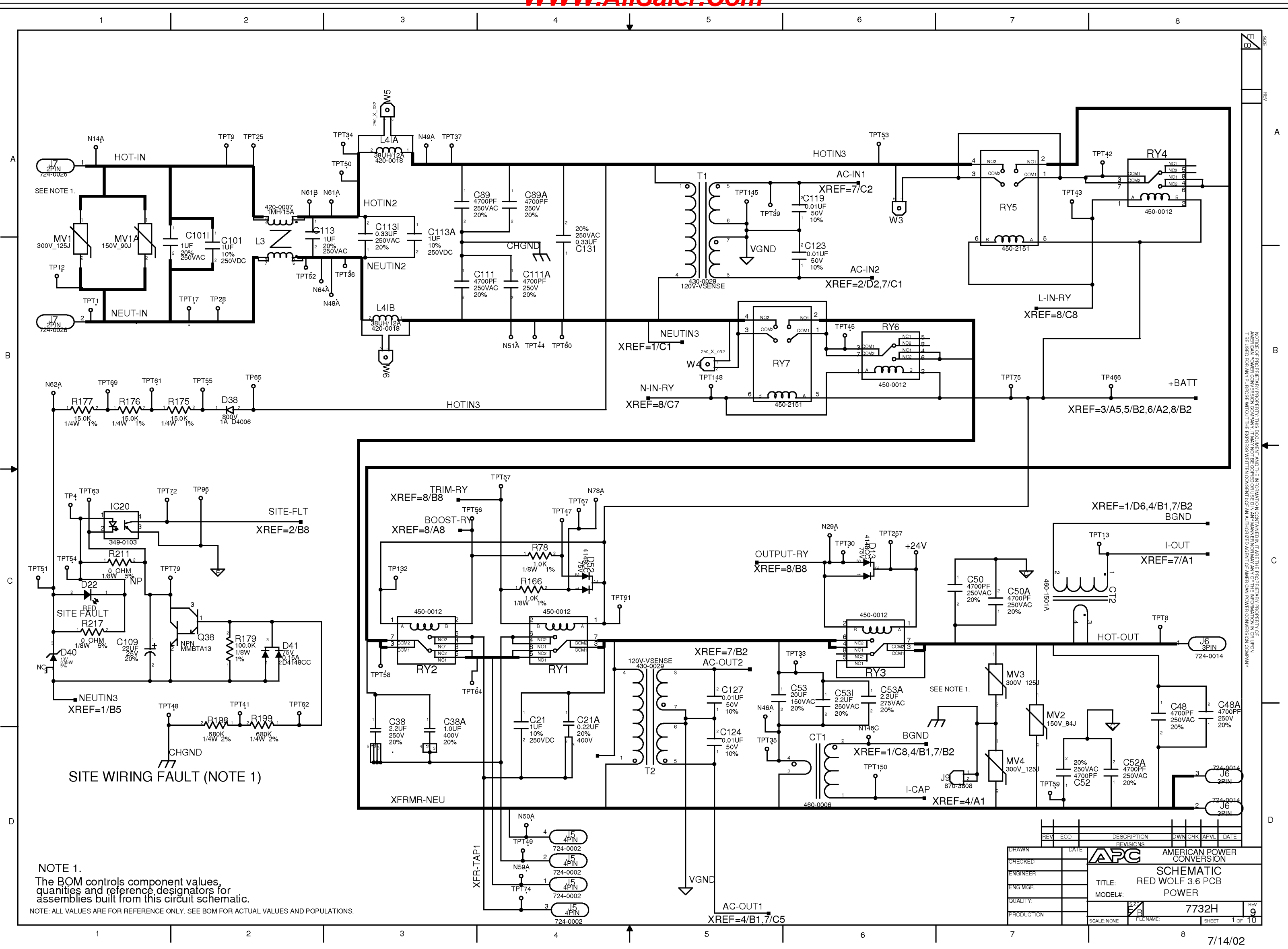


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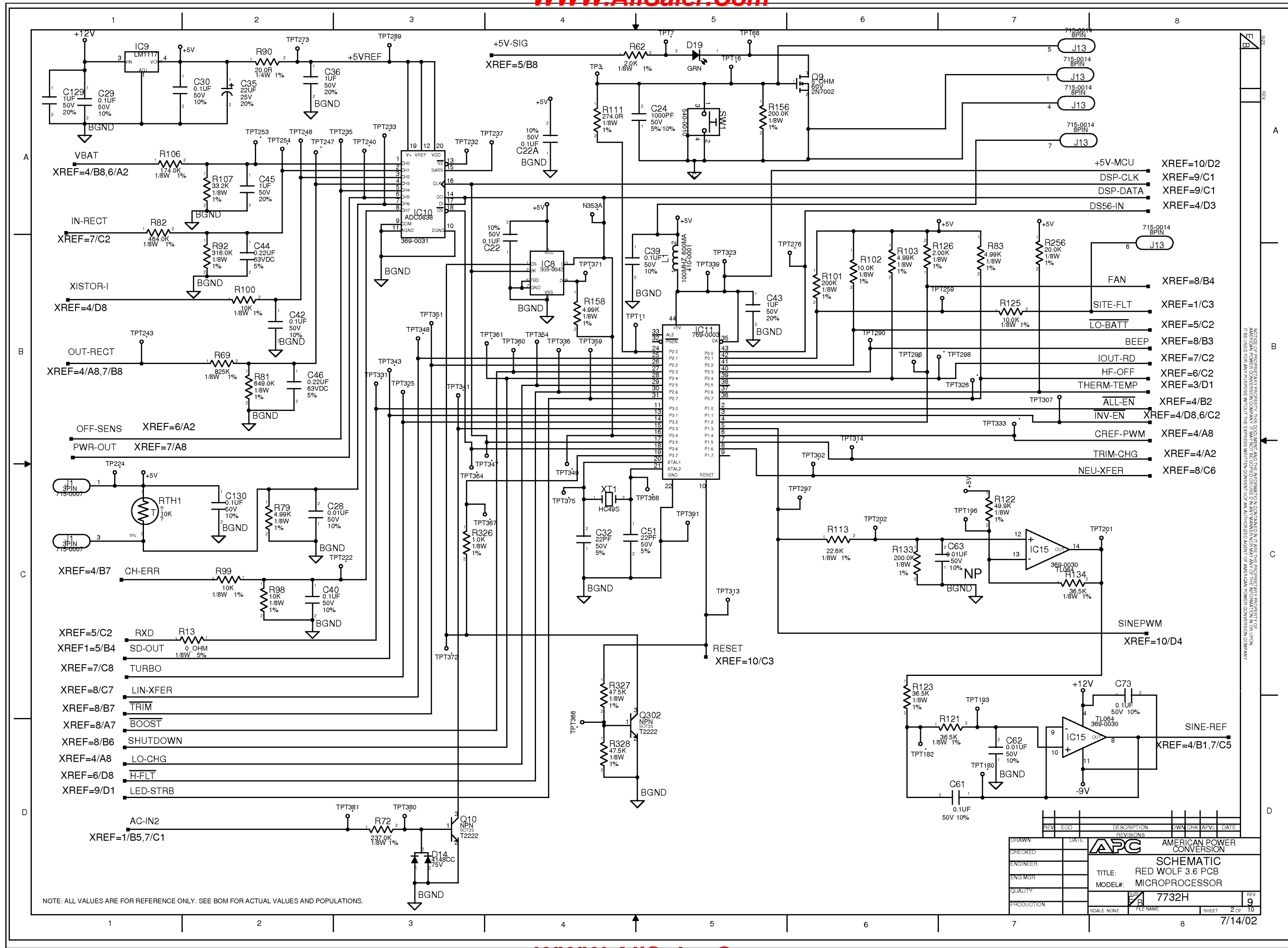


NOTE 1.  
The BOM controls component values, quantities and reference designators for assemblies built from this circuit schematic.  
NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.

| REV | ECO | DESCRIPTION | OWN | CHK | APVL | DATE |
|-----|-----|-------------|-----|-----|------|------|
|     |     |             |     |     |      |      |

|            |  |      |  |                           |               |
|------------|--|------|--|---------------------------|---------------|
| DRAWN      |  | DATE |  | AMERICAN POWER CONVERSION |               |
