

This clutch and flywheel kit is a high performance unit, derived from a proven competition based system. The clutch parts are engineered for the use conditions determined by AP Racing, the clutch manufacturer. The components in this system have been engineered to endure conditions experienced in normal traffic driving, autocross, spirited street driving and those of the racetrack.

AP Racing has rated this clutch for 315 lb/ft (427 Nm) of torque. The high performance organic friction material on the clutch disc will tolerate elevated temperatures, but as with all automotive clutch systems - care should be taken to avoid continuous thermal abuse

This kit is designed to be installed on either 6-bolt or 9-bolt crankshaft motors, with a standard 915 transmission in an unmodified 911 body shell, 1972 through 1986. There are some variations in mating parts and clutch release mechanism components across this 15-year period; however this WEVO 915 Streetlite has been designed to work with all combinations of the factory cable release mechanisms. Call WEVO with any questions or difficulties encountered during installation. If your car is modified, there is still every chance this kit will work with your modified car, WEVO can assist if you have questions about your specific application.

This kit includes the flywheel, crankshaft pilot bearing, clutch assembly, clutch cover screws, Starter Ring Gear mount screws & nuts, Starter Ring Gear mount top-hat-bushings and Release Bearing adapter.

The O.E. Starter Ring Gear from your original 915 clutch installation and the O.E. Release Bearing are both re-used during the installation of the WEVO 915 Streetlite clutch kit.

Additional kits are available to allow for different Engine management installations, such as the 3.2 DME Speedring kit and the 3.6 DME Speedring kit. There is also a clutch pedal stop kit that can be used to supplement or replace the O.E. floorboard mounted clutch pedal stop.

These instructions assume an experienced level of technical capability, including execution under good working conditions and performed with accepted good work practices. These instructions also assume the installers will familiarize themselves with the general process of adjusting and maintaining a common competition style clutch system.

FLYWHEEL

The new WEVO 915 Streetlite flywheel can be installed in the condition it is supplied. If your existing 9 bolt factory flywheel has the pilot bearing attached to the crankshaft by 3 x M6 screws, then this assembly should be removed. The pilot diameter of the 915 input shaft is compatible with the new ball bearing used in the WEVO 915 Streetlight flywheel. The kit does not include new Flywheel bolts, Porsche do however recommend these are replaced at every removal.

Torque the Flywheel bolts to the original factory specification for your Flywheel bolt configuration. Six bolt flywheels (only) continue to use the unique 6 hole washer between the flywheel bolts and the flywheel.



CLUTCH

The AP Racing 215mm Clutch cover assembly and Clutch Disc are included in this kit. Spare parts can be purchased from Windrush, or through your local AP Racing agent (worldwide) using the same parts numbers.

Clutch Assembly, complete - CP3850-2ABLK

Friction Disc – CP3850-4

INSTALLING THE RELEASE BEARING

The AP Racing clutch is supplied with an adapter that allows the standard Porsche O.E. 915 Clutch Release Bearing (Part # 915 116 082 80) to be used with the AP Racing 215mm pull center clutch.

The installation must be performed correctly and in the following sequence to avoid damage to the adapter and provide reliable service.

The adapter must always first be installed on the AP Racing clutch diaphragm spring; it is installed in the same way the factory release bearing is attached to the O.E clutch diaphragm spring. This is most easily done with the diaphragm removed from the clutch cover. These parts are not mechanically joined, so removal is as easy as separating them.

There is a new retaining ring included with the adapter, this is a direct interchange with the O.E. retaining ring and either ring can be used.



Once the adapter is mounted onto the diaphragm – without the release bearing, the O.E. release bearing can be mounted to the adapter.

Prepare the O.E. Release bearing to be mounted on the adapter. The original shim must remain on the bearing and the helical wave washer placed against that shim.



Original shim placed onto the Porsche Clutch Release Bearing – first.



Followed by the helical wave washer supplied with the adapter.

The retaining clip is positioned into the “open” position in the wide slot of the adapter.

Use a press or clamps to position the bearing into the adapter until the bearing is fully seated. This will require little force, just enough to overcome the partial compression of the helical wave washer.



