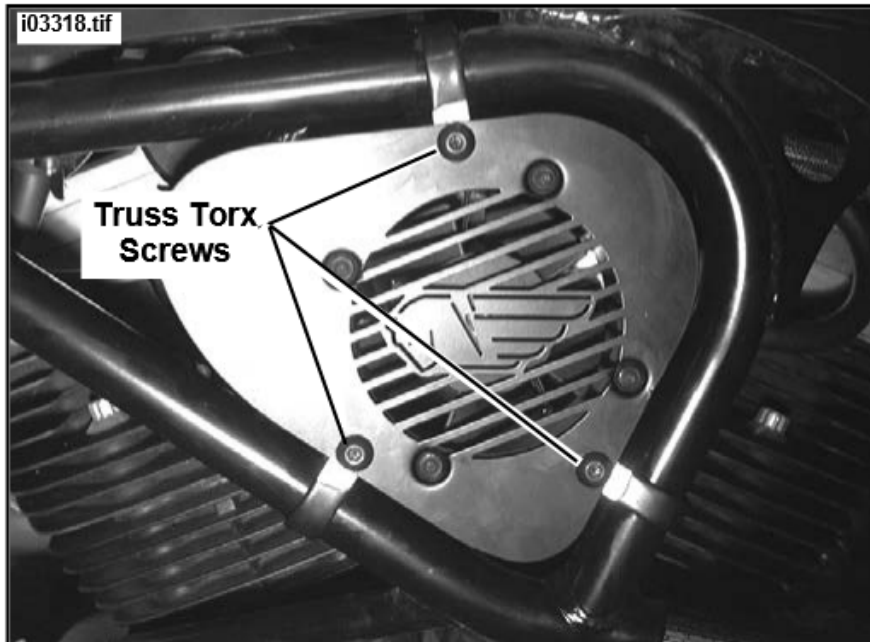
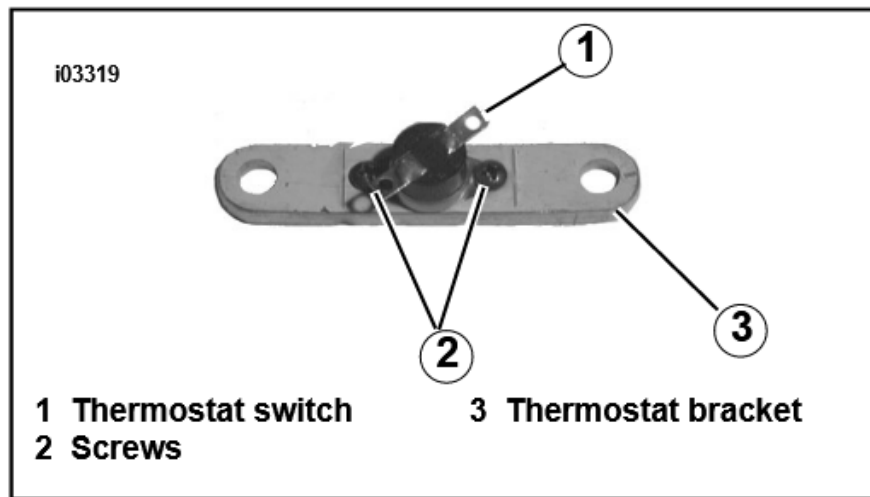


