

## *Allied- Generic Wayne ANDI Systems - Release Notes*

**Allied Versions:**      **GWA0600S or newer**  
**Report Date:**        November 28, 2006  
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<b>Version(s)</b>	<b>Status</b>	<b>Release Notes</b>
<b>GWA0600S</b>	<b>Released 11/12/1998</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support for Control #, Hubometer and Purchase # prompts at the DPT.</li> <li>3. Added support for Wayne in dispenser bar code scanners. See the Dispenser Configuration Command (DIS M) for details on enabling/ disabling the scanner on a fueling point by fueling point basis. See the DPT Authorize Barcode Command (DPT d) for details regarding the bar code authorization request.</li> </ol>
<b>GWA0601S</b>	<b>Released 03/15/1999</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support for DUKPT method of debit encryption.</li> <li>3. Added support for the Additech fuel additive system.</li> <li>4. Added ability to detect the nozzle out condition before the customer selects a grade/ product.</li> <li>5. Added logic to report a failed car wash to the POS. This is utilized for operations where the car wash controller interface resides in the POS (i.e. car wash codes are provided via the POS).</li> </ol>
<b>GWA0602S</b>	<b>Never Released to Production</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support for the Lumitronic (MTI, Inc.) Electronic price sign.</li> </ol>
<b>GWA0603S</b>	<b>Never Released to Production</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Support added to ignore the setting of the "Report calling as Idle" and "Report Idle as Calling" flags when the CRIND is offline. See the DPT J command for details.</li> <li>3. Added support for card type selection (Credit or Debit). The POS can respond with a completion code that indicates it wants the customer to make the selection. This feature is activated via the DPT Configuration command (DPT J). See the DPT J command for details.</li> <li>4. Added support To allow the POS to control when the ANDI prompts the customer for a receipt. This can be set to prompt for receipt during or after the dispenser starts to fuel, as opposed to before fueling. The enhancement adds new flags to the "print receipt always" flag in the DPT J command (now referred to as receipt prompt mode flag).</li> <li>5. Enhanced the car wash prompt mode and receipt prompt for additional prompting scenarios. See the DPT configuration command (DPT J) for additional details.</li> </ol>

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<b>GWA0604S</b>	<b>Released 06/24/1999</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> </ol>
<b>GWA0605S</b>	<b>Never Released to Production</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Enhanced the logic to better handle POS systems that monitor all active pumps at the same time.</li> <li>3. Added support to allow the POS to configure an individual dispenser's slow flow volume value. Please refer to the Dispenser configuration Command (DIS M) for additional details.</li> <li>4. Added support for Preset by Volume in the DIS (authorize dispenser) and DPT R (authorize card) commands. See these commands for additional details.</li> </ol>
<b>GWA0606S</b>	<b>Released 01/25/2000</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support to report new owning device values based on the key pressed at the dispenser when in a calling state. Please see the DPT Data Element Dictionary section for definitions of the new owning device values.</li> <li>3. Added support to create a log event (SSC K) for when a printer returns to normal operation (Printer OK).</li> <li>4. Added logic to support Wayne graphics/ animated images.</li> <li>5. Added support to display transactional specific text when supplied by the POS during a sale authorization. The provided text will display for 5 seconds.</li> </ol>
<b>GWA0607S</b>	<b>Never Released to Production</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support for PPG discounting. See DPT Authorize Card (DPT R) and Authorize Dispenser (DIS D) commands for additional details. Requires PIB version 39000 or newer and CPU version 49.37 or newer in the Wayne Electronic Central.</li> <li>3. System includes the new boot loader support, which requires the ANDI to be populated with two RAM boards (Expansion/ Normal RAM slots).</li> </ol>
<b>GWA0608S</b>	<b>Released 08/21/2000</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Logic was changed to only send prices if needed.</li> <li>3. Enhanced the SSC menu (press 3-2-1). Added an additional screen for the Idle Status. If the first screen shows "System Not Idle", press the '1' key to display further details regarding the part of the system which reports the "Not Idle" condition.</li> <li>4. Added a new keypad to the ANDI system, value 9. Please see ANDI keypad document or Generic ANDI Service Manual for layouts.</li> <li>5. Added a new keypad to the ANDI system, value G. Please see ANDI keypad document or Generic ANDI Service Manual for layouts.</li> <li>6. Added support for communicating with the PIB at either 1200 baud (default) or 9600 baud.</li> </ol>
<b>GWA0609S</b>	<b>Never Released to Production</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added owning device "TS" to the dispenser status message (DIS A) when a hot authorized dispenser is denied. This allows the POS to recognized a hot authorized denial condition at the POS.</li> <li>3. The date-time of a card-reader transaction is now established at the start of a transaction and remains the same for the duration of the transaction. Both the DPT R and DPT C messages now contain a Date/Time field (field type 'e'). For an individual transaction, the content of this field is the same in both messages.</li> <li>4. A new optional POS SALE ID field has been added to the DPT R message, Field type '@' (0x40), max length 64 bytes. If the POS returns this field in the DPT R response message the SSC will return it in subsequent DPT R and DPT C messages for that transaction. This allows the POS to attach some arbitrary</li> </ol>