**Retaining Clip in the “open” position
(Diaphragm removed for clarity of photo)**

Using pliers close the retaining clip, it should seat into the groove in the Release Bearing and allow the tips of the retaining clip to pass through the gate. With the clip held in a closed position, release the clamps or press and allow the Release Bearing and adapter to separate, as they separate the tips of the retaining clip will pass through the gate, then they can be seated in the “closed” position of the groove.



**Retaining Clip in compressed position so tabs can pass through gate.
(Diaphragm removed for clarity of photo)**

The Release Bearing can now be treated the same as when it was installed on the O.E. 915 Clutch cover.



Retaining Clip shown “latched” into the closed position.

MOUNTING THE CLUTCH

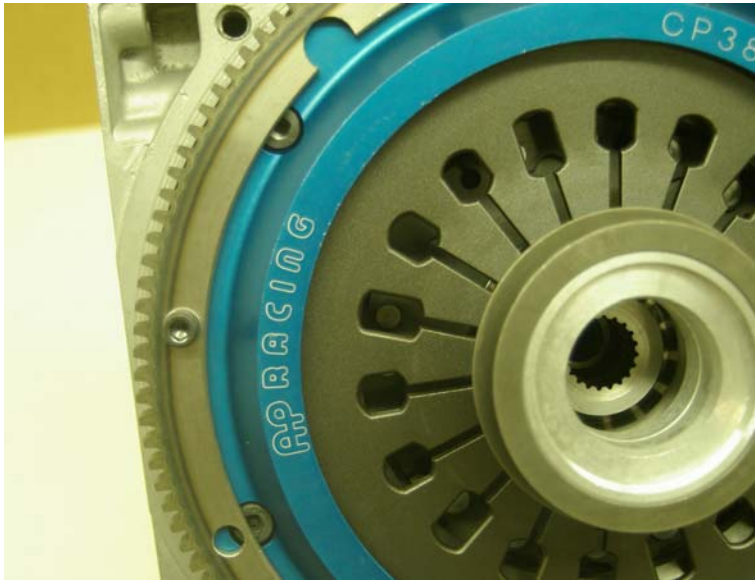
The clutch is fastened by six M8 x 30, 10.9 grade Low Head Cap Screws. These are tightened to 22 ft/lb of torque and we recommend also using high strength, hi temp thread lock.

The clutch cover and pressure plate are marked with yellow paint. This is the indexing of the parts that has been inspected and recorded by AP Racing during clutch manufacture. It is normal practice to keep the clutch assembled with these parts in the recorded position.

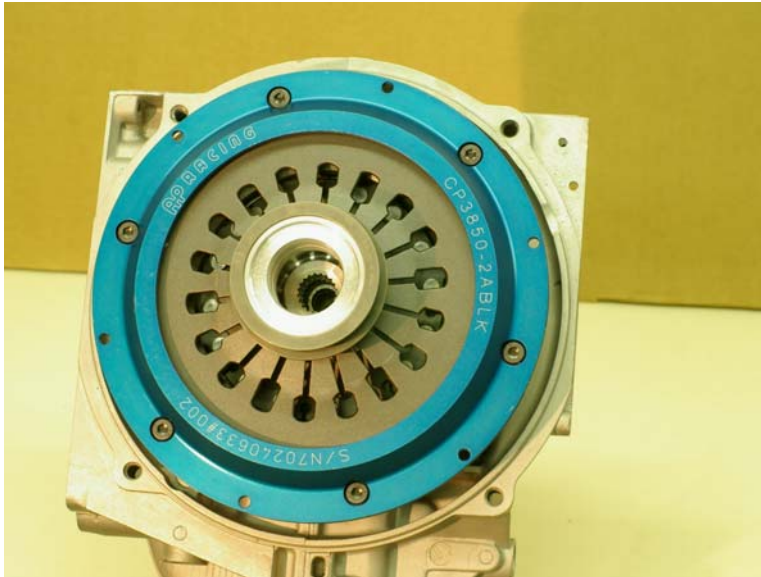
Be sure to keep the diaphragm spring correctly registered in the clutch cover and not titled, crooked or eccentric from the step feature that locates the diaphragm spring. Familiarize yourself with the parts before assembly to see how these parts must look when correctly assembled against the flywheel. This should be checked as the clutch cover bolts are tightened.

