

ABRAMS MAIN BATTLE TANK
MILES POCKET REFERENCE GUIDE

INSTALLATION CHECK

1. Verify that all cable and belt connections are correct and secure.
2. Ensure that all excess cabling is secured with velcro ties.
3. Vehicles without turret bustle will ensure excess #6 belt lengths are secured to vertical railing support. Wedge blocks are mounted RED SIDE OUT.

CONDUCT SYSTEM SELF-TEST AND TRANSMITTER VERIFICATION

1. Turn VEHICLE MASTER, UTILITY POWER, TURRET POWER Switches ON.
2. With control console switch in self-test position, verify PRESS TO READ display reads 00.
3. Place controllers green key into CONTROL CONSOLE, turn to controller position, then key back and remove.
4. Rotate CONTROL CONSOLE SWITCH to HIT/KILL and return to SELF-TEST.
5. Verify PRESS TO READ DISPLAY reads 88.
6. Use CONTROL CONSOLE SWITCH to verify display readings.
 - a. MAIN GUN position should read 55 (50 on M1A1 w/120mm gun).
 - b. COAX position should read 99.
7. Insert orange weapons key in CONTROL CONSOLE, turn key, turn key back and remove.
 - a. Verify kill tone in intercom and continuously flashing CVKI.
 - b. Verify PRESS TO READ DISPLAY with switch in HIT/KILL position displays 99.
 - c. NOT READY light comes on until reset.

8. Use controllers green key to reset CONTROL CONSOLE, re-verify displays.
9. Remove transmitter from breech. Have crewman hold operational MWLD in front of transmitter. Main gun switch ON, MAIN GUN SAFETY OFF, FIRE MAIN GUN, VERIFY MWLD KILL TONE SOUNDS. Verify PRESS TO READ DISPLAY with switch in MAIN GUN position displays 54.(49 on M1A1 w/120mm gun)
10. Reset MWLD, again hold in front of transmitter, fire blanks from M240 coax, VERIFY MWLD KILL TONE SOUNDS.
11. Set main gun switch trigger safe, move ejection guard safety forward.
12. Use controllers green key to reset CONTROL CONSOLE.

CHECK DETECTOR BELTS

Use CONTROLLER GUN to shoot each detector on all three DETECTOR BELTS. Verify that each detector causes CVKI LIGHT to flash 2-3 times and also causes intercom to sound intermittent "beeps." Only ONE detector per belt may be bad. As final check, kill the vehicle for system check. TAG (DA 2402) and DX bad belts.

TROUBLESHOOTING TIPS

1. Verify that all cable connections are tight and that all installed batteries are serviceable. Check all cables AND DETECTOR BELTS for broken, pinched or worn areas.
2. Use self-test to locate fault. Determine ALL possible causes. Then use EQUIPMENT TEST SET to isolate fault, and replace necessary part. Consult TECHNICAL MANUAL for troubleshooting procedures.
3. ALWAYS tag (DA 2402) faulty equipment before turn-in. Whenever possible, IDENTIFY SPECIFIC FAULT on tag.

ABRAMS MAIN GUN BORESIGHT PROCEDURE

WARNING: DATA RECORDED IN STEPS 4, 6, AND 16 MUST BE REENTERED AT END OF MILES EXERCISE. DO NOT LOSE THIS DATA.

1. Set up boresight target at known range, 1200m is recommended.
2. TURRET POWER ON, COMPUTER ON, THERMAL MODE switch to STBY.
3. Set fire control to EMERGENCY, set ammo select to SABOT.
4. Press BORESIGHT key and RECORD DATA LR _ _ _ _ UD.
5. Enter 0.0. 0.0 using CCP numbered keys, press ENTER key.
6. Press ZERO key and RECORD DATA LR _ _ _ _ UD.
7. Enter 0.0, 0.0 using CCP numbered keys, press ENTER key.
8. Press LEAD key, enter 0.0, press ENTER key, button MUST remain lit.
9. Press CANT key, enter 0.0, press ENTER key, button MUST remain lit.
10. Press CROSSWIND key, enter 0.0, press ENTER key, button MUST remain lit.
11. Press AMMO SUBDES key, enter 0, press enter key, close protective cover.
12. Press RANGE key, enter boresight target range, press ENTER key, button MUST remain lit.

NOTE: DATA ENTERED MANUALLY CANNOT BE RECALLED. ENSURE FUNCTION BUTTONS (LEAD, CANT, CROSSWIND, RANGE) REMAIN LIT. DO NOT PRESS FUNCTION BUTTONS AFTER SETTING. IF AT ANY TIME FUNCTION BUTTONS ARE ALL NOT LIT, RESTART BORESIGHT PROCEDURE FROM STEP 8.

13. Press gunner's or commander's palm switches, set FIRE CONTROL mode to MANUAL.

14. Align MILES transmitter boresight scope to boresight target using MANUAL turret traverse and gun elevation crank handles.

15. Press BORESIGHT key, look through GPS and use toggle switch to place GPS reticle on boresight target, EXACTLY AS MILES BORESIGHT SCOPE, press ENTER.

16. Verify GPS reticle is still on aiming point, RECORD AZ and EL knob settings on TIS. AZ ___ EL ___.

NOTE: THERMAL SIGHT TRU READY LIGHT MUST BE ON TO CONTINUE.

17. Set FLT/CLEAR/SHTR switch to SHTR, and TIS to ON.

18. Look through GPS, use BORESIGHT AZ and EL KNOBS to lay night TIS reticle on GPS day reticle aiming point.

19. Set FLT/CLEAR/SHTR switch to CLEAR.

20. Verify GAS set to boresight. Record AZ ____ EL ____.

21. Align GAS to boresight target, using 1200 meter range line and circle on APFSDS-T reticle.

22. Set FIRE CONTROL to NORMAL.

23. VERIFY BORESIGHT by using power controls to move GPS off target and return to target. KEEPING POWER CONTROL HANDLES DEPRESSED, verify MILES BORESIGHT SCOPE, GPS, TIS and GAS are all centered on target.

REPEAT BORESIGHT PROCEDURE IF NECESSARY.

NOTE: Although the data recorded in steps 4, 6, and 16 are recorded on this card, it is recommended that the data be separately copied and kept for safekeeping. Remember, this is the actual gun boresight data for your vehicle.