



Technical Bulletin 004/2020

Date: **06 August 2020**

Subject: **Clutch Kit SCS 2.0**

Product: **MV Agusta Turismo Veloce SCS Euro4
from VIN ...002169 to VIN 002777 included**

Dear Dealers,

It is our pleasure to introduce the latest update of the SCS automatic clutch system called 2.0 available for our Turismo Veloce equipped with SCS clutch.

Compared to the previous version (called SCS 1.0) the SCS 2.0 system introduces the following changes:

- New clutch basket that eliminates the old configuration equipped with sleeves which required maintenance intervals every 7,500Km , aligning the maintenance with the Turismo Veloce models
- New clutch discs trimmed with redesigned profile
- New modified spring holder plate
- New Expander disc

We invite you to read the maintenance tables relating to the SCS models in the respective workshop manuals. The respect of the maintenance and replacement operations provided in the Scheduled Maintenance Table shown in the workshop manual is mandatory to maintain the warranty valid.

The adjustment of the SCS clutch system is performed through a special screw positioned on the clutch pusher rod and will be carried out at each scheduled service, thanks to the use of a tool specifically dedicated to this purpose (code 8000C6941), in order to ensure the correct functioning of the automatic clutch.

For all the more detailed information relating to the maintenance and management of the SCS clutch, please consult the relevant workshop manual available on our RMI platform.

For further details please do not hesitate to contact us

Kind Regards
Technical Assistance Department
MV AGUSTA MOTOR Spa

The code to order the SCS 2.0 update KIT is 8000C9391

The kit consists of the following parts:

- 1 SCS 2.0 kit cod. 8000C7904 which includes
 - o 10 conductive clutch discs code 8000C7907
 - o 12 driven discs cod. 8000C7907
 - o 1 Expander disk code 8000C7905
 - o 1 clutch hub cod. 8000C5716
 - o modified pressure plate code 8000C8211
 - o medium - red spring cod. 8000C5724
 - o hard - blue spring cod. 8000C5725
 - o 6 spring guide washer cod. 8000C5726
 - o 6 tcei screws M6x1-L35 cod. 8000C5727
- 1 modified clutch basket code 8000C7900
- 6 Fixing flange fixing screws cod. 60NDB4391
- 1 clutch cover gasket cod. 8000B2615

NOTE: To ensure the correct operation of the vehicle, it is mandatory to use all the components included in the kit cod. 8000C9391 and proceed with the calibration update with the latest version available

The following tools are required to install the SCS 2.0 clutch kit:

Workshop tools:

- 8000C7621 SCS CLUTCH HUB LOCKING TOOL
- 8000C6941 SCS CLUTCH SETTING TOOL

General tools:

- Allen key (mm): 4 – 5
- Combined key (mm): 12
- Torx key: TX25
- Socket (mm): 32
- Torque wrench key: For tightenings from 0,5Nm to 150Nm

Consumables:

- Loctite® : 2400
- Grease: Molikote® HSC Plus, Motul Top Grease 200

Proceed as follows, scrupulously respecting the assembly sequence:

1. SCS 2.0 clutch installation
2. SCS 2.0 calibration
3. Vehicle road test

The suggested labour time for performing the operations reported above is 60 minutes

* For anything not expressly mentioned, refer to the workshop manual

Before delivering the motorcycle to the customer, perform a road test. If the clutch setting is not correct, proceed with the adjustment again with the engine cold by repeating the operations from point 1.21 to point 1.28 inclusive.

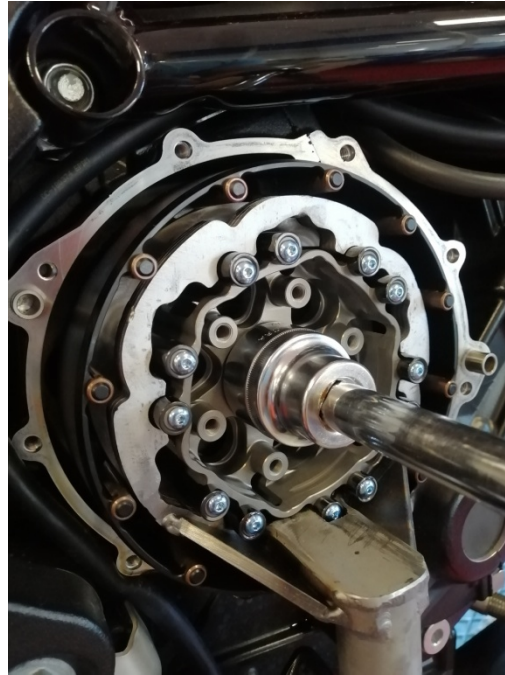
1. SCS 2.0 Clutch installation:

