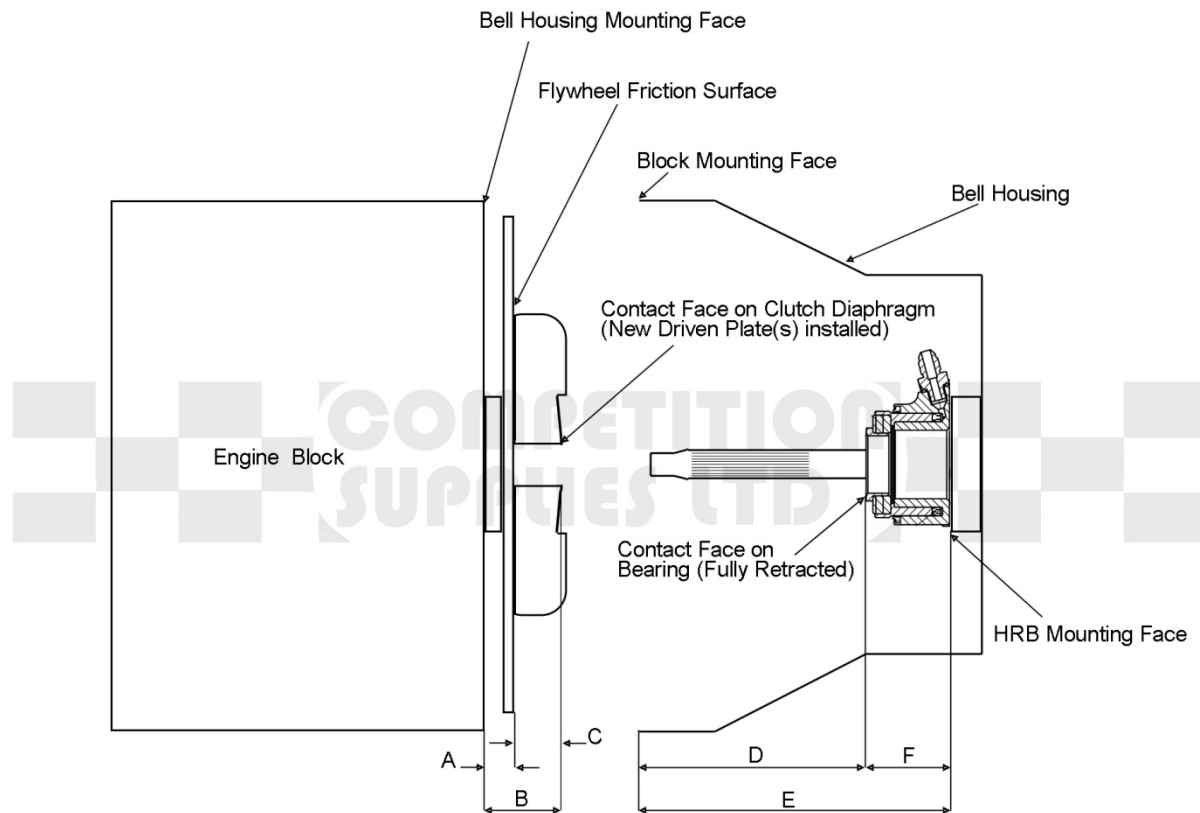


Measuring HRB Installation Height and Clearance



Method:

Use a straight edge and steel rule or vernier caliper to measure whichever of dimensions A,B,C, D, E and F you are able.

Note: Dimensions B & C should be taken with new driven plates fitted if not an estimate of wear should be made as the clearance required will be reduced.

Dimension A

FROM: Block where bell housing mates.

To: Flywheel friction surface.

_____ mm/Inches

Dimension B

FROM: Block where bell housing mates.

To: Bearing contact face on clutch diaphragm spring fingers.

_____ mm/Inches

Dimension C

Clutch set up height with new driven plates.

_____ mm/Inches

Dimension D

FROM: Bell housing face.

To: Bearing contact face with bearing fully retracted.

_____ mm/Inches

Dimension E

FROM: Bell housing face **To:** HRB mounting face.

_____ mm/Inches

Dimension F

HRB height with piston fully retracted

_____ mm/Inches

The clutch diaphragm spring fingers will move back towards the bearing as the driven plate wears so clearance to allow for this must be included in the calculations. This information should be available from your clutch supplier sometimes this is quoted as a set up height (S.U.H.) range, if so simply subtract the smaller figure from the larger then add 0.040" or 1mm to calculate the clearance required. We will refer to the clearance figure as "G". **Required clearance is typically in the range of 0.160 – 0.240" (4-6mm)**

To Calculate ideal HRB height (F): $F = E - B - G$

To Calculate available clearance (G): $G = E - F - B$

To Calculate ideal clutch S.U.H. (C): $C = E - F - G - A$

Clutch Bearing Contact Diameter

Bearing Contact Diameter

Please specify the required bearing contact diameter for your clutch. _____ mm/Inches

Hydraulic System Bleeding & Pedal Stop Set-up

When installing a Tilton Hydraulic Release Bearing Assembly a positive stop on the clutch pedal must be used to prevent over-stroking. Below is an easy means of setting the stop once the drive train is in place:

1. To bleed the system remove the pedal stop, depress the pedal 1/2", open the bleed screw, stroke the pedal its full travel, close the bleed screw, allow the pedal to return, and repeat until all air has been removed from the system.
2. Raise drive wheels and support the car on axle stands.
3. With the engine off and the car in gear, slowly depress the clutch pedal until the tyres just break free.
4. Give the pedal an additional .25" of travel (measured at the foot pad) and lock the pedal stop in place. This will allow the clutch to cleanly release itself without damage.
5. No additional travel or adjustments should be needed. **With a Tilton hydraulic release bearing and a 3/4" bore master cylinder, total master cylinder pushrod travel should be approximately .71"**



With the exception of the 9000 series, Tilton HRB's have an effective piston area of 7.74cm², release bearing travel generated by a master cylinder with 25.4mm of effective stroke will therefore be as follows:

| Master Cylinder Bore | Stroke of HRB |
|----------------------|---------------|
| 5/8"(15.8mm) | 6.5mm |
| 7/10"(17.8mm) | 8.1mm |
| 3/4"(19mm) | 9.4mm |
| 13/16"(20.6mm) | 11mm |
| 7/8"(22.2mm) | 12.7mm |



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