Use a pilot tool to align the clutch disc and pilot bearing.

It is normal practice to tighten these in a criss-cross pattern, slowly winching the clutch cover to the flywheel as the diaphragm spring is deflected. Keeping the clutch cover roughly parallel to the flywheel during this process is the objective.



Once the Low Head Cap Screws are tight, the screw heads should be sub-surface of the clutch cover, providing the flat surface where the Starter Ring Gear will locate.

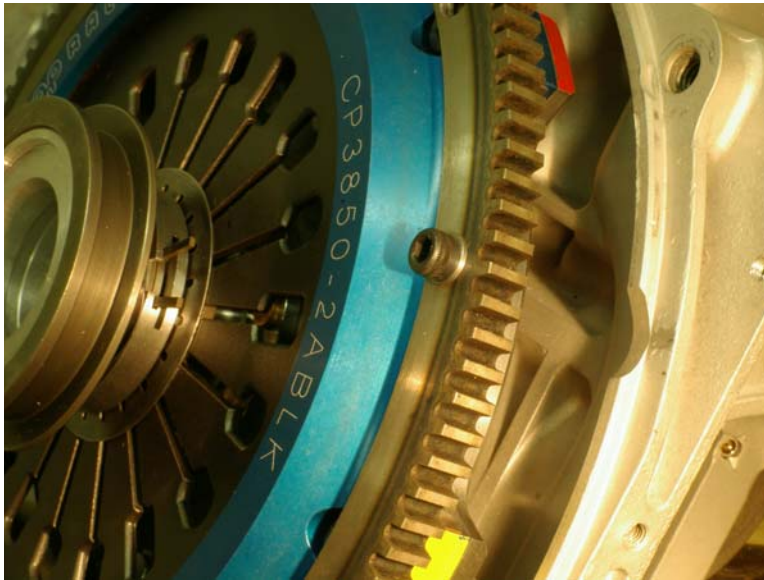


MOUNTING THE STARTER RING GEAR

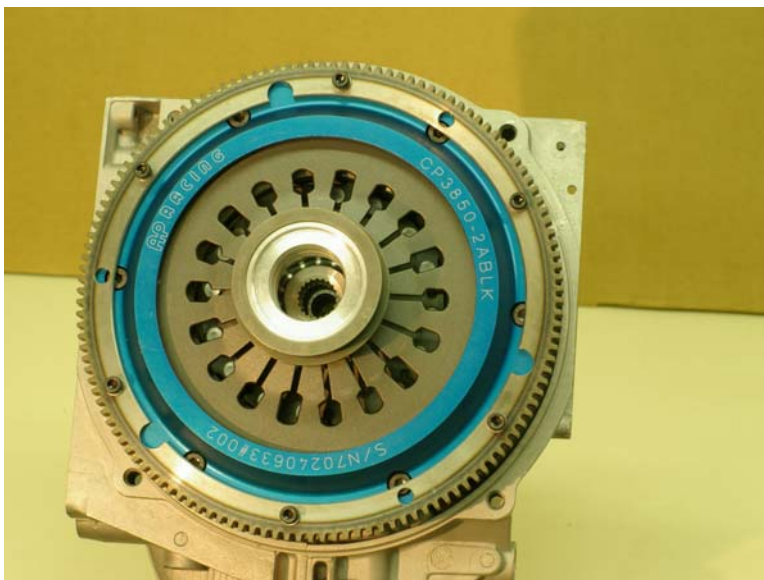
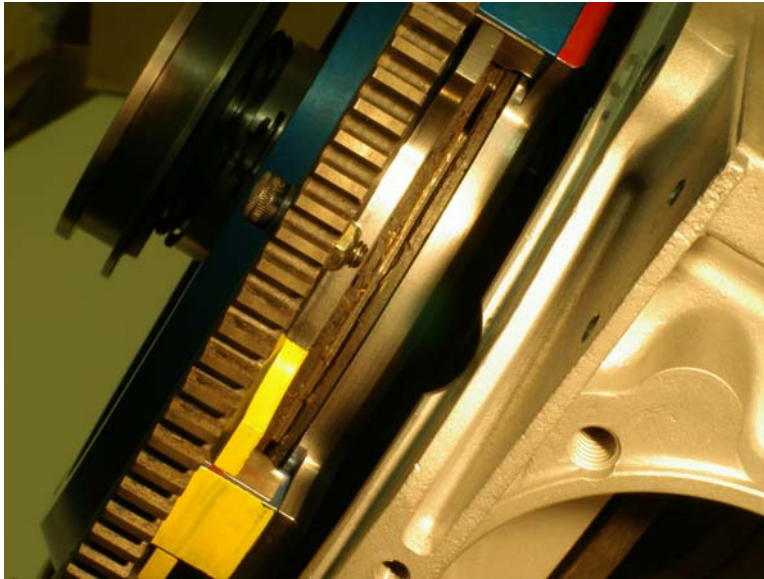
The O.E Starter Ring Gear is used in this kit (Part # 911 116 239 00)

