

Building Tips by PMD

For Wedico Trucks

THESE ARE IN NO PARTICULAR ORDER BUT WILL HELP YOU WITH BUILDING!

Below are some methods we have found to ease the assembly of these models. If you have any ideas while building your truck, please send them to us and we will consider adding to these tips. As with any model, you need to thoroughly review the INSTRUCTIONS and building tips. Plan the building of your model. The parts fit very precisely – if you have to force two parts together then STOP – you are doing something wrong and it is time to look at the instructions and parts to figure out the right sequence.

Recommended Building Sequence: Build the chassis first, then install the driveline and servos as necessary, then the sleeper (if appropriate) and finally the cab. When building the cab, leave the exhaust system stacks removable for shipping. Also glue the exhaust shields spacers to the mufflers to prevent loss.

When Assembling the Professional Chassis: When building a Peterbilt the 8 cab mounts must be installed **now**, see Peterbilt cab instructions page 6. Each wheel has 3 leaf springs, always bend flat the 2 smaller leafs. This will let the truck ride much better because they are too strong for the weight of the truck. Next install all the springs on the left and right frame rails, then assemble with cross members.

OPTION: Unbend the rear of the front cross head, and the front of the rear cross head, this gives more room for PC boards and wire.

OPTION: Part #2004 full fender mounts install NOW.

If You Are Installing a Transmission and Other Driveline Components: These need to be placed into the chassis prior to mounting the front cross head to the chassis. Install the motor(s) and/or the coupler gearbox at this time. Also install the sound system motor pickup at this time if applicable.

Radio Receiver (Airtronics): Servo plug positions:

#1 Main motor speed controller

#2 Steering servo

#3 Hydraulic dump cylinder or winch motor

#4 Sound System dual E switch part # 199

#5 Loading ramp or lift axle or other options

#6 3-speed transmission servo

#7 Power supply lead 4.8 volts

Mount the Steering and the Shifting Servo: We recommend at this point you hook up the radio to the servos, don't forget to plug the small battery into the # 7/battery position of the receiver. Adjust the servos and linkages as needed. Extend the servo leads as needed to reach radio system in sleeper.

See www.gardentrucking.com Work Bench, Instructions for the 3-speed transmission.

FOR THE PETERBILT: As soon as you have mounted the front cross head mount the grill to the frame. **This is different from the instructions.**

Recommend that you install the headlight housing on the grill prior to mounting the grill to the frame – it is easier to put the light bulbs in the housings on the grill prior to mounting. Use a small piece of heat shrink tubing (white for low beams, black for high beams) to identify the leads for each bulb when you start to wire them. With the small screws and nuts that the hinge mounts with, it is easier to install the grill without the hood attached. The hood assembly will easily install to the grill when you are ready. Mount the turn signals on the fenders then mount the fenders to the hood. You have to leave the FRONT screw, lock washer, nut and wedge off until you mount the hood on the grill. These screws go through the grill housing. When installing the hood route the turn signal wires over to the headlight wires and all of them through a small piece of 1/4" diameter heat shrink tubing also a 1/4" long so that they will form a neat bundle and go down through the hole in the frame cross head to reach the PC board underneath. **Mount the front bumper** to the front frame cross head using the 1/4" spacer. Again this is to have easier access to the nuts for the mounting screws.

Electrical System: Part # 782 and 783

The biggest area people tend to get into trouble is while installing the electrical system. Unfortunately, they rush this building sequence and end up shorting the electrical system out. Please keep in mind these are all metal kits – specifically, they are made out of aluminum, which is a very good conductor of electricity.

THE ELECTRICAL SYSTEM WILL NOT FUNCTION UNTIL COMPLETELY ASSEMBLED

PRIOR TO HOOKING UP ANY BATTERY SOURCE, BE SURE THAT BOTH THE FRONT AND BACK PC BOARDS ARE IN THERE PLASTIC MOUNTING TRAYS AND THAT THE MAIN ELECTRICAL SWITCH PANEL IS MOUNTED WITH THE INSULATION PAD IN PLACE.