| CHECKED    |  |      |  | SCHEMATIC                 |               |
| ENGINEER   |  |      |  | RED WOLF 3.6 PCB          |               |
| ENG. MGR.  |  |      |  | POWER                     |               |
| QUALITY    |  |      |  |                           |               |
| PRODUCTION |  |      |  |                           |               |
|            |  |      |  | 7732H                     | REV 9         |
|            |  |      |  | SCALE: NONE               | FILE NAME:    |
|            |  |      |  |                           | SHEET 1 OF 10 |



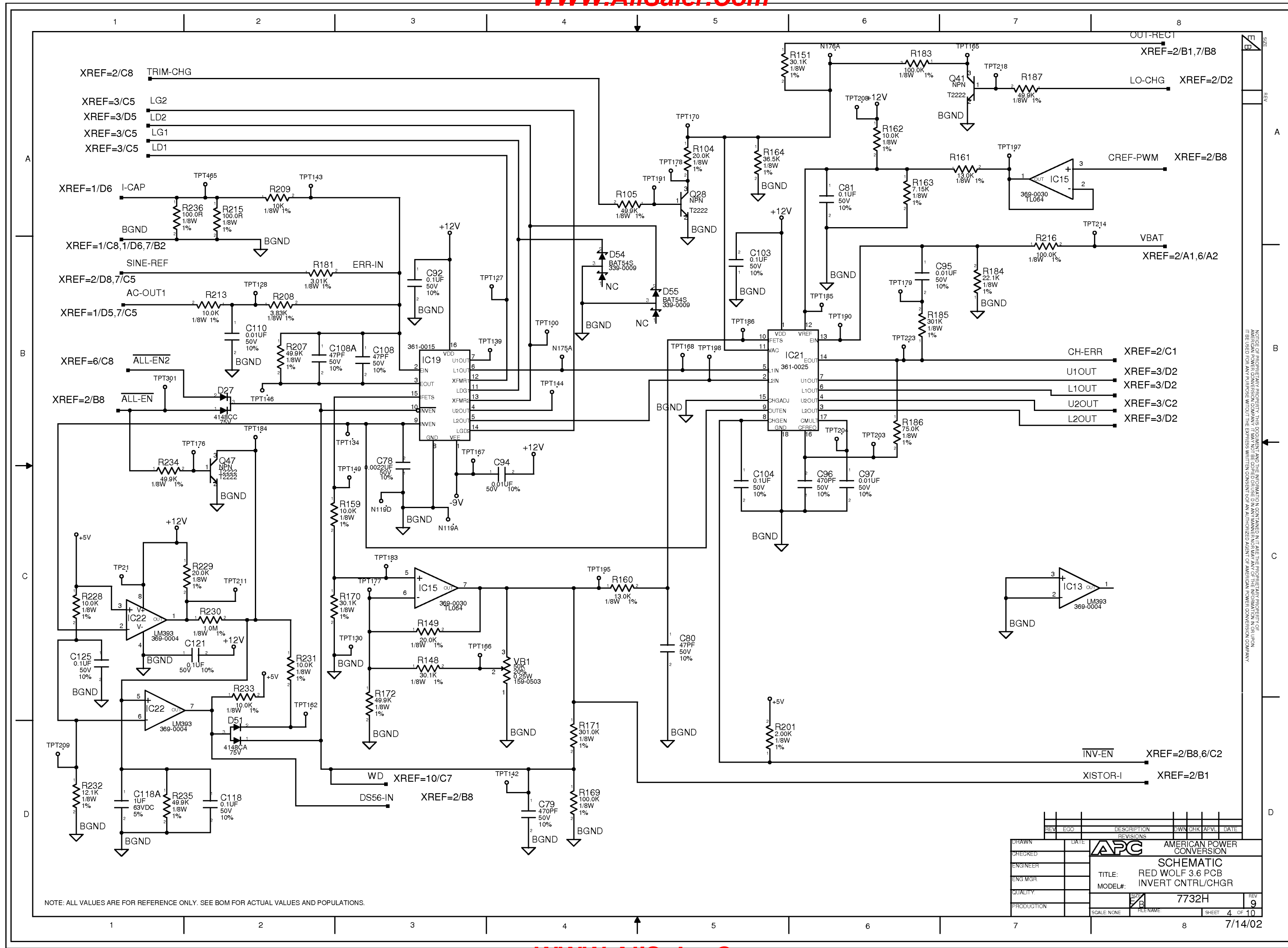
NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.

