



STOP! BEFORE INSTALLING THE RAM CONCEPT 9.5 DUAL, MAKE SURE YOU HAVE ADEQUATE SPACE IN YOUR BELLHOUSING FOR PROPER FIT!

DETERMINING IF THE RAM CONCEPT 9.5 WILL FIT IN YOUR APPLICATION

Before purchasing or installing the RAM Concept 9.5 dual disc, you can easily measure to make sure the unit will fit properly in the vehicle. This will help you decide if you need to make any other changes to accommodate the clutch unit. Use the provided diagram to make your calculations.

CONCEPT 9.5 CLUTCH HEIGHT MEASUREMENT – 2.125" (ORGANIC), 2.175" (METALLIC)

1. **MEASURE THE CRANK PROTRUSION** – measure from the crank flange of the engine to the back of the block. If using a block saver plate, have this in place when measuring. ('A' on diagram)
2. **MEASURE YOUR FLYWHEEL THICKNESS** – measure the thickness of your flywheel from the crank flange to the friction surface. ('B' on diagram)
3. **MEASURE BELLHOUSING DEPTH**
 - a. If using a **MECHANICAL LINKAGE**, install the transmission onto the bellhousing with a few bolts, install the clutch fork and release bearing. Retract the bearing completely and measure from the face of the bellhousing to the face of the release bearing. ('D' on diagram)
 - b. If using an aftermarket **HYDRAULIC BEARING**, measure from the face of the bellhousing to the face of the hydraulic release bearing. ('D' on diagram)
 - c. If using a **FACTORY HYDRAULIC SLAVE CYLINDER**, have someone hold the hydraulic slave bearing face fully retracted and measure from the face of the bellhousing to the face of the release bearing. This number is the 'available space' for the clutch system. ('D' on diagram)
4. **FILL IN THE NUMBERS** – Do the calculations at the bottom of the diagram. You are looking for a positive number in the 'Avail. Space' block.
5. If the minimum of .200" cannot be attained (negative number in 'available space' block), there are several methods to make the unit fit.
 - a. Use an aftermarket hydraulic bearing – see RAM listing with this info packet
 - b. Use a thinner flywheel – see RAM flywheel listing with this packet
 - c. Space the bellhousing from the back of the block using a block saver plate
 - d. Use spacers provided by the aftermarket transmission companies

IF YOU NEED TECHNICAL ASSISTANCE: You must provide this setup information in order for our technical department to assist you with any fitment questions. Make sure you provide the A, B, C, and D dimensions and email your questions to ramtech@ramclutches.com.

CALCULATING AVAILABLE SPACE FOR YOUR CONCEPT 9.5 CLUTCH SYSTEM

DETERMINING IF THE CONCEPT 9.5 CLUTCH WILL FIT YOUR APPLICATION

1. Measure and record dimensions 'A' (crank flange protrusion), 'B' (bearing compressed from the front of the bellhousing), and 'F' (flywheel thickness). Dimension 'C' is standardized for the Concept 9.5; use 2.125" for organic disc models, 2.175" for metallic disc models.

If you are using a mechanical release bearing, slide the bearing on to the input collar and take the 'B' measurement with the bearing flat to the back of the collar.

2. In the gray box, add dimensions 'A', 'C', and 'F' to determine the 'clutch height from the engine'.

3. Subtract 'clutch height from engine' dimension from dimension 'B' (bearing compressed). A positive number result indicates available space, or clearance. This clearance minimum should be .250" for mechanical or cable linkage applications, and .200" for RAM hydraulic bearing applications.

If you are unable to attain these minimum clearances, modifications will need to be made to increase space. This may include using a thinner flywheel, shorter release bearing, or spacing the bellhousing or transmission back.

NOTE: IF USING A RAM HYDRAULIC RELEASE BEARING WITH A CONCEPT 9.5, THE SNAP RING MUST BE REMOVED FROM THE FRONT OF THE BEARING PISTON.