Figure 2. Install Clamps to Frame



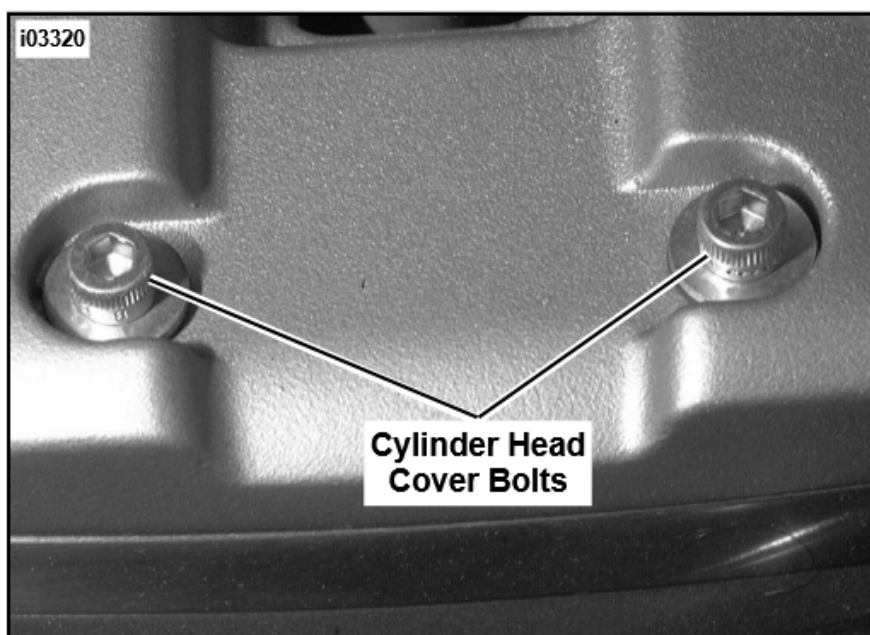
**Figure 3. Install Fan Assembly to Frame Brackets**

8. See Figure 3. Install assembled fan bracket to frame using clamps installed in prior step and truss Torx screws (part number AA0406.11CBL). Tighten screws to 5.0-8.0 ft-lbs (6.8-10.8 Nm).

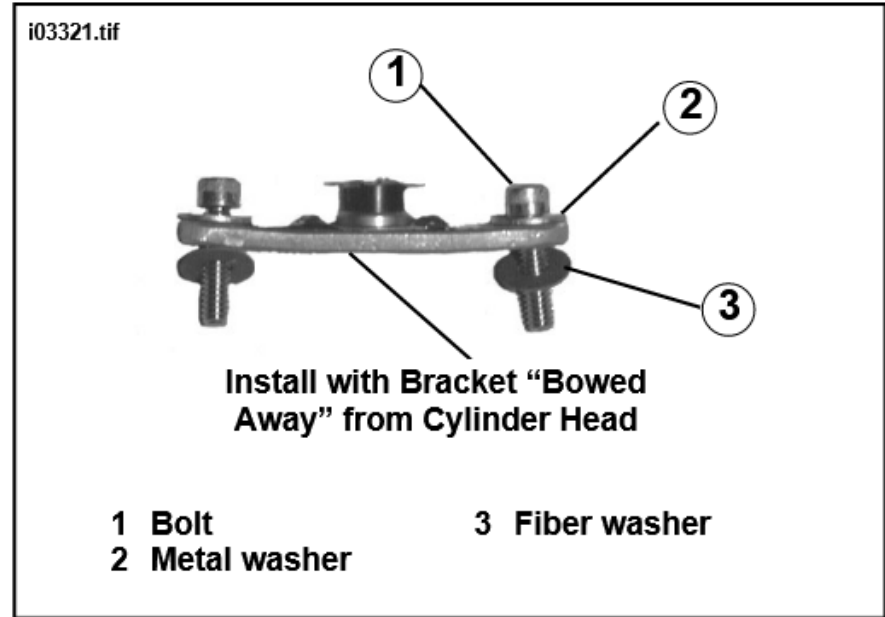


**Figure 4. Install Switch to Thermostat Bracket**

9. See Figure 4. Install thermostat switch (part number Y0052.K) to thermostat bracket (part number R0052.K) using screws (part number C0217.K) and tighten to 12.4-15.0 in-lbs (1.4-1.7 Nm).
10. See Figure 5. Remove front cylinder head cover bolts and discard.

