

# The Real Scoop on Shoulder Harnesses

What you can do to install shoulder harnesses and inertia reels in your twin Cessna

By Larry A. Ball

The following comment came on a renewal form from Keith Graham in Zionsville, Indiana. He wrote: *"I'd sure like to see an effort to find or have someone get FAA approved inertia reel shoulder harnesses for the 310. Comparative data in an article form would be of great interest for 310 owners who are debating larger 300 through 335 horsepower engines. Thanks and keep up the good work."*

We listen to what our members say and ask. So, here goes. We will attempt to give you all of the latest information available for all models.

First of all, Cessna addressed the installation of shoulder harnesses in all models through Service Bulletins released primarily in 1996.

**MEB96-4** released March 29, 1996 provided for an inspection of all shoulder harnesses already installed in all models from the 303 through the 421C including the 336 and 337 models. This inspection involved the bushing on the rivet head connector on the seat or lap belt where the shoulder strap slot attached. Cessna wanted all owners to inspect the shoulder strap rivet connectors for the presence and condition of the plastic type bushing. Any non-serviceable part was to be removed and all missing parts were to be replaced. The bushing, part number S-2237-3 is available and carried a list price of \$1.10 each in March of 1996. See the illustration below.

**MEB96-11**, released October 18, 1996 provided for the installation of shoulder harnesses in all 310, 320, and 421 through 421B models. This bulletin announced the availability of Cessna Service Kit 310-105 for all 310 and 320 models and Cessna Service Kit 421-144 for all 421 through 421B models.

SK310-105 came in two separate applications. SK310-105-1 was the belt/shoulder harness

combination and SK310-105-2 was the doubler and nutplate required for installation of SK310-105-1. See the illustration below.

Cost for SK310-105-1 was \$133.00. Cost for SK310-105-2 was \$94.10. Cost for SK421-144, the installation kit for 421 through 421B models was \$817.00 but it includes two inertia reels, part number CM4020-1 and all of the necessary parts for installation.

A good mechanic could look at the installation instructions for the 421 and use SK421-144 along with the mounting parts from SK310-105-2 and install shoulder harnesses, with inertia reels, in all twin Cessna models. Total cost for parts, for the pilot and co-pilot seats only, should be just under \$1000.00. Labor should involve between 10 and 30 shop hours depending on the model.

**MEB97-6**, released on August 4, 1997 provided for the installation of inertia reel shoulder harnesses in all 401 through 401B, 402 through 402B and 411 through 411A models.

The service kit is SK402-43 and it had a list price of \$864.00. Cessna stated in all of the bulletins that the prices shown were specially priced, some below Cessna's cost, to encourage the installation of these safety enhancements.

All of the above Service Bulletins are "mandatory" and must be accomplished within 400 hours or 12 calendar months.

The following pages shows a list of parts from the service kit installation instructions. For a copy of the service bulletins and complete installation instructions, contact Cessna Product Support at (316) 517-5800.