| REV | ECO | DESCRIPTION | DWN | CHK | APVL | DATE |
|-----|-----|-------------|-----|-----|------|------|
|     |     |             |     |     |      |      |

|            |      |                               |                |
|------------|------|-------------------------------|----------------|
| DRAWN      | DATE | APC AMERICAN POWER CONVERSION |                |
| CHECKED    |      | SCHEMATIC                     |                |
| ENGINEER   |      | TITLE: RED WOLF 3.6 PCB       |                |
| ENG MGR    |      | MODEL#: MICROPROCESSOR        |                |
| QUALITY    |      | 7732H                         |                |
| PRODUCTION |      | SCALE: NONE                   | SHEET: 2 OF 10 |





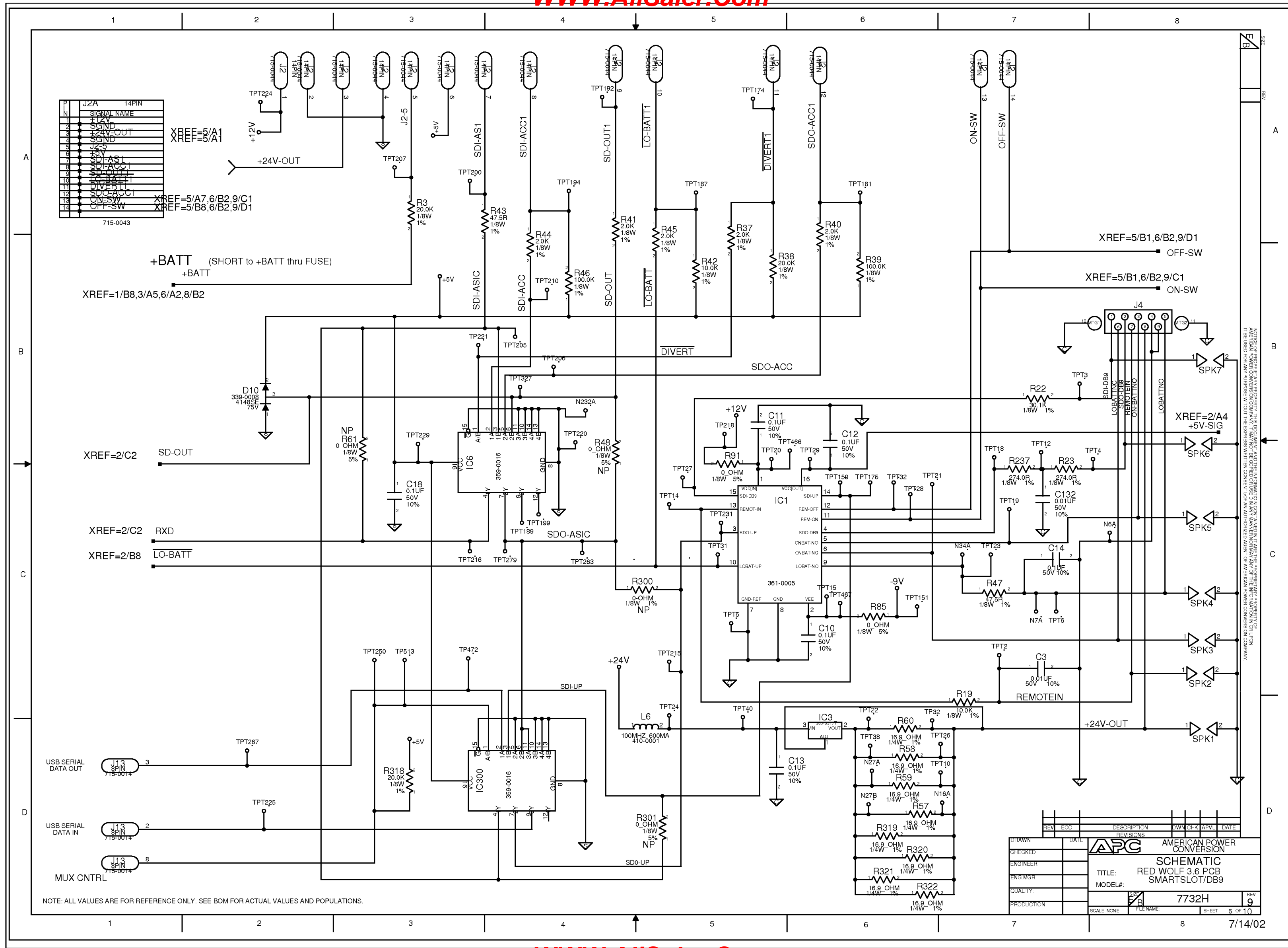
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| REV | ECO | DESCRIPTION | DWN | CHK | AP-PL | DATE |
|-----|-----|-------------|-----|-----|-------|------|
|     |     |             |     |     |       |      |

