

INSTRUCTION SHEET **Buell** AMERICAN MOTORCYCLES

-J01645

Kit Number 91367-99Y

REV. 10-16-00

BUELL X1 COOLING FAN KIT

General

This Cooling Fan Kit is designed for installation on Buell X1 (Lighting) Model Motorcycles.

This kit consists of the following.

Qty	Description	Part Number
4	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	Standoff, fan bracket	R0051.K
1	Bracket, fan	R0050.K
4	Nut, 8/32 nylock	DN0800.2CZ
2	Clamp, #17 rubber	C0529.KA
1	Clamp, #17 cushioned	C0529.B
2	Screw, 3/8-16x3/16	C0217.K
4	Spacer, black nylon	C0121.K
2	Washer, flat 1/4x5/8 fiber	63858-49
2	Washer, flat 1/4x9/16	BA0409.1Z
4	Screw, button head #8-32x1-1/4	AN0810.3CBL
1	Screw, button head 5/16x1-1/4	AA0514.3CBL
2	Screw, socket head 1/4-20x1	AA0406.2CZ
2	Screw, truss torx 1/4-20x3/4	AA0406.11CBL
1	Clamp, fuel line	Q0115.0

⚠ WARNING

Use the appropriate Service Manual Procedures! Service Manuals are available from your Buell dealer. If the procedure is not within your capabilities or you do not have the correct tools, have your Buell dealer perform the installation. Inadequate safety precautions could result in death or serious injury.

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.

2. Follow instructions in applicable Service Manual and remove the following:

NOTE

Be sure to purge the pressure prior to removing fuel tank.

- a. Seat
- b. Air Scoop
- c. Fuel Tank Cover
- d. Fuel Tank
- e. Horn (Leave horn bracket and clamp; Save nut)

3. See Figure 1. Install fan (P/N Y0050.K) (oriented as shown) to fan bracket (P/N R0050.K) using 4 black nylon spacers (P/N C0121.K), screws (P/N AN0810.3CBL) and Nylock nuts (P/N DN0800.2CZ). Tighten hardware to 12.4-15.4 in-lbs (1/4-1.7 Nm).

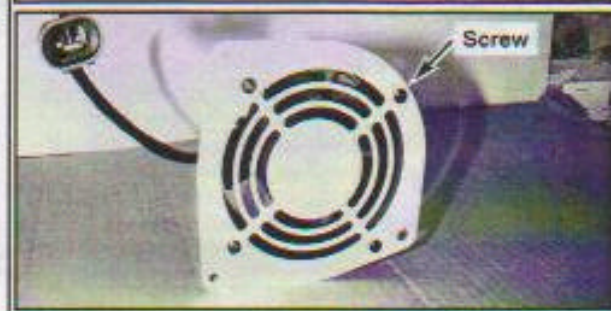


Figure 1. Install Fan Bracket

4. See Figure 2. Install two rubber fan bracket clamps (P/N C0529.KA) to frame member oriented as shown.

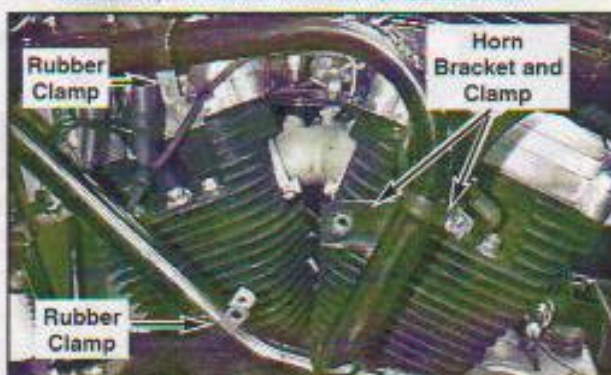


Figure 2. Install Clamps to Frame

- See Figure 3. Install assembled fan bracket to frame using clamps installed in prior step and truss Torx screws (P/N AA0406.11CBL). Secure fasteners but do not tighten completely at this time.

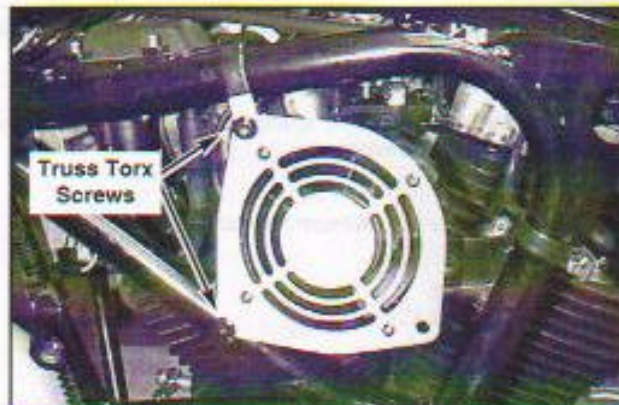


Figure 3. Install Fan Assembly to Frame Brackets

- See Figure 4. Obtain the fan bracket standoff (P/N R0051.K) and install between the fan bracket and horn bracket (clamped to frame) as shown. Using 5/16x1-1/4 inch button head screw (P/N AA0514.3CBL), secure fan bracket to horn bracket. Tighten screw to 10-13 ft-lbs (13.6-17.6 Nm).

