Fitting & Installation Instructions

The following general installation instructions are to be considered as a supplement to the Factory Service Manual for your particular model of engine and transmission. Engine and transmission combinations may vary by model year and country of origin. Failure to observe and carefully follow these instructions when installing your new clutch will void the warranty.

1. It is vital to diagnose the cause of the failure of the old clutch before replacing it with a new unit. Any premature failure, other than overpowering of the old unit, must be properly remedied before replacement. Failure to remedy the cause of premature failure of a clutch unit will also cause the new unit to fail prematurely. Be sure, if the old clutch failed due to overpowering, that the replacement clutch is designed to handle the torque, vehicle weight, and driving style that it will be used for. Contact the DKM Technical Help Line if you cannot diagnose the reason for the failure of the old clutch or if you have questions about the capacity of the new clutch unit.

Common causes of premature failure include:

- Improperly-followed installation procedures.
- Kinked, bent, obstructed, or constricted clutch hydraulic lines and damaged or worn linkage.
- Improper setting of clutch pedal free-play which causes slipping and rapid wear.
- Worn bearings or bearing sliding surfaces which cause binding of components.
- Engine oil leaks that contaminate the friction material.
- Overuse of clutch spline lubricant that contaminates the friction material.
- Dirty, sloppy, unorganized installation area which leads to: Capturing of debris or material between mating surfaces which cause misalignment of the clutch or transmission.

2. **Carefully read the entire Factory Service Manual** for your particular model of engine and transmission to ensure that all of the proper tools and consumable parts are on-hand before scheduling the installation. Research should also be done to identify common failures of non-clutch components that must be removed during clutch replacement (such as axle seals or retaining clips that may be damaged during removal). Consideration should also be given to items that are commonly replaced during clutch replacement due to ease of access (such as rear-main-seals and transmission tailshaft seals).

3. **Make sure you have the correct parts for your application**. After disassembly and cleaning, you should pre-fit the components as much as possible to assure compatibility between the splines, linkage, bearings, and hydraulic fittings before beginning reassembly. Consult DKM if you have any questions or if you are missing parts in your kit as soon as possible.

4. This DKM kit is not compatible with any flywheel, disc, or pressure plate not manufactured by DKM unless explicitly stated on the included bill-of-materials.

5. The flywheel and pressure plate are coated with rust inhibitors or preservative oil. The mating surfaces and friction surfaces of these parts must be thoroughly cleaned before reassembly. Use a residue-free brake and clutch parts cleaner to thoroughly clean the mating surfaces and friction surfaces of the components just before installation. Failure to remove the rust preventative and oil from the mating surfaces of the components can cause improper torqueing of the assembly hardware and cause the clutch or flywheel to \ detach after installation. Failure to remove the rust preventative and oil from the friction surfaces of the clutch components will cause premature wear and failure of the clutch unit. **Only clean the mating surfaces and the flywheel and pressure plate friction surfaces as overuse of degreaser could wash away grease from the pilot bearing or other critical areas.**

6. Clean the old grease from the gear box input shaft splines and check that the new clutch disc slides freely on the shaft. Lightly grease the input shaft with high temperature “disc brake grease.” Lack of proper spline lubrication will cause binding, failure to disengage, and clutch drag. Over-application of grease will contaminate the friction material, causing clutch slip and premature failure.

7. Remove and replace the pilot bearing (if applicable). Remove and replace the release bearing or the concentric slave cylinder (CSC) (where applicable).

a. For vehicles equipped with a separate release bearing and fork, be sure that the fork pivot points and the bearing guide tube are in good condition and properly lubricated. Replace the guide tube, pivot ball, or any linkage that is excessively worn.

b. For vehicles equipped with a concentric slave cylinder (CSC), observe any special installation instructions or bleeding procedures in the Factory Service Manual. Many CSC systems will not work properly if bleeding instructions are not followed exactly. Some CSCs are not reusable and must be replaced each time the transmission is removed, regardless of wear.

8. When fitting the flywheel to the engine, it is critical that the mating surface of the crankshaft and the flywheel are clean, flat, and free of burrs. Consult the Factory Service Manual for proper bolt torqueing procedures and ratings. Many vehicles require special crankshaft bolt sealing techniques to prevent oil leakage from around the bolts.

9. Observe the proper Friction Disc orientation when fitting it to the flywheel. The pressure plate bolts should be tightened in a diagonal, crisscross pattern in several steps. Failure to use the proper torque sequence can cause damage to the pressure plate. Never use air tools to install the pressure plate bolts. Apply Thread Locking Compound to the pressure plate bolts and tighten to 38 N•m (28 Lb•Ft).

10. When refitting the gearbox, be sure to fully support the weight of the gearbox until it has been securely attached to the engine. Never allow the weight of the gearbox to be supported by the input shaft or the friction disc. Do not force the input shaft through the friction disc and never apply twisting or bending motion to the disc by the input shaft. Care must be taken not to bend the disc or damage the splines as this is the most common type of installation error that results in a faulty, nonfunctional clutch.

11. Check all bell housing dowels to be sure that they are in the correct position before tightening bell housing bolts. Make sure there is no dirt or material between the mating surfaces of the engine and bell housing. Refer to the Factory Service Manual for proper torque procedures.

12. Refer to the Factory Service Manual for clutch adjustment unless alternative specifications are provided.

Dual Mass Flywheel Replacement (If applicable):

This DKM Clutch Kit is a solid flywheel conversion kit that replaces the factory dual mass flywheel. Although this clutch kit has been engineered to minimize the effects of using the stronger solid flywheel, you may experience the following changes:

- The clutch pedal free play may need to be adjusted (if applicable) for proper operation
- There may be more free play in the pedal than a stock kit (1” to 2”)
- There may be audible gear rattle caused by engine harmonics while in neutral or engine braking.
- The clutch engagement point may differ from the stock clutch
- The clutch pedal may have a different feel from the stock clutch

Should you have any questions about the above changes, please call our technical help line for advice before fitting this DKM clutch kit