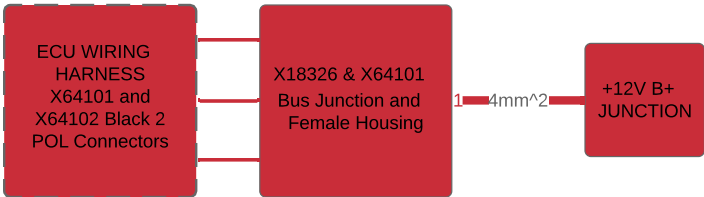
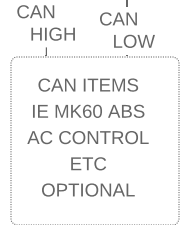
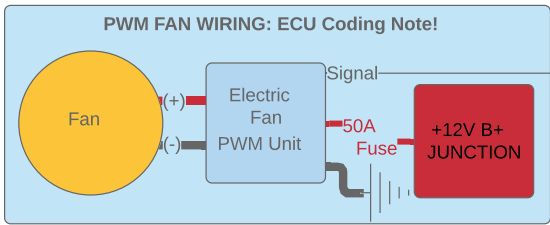
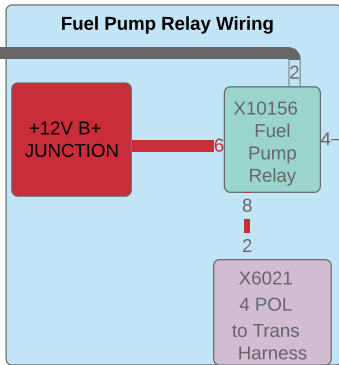
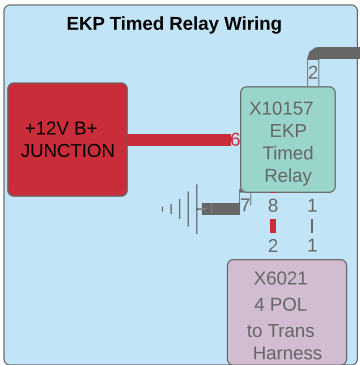
