Messerschmitt Owners' Club: PartsMart

Choke Cable (1477) and Choke Spring (0332a) Fitting Notes

Note: This guidance is for 1956 onwards KR's fitted with an 8mm long choke sleeve and short piston. Early cars with a longer choke piston require a different cable and fitting.

1 Preparation:

- 1.1 Securely attach a 3m plus length of strong thin string or flexible wire to the old cable/inner and withdraw carefully through the front chassis tube slot within the nose.
- 1.2 Check that the choke piston base seal is in good condition. The original black rubber seal degrades with modern fuels; it was later replaced with a brown fibre material.
- 1.3 Check the free length of choke spring prior to fitting if it exceeds 52mm it will cause excessive cable load. Recommend the purchase of a replacement spring (part number 0332a) which is reduced tension and reduces the dash pull load (see Kabinews article, July 2021). Check choke sleeve is free in the carb. bore; flange nut removal can distort the carb. body.
- 1.4 Inspect the condition of the steel cable clip spot-welded under the rear Teleflex bracket. It should be complete and aligned with a diagonal cable run. If the clip is still present (photo 1) but unable to grip the cable, a cable tie on right hand side of the clip should be sufficient.

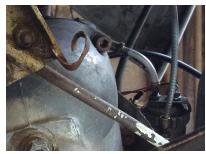


Photo 1 – FMR Original Clip



Photo 2 – Substitute Clip

1.5 If the original FMR clip is absent, alternative provision must be made. Some members have made a substitute clip attached to the Teleflex bracket (photo 2). Other members have supported the cable lower down (photo 3).



Photo 3 – Lower Wire Clip

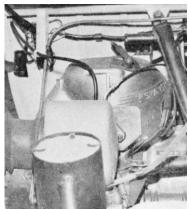


Photo 4

2 Installing the new cable:

Do NOT apply any additional lubrication to the new cable. Installation is best undertaken by two people - one in the nose, one at the rear. If this is a new rebuild, ensure the choke cable is fitted before the wiring loom to minimise entanglement of the cable and the loom.

Securely attach string/wire to the new cable and carefully feed the new cable into the front chassis slot whilst gently pulling the string from the rear - take care that the cable outer does not become caught or distorted whilst doing this, or become tangled with the wiring harness routing. Pull at least 50cm of the cable into the engine bay, then pull the cable back until 36cm of the cable outer is between the chassis outlet and the cable adjuster.

3 Rear End Fitment:

Screw the adjuster fully into the spring cap and then slide through the cable inner. Scroll the first few turns of the spring onto the inner cable and then fit the sleeve and piston. Twist the spring until it is fully in position, encircling the cable and located between the sleeve and inside the spring cap. Insert the piston into the carburettor bore, then compress the spring and carefully thread the adjuster assembly (cross-threading and overtightening resulting in carb. damage is a real risk) until it is fully home and nipped tight - do not overtighten!

Achieving a vertical path of the cable into the carburettor is important to maximise pull-load and correspondingly reduce cable friction and cable fraying. Close attention to rear cable routing will reduce dashboard knob pull force by at least another 20%.

The cable routing should be arranged so that the cable is initially vertical above the carburettor (see photo 4 of a period installation). The support clip (section 1.4, 1.5) will need to be adjusted so that the cable is held firmly, using a cable tie if required.

Temporarily close the engine cover, view through the louvres and check that the cable is not fouling on the petrol tank.

4 Front End Fitment:

With the rear routing completed, attention moves to the front. Fit and hand-tighten the cable threaded end into the dashboard with the outer knurled fastener flush with the cable end. Arrange the cable in a smooth arc between the chassis slot and the rear of the dashboard, ensuring it remains clear of the left foot. Do not attempt to use the FMR cable clipping point.

5 Adjustment and Checking:

Now screw the adjuster above the carburettor until there is 2mm of end-float in the cable outer and tighten the lock nut - this ensures full seating of the carb. jet to prevent petrol flow. Finally fit the dashboard ivory knob ensuring there is at least 2mm of clearance between the knob base and the cable housing threaded end.

Now it is time to ensure that the knob pull-load is reasonable, enabling single-handed operation with the canopy closed. A load of up to 4kg.f is quite usual to start the cable inner moving. Some re-positioning of the cable under the engine cover may be required to achieve best results. The use of both the Teleflex clip AND a clip nearer the carburettor may create tight cable curvatures and hence friction in the cable. It is not necessary to pull the knob more than a few mm for the carburettor choke enrichment device to be fully operational.