|            |      |                                                                                                                                                                          |     |
|------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| DRAWN      | DATE | <br><b>AMERICAN POWER CONVERSION</b><br><b>SCHEMATIC</b><br><b>RED WOLF 3.6 PCB</b><br><b>INVERT CNTRL/CHGR</b><br>MODEL#: <b>7732H</b><br>SCALE: NONE<br>SHEET: 4 OF 10 | REV |
| CHECKED    |      |                                                                                                                                                                          |     |
| ENGINEER   |      |                                                                                                                                                                          |     |
| ENG MGR    |      |                                                                                                                                                                          |     |
| QUALITY    |      |                                                                                                                                                                          |     |
| PRODUCTION |      |                                                                                                                                                                          |     |

NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.



| PIN | J2A | 14PIN | SIGNAL NAME |
|-----|-----|-------|-------------|
| 1   |     |       | +12V        |
| 2   |     |       | SGND        |
| 3   |     |       | +24V-OUT    |
| 4   |     |       | SGND        |
| 5   |     |       | +5V         |
| 6   |     |       | SDI-AS1     |
| 7   |     |       | SDI-ACC1    |
| 8   |     |       | SDI-UP      |
| 9   |     |       | SDI-DN      |
| 10  |     |       | SDI-DN      |
| 11  |     |       | DIVERT      |
| 12  |     |       | SDI-ACC1    |
| 13  |     |       | OFF-SW      |

XREF=5/A1  
XREF=5/A7,6/B2,9/C1  
XREF=5/B8,6/B2,9/D1

+BATT (SHORT to +BATT thru FUSE)  
+BATT  
XREF=1/B8,3/A5,6/A2,8/B2

XREF=2/C2 SD-OUT  
XREF=2/C2 RXD  
XREF=2/B8 LO-BATT

XREF=5/B1,6/B2,9/D1 OFF-SW  
XREF=5/B1,6/B2,9/C1 ON-SW

XREF=2/A4 +5V-SIG

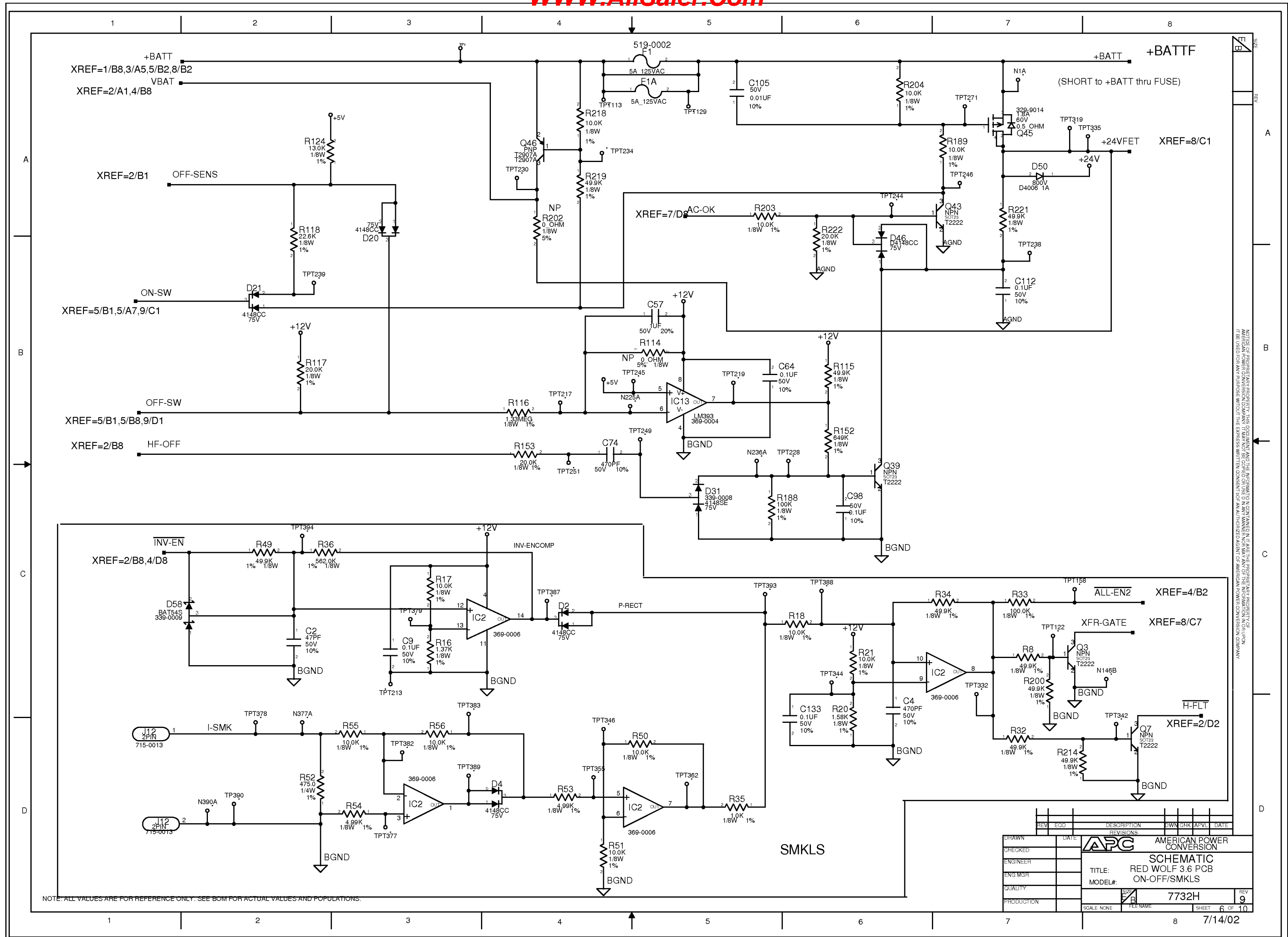
NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.