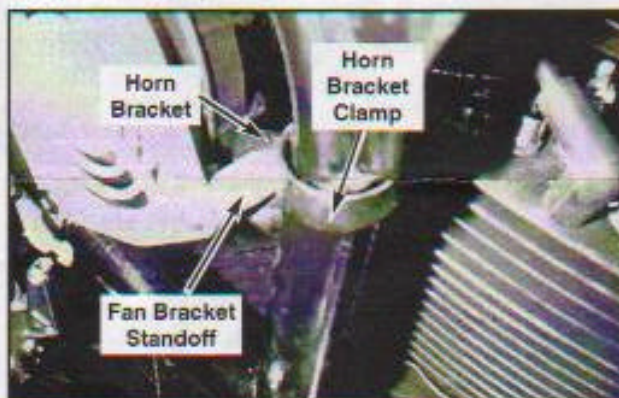


Figure 4. Install Fan Bracket Standoff

- Align mounting clamps then return to the two fan bracket screws installed in Step 5 and tighten to 5.0-8.0 ft-lbs (6.8-10.8 Nm).
- See Figure 5. Obtain cushioned clamp (P/N C0529.8) and install horn to frame at location shown using nut saved during horn removal (Step 2). Tighten to 12.4-15.0 in-lbs (1.4-1.7 Nm) and connect horn terminals.



Figure 5. Install Horn to New Location

- See Figure 6. Install thermostat switch (P/N Y0052.K) to thermostat bracket (P/N R0052.K) using screws (P/N C0217.K) and tighten to 12.4-15.0 in-lbs (1.4-1.7 Nm).

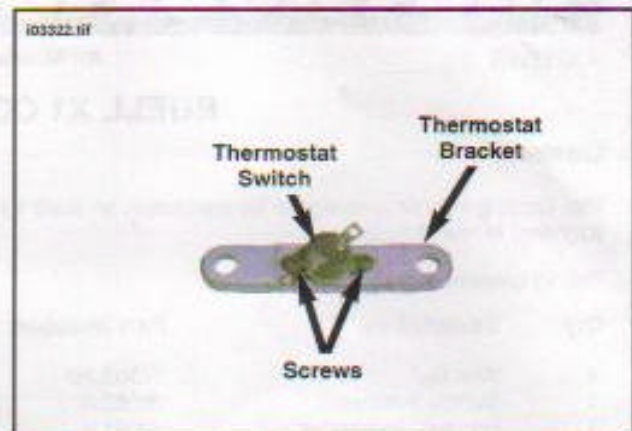


Figure 6. Install Switch to Thermostat Bracket

- See Figure 7. Remove front cylinder head cover bolts and discard.

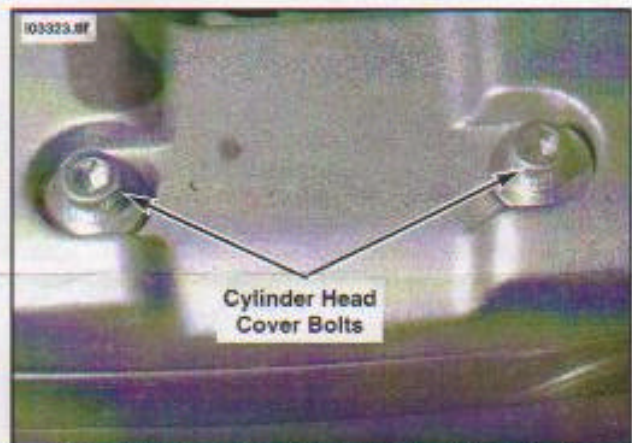


Figure 7. Remove Front Cylinder Head Cover bolts

- See Figure 8. 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 (P/N AA0408.2CZ) using new fiber washers (P/N 63858-49) and flat metal washer (P/N BA0409.1Z) from kit. Tighten bolts to 10.0-13.0 ft-lbs (13.6-17.6 Nm).

