La France Specialties
P.O. Box 2506
Newport Beach, CA 92659-1506
Message: 619-548-2159 Fax: 949-642-4676

#318

INSTALLATION INSTRUCTIONS---TwinTube GAS SYSTEM

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The La France Specialties twin-tube gas system is designed exclusively for installation in carbine versions of the Colt M16 rifle, both semi and full auto. It will reduce the cyclic rate of these weapons in the full auto mode from well over 1300 rpm to only 800 rpm, regardless of the barrel length. Before it can be installed correctly, however, two preliminary precautions must be taken. These should be undertaken by a competent armorer only, as they require special tools and skills not available to the average person.

First, the size of the gas port drilled in the barrel must be determined and corrected to insure proper gas volume for the system to operate in the full auto mode. To do this, the front sight frame must be removed from the barrel and the gas port gaged with wire size drills. After-market barrels have a wide range of gas port hole sizes. It may be necessary to sleeve the hole if it is already too large for the barrel length in use.

A Colt factory M4 carbine barrel which is 14.4" long, has a 0.062" diameter hole. If the finished barrel length you will use is from 14" to 16", the hole must be drilled to 0.070"/0.073" diameter. A factory Colt 16" semi-auto barrel already has a 0.077" diameter hole in it. It is not worth the time to sleeve one of these barrels unless you absolutely must have minimum rate of fire. If you intend to use a barrel length of 10.5" up to 13.0", you must drill the gas port hole out to 0.093"/0.099". We can sleeve your gas port hole with a stainless steel sleeve if required for a nominal fee. (Do not exceed 0.120" under any circumstances as this will cause shaving of the bullet jacket to such an extent that the copper shavings will plug the gas system in only 5,000 rounds!)

Second, the barrel nut must be secured tightly to the upper and in such a way that the index notch in the barrel nut is exactly centered on the gas tube hole in the upper. If this is not done, the gas tube will bind in the hole, causing it to be misaligned with the key in the bolt carrier, which in turn increases the drag on the bolt carrier causing short stroking, as well as wearing out the sealing end of the gas tube.

Once these two features are correct the La France gas system installs in place of the original short gas tube with no alterations to the gun. The front gas tube is the one with the junction block permanently attached. This tube installs with the same 5/64" roll pin as the original single tube did into the front sight assembly. This gas system will fit any barrel up to 0.930" in diameter, which includes the new heavier A2 barrel (0.845" diameter).

After the front gas tube is pinned into place, simply install the rear tube--first into the upper, then rotate it into alignment with the opening at the rear of the junction block. Now slide it forward into the junction block hole until it bottoms. Make sure that the 5/64" pin hole in the gas tube is visible through the lower access hole in the junction block. Support the lower portion of the junction block and drive the mounting pin into the junction block and through the gas tube until it is flush with the lower edge of the junction block.

Test fit the upper handguard to ascertain whether the heat shield must be trimmed to clear the junction block. On some non-Colt handguards, this has been necessary. It is permissible for the junction block to rest directly against the shield, so long as the

handguard will lock easily into place. If the handguard won't lock easily, use a pencil to outline the position of the junction block on the heat shield, remove the handguard, and cut out a clearance rectangle in the shield with a nibbler or Dremel wheel.

This patented gas system has a lifetime guarantee consistent with all products bearing La France Specialties' name. It is made of the highest quality materials and has been engineered and tested to replace the original short gas tube with a minimum of labor. We admonish you to have this system installed by a competent armorer if your gun is not an original Colt product, as many of the aftermarket front sights and barrels are not made to the original G.I. blueprints which we used in designing the interchangeabilty of this system.

This system has been tested on a variety of aftermarket non-chrome barreled guns and worked successfully. By allowing the chamber pressure to drop to zero before the bolt opens, this gas system eliminates the need for constant cleaning of the chamber, lubricating the ammo, etc. Note that on 10.5" barrels equipped with only a birdcage flashhider, the gun will probably not cycle anything but U.S. G.I. ammo. This is due to the fact that the gas hole is so close to the muzzle that there is not enough back pressure to allow the gas system to fill. You can rectify this by adding a muzzle brake to the gun which automatically increases the back pressure in the barrel, allowing the gas system time to fill completely.

If for some reason you must reduce the rate of fire below the 800 rpm range that this installation provides, there is a substitute buffer that may be purchased from La France Specialties which is a drop-in replacement for the aluminum buffer that is original equipment. The part number is 62913 and when this buffer is used in conjunction with a twin-tube installation, the rate of fire will drop to approximately 700 rpm. Installation of the buffer alone without the twin-tube gas system will cause the gun to malfunction--it will become quite unreliable! The heavy steel buffer can only be used with the twin-tube gas system! The price of the hardened steel buffer is $65.00.

USE EXTREME CAUTION WHEN UTILIZING DRUM MAGAZINES!

EXCEEDING SIX SHOT BURSTS WILL OVERHEAT THE BARREL ASSEMBLY AND MELT THE GAS TUBES!

SUCH ABUSE WILL VOID ANY PRODUCT WARRANTY, EXPLICIT OR IMPLIED!