EASY CONVERSION OF HK SEMI-AUTO FIREARMS (Models 91, SR9, 93, 94, SP89, etc.) TO SELECT FIRE

USING A STANDARD MILITARY FULL-AUTO BOLT CARRIER AND GRIP FRAME ASSEMBLY

- AND WITHOUT MODIFICATION TO THE SEMI-AUTO RECEIVER!

Step #1
Field strip the semi-auto firearm by removing the GRIP FRAME and BOLT CARRIER groups.

Step #2
Remove the complete FIRE CONTROL BOX from a Full-Auto GRIP FRAME by rotating the Selector Lever to the 12:00 position and pushing the Selector to the left of the GRIP FRAME to remove. Lift the FIRE CONTROL BOX out of the GRIP FRAME and align the BOX against the bottom edge of the Semi-Auto Receiver. (Disassembly of the FIRE CONTROL BOX is not necessary for this conversion!) An approximately .200" by .100" portion of the front bottom edge of the BOX will need to be removed so as to allow the GRIP FRAME & BOX to be installed on the Semi-Auto firearm. Scribe a line on the BOX at a point just above where the BOX butts up against the milled block welded onto the rear bottom of the Receiver Magazine Well. This mark will be approximately .200" up from the bottom front edge of the BOX. Measure back from the front bottom edge of the BOX approximately .100" and scribe a vertical line on each side of the BOX (see illustration). These marks indicate the small portion that will need to be removed from the BOX by hacksawing, grinding, filing, or milling. After the indicated portion of metal is removed from the BOX it can now be pushed over the top edge of the above mentioned milled block when aligned with the bottom edge of the Receiver. The fit of the BOX to the Receiver should be free, but not too loose.

Step #3
The various Plastic S-E-F Custom Full-Auto GRIP FRAMES that have been modified to fit on the semi-auto weapons and that are available from various HK repair shops can be used to mount the above modified FULL-AUTO FIRE CONTROL BOX Assembly to your particular firearm. If a Steel S-E-F GRIP FRAME is used then cut off the front 2 mounting ears of the GRIP FRAME flush with the front edge of the FRAME (see below illustration). With the FIRE CONTROL BOX now modified and installed in one of the above mentioned modified GRIP FRAMES it is ready for installation on the firearm. When installed on the firearm the GRIP FRAME Assembly should butt flush against the rear surface of the Magazine Well and the Buttstock Assembly should be able to be installed and retained with both Push Pins. If it will not fit flush enough to allow the Push Pins to be inserted remove a little more metal from the FIRE CONTROL BOX so the GRIP FRAME Assembly will fit flush to the Receiver Magazine Well.

Step #4
Replace the Semi-Auto BOLT CARRIER with the corresponding Full-Auto military BOLT CARRIER for your particularly firearm - e.g.

MP5K Carrier in Model SP89
MP5 Carrier in Model 94
G3 Carrier in Models 91, SR9, SAR8, XG3S

Step #5
Dry cycle the completely assembled weapon and check that the gun will now function in Safe, Semi, and Full-Auto (S-E-F). Prudently test fire the weapon in a safe and reasonable manner and location.
Assembly Order of HK *Semi Auto*  
**FIRE CONTROL HOUSING:**

1. Insert SPACER into Semi Auto Sear SPRING.
2. Place SPACER/SPRING assembly inside forward part of Semi-Auto type FIRE CONTROL HOUSING with Roller part of Spring to the rear. Insert PIVOT PIN thru Housing and into Spacer/Spring assembly.
3. Install TRIGGER with SPRING into underside of HOUSING, but leave tail of Spring hanging down loose. Insert Trigger PIVOT PIN only through one side of Trigger.
4. Now from top install SEAR into Trigger and push Trigger Pivot Pin all the way through Trigger & Sear to hold both in place. Install hook curved end of Trigger Spring onto Hammer Pivot Pin BUSHING that is permanently fixed to left side of Fire Control Housing. Lift Trigger Spring tail into retaining groove of Trigger.
5. Install HAMMER and it's PIVOT PIN.
6. Slip HAMMER SPRING over SHANK. Insert Shank tapered end into hole in rear of Housing from the inside and then snap assembly into place against Hammer.  
(Do Steps #6 & #7 together for 9mm weapons which have Hammer and Shank that are pinned together!)
7. Install Ejector Lever PIVOT PIN into housing to make sure it will fit properly. Some slight tweaking or filing may need to be done to get this part to fit properly to Housing. Now install (without Spring) EJECTOR LEVER and it's PIVOT PIN into Housing. Make sure Lever moves freely up & down. The Lever itself or the inside Pivot Pin support piece of Housing may need to be tweaked slightly in order to give free movement to Lever. If all parts fit and move properly install SPRING, EJECTOR LEVER and PIVOT PIN.
8. Insert HOUSING assembly into GRIP FRAME and install SAFETY/SELECTOR LEVER at 12:00 position and rotate to Safe and Fire and check function of Fire Control assembly at each position.

**Note!** HK Standard Semi-Auto Fire Control assemblies are almost all identical. So it helps to have an already assembled unit to refer to when assembling one.

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**Assembly Order of HK 3 position *Full Auto***
FIRE CONTROL HOUSING:

1. Insert SPACER into Full Auto Sear Catch SPRING. Place SPRING onto SEAR CATCH with hooked spring ends to inside top of Catch.

2. Place SEAR CATCH/SPRING assembly inside forward part of FIRE CONTROL HOUSING. Insert Sear Catch PIVOT PIN thru Housing and into Sear Catch/Spring assembly.

3. Install TRIGGER with SPRING into underside of HOUSING, but leave tail of Spring hanging down loose. Insert Trigger PIVOT PIN only though one side of Trigger.

4. Now from top install SEAR into Trigger and push Trigger Pivot Pin all the way through Trigger & Sear to hold both in place. Install hook curved end of Trigger Spring onto Hammer Pivot Pin BUSHING that is permanently fixed to left side of Fire Control Housing. Lift Trigger Spring tail into retaining groove of Trigger.

5. Push SEAR CATCH to forward position and insert small screw driver in left side of box hole to hold SEAR CATCH in forward position while at the same time pull Trigger fully rearward. Now you can install TRIP LEVER over it's stud on right side of Housing.

6. Install HAMMER and it's PIVOT PIN.

7. Slip HAMMER SPRING over SHANK. Insert Shank tapered end into hole in rear of Housing from the inside and then snap assembly into place against Hammer. (Do Steps #6 & #7 together for 9mm weapons which have Hammer and Shank that are pinned together!)

8. Install Ejector Lever PIVOT PIN into Housing to make sure it will fit properly. Some slight tweaking or filing may need to be done to get this part to fit properly to Housing. Now install (without Spring) EJECTOR LEVER and it's PIVOT PIN into Housing. Make sure Lever moves freely up & down. The Lever itself or the inside Pivot Pin support piece of Housing may need to be tweaked slightly in order to give free movement to Lever. If all parts fit and move properly install SPRING, EJECTOR LEVER and PIVOT PIN.

9. Insert HOUSING assembly into GRIP FRAME and install SAFETY/SELECTOR LEVER at 12:00 position and rotate to S, E and F and check function of Fire Control assembly at each position.

   Note! HK 2 & 3 position Fire Control assemblies are almost identical. So it helps to have an already assembled unit to refer to when assembling one.