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<b>GWA0609S (cont.)</b>	<b>Never Released to Production</b>	<p>information to the sale.</p> <ol style="list-style-type: none"> <li>5. Enhanced the PIB interface to allow the ANDI to set mode 18 (product to hose assignment), mode 03 (product to tank assignment), and mode 17/ sub mode 6 (blend configuration for grade 6). This removes the need for a Wayne decade 2400 console during a stations startup.</li> <li>6. The ANDI code was enhanced to add a checksum to the configuration record. When the record is found to be invalid the ANDI requests a new copy from the Decade 2400.</li> <li>7. Existing ANDI systems reports the dispenser version as 6 characters. These 6 characters are the last 6 characters from the Wayne configuration record. The entire Wayne configuration record consists of 10 characters. The ANDI code was changed to report all 10 characters in the dispenser version field.</li> <li>8. Lab testing revealed that the ANDI would send a 'g' command (write grade at pump positions) to each dispenser that was reported as being offline by the PIB. This may have been introduced by the new 'program PIB values' enhancement mentioned above. This did not cause any problems other than adding unnecessary communication overhead. The logic was changed to no longer repeat the 'g' command under this condition. Repeating this command is not necessary, because the PIB is online and is responsible to forward that information to the dispenser.</li> <li>9. When programming blend-ratios in the PIB the ANDI was using the ratio of the first pure product of a blended product in GWA0609S revision 02. Most existing Wayne blender sites have the system configured with low stock-feed as the first pure product and the high stock-feed as the second pure product. It turns out that the Wayne PIB requires programming to be a percentage of the high stock-feed product. This required the site configuration to be changed to program high stock-feed as first product. To prevent having to change ANDI configuration at existing sites when upgrading ANDI software, the code was changed to program the PIB using the ratio of the second pure product. Please note that because of this change, locations with GWA0609S Rev 2 or Rev 3 and locations with SWN0202S will have to change their configurations back to "standard" Allied programming guidelines after upgrading to the next version Allied code.</li> <li>10. Modified the Preset Volume and "Fuel Up To x G" display. The logic was changed to no longer display "Fuel Up To X G" when the transaction type is set to 1 (fill-up) or 4 (auto auth fill-up). Please note that for these two cases, the ANDI will still display "Fuel To \$" at the card reader if the customer enters a fuel preset amount at the DPT (if enabled in the DPT configuration).</li> </ol>
<b>GWA0610S</b>	<b>Released 02/16/2001</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support for the Milwaukee Electronic Price Sign interface. The price sign connects to ANDI channel 12 in order to maintain the MTI sign interface on channel 15.</li> </ol>
<b>GWA0611S</b>	<b>Released 05/29/2001</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. The CAT/ Cash acceptor interface was enhanced. If the ANDI received an error with regards to the cash acceptor, the system would try to alleviate the problem by reconfiguring the device. This created the possible scenario where the ANDI would continuously try to reconfigure and cause sluggish communications.</li> </ol>

