

Construction tips for the Sa 26 Czech SMG

I have provided these guidelines to assist the builder in the steps required to assemble a Czech Sa 26 SMG kit – feel free to use or ignore any or all of the steps outlined, as they at the very least give an idea of what work is involved, and with the complete lack of any construction hints up to now, I hope they prove helpful. I have no control over any legal issues that may arise from constructing this firearm in your country/state/municipality, nor do I assume responsibility for any misuse, damage or injuries related to the same. The steps outlined are simply personal opinion, as I have no access to genuine CZ blueprints or construction drawings.

That's out of the way, so lets get started!!

Ensure your kit is complete with the barrel, barrel lock and washer, barrel collar/front sight assembly, trigger assembly and pin, bolt, center cut receiver section containing the mag well/hand grip, stock mount and rear sight assembly, the rear receiver section which has the lugs, recoil spring assembly, recoil spring cap, rear stock, handguard and screw, hand grip panels, and the handgrip lock tab and screw. Not a lot of parts! You may get lucky and get one with a wood stock, but most have a good folding stock.

Tubing selection is your choice – original size is 1.575" outside, 1.375" inside. and 13 1/8" long. If you stay with the 1.625" outside tubing without turning it to size, a few things to keep in mind – this is a lot of metal to play with – the cocking handle slot has a tab in the rear that must be bent down for a cocking handle 'lifter', and cutting it and hammering it down (neatly) to a 45 degree angle is a fun task, as is bending the trigger housing mount tabs. The cocking handle will also bind due to a lack of clearance when it lifts to the outward position – you can either open up the notch on the cocking handle or grind the tubing adjacent to cocking handle cut on the top centerline side for clearance. Also, the trigger housing has to fit closer to the tubing, or the sear will not engage (I'm guessing nobody likes a runaway SMG!). This means that a flat area the width of the trigger housing has to be ground from the trigger housing cutout to the mag well cutout, and the mag housing has to be fitted closer to the tube, as it locates the height of the trigger housing with the hole on the front of the mag well.

All the cutouts marked on the template should be cut on the line – the ejection port and the trigger cutout patterns have been opened up a bit from factory sizes to alleviate some tight areas I've found. The rear sight assembly has a clip providing tension on the rear sight, and requires a clearance cut on the tubing to accommodate it. It's essential to scribe a line top and bottom on the tubing to conform with the top and bottom template lines – these will come in handy to center the front and rear sights before welding them in place.

It is preferable to use the rear cut section from the original receiver to save a bunch of machining time – you may also want to salvage the center section and weld the cut rear segment to it (save the cool SHE and serial number by careful welding – early guns also had a year of manufacture stamped in the same location) . You'll also notice the factory used impressed dimples in four spots about 3/16" long – these were the bolt alignment guides. Also, it is imperative to keep the tube as straight as possible to avoid bolt binding issues and other ugly things...

With the magwell housing welded into place (the 9mm version has a vertical mag placement, and the 7.62 version has an 11 degree forward rake) and the bolt moving freely, ensure the trigger sear engages the bolt (!!!), and then it's time to weld in the barrel bushing in place (you have removed all the tubing, right?). With a DUMMY round in place on the bolt (ensure the fixed firing-pin isn't holding the round from fully seating against the bolt face), slide the barrel rearward to mate with the bolt. The rear face of the bolt has a finger projecting downward – this appears to prevent the bolt from travelling forward out of the firearm after a barrel bushing failure, as it strikes the rear of the magazine and stops. Fix the magazine in place and put a 1/8" spacer between the mag and the bolt projection – this should properly locate the forward position of the bolt in the receiver. OK – we're a little out of order here, but you get my drift. Now slide the barrel bushing/barrel assembly (first screw it all together – barrel, barrel washer and barrel lock into the barrel bushing/sight housing, ensuring the barrel collar is properly aligned with the bushing tab) until it seats against the bolt with dummy round. Space the bushing about 0.1 further forward, align the front sight with the top alignment groove you carved so neatly along the plan line, and spot weld it (MIG works great here). The reasoning I believe you should space the barrel bushing a bit further forward is to give some 'crush' to a seated round and to prevent any barrel cone damage from the bolt slamming shut on an empty chamber – make sense? Stop now, take a look at everything for any mistakes, double check the sear engagement and locate and drill the front trigger housing holes.

The paint the Czech's use is good stuff – a battleship grey semi-gloss baked enamel, which they also use on the VZ58 rifle. My paint preference is Dupli-Color engine paint with ceramic – a chemical resistant finish that adheres well and is scuff-resistant if using light coats and adequate curing time

For a semi-only conversion - feel free to throw some ideas around. I've thought a striker system similar to the VZ58 would work, but I haven't seen how the semi-Uzi conversion is constructed...yet!

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GPDave

The Gunnery Blueprints

Dave Burritt

13.1"

Overlap

Turn rear 0.8" down to 1.50"
EXCEPT FOR THE LUG AREA!
Taper crosshatched area at 80 degrees

Top

at 1/8" radius / 0.25" drill

Ejection port

Stand not aligned too forward at 80 degrees on this line

Cocking handle slot cutout

0.20" wide

Rear sight mount

Right angled wall 1/8" deep
DIN 0.2"

Lugs 12 - 0.8 x 0.085
4 - 0.8 x 0.15

Fold tube, check hole location with trigger housing
then drill 0.14"

DIN 0.28"

Bottom

Handguard stud mount
Handguard mount - 0.687 x 0.5" x 0.325"

Cut along three heavy lines

Trigger pack cutout

0.875" wide

at 1/8" radius / 0.25" drill

Mag cutout

Fold tube outward 80 degrees on these lines

Stock mount

DIN 0.44" hole

Overlap

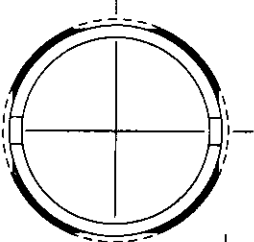
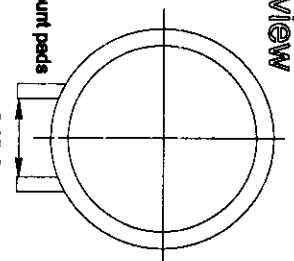
Front view

Rear lugs side view

Use tubing 1.625" outside, 1.375" inside
4130 recommended, turn outside to 1.575" and fasten template
Salvage rear section with lugs and weld onto new tube
Trim tubing from front sight/barrel mount

CZ Sa 26 Template

Trigger mount pads



Rear lug details