# **Trouble Shooting Common HRB Problems**



## **BRAKE FLUID LEAKING:**

- Excessive initial gap between bearing and clutch at setup. This is by far the most common mistake.
- Wrong brake fluid (or fluid other than brake fluid) used. Use only DOT 3, DOT 4 or DOT 5.1 brake fluid. Avoid high temperature brake fluids.
- Clutch hose damaged by clutch. Be sure clutch hoses are out of the way of rotating components and are secured.
- No pedal stop (if being used with a larger sized master cylinder).

## **CLUTCH WON'T RELEASE:**

- Air in system.
- Too small of master cylinder.
- Pedal motion ratio or footwell design prevents full stroke of master cylinder.
- No pedal stop (in some applications) will mean the fingers are being pushed into the clutch disc.

# **CLUTCH WON'T ENGAGE (STAYS RELEASED):**

- Cutoff port of master cylinder blocked. Check master cylinder pushrod for clearance.
- Bellhousing out of parallel or concentricity.
- Burr or debris behind bearing mount (bearing not mounted flat).

#### **CLUTCH PEDAL STAYS ON FLOOR:**

- If the clutch is not staying disengaged, this is a master cylinder or pedal geometry issue. There is nothing a hydraulic release bearing can do to make the pedal stay on the floor.
- Check for excessive master cylinder pushrod angle or binding in the system.
- Some OEM clutch pedals have a driver assist spring (over the center spring) to reduce driver leg fatigue. Some of these may not be compatible with aftermarket release bearings or clutches.

# **CLUTCH PEDAL IS TOO HEAVY:**

- Insufficient clutch pedal motion ratio
- Master cylinder too large for application
- Clutch spring too heavy for application

# **CLUTCH PEDAL FEELS "NOTCHY" WHEN RELEASING CLUTCH:**

- Bearing is not mounted concentric with clutch.
- Bellhousing is out of parallel (many steel bellhousings have excessive powder-coating).
- Burr or debris behind bearing mount (bearing not mounted flat).

# **BEARING MAKES NOISE (NEW BEARING):**

- Make sure it is the clutch bearing and not the input shaft bearing.
  - Does the noise stop when the pedal is depressed?
  - Does it only make noise when the pedal is depressed?
- Some new bearings will make noise when skidding on initial take-up. On a new bearing, the grease is not evenly distributed, and the seals are stiff. As the bearing breaks in, this will usually go away.

## **BEARING FLINGS EXCESSIVE GREASE:**

- Bearing was overpacked. Early 62-618 had this problem and it was messy but harmless. Newer 62-618 bearings (identified by large chamfer on OD) are filled with less grease and add an inner seal.
- Do not assume excess grease in the bellhousing means that the bearing is bad.