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<b>GWA0612S</b>	<b>Released 11/29/2001</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. The ANDI was enhanced to enforce the "DPT START FUELING TIMER" when a barcode with a Remaining Balance is used to authorize the dispenser. If the customer doesn't start fueling , the sale will remain authorized. The logic was changed to terminate the sale after the DPT START FUELING TIMER expires without detecting fuel flow (same as card transactions).</li> <li>3. The Wayne PIB system will not allow a price discount to occur if the nozzle is removed and a product is selected. The card reader will now display "Replace Nozzle For Discount" if necessary.</li> <li>4. Enhanced the logic to only show car wash options that the customer can afford (i.e. prompting at the end of the sale).</li> </ol>
<b>GWA0613S</b>	<b>Released 04/29/2002</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Enhanced the DPT X command to allow the POS to get card data and/or barcode data from the card reader. This was designed to work independent of the customer transaction at the dispenser and may be used for both inside sales and outside sales. Please see ANDI DPT X command for additional details.</li> <li>3. Added log event messages (SSC K) for messages received from a POS that can't be applied. If the received message was sent with the completion code field set to 'blank', the ANDI will respond with a completion code. Otherwise a generic "Msg Not Processed" message is generated.</li> <li>4. Enhanced the receipt prompt mode flag in the DPT configuration command (DPT J). The value of 'H' will instruct the ANDI to suppress prompting of the receipt at the beginning of the sale until one of the following completion codes is returned: <ul style="list-style-type: none"> <li>• @= Hot authorization.</li> <li>• W= Keep waiting for authorization.</li> <li>• &gt;= Accepted, POS will authorize dispenser.</li> <li>• A= Accepted/ authorized.</li> </ul> The ANDI will also suppress the car wash prompt when set to this mode if car wash is set to prompt in the beginning of the sale. </li> <li>5. Changed timers for "Re-Insert Card" and "Card Read Error Please See Cashier". Formerly the prompt timeouts were hard-coded for 45 seconds and because of an error in the code this timer would run twice (in effect be 90 seconds). This has been changed to use the configurable "DPT Await Card" timer.</li> <li>6. Added support for new Download Modes F (Forced Idle) and S (Forced Timed). See the Load Program Command (SSC J) for additional details.</li> <li>7. Added support for wild cards in the Log Event message. See the SSC K command for additional details.</li> <li>8. Added support for wild cards in the Log Event message. See the SSC K command for additional details.</li> <li>9. The system will now do a better job of displaying "Barcode Approved" for card-sales if barcode comes after the card-swipe.</li> <li>10. Fixed support of the DPT Print command for allowing the POS to print a generic receipt at the DPT.</li> <li>11. Added Support for the enhanced DPT Customer Prompts command (DPT X), to allow for the return of bar code or card swipe data. Please refer to the enhanced DPT X command specification for additional details.</li> </ol>
		<ol style="list-style-type: none"> <li>12. Added Support for the new DPT Prompt Complete command (DPT m) to allow the POS to indicate when specific prompt requests via the DPT X</li> </ol>

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<b>GWA0613S</b> <b>(cont.)</b>	<b>Released</b> <b>04/29/2002</b>	<p>command are complete. Please refer to the DPT m command specification for additional details.</p> <ol style="list-style-type: none"> <li>13. Added Support for new field types within the Program DPT Configuration command (DPT J). specifically, the “Press Enter When Done”, “Customer Prompt Mode”, and “Card Reader Pay Mode” flags have been added. Please refer to the DPT J command specification for additional details.</li> <li>14. Added logic to ignore multiple scans of the same barcode within one transaction. This was done to work around the Tokheim bar code problem, where they often report the same barcode multiple times.</li> <li>15. Added support for zip code prompt at the DPT. The POS requests the zip code prompt by returning a value of ‘)’ (0x28) in response to the authorize card command (DPT R). the zip code will be returned by the ANDI in field type ‘=’ (0x3D). this requires that debit modules be injected with the appropriate ZIP Code prompt.</li> <li>16. Added support for up to 4 transaction records (customer buffers) per dispenser. This is controlled by the new Maximum Customer Records field in the Program Station Configuration command (DIS O). If omitted from the message, this field defaults to 2 (compatible with current values). Note that changing this field changes the number of customer records returned in the DIS A message (dispenser status).</li> </ol>
<b>GWA0614S</b>	<b>Released</b> <b>08/09/2002</b>	<ol style="list-style-type: none"> <li>1. Includes Enhancements from previous versions.</li> <li>2. Changed logic to no longer accept a car wash code of all zeroes as a valid code. A report from a field location using the Kesseltronics controller (emulates Ryko) would sometimes do this under error conditions.</li> <li>3. Enhanced the sale recovery logic for when a dispenser would go off- line during fueling. Previous systems would have problems collecting sales information at the end of the sale.</li> <li>4. The Sale Cancelled Timer as set in the DPT Configuration command (DPT J) was hard coded. The system was modified to use the value as set in the configuration command.</li> <li>5. Added support to allow the POS to print the cash receipt even for cancelled cash sales. This was done by ensuring the ANDI sends the DPT Card Sale (DPT C) message before printing the receipt. This allows the POS to provide print data in the DPT C response message.</li> <li>6. Rebel Oil/Phillips 66 requested a change in regards to Debit at the card reader. The request was to change the DPT display to show "ATM/Debit" instead of "Debit" in all screens related to debit transactions. Some current Generic ANDI users still require the prompt to display “Debit”. To satisfy both requirements, a configuration parameter was added "Show Debit As ATM/Debit" in the DPT J command. To remain compatible with older systems it defaults to "No".</li> <li>7. Added enhancements to the Program Fuel Information (DPT D) command. In previous builds, the ANDI would reject a product if both the Name and Short Name fields were blank filled. The ANDI would also stop reading the remainder of the message (i.e. ignore other fuel programming information). The logic was changed to accept blanks in the Name and Short Name fields. This also can be used to restore default values of a fuel product (Gasoline).</li> </ol>