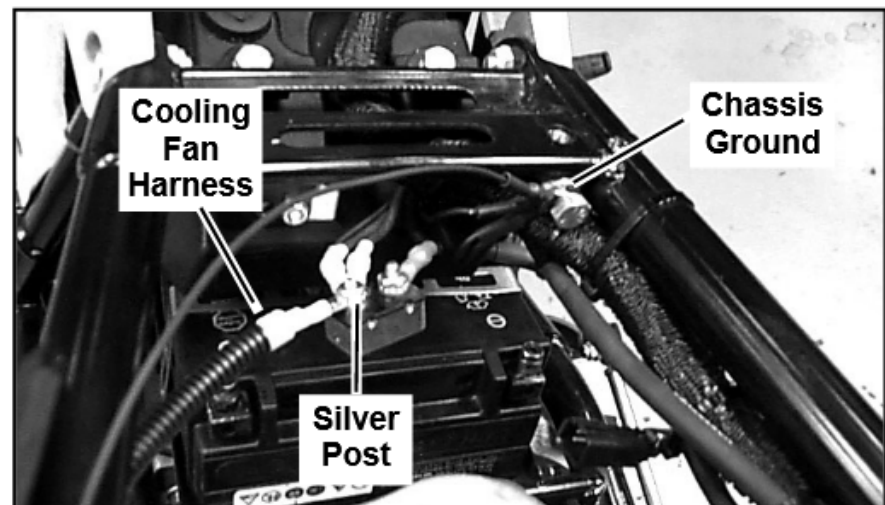


**Figure 5. Remove Front Cylinder Head Cover bolts**



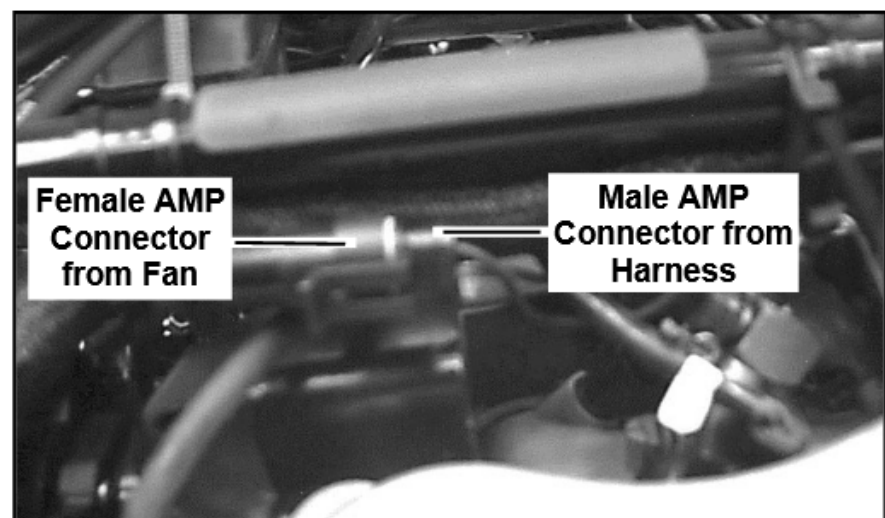
**Figure 6. Thermostat Hardware**

11. See Figure 6. Orient thermostat bracket so bracket is "bowed away" from cylinder head and align holes in thermostat bracket with holes in cylinder head cover. Install new longer bolts (part number AA0408.2CZ) using new fiber washers (part number 63858-49) and flat metal washers (part number BA0409.1Z) from kit. Tighten bolts to 10.0-13.0 ft-lbs (13.6-17.6 Nm).
12. Remove circuit breaker from clip on harness.