Main switch PC Board viewed from the rear of the truck

Left switch = 4 way flasher, next switch = lights, next switch = radio, right switch = main power

Always turn switches on right to left

MULTINAUT AND MULTI-SWITCH ARE NOT USED IN THE USA

Roof Lights: Here is an easier way to pull the light bulb leads through the roof light housing – this will require a small soldering iron. Push a small piece of wire from the bottom of the housing so that it sticks out the front of the housing. Solder this to the two ends of the light bulb pigtailed. This does not require a big glob of solder on the wire. See www.gardentrucking.com “Work Bench” - “How to Solder”. Pull the light bulb back into its housing, now unsolder the wire and separate the two light bulb leads. The instructions show using a terminal block. By eliminating this terminal block from the roof of the cab the upholstery will install much easier. You will solder one wire of a light bulb to another until you come to the end. You will have 2 wires left. You will find a black and red wire in the package of part # 782 or 783 and then you will solder the black lead to one wire on the left light and the red wire to one wire on the right light. See www.gardentrucking.com “Work Bench” – “Complete Kit Freightliner COE - Step 18”.

File a notch for the wire to exit the cab at the rear edge of the floor so as to not pinch the wire when the rear panel is installed on the cab. The black and red wires go from the cab up into the sleeper for final wiring.

HINT: Prior to mounting any light bulbs, test them with a 1.5 volt battery to ensure they work. This is important because most of the lighting is hooked up in series and if one bulb is defective, then the remaining lights will not work.

Voltage Regulator on Electrical Systems # 782 and # 783

If voltage regulator is not bolted down securely to a metal surface it will overheat and your radio will go crazy.

One option is to drill a hole in the sleeper floor near the rear passenger side and bolt it there or route it outside and bolt to the frame somewhere.

You will need to enlarge the hole in the center bottom of the sleeper by about 2 times. All the wiring goes into the sleeper and you will need lots of room to work.

PC Board Orientation: The front PC Board is marked with a “V” and a 4 wire ribbon on one end. The rear PC Board is marked with an “H” and 7 wires on one end and 5 wire on the other end. When looking at the instructions, the orientation is as if you had the PC Boards laying flat on the work surface and you are looking down at them. A good indication is the ribbon wires that come into the PC Board, look at the colors of the wire,

this will tell you which side of the PC Board to hook the light bulb wires into as shown on the instructions.

Light Bulb hook up: At this point all the light bulbs have been installed. Before hooking any bulbs to the PC board each will need to be tested with a 1.5 volt flashlight battery to verify their function and location (example; High beam, left turn, etc.). A small (1/8") piece of colored heat shrink tubing should be placed around each bulbs pair of wires to identify its function. This is very important to do. Heat shrink tubing is supplied in Pro Builders Kit #1200.

Color Coding For Rear Of Tractor And Rear Of Trailers

Yellow Band on Turn Lights

White Band on Taillights

Red Band on Brake Lights

Use Black Band Plus a Color For Rear Fog and Backup Lights

Color Coding For Front Of Tractor

Yellow Band on Turn Lights

White Band on Low Beam

Black Band on High Beam

Always start with the rear lighting. Hook up one bulb at a time starting with the blinkers. Here is the typical sequence. Left blinker (yellow) then the right blinker (yellow). Left tail light (white) Then the right tail light (white) . Left break light (red). Then the right break light (red). Fog tail light (if applicable) and, reverse backup light (if applicable). Now mount the rear PC Board (designation "H") or the one with 7 wires coming out of one side. Mount this PC Board in its plastic tray. Then mount the plastic tray to the chassis with 2-sided tape.

Move to the front PC Board (designation "V") or the one with 4 wires coming out of it. OPTION: Solder the 5 wire ribbon from the rear PC Board into the 5 holes on the end of the board as per color coded instructions for #782 or 783. RECOMMENDED

Wire the left blinker (yellow) then the right blinker (yellow). Left head light low beam (white) then the right head light low beam (white). Then wire the left high beam

(black) and the right high beam (black). Again mount the PC Board into the plastic mounting tray and the plastic tray to the front of the chassis using 2 sided tape. This sequence also applies to the trailer lighting.

Main Switch Unit: (Main PC Board) Some of the terminals will have several wires coming into them. You can easily place up to 3 wires in the screw terminals

OPTION: We recommend that you solder those wires together to a single wire then mount it into the appropriate terminal. As you mount the wires check them off with a red pen.

TIP: Tin the tip of all wire with solder before clamping them into a screw terminal.