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<b>GWA0614S</b> <b>(cont.)</b>	<b>Released</b> <b>08/09/2002</b>	<ol style="list-style-type: none"> <li>8. Added support for taxable car wash product (support different car wash tax amounts for each car wash product). Please see the DPT Product Configuration command (DPT F) for additional details.</li> <li>9. Addressed potential issue with regards to operating dispensers in auto payout mode. In some cases, the ANDI sale buffer field would not be cleared after the sale was reported to the POS. Logic was added to check for auto-pay each time a Reserve, Authorize, Stop or Suspend command is received.</li> </ol>
<b>GWA0615S</b>	<b>Released</b> <b>04/27/2005</b>	<ol style="list-style-type: none"> <li>1. In systems with two-line displays where the idle display toggles multiple screens, the ANDI re-enables the card reader and cash acceptor each time it cycles back to the first screen. This could cause a situation where the timing is such that the customer's card data is being cleared before it can be picked up. Wayne recommended a work-around, which was successfully implemented. The ANDI no longer constantly re-enables the card reader when toggling screens at the idle prompt.</li> <li>2. The ANDI would sometimes not pay-off an outside sale if the wrong transaction pointer was used. The ANDI would change the current transaction pointer from the current transaction (outside sale) to the new auto-authorized transaction. The ANDI attempts to pay the transaction, however, the transaction pointer changed and therefore it attempts to pay the wrong transaction (the payable transaction that needs to be cashed out by the POS). The customer is properly billed on his credit card but the POS will count the sale twice (once as inside sale and once as outside sale).</li> <li>3. Added "DPT xx Link Up" and "DPT xx Link Down" log event messages. Logic was also changed to use the proper values for the "Event Nature" field (w = DPT Link Down, x = DPT Link Up).</li> <li>4. Added logic to return completion code "B" (busy) if the POS requests dispenser totals (group DIS, cmd T) while the ANDI is retrieving or is about to retrieve totals from the dispenser.</li> <li>5. Added the debit "fuel to" field. The amount is chosen based on the Debit Flag (cash/credit).</li> <li>6. Added support for beginning a sale with barcode presentation and ANDI remembering the discount rule from the POS in response to that barcode for the subsequent sale.</li> <li>7. If the DPT configuration parameter "Barcode" is set to a value of "2" and a barcode is swiped at the DPT, the owning device for that pump will be set to "BC."</li> <li>8. Added support for French promotional prompting for Canadian based customers.</li> <li>9. Added a volume limit to the station-wide (DIS 'O') message. This is a 7 byte field, numeric, with 3 decimal places. It's default is 0.</li> <li>10. Added a volume preset field to the Barcode (DPT 'd') response. It uses the same field code and format as the volume preset in other DPT response messages such as the DPT 'R'.</li> <li>11. Fixed a Wayne Dispenser bug. If a dispenser has cash/credit select buttons (and therefore separate cash/credit windows per product), only the default prices would be displayed after a sale.</li> <li>12. Enhanced log event message for blend ratio errors so that the log event contains the actual blend ratio.</li> <li>13. Changed logic to no longer accept a car wash code of all zeroes as a valid code. A report from a field location using the Kesseltronics controller (emulates Ryko) would sometimes do this under error conditions.</li> <li>14. Added enhancements to the Program Fuel Information (DPT D) command. In</li> </ol>