The Starter Ring Gear (SRG) is mounted with the step side facing the clutch cover and this step is a close tolerance fit over the outside diameter of the clutch cover. Ensure that all clutch friction material debris and corrosion is cleaned from the SRG before any attempt is made to fit the SRG over the clutch cover.

Six of the nine available holes in the SRG are used to fasten it to the clutch cover. The six fasteners are M6 x 18 Socket Head Cap Screws, each with a top hat bushing and all steel locking nut.



Identify the 6 holes in the SRG that match the 6 holes in the clutch cover and assemble these parts. The M6 screws should be torque'd to 11 ft/lb.



PEDALS

The various pedal assemblies used from 1972 through 1986 RHD and LHD are all compatible with the WEVO 915 Streetlite system. There are a variety of different clutch shaft levers part numbers on these pedal assemblies – each of these has an impact on the motion ratio and pedal travel. The later model systems with the omega spring on the transmission will be the most sensitive to set-up.

In all cases make sure your pedal assembly is in good functional condition, so that any difficulties in adjusting the clutch for the feel and release position are not associated with poor pedal maintenance.

ADJUSTMENT

The WEVO 915 Streetlite requires little adjustment.

After the initial installation, you will need to adjust the clutch cable to establish the correct release and engagement positions and cable free-play.

The WEVO 915 Streetlite is activated with a shorter pedal travel than the O.E. Sachs clutch.

As a result, you may find the clutch engagement and release area of the pedal travel is higher than previously.

Making adjustments to both the front end of the cable, where it attaches to the pedals – and the rear end of the cable where the mechanism is mounted on the transmission will allow the clutch engagement to be moved higher and lower in the arc of pedal travel.

Be sure to fasten all jam nuts once the desired outcome is achieved.

See below the importance of the clutch pedal stop to limit over-travel.

CLUTCH PEDAL STOP

The clutch pedal stop device is important to prevent excessive over-travel of the clutch release mechanism. Over-travel could lead to deformation of the clutch diaphragm spring and reduced clutch performance.

All 911's equipped with the 915 transmission have a clutch pedal stop incorporated into the pedal floorboard. This adjustable stop needs to be in adjustable condition, including the rubber buffer – often missing (901 423 391 00), to be able to adequately adjust the pedal stop to suit the 915 Streetlite clutch kit.

If your car is modified and the floor board or the O.E. clutch pedal stop removed, we **HIGHLY** recommend an alternate clutch pedal stop mechanism be installed to limit travel at the pedal.

MAINTENANCE

The WEVO 915 Streetlite does not require any unusual maintenance. Periodic adjustment as per the O.E. clutch is a good service practice.

NOISE

The AP Racing 215mm clutch is a “lug drive” style clutch; there are six massive lugs that form the spokes of the clutch cover. The clamping ring is engaged with the lugs and this is what transfers the torque from the crankshaft to the transmission side face of the friction disc. The advantage of this architecture is the superb durability over “tab drive” clutches like the O.E. 915 Porsche clutch.

The disadvantage is noise – you will hear some rattling noise from the clutch, in neutral at idle. This will cease when the car is driven and the firing impulses of the crankshaft are smoothly reacted through the drive train.

In addition, some noise may be heard from the transmission, this is a function of the reduced clutch and flywheel mass acting as a torsional damper on the crankshaft. With the performance advantages of the lightweight clutch and flywheel assembly come some small penalty in NVH.

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