| REV | ECO | DESCRIPTION | DWN | CHK | APVL | DATE |
|-----|-----|-------------|-----|-----|------|------|
|     |     |             |     |     |      |      |

|            |      |                               |               |
|------------|------|-------------------------------|---------------|
| DRAWN      | DATE | APC AMERICAN POWER CONVERSION |               |
| CHECKED    |      | SCHEMATIC                     |               |
| ENGINEER   |      | RED WOLF 3.6 PCB              |               |
| ENG MGR    |      | SMARTSLOT/DB9                 |               |
| QUALITY    |      | MODEL#                        |               |
| PRODUCTION |      | 7732H                         | REV 9         |
|            |      | SCALE: NONE                   | FILE NAME     |
|            |      |                               | SHEET 5 OF 10 |

7/14/02



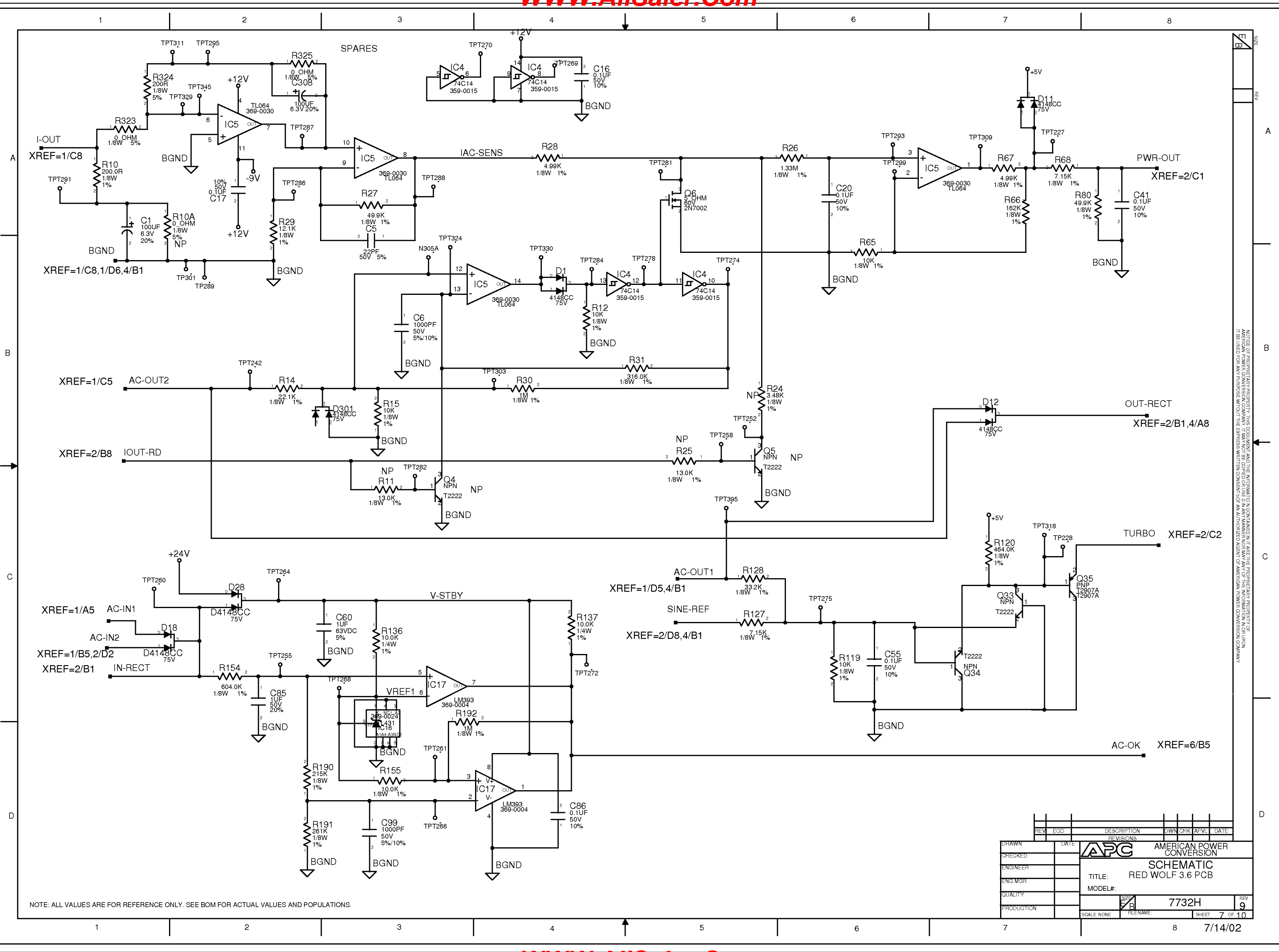
NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.