1. Unscrew the piston aduste screw on the clutch rod actuator placed on the left side of the motorcycle until the aduste screw is no longer in contact with the clutch push rod (SCS clutch rod length \approx 253mm)
2. Remove the SCS clutch cover
3. Remove the six clutch springs (NOTE: the six clutch springs MUST NOT be used again).
4. Remove the pressure plate and take the disc push rod; keep the clutch push rod in its current position. (NOTE: the pressure plate MUST NOT be used again).
5. Remove all the clutch discs and the Expander disc (NOTE: the discs MUST NOT be used again).
6. Remove all the clutch sleeve from the clutch basket
7. Remove the hub fixing nut using the special tool code 8000C7621 (SCS CLUTCH HUB LOCKING TOOL)
8. Remove the spacer cod. 8000B3018
9. Remove the flange \ clutch bell assembly with the relative roller bearing cod. 8000B3997 and the spacer cod. 8000B3989
10. Remove the clutch basket cod. 8000B9716 and the related O-Ring cod. 8000B3996 from the flange removing the six screws cod. 60NDB4391 and removing the rubber cush drives cod. 8000B1727. (NOTA: the clutch basket cod. 8000B9716 MUST NOT be used again)
11. Using the same rubber cush drives, applied in alternating green / black position and with the wording "UP" upwards, fit the new clutch basket code 8000C7900 on the flange taking care to correctly position the O-Ring code 8000B3996.

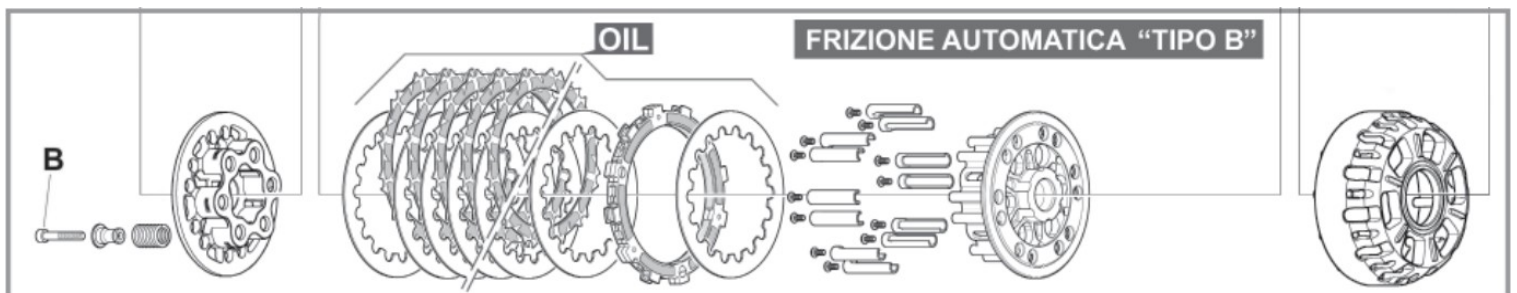


12. Reposition the flange disk cod. 8000B1727 using the six new fixing screws cod. 60NDB4391 supplied in the kit, applying Loctite® 2400 and tightening them to a torque of 10 Nm.
13. Before repositioning the flange / basket unit in the engine, make sure that the spacer cod. 8000B3018 is positioned with the smaller diameter on the engine side.
14. Proceed with the repositioning of the flange / basket assembly equipped with the relative roller bearing cod. 8000B3997 and the spacer cod. 8000B3989. Check that the oil pump control gear is correctly engaged with the primary gear of the clutch bell.
NOTE: the new clutch basket IS NOT APPLICABLE on the components of the old version 1.0
15. Place the spacer cod. 8000B4997.
16. Place the clutch hub cod. 8000C5716.

17. Place the spacer cod. 8000B7308 and the fixing nut cod. 8000B7311 with Loctite® 2400 and tightening with the torque of **120 Nm** (use the dedicated tool cod. 8000C76210 SCS CLUTCH HUB LOCKING TOOL



18. Position the clutch discs in the order shown (be careful to position the new sintered discs with the external profile matching the sliding columns on the clutch hub):



NOTE: apply oil on all the discs before the assembling.