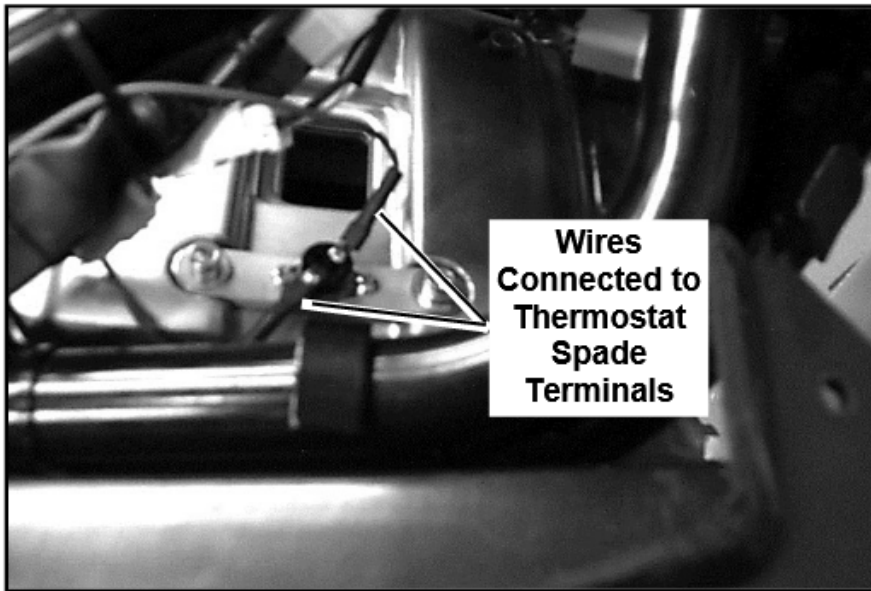


**Figure 7. Install Cooling Fan Harness**

13. See Figure 7. Remove nut from silver (Axillary) post of main circuit breaker. Place ring terminal (from red wire) of harness (part number Y0051.K) on silver post, then re-install nut.
14. Replace circuit breaker in clip on harness.