| REV | ECO | DESCRIPTION | OWN | CHK | APVL | DATE |
|-----|-----|-------------|-----|-----|------|------|
|     |     |             |     |     |      |      |

|             |           |                                                                                                                                          |         |
|-------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------|---------|
| DRAWN       | DATE      | <br><b>AMERICAN POWER CONVERSION</b><br><b>SCHMATIC</b><br><b>TITLE: RED WOLF 3.6 PCB</b><br><b>MODEL#: ON-OFF/SMKLS</b><br><b>7732H</b> | REV     |
| CHECKED     |           |                                                                                                                                          | 9       |
| ENGINEER    |           |                                                                                                                                          |         |
| ENGR MGR    |           |                                                                                                                                          |         |
| QUALITY     |           |                                                                                                                                          |         |
| PRODUCTION  |           |                                                                                                                                          |         |
| SCALE: NONE | FILE NAME | SHEET                                                                                                                                    | 6 OF 10 |


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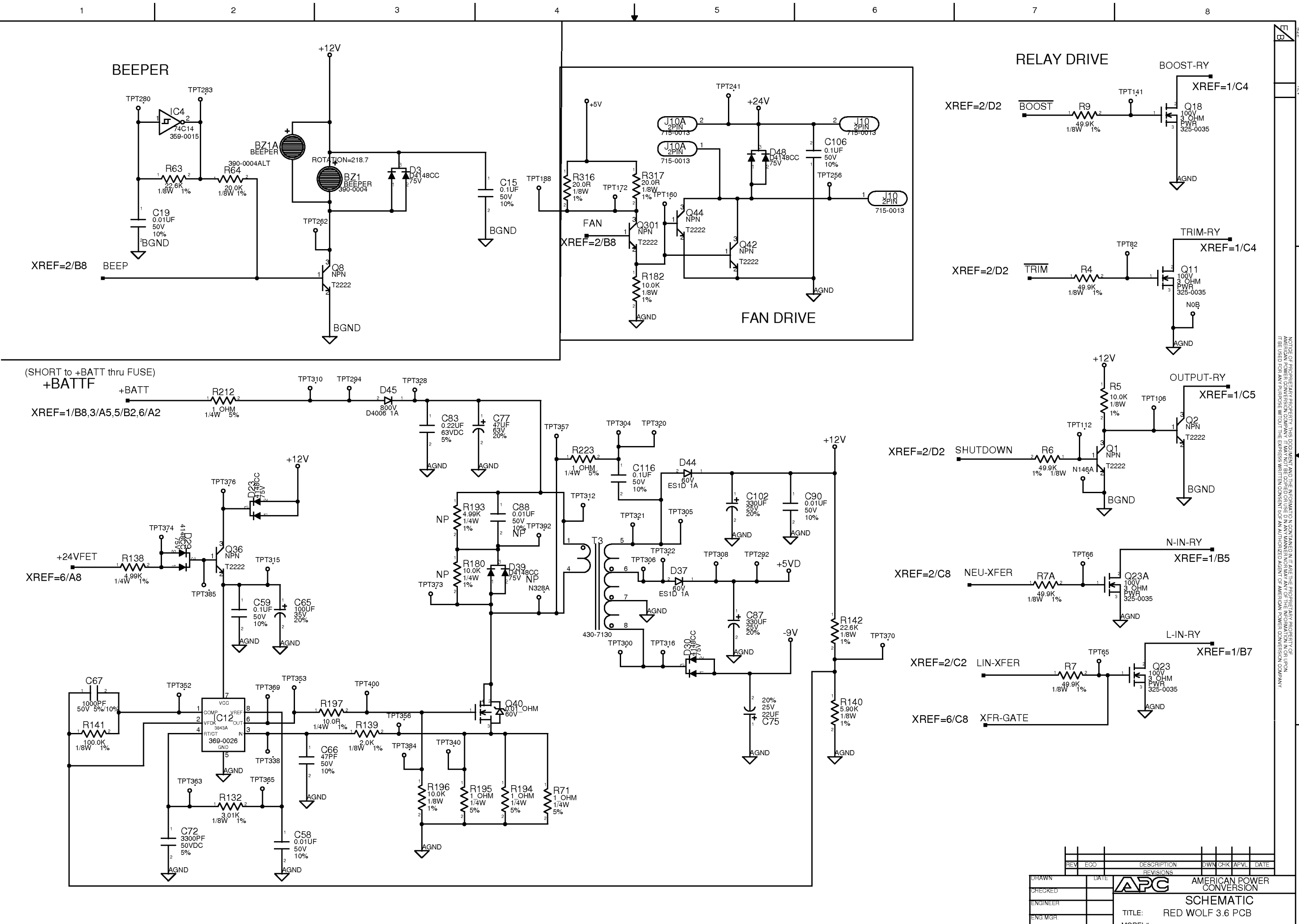


NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.

