GEAR LEG FAIRING INSTALLATION

The main gear spring on the Pitts Model 12 is streamlined with a rubber fairing bonded to the trailing edge. These instructions are for the installation of the faring.

gear fairing shaped with brake and vent lines installed

The fairing material is shipped in 2 forms. One approx. 6 foot long piece or cut into two approx 3 foot long pieces. If shipped in one long piece, cut into 2 equal length pieces.

Alum brake line material

The brake lines are made from ¼" soft alum tubing as avail from most aircraft suppliers(not included). Four lengths of tubing are required for the fairing installation. 2@ 6ft, 1@ 4ft., and 1@ 1ft.


Faring temporarily installed on gear spring with tape. Mark location on leg.


Lower end trim point even with top of wheel pant bracket. Upper trim point.

Trim fairing to length. Upper trim point is where the radius ends on the trailing edge. The point where the spring starts to transition to square edges. The lower trim point is even with the top of the wheel pant mount bracket. Of brackets are not yet installed, install them temporarily for this measurement. Cut the fairing material with a band saw or similar tool. Recheck fit on main gear spring.

Marking vent line exit hole location 2” above pant

4ft long Main tank vent tube pulled though cut exit hole

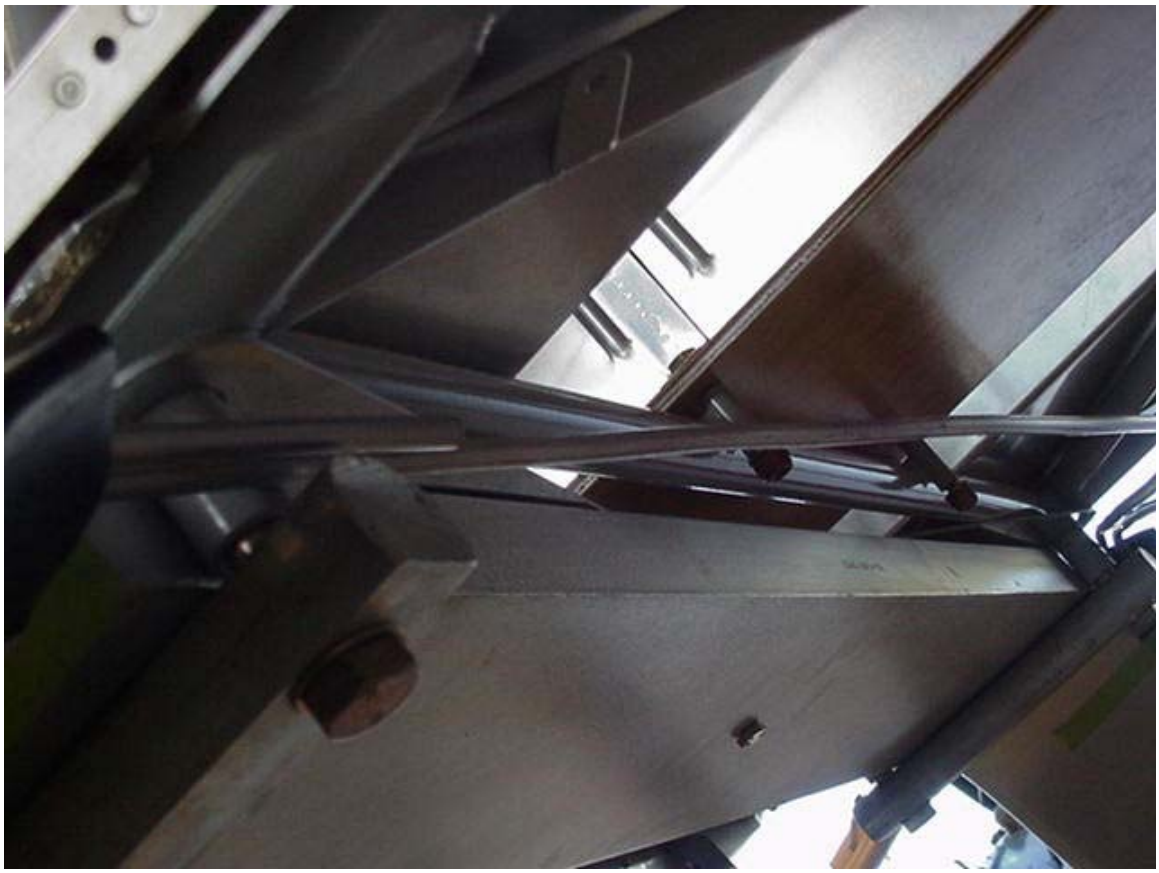
Cut hole through rubber at rear inner hole at vent exit point. The hole is a slot so that the tube can exit on an angle as shown above. Use a die grinder or dremel type tool to cut this hole.

Alum brake and vent lines installed in faring material

Insert the alum lines into the holes in the fairing material. One 6 foot long piece of tubing is to be inserted into the hole nearest the large, cupped edge of the fairing. The 6 ft long brake line tubes should stick out the bottom end of the fairing 12 inches and have approx 24 inches out the top end as shown above. The 1ft long tube is a forming aid only and should be inserted such that 2” extend out of the fairing material as shown.. The 4ft tube is the main tank vent tube and should be positioned with 12 inches exposed at top and 3 inches pulled out through hole as shown above. The fairing with the 4ft long tube in it is the right fairing and the one with the 1 ft. tube is the left fairing.

Bend the rubber to match the upper and lower bends in the gear leg. The alum tube acts and a stiffener to help shape the rubber. This is why we have the 1ft piece in the left rubber. It allows the left fairing to bend like the right one with two tubes in it.

Right rubber in place showing line positions



Upper end of lines

With the rubber temporarily taped in place on each leg, mark the top and bottom end locations on the leg for alignment when gluing in place.

Remove the temp tape that holds the rubber to the leg. Mask off the leg 1/8” away from where the rubber fits on the leg. Mask off all of the rubber except the concave face that fits on the main gear leg. Clean the glue areas of the rubber and leg with Lacquer thinner. Mix a batch of epoxy such as T88 and apply it to the glue area of both the gear leg and the rubber fairings. Reinstall the rubber fairings to the legs and hold in place with several bands of 2” masking tape wrapped around the rubber and leg. Check alignment and wipe up any glue mess. When dry, remove all masking tape and clean up as needed. Fill and prime as desired using a flexible primer. Paint as desired.