Main Switch Unit: (Wiring System #782) Terminal #1 is 4.5 volt Positive for your radio receiver. Terminal #2 is your **ground** and terminal #3 is 12 volt **Positive on the 12 position terminal block**. You can have several wires coming into these terminals and they will not all fit. If a number of optional accessories are going to be added to the truck, bring a single lead off of each of these terminals and solder all leads that would go to the respective terminals to the single lead coming from each terminal, then insulate the solder joint with heat shrink tubing (available at your local Radio Shack or Hobby Shop or supplied in our **Pro Builders Kit #1200**)

REMEMBER..... On the 12-position terminal block (main circuit board) positions # 1 and # 2 are wired to the radio receiver pig-tale that is plugged into position #7 on the radio receiver. This will supply power to the radio receiver so you can drive the truck via R/C forward and back. This system is now the main power supply for the radio receiver. The 4.8 volt battery pack that was used during setup for adjusting is no longer used.

Power Distribution Terminal: The 6 pin terminal block left over from the cab light installation may now be used as an additional power supply center. This is accomplished by cutting off flush the 6 pins sticking out of the bottom of the block and then soldering a red wire to 3 of the pins for positive and a black wire to the remaining 3 pins for negative. Mark the 3 positive positions with red paint and the 3 negative positions with black paint. Be sure to insulate all of the pins so as not to create a short. By attaching the terminal block in a convenient location with 2-sided tape you can create the insulation to protect the open soldered ends. You now have a power distribution center for additional accessories. Install this in a convenient location in the sleeper. Running the negative wire (black) to terminal #2 and the positive wire (red) to terminal #3 of the 12 terminal strip. You now have a convenient way to hook up accessories to the main power supply.

Reverse Light: If your reverse light comes on when the truck is going forward instead of backwards, then unsolder the two white wires that go to the motor from the main circuit board and reverse what motor terminal they are soldered onto.

Receiver Antenna: Do not cut off any of the antenna wire from the receiver when using part # 155 antenna. If you are using a custom antenna part # 1033 follow the instructions enclosed with it. Do not bundle the antenna wire with other electrical wires as this will cause interference and make your truck go crazy. Excess antenna wire should be made into a bundle after attaching to antenna base and kept separate from other electrical wires.

RC System Installation Hints

PMD recommends Airtronics VG 400 FM 4 channel and VG 600 FM 6 channel radio systems for our trucks.

Multinaut and multi switch are not used in the USA.

As shown on instructions for #782 and 783

The Wedico electrical systems all provide 4.8 volt DC for the receiver in the truck. No additional battery is needed in the cab for the receiver. Use the servo extender cable that is supplied in the Airtronics radio kit. Cut off the large blue plug and separate off the blue wire and discard. The small blue plug will go to position #7 on the receiver. The red lead is your 4.8 volt positive position #1 on #782. The black lead is negative and goes to position #2 on #782 electrical system main switchboard of the 12 terminal block. Electrical system #783 will be similar but read instructions carefully. The COMPLETE KIT electrical system will require soldering the leads to the main PC Board as indicated, illustration #11, page 11 of the COMPLETE KIT instructions. Again the multinaut and multi switch is not used in the USA.

Speed Controller: Speed controllers supplied by Wedico have a 3-prong plug that may be used with the supplied adapter plug to connect to a radio receiver lead. We recommend cutting the lead shorter as needed. By taking a short piece of a servo extender cable or servo lead available from PMD or your local Hobby Shop and soldering it to the speed control cable. Place heat shrink tubing on the wires before soldering together, color code is: red to red, black to black, blue to yellow for Airtronics. You can now plug directly into the radio receiver position #1.

HINT: Servo cables may have different color wires it will require your close inspection.

HINT: See “How to Solder” at the “Work Bench” on www.gardentrucking.com

R/C Functions for a Semi Dump Trailer: Electrical System # 782

R/C functions on the trailer are routed through a small 3-point terminal block on the main switch PC Board. Precision Model Distributors assembled trucks use the following wiring code:

Radio Receiver position # 3 is hooked up to main circuit board for control of semi dump hydraulic system.

There is a 3 terminal block on the main circuit board. Take a servo lead and cut to determined length (from receiver to circuit board with slack) and remove the black or negative lead leaving the positive lead (red) and the data lead (possibly blue or yellow). Strip the end of the wires and tin the tips with solder.

Terminal # 3 from radio receiver plug connect the red lead 4.5 volts positive.

Terminal # 2 from radio receiver plug connect the blue data lead.

Terminal # 1 is unused – This maybe used with Dual E Switch Part #199 for additional functions on trailer.