| REV | ECO | DESCRIPTION | OWN | CHK | APWL | DATE |
|-----|-----|-------------|-----|-----|------|------|
|     |     |             |     |     |      |      |

|             |           |                                                                                                                                                                                                  |         |
|-------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| DRAWN       | DATE      | <br><b>AMERICAN POWER CONVERSION</b><br><b>SCHEMATIC</b><br><b>RED WOLF 3.6 PCB</b><br>MODEL#: <b>7732H</b> | REV     |
| CHECKED     |           |                                                                                                                                                                                                  |         |
| ENGINEER    |           |                                                                                                                                                                                                  |         |
| ENG. MGR.   |           |                                                                                                                                                                                                  |         |
| PRODUCTION  |           |                                                                                                                                                                                                  |         |
| SCALE: NONE | FILE NAME | SHEET                                                                                                                                                                                            | 7 OF 10 |



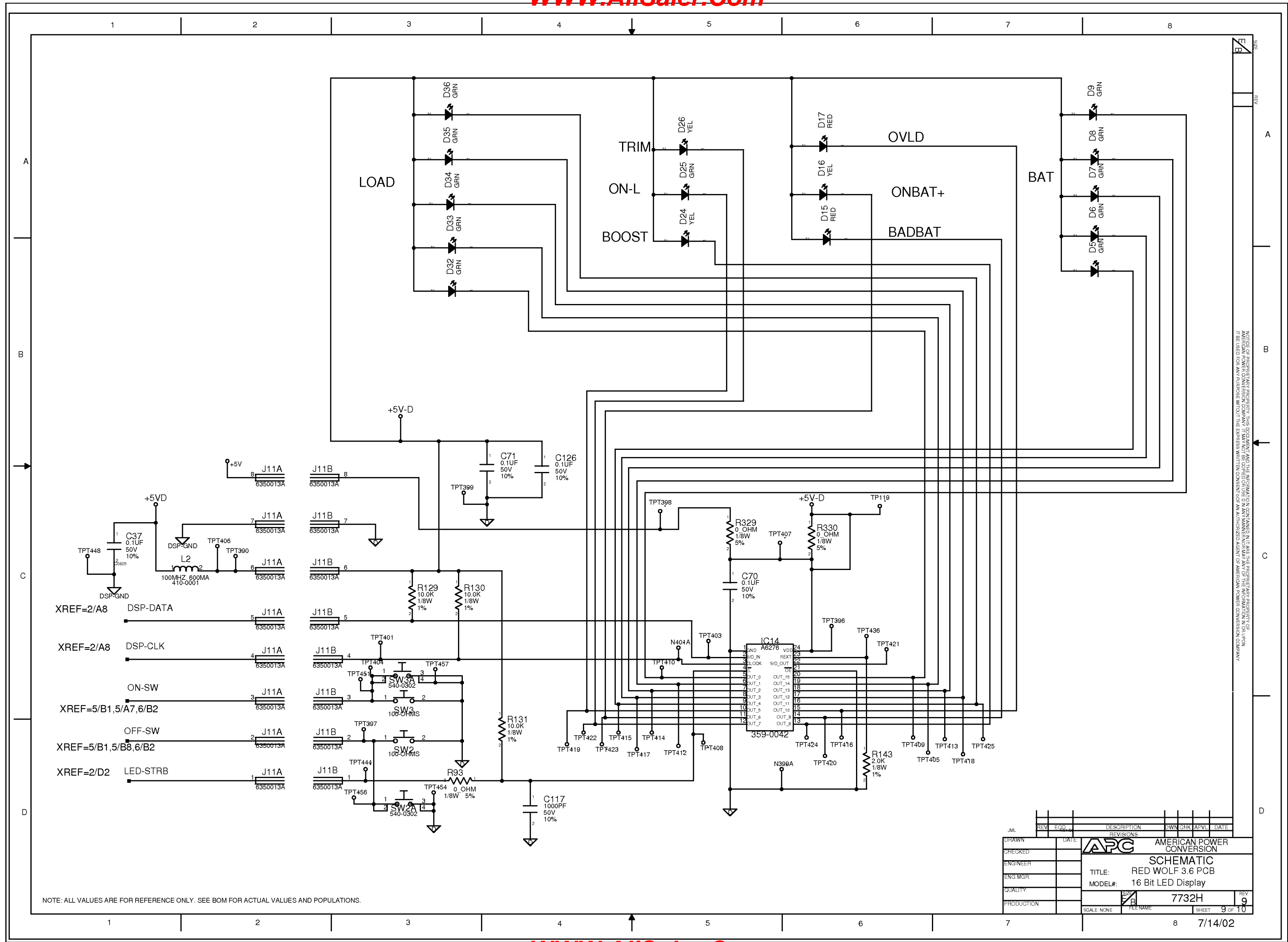
NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.

| REV | ECO | DESCRIPTION | OWN | CHK | APVL | DATE |
|-----|-----|-------------|-----|-----|------|------|
|     |     |             |     |     |      |      |

|            |  |      |  |                           |  |
|------------|--|------|--|---------------------------|--|
| DRAWN      |  | DATE |  | AMERICAN POWER CONVERSION |  |
| CHECKED    |  |      |  | SCHEMATIC                 |  |
| ENGINEER   |  |      |  | TITLE: RED WOLF 3.6 PCB   |  |
| ENGR MGR   |  |      |  | MODEL#: 7732H             |  |
| QUALITY    |  |      |  | REV 9                     |  |
| PRODUCTION |  |      |  | SCALE: NONE               |  |
|            |  |      |  | FILE NAME: 7732H          |  |
|            |  |      |  | SHEET 8 OF 10             |  |