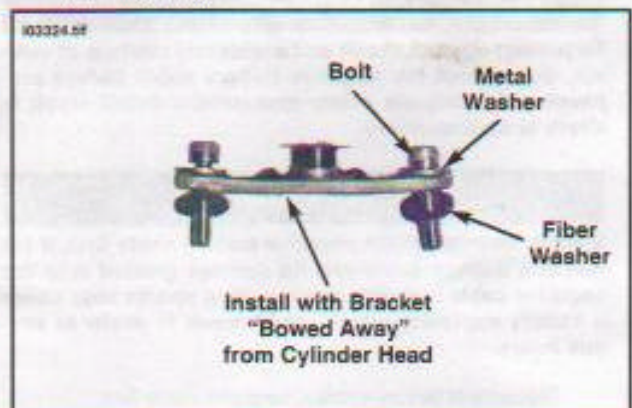


Figure 8. Thermostat Hardware

12. Remove circuit breaker from clip on harness.
13. See Figure 9. Remove nut from silver (Axillary) post of main circuit breaker. Place ring terminal (from red wire) of harness (P/N Y0051.K) on silver post, then re-install nut.
14. Replace circuit breaker in clip on harness.
15. Remove screw securing main chassis ground wires. Install ring terminal of black harness (with other two ground ring terminals) and re-install screw.

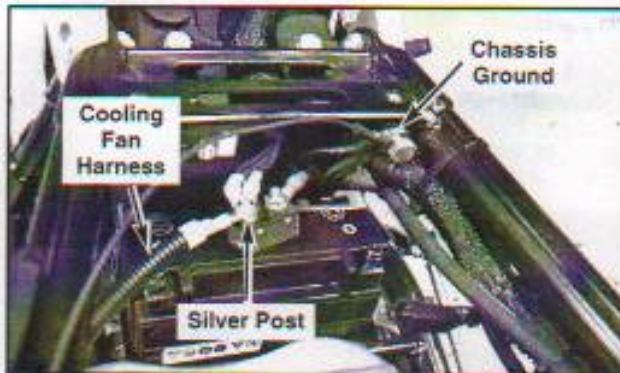


Figure 9. Install Cooling Fan Harness

16. See Figure 10. Connect the two-pin male AMP connector from the harness to the Female AMP connector coming from the fan.

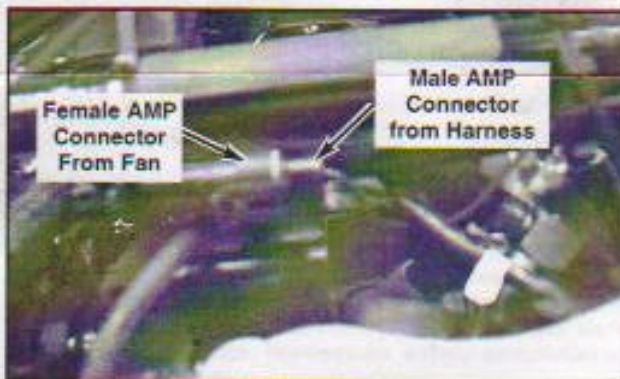


Figure 10. Connect Harness to Fan

17. See Figure 11. Connect spade terminal wire from each harness to the spade terminals located on the thermostat switch. Order of connection makes no difference.

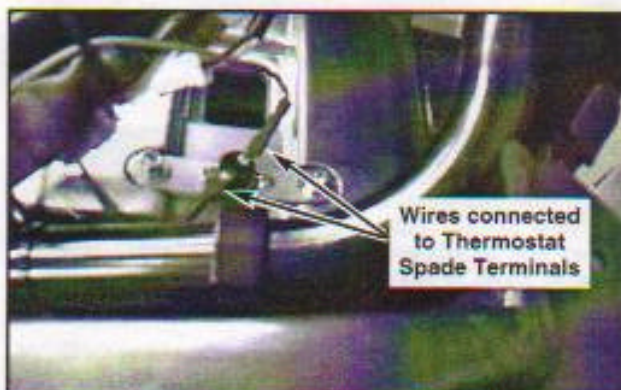


Figure 11. Connect Harnesses to Thermostat

18. Install wire ties to secure the harnesses at locations shown in Figures 12 and 13.



Figure 12.

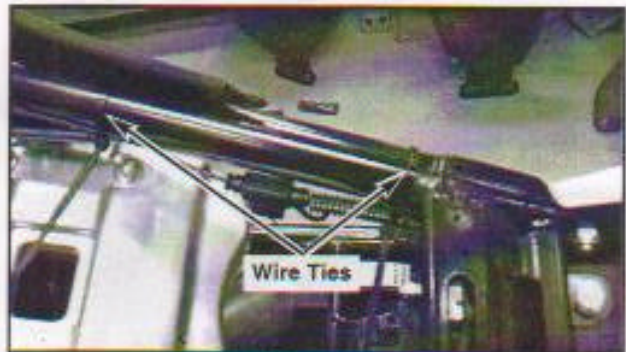


Figure 13.

19. See Figure 14. Install spare 5 amp fuse to empty position in main fuse holder (motorcycle trunk).



Figure 14. Install Spare Fuse

20. Re-install air scoop, fuel tank, fuel tank cover and seat.

⚠ 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 operation of fan by starting motorcycle and letting it idle for at least 20 minutes. The fan should come on after approximately 15 to 20 minutes. After shutting the bike off, the fan should turn off after 5 to 15 minutes.