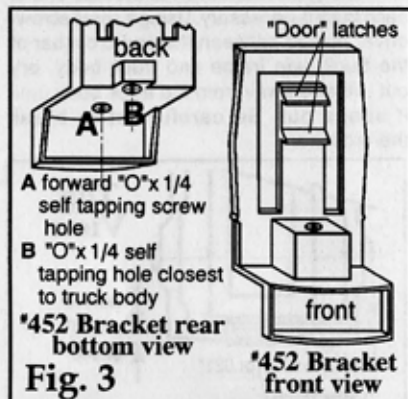
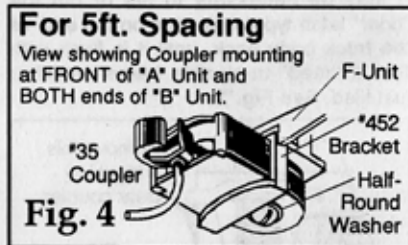


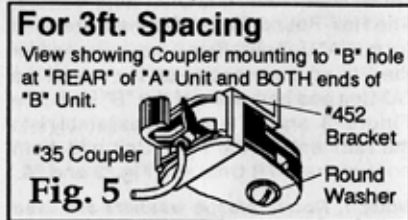
Note: 2, When assembling the Couplers to the #452 Bracket always use the front hole "A" for the Five foot spacing and the rear hole "B" for the 3 foot spacing, see Fig.*3. Read on before assembling to chassis.



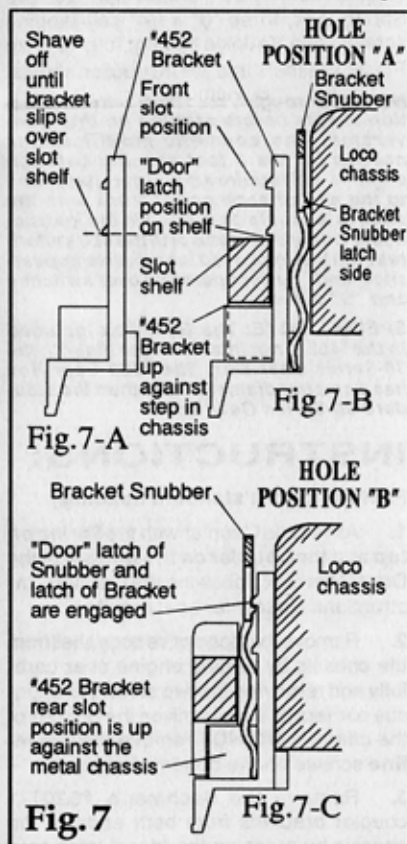
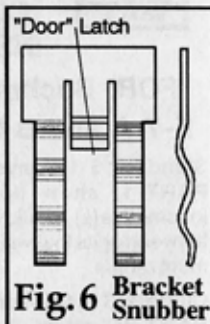
7. The front (pilot) end coupler of the F-7A Unit must be installed *after* the #452 Bracket has been inserted into the chassis, as described in step #8, and the chassis reinstalled in the body shell. (Note: this is a very tight fit) Then slide the assembled #35 Kadee® Coupler through the pilot opening in the front of the shell and through the loop on the #452 Bracket and attach with the "O" x 1/4" self-tapping screw placed in the forward "A" mounting hole. Test for correct Coupler height by using the Kadee® #205 Coupler Height Gauge and check for freedom of operation.



8. The rear (back) end coupler of the F-7A and both ends of the F-7B Unit require that you insert the #452 Bracket from the bottom of the chassis slot, see Fig.*7-B. Using a small screwdriver, press forward until the "door" latch snaps or slips forward over the top of the slot shelf.



