



Thank you for purchasing our improved throttle linkage for the Lotus Elise S1 and Elise S2

Please carefully read below instructions before starting the installation of this kit.

Contents of this kit:

- Throttle Linkage Lever including ball bearing with installed centre bush.
- 2 x M4x16 bolts
- 2 x M4x20 washers
- 3 x M4x12 washers
- 1 x M4x10 washers
- 2 x M4 locknuts
- 2 x M5x16 bolt s
- 2 x M5 spring washers
- 2 x Nylon washers for throttle cable end.

Tools needed for installation:

- Screwdriver, Philips head
- Spanner, size 7 and 8 mm
- 1/4" Socket combination set including a socket size 7 and 8mm
- Long nose pliers

Installation Instructions:

The original throttle linkage is located on a base plate above the throttle pedal.

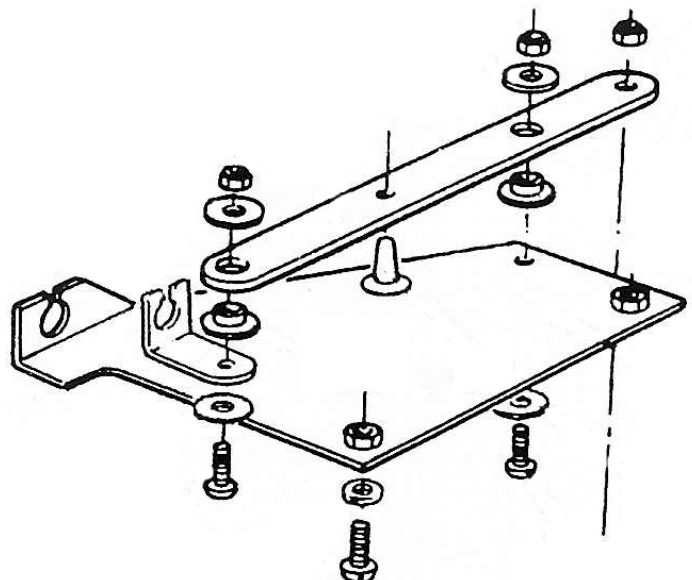
Remove this base plate including the original throttle linkage, locate the two Phillips head screws in the lower dash structure. Remove the two screws and the base plate will release, held by the throttle cable on one side and the connecting rod to the throttle pedal plus the spring on the other side.

Undo the spring from the base plate by finding the open end. Use the long nose pliers to move the spring end in the right location. You can now undo the linkage locknut from the original throttle linkage lever. Once done, the side of the throttle pedal is completely disconnected.

Remove the M4 bolt on the other side of the throttle linkage lever. This part connects to the actual throttle cable. Carefully remove the bolt as the linkage is created using a stack of washers of which some need to be used in the new configuration. Remove the actual throttle cable from the linkage base plate. The base plate will be completely disconnected from the car now.

The illustration at the right shows the original throttle linkage system.

Parts that are arrowed at in the illustration will be replaced by new ones or are not required in the new throttle linkage configuration.



Undo the bolt which holds the throttle linkage lever on the base plate. If your car has a base plate with a stud welded on to it, the stud will remain the same. If your car has a base plate with a separate bolt to hold the lever, the original bolt will be discarded for a new stainless M4 bolt in the kit.

Remove the original throttle linkage from the base plate.

You can now start the assembly of the new throttle linkage.

If your car's base plate has a stud installed, please use the M4x12 (12mm outer diameter) washer on the stud. If you car had a bolt in the base plate use a new M4x16 bolt in the base plate (head should be facing down) and use an M4x12 washer on the bolt.



Now position the new throttle linkage over the stud/bolt. (view the picture to see the correct position of the throttle linkage)

The bearing needs to go first, so the long part of the lever should be installed closest to the base plate.

Use an M4x12 (12mm outer diameter) washer on top of the bearing and put a M4 locknut on top of that. Tighten the M4 locknut using a spanner and ratchet. The M4 locknut needs to be firm, but hand tight.

You should now be able to move the throttle linkage without it touching the base plate (except for the part closest to the throttle cable holder and the nut which is welded on the base plate and keeps the base plate in it's position in the dash).

If the base plate seems to be bent, you might try to straighten it again, or you might undo the locknut of the throttle linkage, take the throttle linkage off again and adding the extra M4x12 washer on top of the first washer.

We do however recommend to try and straighten the base plate as the extra washer might add some instability.

It is now time to re install all the parts.