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GWA0615S (cont.)	Released 04/27/2005	<p>previous builds, the ANDI would reject a product if both the Name and Short Name fields were blank filled. The ANDI would also stop reading the remainder of the message (i.e. ignore other fuel programming information). The logic was changed to accept blanks in the Name and Short Name fields. This also can be used to restore default values of a fuel product (Gasoline).</p> <ol style="list-style-type: none"> <li>15. Added support for taxable car wash product (support different car wash tax amounts for each car wash product). Please see the DPT Product Configuration command (DPT F) for additional details.</li> <li>16. Added support to allow the POS to print the cash receipt even for cancelled cash sales. This was done by ensuring the ANDI sends the DPT Card Sale (DPT C) message before printing the receipt. This allows the POS to provide print data in the DPT C response message.</li> <li>17. Added support for keypad type "J".</li> <li>18. Fixed issue with debit not working when using the master key/session key method of encryption. The pin code was being rejected by the host due to the ANDI passing invalid PIN data. This was a byproduct of the MSM II (Canadian Debit) implementation.</li> <li>19. Fixed issue with MAC requests never getting a response.</li> <li>20. Added support for the "Enter PIN Code Or Press NO" prompt as requested by QuikTrip. The implementation operates within Wayne's limitations with a PIN prompt: When the "Enter PIN Code" prompt is displayed [completion code = 'p'], the &lt;CLEAR&gt; and &lt;CANCEL&gt; keys operate the same way <ul style="list-style-type: none"> <li>- When 1 or more digits are entered, the key acts as &lt;CLEAR&gt;</li> <li>- When no digits are entered, the key acts as &lt;CANCEL&gt;</li> </ul> This is the same as in existing systems.  When the "Enter PIN Code Or Press NO" prompt is displayed [completion code = ')'], the &lt;CLEAR&gt;, &lt;CANCEL&gt; and &lt;NO&gt; keys operate the same way <ul style="list-style-type: none"> <li>- When 1 or more digits are entered, the key acts as &lt;CLEAR&gt;</li> <li>- When no digits are entered, the key acts as &lt;NO&gt;</li> </ul> </li> <li>21. Changed logic to beep once if the MSM goes offline.</li> <li>22. MSM Menu: Added <i>MSM/DSM Revision Number</i> and <i>MSM/DSM Revision Date</i> to display options.</li> <li>23. MSM-II, Canadian debit. Added logic to read the MSM Revision Number and Revision Date.</li> <li>24. MSM-II, Canadian debit. Added prefix MSM: Serial # to the log event message of the MSM serial number.</li> <li>25. Added support for DSM (translate Wayne DUKPT to customer DUKPT).</li> <li>26. Added logic to send a log event message with the text "Msg Not Processed" if the <i>Message Token</i> in a DIS I response message does not match the <i>Message Token</i> in the DIS I request message.</li> <li>27. Fixed issue with debit not working after a warm start. This issue did not apply to "DUKPT in the CAT" systems.</li> <li>28. Added support for <i>Encryption Mode</i> value "U" in the DPT J command. Setting this mode makes "DUKPT via the DSM" mandatory.</li> <li>29. Added support for the Able price sign controller (channel 12).</li> <li>30. Assume the Able Price Sign controller is hooked up to Channel 12. When the content of Price Sign Product 9 (DIS O command) is set to a value other than zero, the WAWA Price Sign rules are implemented. When set to a value of zero, the Able Price Sign was disabled. The logic was changed to use the Able Price Sign like any other price sign when that value is set to zero.</li> </ol>

		<p>31. Added support for the DIS “X” (Return Transaction) command.</p> <p>32. Fixed cash acceptor warm start issue.</p>
<b>GWA0616S</b>	<b>Never Released to Production</b>	<ol style="list-style-type: none"> <li>1. Fixed “card take over” scenario at the CAT.</li> <li>2. Fixed issue where a preset sale authorized with <i>Discount Rule 2</i> would not permit the dispenser to fuel the maximum allowed amount.</li> </ol>
<b>GWA0700S</b>	<b>Internal QA</b>	<ol style="list-style-type: none"> <li>1. Fixed issue that caused the SSC ‘I’ (request config) message to be sent after a warm start even if configuration had been programmed.</li> <li>2. Fixed issue where unexpected low level protocol handling by the POS could result in an ANDI warmstart.</li> <li>3. Fixed issue where a DPT “X” (short format) would be returned in a message level response to a DPT “x” (long format) record.</li> </ol>