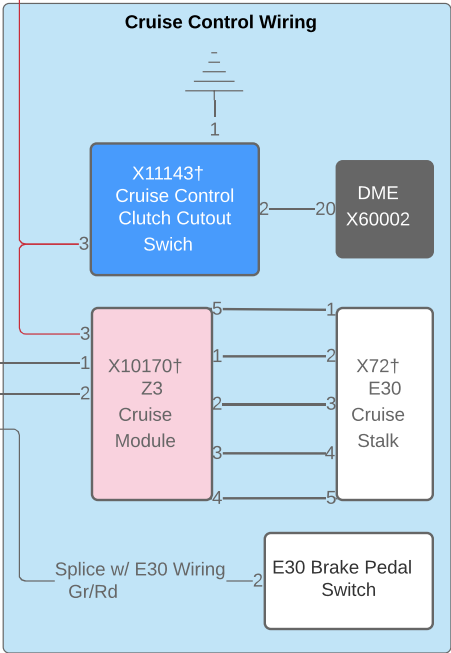
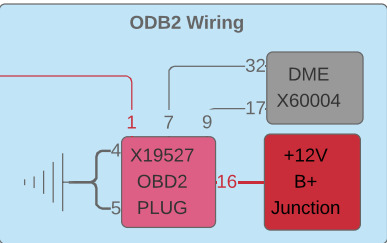
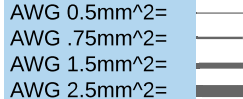
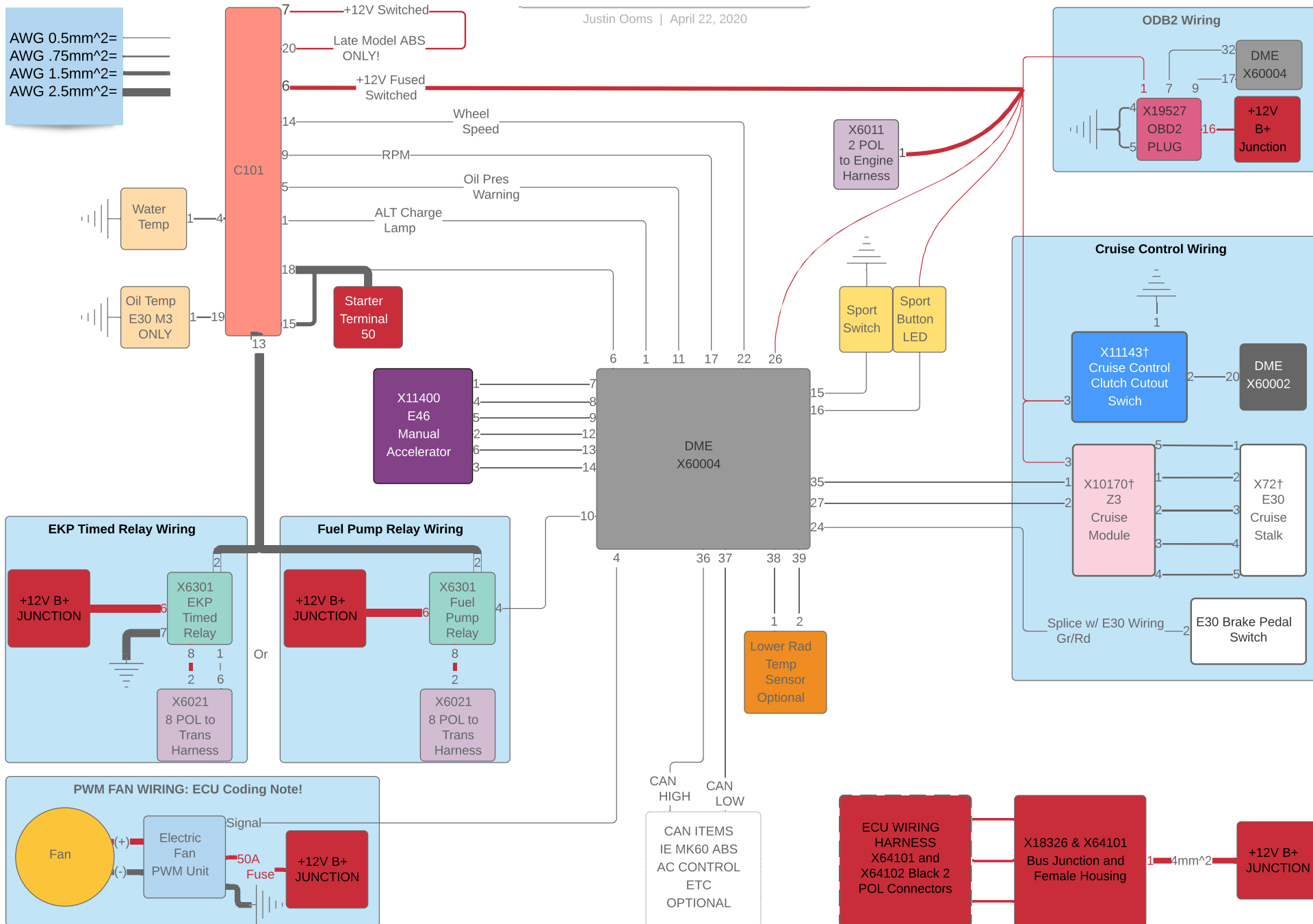


