



FITTING GUIDE

TASSO 180 KIT TS080
2023/02

Thank you for purchasing a Tasso Works Kit. We recommend that you have this fitted by your local dealer or competent mechanic. This guide will help with fitting your kit.

Disclaimer

We accept no responsibility for damage to motors when fitting or using this kit, for any damages consequential, incidental along with any expenses or injury directly or indirectly incurred from the use of the exhaust system. It is important to ensure PRIOR TO INITIAL USE that you check all necessary fixings and screws and that they are properly secured. The onus is on the person who fits the kit to ensure that all nuts, fixings, torque settings and fitment prior to initial use.

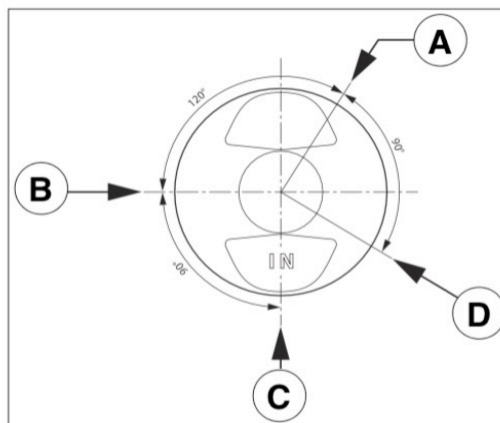
1. Remove Engine from Scooter, we recommend our TASSO Jack tools TS130 to help stabilise the frame whilst removing the engine
2. Remove plastic shrouds from engine around cylinder and flywheel cover. Remove throttle body and manifold.
3. Remove Cylinder head cover, 4 x captive hex nuts m10
4. Set timing at TDC, cam down and using T mark on flywheel aligned to casing mark
5. Hold flywheel and slacken nuts on cam chain sprocket, lock cam chain tensioner and then remove cam chain sprocket. Loop a cable tie around chain to save loosing into the engine.
6. Remove two long size bolts, from side of cylinder. Remove 4 cylinder head bolts and copper washers. Slide off Cylinder head. Remove metal head gasket, and 2 stud guides. Remove lower cam chain guide.
7. Slide off Cylinder, remove piston circlip, slide out gudgeon pin and remove piston. Remove paper base gasket, clean up casing face of old/broken gasket
8. Fit rings to new piston 1R - 1st top ring, RN - 2nd ring, and oil control rings below see FIG A, fit new piston circlip to left side of piston (gap facing up) and partially slide from right in new gudgeon pin. With IN mark on the piston pointing to top of engine (inlet side) Refit piston to conrod and secure with the remaining circlip (gap facing up).
9. Fit new paper base gasket, slide on stud guides and push into casing. Slide on new cylinder, pressing in rings and taking care not to force rings. Refit cam chain guide, refit head stud guides and fit new metal head gasket. Pulling through cam chain at the same time.
10. Slide on cylinder head, pull cam chain through, remove cable tie and refit to sprocket. Align timing mark (T) on the flywheel to casing mark, FIG B. Refit Cam sprocket, making sure marks are parallel with head, apply loctite to bolt and refit finger tight, Refit 4 copper washers to cylinder studs and nuts and torque to **22 Nm**. Refit long side studs to side of cylinder and torque to **12 Nm**. Refit cam chain tensioner and unlock. Holding flywheel tighten cam sprocket bolts to **12 Nm**.
11. Refit plastic shrouds. Refit throttle body, Refit engine into scooter.

• RUNNING IN PROCEEDURE

- USE ONLY e5 Super Unleaded fuel (ideally SHELL, ESSO, BP)
- $\frac{3}{4}$ Throttle for 500miles, avoid long distance, labouring hills.
- Change engine oil 10w40 850ml at approx 500 miles
- $\frac{3}{4}$ Throttle for further 500miles, opening throttle a little more than $\frac{3}{4}$ on occasion.
- During run in period monitor OIL level and any signs of oil coming from cylinder head breather

■ Fitting the cylinder

- Position the piston ring gap as follows:
 - A. Top compression ring gap.
 - B. Compression ring gap.
 - C. Upper oil control ring gap.
 - D. Lower oil control ring gap.



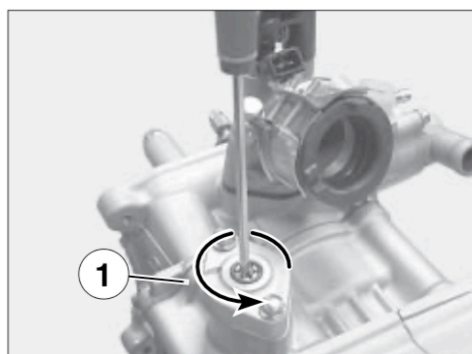
CYLINDER HEAD/CYLINDER/PISTON

- Fit the chain tensioner gasket.
- Install the chain tensioner and the 2 attachment screws (1).

Tightening torque: 10 Nm.

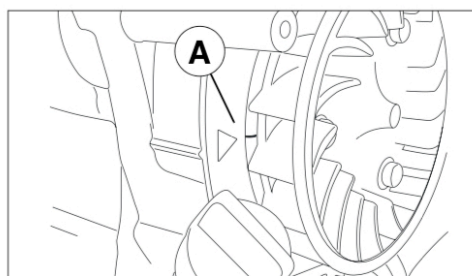
- Using a flat blade screwdriver, unlock the chain tensioner screw.
- Fit the O-ring.
- Install the tensioner cap.

Tightening torque: 8 Nm.



■ Checking the timing

- Rotate the engine twice: 2 revolutions in the engine's operating direction.
- Turn the crankshaft to bring the mark on the flywheel magneto into line with the mark on the crankcase (A).
- Make sure the camshaft marks (B) are parallel with the gasket seat surface.
- If the marks are not aligned, reset the valve timing.

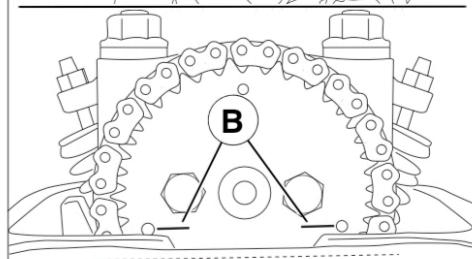


■ Checking the valve clearance

- Remove the rocker cover.

Tightening torque: 8 Nm.

- Using a wrench, turn the crankshaft in the direction of operation to as to line up the marks on the camshaft gear (B) with the cylinder head gasket face.



■ Installing the valve clearance

- Using the set of feeler gauges, measure the clearance of each valve.

Clearances:

- 0.12 ± 0.02 mm at the intake.
- 0.12 ± 0.02 mm at the exhaust.

- If the clearance is not correct, adjust by means of the cam follower screw.