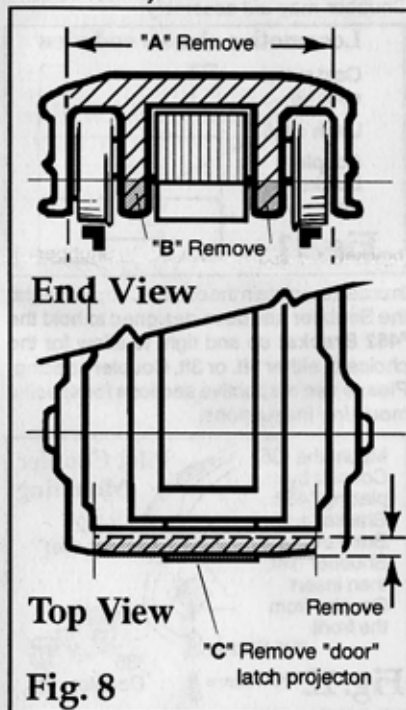
There is about 1/64 of an inch difference between the front and back slot latch shelf. See Fig.*11 and "Tips...". It may be necessary to file the shelf or the bracket's latch face engaging the shelf surface, see Fig.*7-A and Fig.*11, to allow it to snap or slip over the shelf. The **Bracket Snubber**, a flat wavy plastic spring, is now very carefully slipped between the #452 Bracket and the motor side of the slot and pushed all the way down. The Snubber holds the latch in place and prevents it and the Coupler from dropping down and out. The Bracket Snubber, Fig.*6, is meant to be tight to prevent the #452 Bracket from flexing in the slot and to stabilize the Coupler height. If Snubber is too tight, file the "door" latch side, see Fig.*7-B, just enough to maintain a tight fit. Remember the spring is on top and the coupler is on bottom for correct height.



PART II For Prototype 3 Foot Spacing

9. Complete steps 1 through 3 of PART I of these instructions. Read and familiarize yourself with the rest of PART I, steps 4 thru 8, as these instructions contain some important information about converting to 3 ft. spacing. You may find it helpful to detach the truck and electrical pick up from the chassis to accomplish the following modifications.

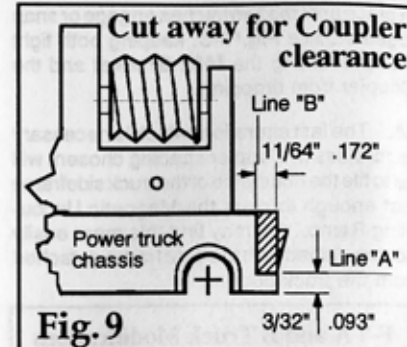
10. Completely remove the material between "A" and "C", the crossbar and the two vertical bars, as shown in Fig.*8. Cut or file any part of vertical bars remaining flush with the rear end at the bottom edge of the truck sideframe, "B", as shown in Fig.*8. **DO NOT** remove or disturb the brake shoe assembly.



11. Next, with a fine jewelers or "Zona" type saw, cut a step 11/64" or .172" deep in the end of the power truck chassis, leaving a ledge of about 3/32" high at the rear end bottom of the truck, see Fig.*9 & *10.

12. If you have a dial caliper it will simplify layout of the lines on the truck body for cutting clearance to clear the #452 Bracket and Coupler Draft Gear Box for 3 ft. prototype close coupling.

Set the calipers to the dimensions per Fig.*9. Use one jaw and the bottom of the truck body as a guide and the other jaw to scribe a horizontal line "A" along the bottom on both sides and the end.



Next, adjust the calipers to the dimension per Fig.*9 and scribe both vertical side lines "B" and the top line, using the truck body end as a guide. We suggest cutting just above the horizontal line "A" first to allow the side wall to support the ledge, cutting just past the vertical lines on each side. Now, just cut forward of the line towards the end of the truck body on both sides as shown in Fig.*9.

13. Remove all burrs with a fine file or knife, clean plastic sawdust off of all plastic parts, wash gears in a suitable cleaner and lubricate the gears with a plastic compatible light white grease.

14. Cut or file the remainder of the "door" latch type projection on the rear end at the bottom edge of the truck body "C", flush with the rest of the truck body surface, as shown in Fig.*8.

15. Test coupler clearances between truck, side frames and Coupler Draft Gear Box with #452 Bracket and Couplers installed temporarily by holding truck side frame to truck body with a rubber band around the ends of the truck body and truck sideframe.

16. When assembling the Couplers for 3ft. spacing to the #452 Bracket, use the rear "B" hole, see Fig.*3, the hole *closest* to the truck body and the round plastic washers. See Fig.*3 and *5. Check for clearance between the truck and Coupler on level track. There should be about .031" or 1/32 of an inch clearance between the two.

17. To assure a tight and proper Coupler fit with 3ft. spacing, a Snubber, see Fig.*6 and *7-C, is inserted first all the way down from the top towards the front of the slot,