



Piaggio/Vespa Scooters Service and Repair Manual

by Matthew Coombs & Phil Mather

Models covered

(3492-432-11A14)

Piaggio Sfera 50	50 cc	1991 to 1998	Piaggio NRG MC ²	50 cc	1997 to 2000
Piaggio Sfera 80	80 cc	1993 to 1998	Piaggio NRG MC ³ DT	50 cc	2001 to 2004
Piaggio Sfera 125	125 cc	1996 to 1998	Piaggio NRG MC ³ DD	50 cc	2001 to 2004
Piaggio Typhoon 50	50 cc	1993 to 2009	Piaggio NRG Power DT	50 cc	2005 to 2009
Piaggio Typhoon 80	80 cc	1994 to 1998	Piaggio NRG Power DD	50 cc	2005 to 2009
Piaggio Typhoon 125	125 cc	1995 to 2004	Piaggio B125/Beverly	125 cc	2002 to 2006
Piaggio Zip 2T	50 cc	1993 to 2009	Piaggio X9 125	125 cc	2001 to 2008
Piaggio Zip SP	50 cc	1997 to 2005	Piaggio X8 125	125 cc	2005 to 2008
Piaggio Zip RS	50 cc	2009			
Piaggio Zip 4T	50 cc	2001 to 2008	Vespa ET2 2T	50 cc	1997 to 2004
Piaggio Zip 100	100 cc	2007 to 2008	Vespa ET2 4T	50 cc	2001 to 2004
Piaggio Zip 125	125 cc	2001 to 2004	Vespa ET4 125	125 cc	1996 to 2004
Piaggio Fly 50 2T	50 cc	2005 to 2009	Vespa LX2 50 (LX50 2T)	50 cc	2005 to 2009
Piaggio Fly 50 4T	50 cc	2006 to 2009	Vespa LX4 50 (LX50 4T)	50 cc	2005 to 2009
Piaggio Fly 100	100 cc	2007 to 2009	Vespa LXV50	50cc	2008 to 2009
Piaggio Fly 125	125 cc	2005 to 2009	Vespa LX125	125 cc	2005 to 2009*
Piaggio Skipper	125 cc	1993 to 2000	Vespa LXV125	125 cc	2008 to 2009
Piaggio Skipper ST	125 cc	2001 to 2004	Vespa S50	50 cc	2007 to 2009
Piaggio Hexagon	125 cc	1994 to 2000	Vespa S125	125 cc	2007 to 2009*
Piaggio Super Hexagon	125 cc	2001 to 2003	Vespa GT125	125 cc	2003 to 2007
Piaggio Liberty 50 2T	50 cc	1997 to 2009	Vespa GTS125	125 cc	2008*
Piaggio Liberty 50 4T	50 cc	2001 to 2008	Vespa GTV125	125 cc	2007 to 2009
Piaggio Liberty 125	125 cc	2000 to 2009	Vespa GT200	200 cc	2003 to 2006

*Note that the LX125, S125 and GTS125 Super i.e. for 2009 were fitted with fuel injected engines in certain markets.

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The Piaggio Story

by Julian Ryder

Outside of its native Italy, Piaggio is in a strange position. Everyone has heard of one of its products while comparatively few know the name of the parent company itself. That product is, of course, the Vespa, the first mass-produced scooter and the vehicle that got Italy mobile after World War II before becoming a style icon for generations all over the world.

The first Vespa was completed in April 1946, after just three months design work by the gifted aeronautical engineer Corradino d'Ascanio. Piaggio itself was founded as long ago as 1884 by Rinaldo Piaggio, then only 20 years of age, to manufacture components for naval and railway applications. At the outbreak of World War I, Piaggio branched out into aeronautical parts and by 1923 had built a monoplane fighter with cantilever wing. He also started Italy's first airline and became a member of the Italian Senate. In 1924 the company took over the Pontedera factory near Pisa to build seaplanes and bombers. Today, it is the Piaggio group's biggest manufacturing facility.

After Rinaldo Piaggio died in 1938, his sons Armando and Enrico took over the company, and it was Enrico who, with d'Ascanio, developed the first Vespa. He was responsible for redeveloping the Pontedera plant, which had been blown up by the retreating Germans and bombed by the advancing allies. He realised that the country was crying out for mobility, and it would have to be mobility at the lowest possible price and with the toughness and ease of use that could cope with the prevailing conditions. Enrico had already started thinking about this problem before the end of the War, he started with a small motorcycle built for parachute troops which was modified with unsatisfactory results. This prototype, the MP5 or Paperino – Italian for Donald Duck – was then handed over to d'Ascanio, a man who did not like motorcycles because of their bulk, the difficulty involved in changing wheels and the fact that exposed drive chains made them dirty.

In an astonishingly short period of time (around three months) d'Ascanio had refined

his ideas and laid out a totally new and original vehicle that is still recognisable today. He attached the motor to a load-bearing single-sided swinging arm with direct gearing to the rear wheel, he put the gearchange on the handlebar, he used an aircraft-undercarriage strut design for the stub-axle front suspension thus allowing instant wheel changing both front and rear, and he clothed the whole thing in lightweight bodywork that protected the rider from the elements.

It was christened when Piaggio himself saw the first prototype, the MP6, and he remarked that with its wide engine housing and narrow central 'waist' it looked like a wasp.

The Italian word for wasp is *vespa*.

The first 98 cc Vespa was an instant success. In the first year 2484 were sold, 10,535 in the following year, and in 1948 just under 20,000 were built. Piaggio did his first deal for licensed-production in 1950 with Germany. Already, the Vespa was becoming a cult object. By 1953 there were 10,000 Piaggio dealers all over the World, and that same year production passed the half-million mark. The millionth Vespa left the production line in June 1956, the two-millionth in 1960, the four-millionth in 1970, the ten-millionth in 1980, and production is now past 15,000,000 in eighty-nine different models. Worldwide, the Vespa is still Piaggio's top-selling two-wheeler.

But it would be wrong to think that Piaggio is nothing but Vespa. In 1967 the company started making mopeds and in '69 took over one of the Italian motorcycle industry's greatest names – Gilera. In 1980 it absorbed Bianchi one of the greatest names in the Italian bicycle industry (as well as an occasional motorcycle manufacturer) and seven years later took-over the Austrian company Steyr-Daimler-Puch. And that's just the two-wheeled business: there are also Piaggio companies involved in chemicals, textiles, mechanical engineering (which supplied machinery to Toyota's new plant in Derby, England), powder technology, automation, and industrial plant, to name but a few.



The Vespa 150 Sportique of 1964