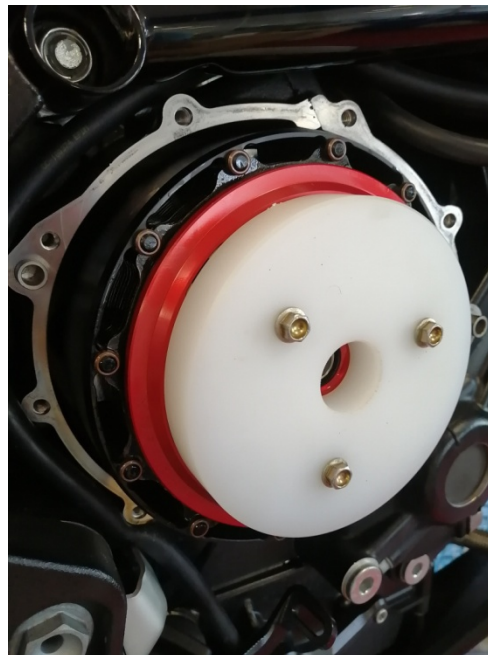
NOTE: the new sintered discs ver. 2.0 ARE NOT INTERCHANGEABLE with the old version 1.0 due to the different external profile:



NOTA: the new Expander disc cod. 8000C7905 IS NOT INTERCHANGEABLE with version 1.0 due to a different teeth dimension:

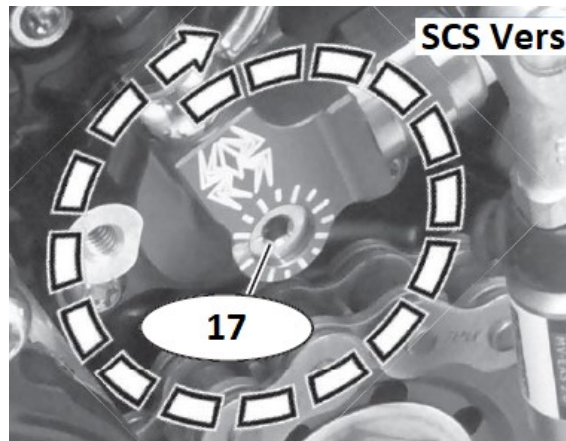


19. Install the disc push rod on the SCS 2.0 disc push plate
20. Install the new modified pressure plate cod.8000C8211 supplied in the kit placing the 3 new red springs cod. 8000C5724 medium spring - red supplied in the kit and tighten them with the torque of 10 Nm.
21. Install the tool cod. SCS CLUTCH SETTING TOOL;



To adjust the SCS clutch, the clutch lever must be positioned at the maximum distance from the handlebar and the engine **must be cold**; make sure that the clutch piston adjusting screw is not in contact with the clutch rod.

22. Put the clutch piston adjuster in contact the clutch rod with a torque of 0.5 Nm.
23. Remove the tool code 8000C6941 SCS CLUTCH SETTING TOOL.
24. Install the 3 blue springs supplied in kit cod. 8000C5725 hard spring - blue and tighten them to a torque of 10 Nm.
25. Screw in clockwise direction the clutch piston adjuster (starting from the previously detected position) of 1 turn + 1 notch (17 notches):



26. Place the appropriate cap on the access hole to the adjustment screw on the sprocket cover.
27. Place the new clutch gasket cod. 8000B2615 supplied with the Kit.
Note: Apply liquid gasket on the two joints of the crankcase
28. Re-assembly the transparent SCS clutch cover tightening the screws with the torque of 10 Nm.



2. SCS Mapping:

For the correct use of the SCS clutch system, it is MANDATORY to install the latest SCS calibration available in the control unit.

ALWAYS refer to the latest Service Bulletin issued for updates to the Turismo veloce SCS mapping.

ATTENTION: Before updating the calibration, make sure that the battery voltage has a minimum voltage of 12.5V and use a battery charger during updating operations.

3. Road test:

Before delivering the motorcycle to the customer, perform a road test. If the clutch setting is incorrect, proceed with the setting again with the engine cold by repeating the operations from point 1.21 to point 1.28 included.