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E30 S54 Swap Wiring Harness DIY w/ Z3M Main and Z3M Manual Trans Harness

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Grounds Best Practices:
 Seperate Grounds as much as possible, ESPECIALLY IGNITION GROUNDS FROM EVERYTHING ELSE!
 Ideal Spots: Strut Tower, Battery Tray, Dashboard/Glovebox. Do not be afraid to create a ground point.

E30 Fuse Box: Change Fuse 11 to 15A for Fuel Pump

Early Model Tach and Wheel Speed : C104 pin 1 needs to be wired to chassis side C101 pin 9. Cluster C2 White Plug Pin 12 Splice and wire C101 Pin 14 Chassis Side. Female C101 Parts Listed.

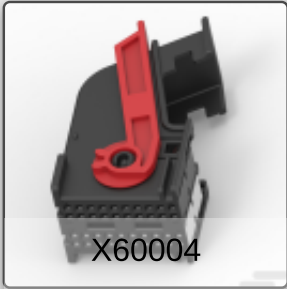
ABS NOTE: C101 Pin 20 ONLY is used for LATE MODEL ABS. Check C101 Chassis side for Red/Yellow wire, if so, connect as shown.

Flash Required ECU Partial depnding on AC Solution. Without AC Pressure sensor fan will run at 60% ALWAYS unless coded out. To have proper E46 AC, one will need a custom computer to create K-Line messages and let the ECU know how fast to run the fan based on engine temp, engine load and AC Pressure output. E30 stock AC can be used but the PWM fan will not compensate for AC load.

| Connector | BMW Designation | Part # | Pin Quantity & # | NOTE |
|--|---------------------|--|--|---|
| Engine to Chassis Housing | C101 | 12521707283 | 20x 61131376191 2x 61131376193 2x 61131376195 Female 2x 61131376202 | Pin Removal Tool 83300495385 Crimper: www.vintageconnections.com/Products/Tools & Steelman 23-Piece Universal Terminal Tool Kit |
| ECU X60004 | X60004 | 12521744629 or TE 284229-1 | 40 x TE 61-13-0005-197 | Internal Housings: 284150-2 & 284150-1 |
| Accelerator | X11400 | 61138383300 | 6x 61130005197 | Pedal 35426786282 Mount 35426772703 |
| OBD2 | X19527 | 61138380698 | 6x 61138366598 | Frame 61138373323 |
| Fuel Relay | X10157 X10156 X6301 | 61131389113 61368373700 | 2x 1131378906 2x 61131370692 | EKP module if used: 61357892976. Pins: 1x 61138377730, 4x 61138377731, |
| E46 Blue 4 POL or Z3M 8 POL | X6021 | 61132360044 Kit w Pins | 2x 61138373293 | Female Housing if Needed: 61132359996 . For Z3M harness recommend converting ECU side to E46 X6011 |
| E46 Blue 8 Pin or Z3M 2 POL | X6011 | 61136905999 | 2x 61138373293 | Female Housing if Needed: 12527505477, Pins: 12527502933. For Z3M, convert to E46 X6021 |
| Clutch Switch & Female Housing | X11143† | 61318381612 TE 3-1718346-1 | 3x TE 5-963715-1 | |
| Cruise Control Module & Female Housing | X10170† & X72† | 65718380054 TE 2-1718346-1 | TE 5-963715-1 | Recommend adding 4 POL connector in glove box for easy servicing of wiring/ECU/Engine Removal |
| B+ Junction Joiner Bus and Housing | X18326 | 61138373609 61138377082 | 1x 61138377732 | |
| Rad Inlet Temp Sensor & E30 M3 Oil Guage | | Sensor 12621710512 Housing 12521427615 or Housing Kit 1287013003 | 2x 12521427608 | Bosch Jetronic Protective Boot :1280703031 Technica Motorsports S54 Coolant Adaptor Recommended. Use a safety wire drill guide and connect the body of upper rad temp sensor to any ground point. |
| Rad Outlet Temp Sensor | | 13621433076 12521427787 | 2x 12521427608 | Bosch Jetronic Protective Boot :1280703031 |
| PWM Fan Module | | 645469889 | | Optional but recommended. PWM module not sold seperatly via BMW. Wire up your your desired 3 pin weather protected housings that are 30A rated. Recommended 16 SPAL Pusher Fan 30102048 16:" |
| Sport Switch | | | | Momentary Push Button Normally Open IE: www.aliexpress.com/item/32811686847.html |



C101



X60004



X11400



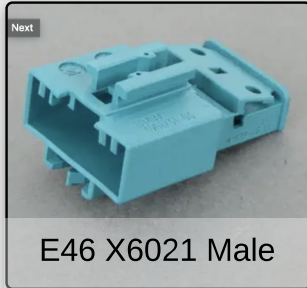
X19527



X19527 Frame



X10157 X10156
X6301



E46 X6021 Male



E46 X6021 Female



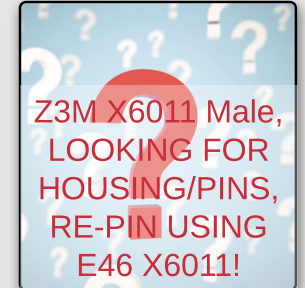
E46 X6011 Male



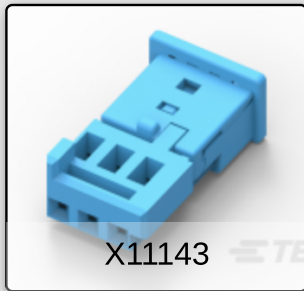
E46 X6011 Female



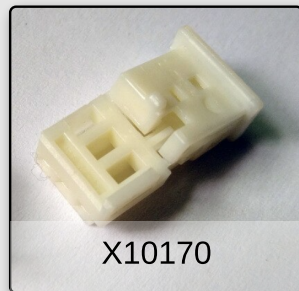
Z3M X6021 Male,
LOOKING FOR
PINS. RE-PIN
USING E46
X6021!



Z3M X6011 Male,
LOOKING FOR
HOUSING/PINS,
RE-PIN USING
E46 X6011!



X11143



X10170



X18326 Joiner
Bus



X18326



E30 Rad Inlet/ E30
M3 Oil Temp



Rad Outtet



PWM Fan Module



Sport Switch