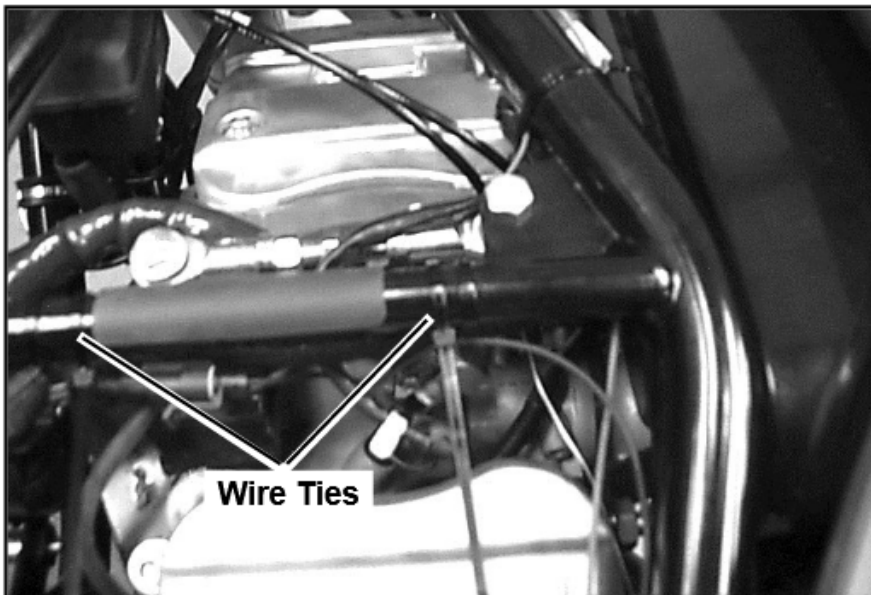


**Figure 8. Connect Harness to Fan**

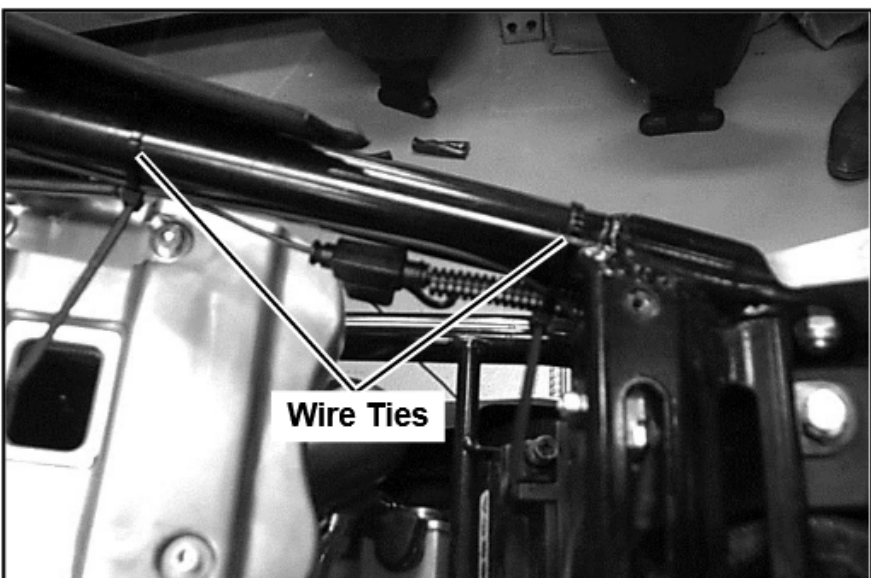


**Figure 9. Connect Harnesses to Thermostat**

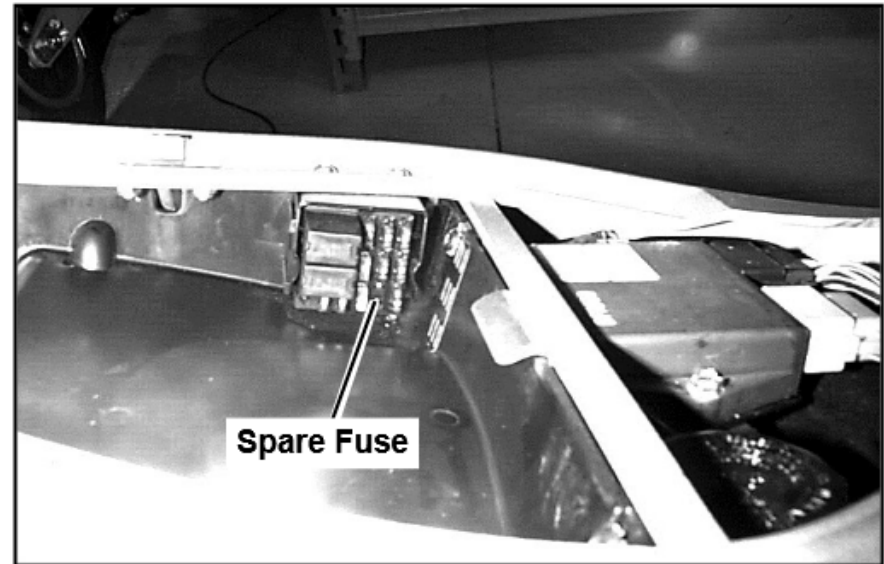
15. Remove screw securing main chassis ground wires to frame . Install ring terminal of black harness on screw (with other two ground ring terminals) and re-install screw.
16. See Figure 8. Connect the two-pin male AMP connector from the harness to the Female AMP connector coming from the fan.



**Figure 10.**



**Figure 11.**



**Figure 12. Install Spare Fuse (Motorcycle Trunk)**

17. See Figure 9. Connect spade terminal wire from each harness to the spade terminals located on the thermostat switch. Order of connection makes no difference.
18. Install wire ties to secure the harnesses at locations shown in Figures 10 and 11.
19. See Figure 12. Install spare 5 amp fuse to empty position in main fuse holder (motorcycle trunk).
20. Follow instructions in applicable Service Manual and reinstall fuel tank and seat. On S3T models, reinstall left fairing lower. A new hose clamp is included in the kit for reattaching the fuel line. A new wire tie is also included for reattaching the fuel vent line.

**⚠ WARNING**

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift position during vehicle operation causing loss of control which could result in death or serious injury.

**⚠ WARNING**

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion resulting in death or serious injury.

21. Reconnect negative battery cable.
22. Verify proper operation of horn.
23. Verify operation of fan by starting motorcycle and letting it idle for least 20 minutes. The fan should come on after approximately 10 to 20 minutes. After shutting the bike off, the fan should turn off after 5 to 15 minutes. These times may vary slightly depending on ambient temperature and motorcycle.