First, connect the linkage from the throttle pedal to the new throttle linkage lever. As you can see, there are three holes. The centre hole will make the throttle feel (react) as it did when the car was new (without any play on the throttle linkage that is).



If however, you want to have more travel on the throttle pedal (Honda-SC or Audi powered cars might benefit from longer travel) you might want to connect to the inner hole.

Plug the stud into the hole you'd like to use (direction as shown in the picture). Put the original washer on the stud and use the original locknut. The stud is made from aluminium, so you need to be careful not to over tighten the locknut.

Installation of the throttle cable

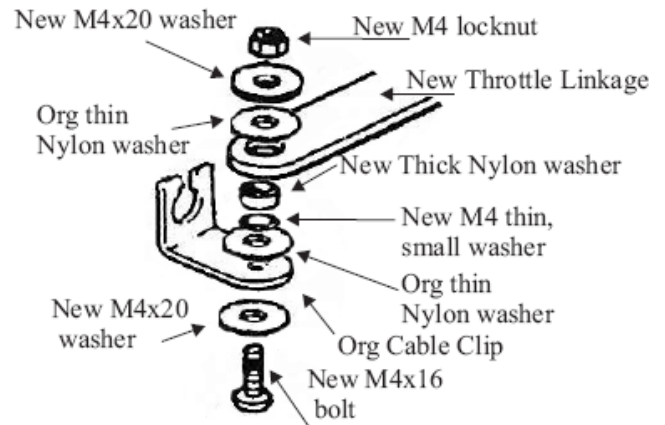
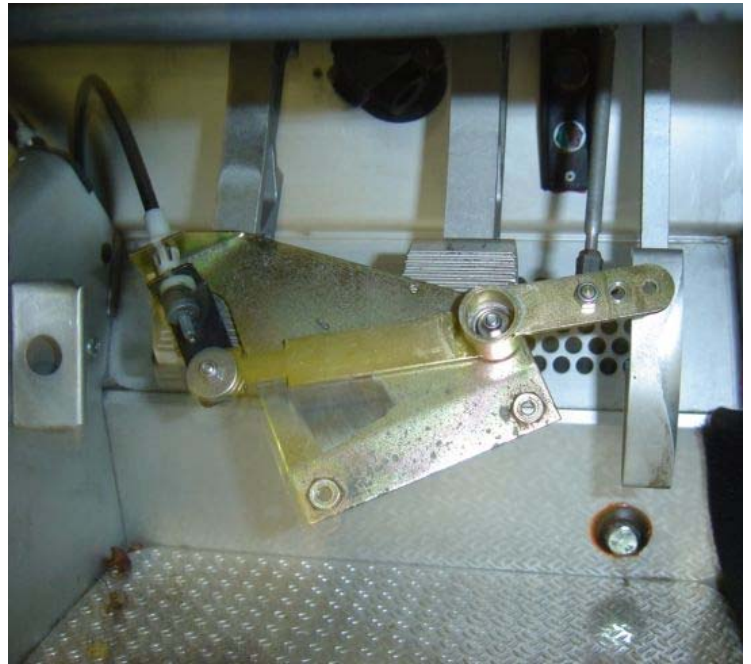
You will now need to attach the throttle cable to the new throttle linkage.

As the connection to the throttle cable is made using nylon sliding washers, we recommend using some grease on both sides of the new throttle linkage to allow the washers to move more freely.

The drawings and pictures explain more than a thousand words.. Here is how to assemble the washer stack for the Throttle Cable Clip:

The correct order (bottom up):

- New M4x16 bolt
 - New M4x20 washer
 - Original Throttle Cable Clip
 - Original thin Nylon washer
 - New M4 thin, small washer
 - New thick Nylon washer (10mm/4mm)
 - New Throttle Linkage
 - Original thin Nylon washer
 - New M4x20 washer
 - New M4 Locknut
- Only tighten **HAND TIGHT**.



Replacement of the complete assembly

We have included two stainless steel M5x16 bolts with spring washers to replace the original Phillips head mounting bolts.

Hold the base plate with its complete assembly in the right location and install the two bolts into the cross-member.

Tighten the bolts once they're both installed.

The completed assembly should look like this: (picture taken in a RHD car, if you own a LHD car, the assembly is mirrored).

Before starting the engine, get into the car and feel what the throttle pedal is like. Have someone check if the lever on the throttle body is opening and closing again. If so, start the engine and use the linkage.

Have fun!