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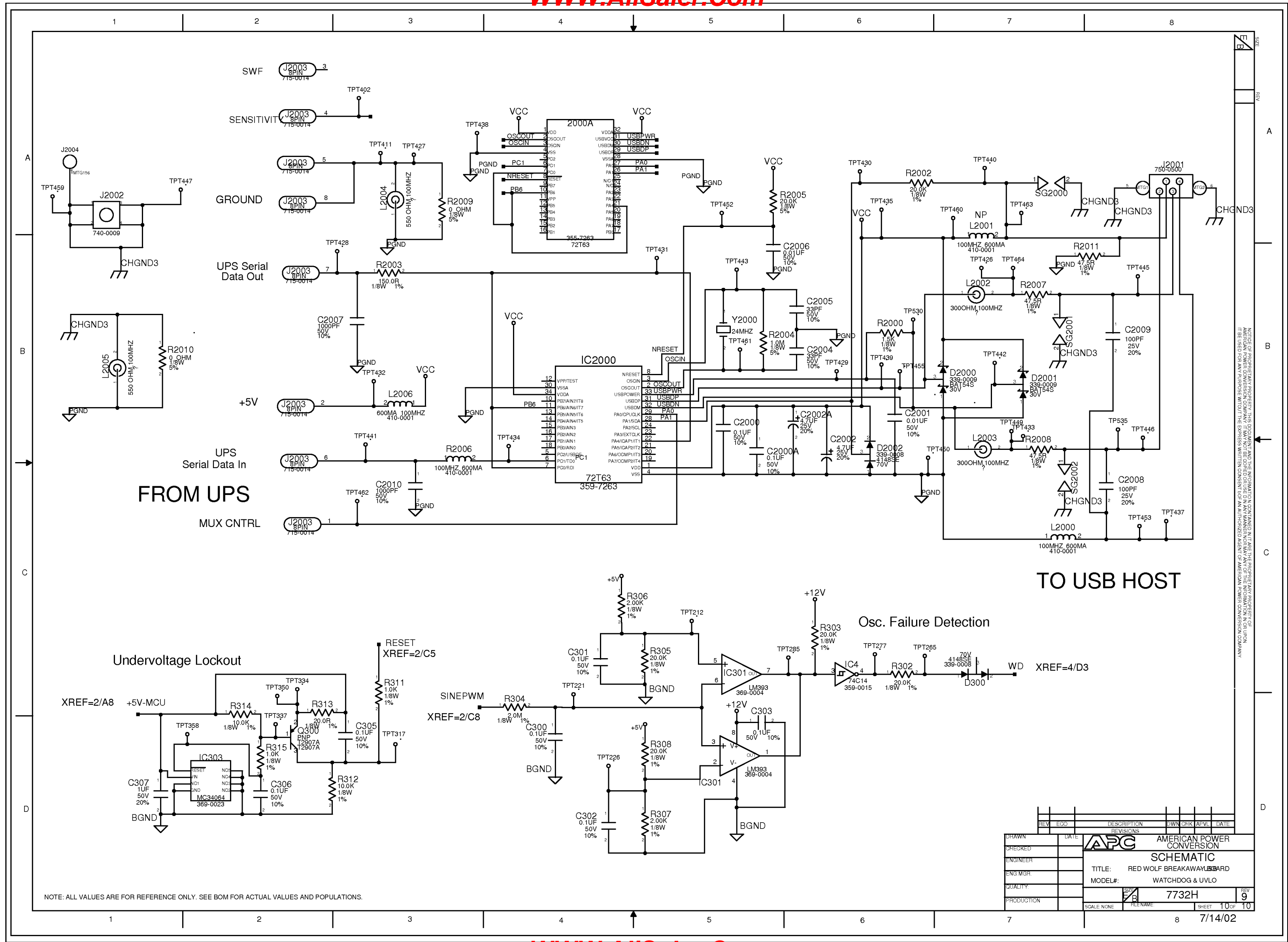


NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.

| REV | EQ | DESCRIPTION | OWN | CHK | APVL | DATE |
|-----|----|-------------|-----|-----|------|------|
|     |    |             |     |     |      |      |

|            |      |                                                                                                                                          |     |
|------------|------|------------------------------------------------------------------------------------------------------------------------------------------|-----|
| DRAWN      | DATE | <br><b>AMERICAN POWER CONVERSION</b><br><b>SCHEMATIC</b><br><b>RED WOLF 3.6 PCB</b><br><b>MODEL#:</b> 16 Bit LED Display<br><b>7732H</b> | REV |
| CHECKED    |      |                                                                                                                                          | 9   |
| ENGINEER   |      |                                                                                                                                          |     |
| ENG MGR    |      |                                                                                                                                          |     |
| QUALITY    |      |                                                                                                                                          |     |
| PRODUCTION |      |                                                                                                                                          |     |



NOTE: ALL VALUES ARE FOR REFERENCE ONLY. SEE BOM FOR ACTUAL VALUES AND POPULATIONS.

| REV | ECO | DESCRIPTION | DWN | CHK | AP-WL | DATE |
|-----|-----|-------------|-----|-----|-------|------|
|     |     |             |     |     |       |      |

|            |      |                                                                                                                                                                              |
|------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DRAWN      | DATE | <br><b>AMERICAN POWER CONVERSION</b><br><b>SCHEMATIC</b><br><b>TITLE: RED WOLF BREAKAWAY USB BOARD</b><br><b>MODEL#: WATCHDOG &amp; UVLO</b><br><b>7732H</b><br><b>REV 9</b> |
| CHECKED    |      |                                                                                                                                                                              |
| ENGINEER   |      |                                                                                                                                                                              |
| ENG MGR    |      |                                                                                                                                                                              |
| QUALITY    |      |                                                                                                                                                                              |
| PRODUCTION |      | SCALE: NONE<br>FILE NAME: 7732H<br>SHEET 10 OF 10                                                                                                                            |