Terminal # 1 may also be used to transmit servo data blue or yellow wire from the receiver to the trailer for a second R/C function. The positive and negative leads of the servo will piggyback with the first servo, terminal # 3 red positive and a negative black terminal.

THE NEGATIVE OR BLACK LEAD IS NOT USED. NEGATIVE IS UNIVERSAL THROUGHOUT THE ELECTRICAL SYSTEM AND MAY BE ACQUIRED ANYWHERE. ON THE TRAILER THE BLACK LEAD NEGATIVE GOING TO YOUR SERVO WILL BE WIRED INTO ANY NEGATIVE TERMINAL.

R/C functions on Semi Dump Trailer: Electrical System # 783

R/C functions on the trailer are routed through the small 3 position terminal block on the main switch PC Board. Precision Model Distributors assembled trucks use the following wiring code:

Radio Receiver Position # 3 is hooked up to the main circuit board for control of a semi dump trailer hydraulic system.

Make up a receiver plug and strip the wires ¼” and tin the tips with solder.

Terminal # 1 from the radio receiver connect red lead 4.5 volt positive.

Terminal # 2 from the radio receiver connect blue data lead.

Terminal # 3 is unused – this maybe used with Dual E Switch #199 for additional function on trailer.

Terminal # 3 may also be used to transmit servo data blue or yellow wire from the receiver to the trailer for a second R/C function. The positive and negative leads of the servo will piggyback with the first servo, terminal # 1 red positive and a negative black terminal.

Semi Dump Trailer R/C hook-up on electrical systems # 784 or 789 # 295 controller for hydraulic pump or winch system. All Precision Model Distributors assembled trailers use the following wiring code.

Brown wire is positive 12 volts.....Hook to terminal # 2
White wire is negative.....Hook to terminal # 6

Green wire is hooked to hydraulic pump black lead.
White wire is hooked to hydraulic pump red lead.

Red wire is radio receiver positive.....Hook to terminal # 4
Black wire is radio receiver negative.....Hook to terminal # 6

Yellow wire is radio receiver data.....Hook to terminal # 3

This information is different than the instructions!!!!!!!!!!!!

A caution when working with the hydraulic oil. Be very careful, do not siphon the oil with your mouth. If you do you will get a very bad reaction. Also when finished with the hydraulic oil you must wash your hands. Find another way to get the oil moving up the clear hose. Again do not use your mouth.

Straight Dump Truck

Hydraulic system on a straight dump truck is controlled by Part# 295

Brown wire is positive 12 volts.....Hook to terminal # 3 of #782

White wire is negative.....Hook to terminal # 2 of #782

Green wire is hooked to hydraulic pump black lead.

White wire is hooked to hydraulic pump red lead.

Red wire is radio receiver positive

Black wire is radio receiver negative

Yellow wire is radio receiver data

These wires may be blended with a servo lead using the adapter supplied and plugged into position # 3. We recommend splicing and soldering a new servo lead plug on.

Double Landing Gear # 424

On the landing gear, be sure to file off all rough edges and lubricate to ensure smooth operation. You might have to put it together and take it apart a few times.

HINT: This unit may also be made R/C operational

Pro 5th Wheel # 700

On the fifth wheel when assembling be sure to file any rough edges and lubricate to ensure smooth operation. You might have to put it together and take it apart a few times.

HINT: This unit may also be made R/C operational

How To Program the Speed Controller

Wedico has upgraded their Electronic Speed Controller. The original Wedico speed controller will run off uncontrollably if it loses radio contact or if the radio is shut off too early. The new line of Wedico speed controllers and speed controllers with combination sound package have a built in FAIL SAFE and will go to NO run if the radio is accidentally shut off. The new units require PROGRAMMING. Very carefully follow the instructions supplied with the units.

HINT: If it fails to operate after programming click your servo reversing switch on your transmitter and reprogram. Also refer to TROUBLESHOOTING in the instructions.

Trucks Without Sleeper

When building a Conventional or Peterbilt without a sleeper it will require creativeness on the builder's part. The Peterbilt has a switch panel bracket that bolts to the interior roof to mount the main circuit board, the radio receiver and a dual E switch. By eliminating the steering wheel and the seats a brick type battery pack will fit into the cab. It is difficult but it can be done.

**When building a Conventional without the sleeper you will have to be
VERY CREATIVE**