



CLUTCH INSTALLATION INSTRUCTIONS

14" STAMPED STEEL / SINGLE PLATE / PULL TYPE CLUTCH

1. Check the condition of the flywheel. If it is cracked or warped, refer to the manufacturer's recommendations concerning resurfacing or replacement.
2. Check pilot bearing condition and fit in flywheel. It is always recommended to replace the pilot bearing.
3. Check the transmission main drive gear spline (input shaft) for excessive wear. Worn splines will prevent clutch discs from sliding freely. Make sure the disc slides back and forth on the splines without any binding.
4. Install two guide studs (3/8-16 thread and 2" long) at the eleven (11) and one (1) o'clock positions.
5. Insert the alignment tool through the release bearing sleeve of the clutch cover. Insert the disc assembly onto the alignment tool making absolutely sure that the side labeled "Pressure Plate Side" is facing the cover and transmission.
6. Position the cover assembly over the guide studs on the flywheel by sliding it over the alignment tool and start the bolts. **IMPORTANT:** Make sure the adjusting mechanism is at the bottom, where you can get to it after the transmission is installed.
7. Tighten the bolts to 30-35 ft/lbs., (40-47 N•m), in an even, modified star pattern. Make sure that the cover assembly seats properly on the flywheel. Replace the two guide studs with bolts and tighten to torque spec.
8. Remove the two large wood blocks from between the cover and release bearing if they have not already fallen out during install. Be sure to keep the two wood blocks in case this clutch is removed from the flywheel for any reason. They must be reinserted between the release bearing and clutch cover.
9. Remove the alignment tool.
10. Install a clutch brake only if the application requires it (non-synchronized transmissions)
11. Install the transmission using extreme care not to hang the weight of the transmission on the clutch. The disc will bend causing non-release and dragging condition. Locate the release yoke in the proper relation to the release bearing housing as the transmission is moved into place.
12. The release bearing housing has been pre-packed with some grease, however it must still be lubricated when the clutch is installed or premature failure may occur. Do not over grease, as the excess grease will find its way to the clutch friction material. Must use grease with a specification of NLGI 2 or 3.
13. If for some reason the clutch is to be removed, be sure to insert the wood blocks between the release bearing cage and the top of the cover.

• See next page for Adjustment and Maintenance Procedures



CLUTCH ADJUSTMENT INSTRUCTIONS 14" STAMPED STEEL / SINGLE PLATE / PULL TYPE CLUTCH

1. Remove the inspection cover at the bottom of the bell housing and reattach it once maintenance is completed.
2. Initial Adjustment: Check and measure the adjustment dimensions of the clutch. If a clutch brake is installed, clearance between the top (the cover) of the release bearing housing and the clutch brake when the clutch brake is positioned against the transmission should be a minimum of $\frac{1}{2}$ ". When a clutch brake is not used, this dimension should be $\frac{3}{4}$ " from the top (the cover) of the release bearing housing to the transmission bearing cover. On original installation, adjust the pedal linkage to insure approximately $\frac{1}{8}$ " clearance between the fork tips and the contact pads. All future adjustments should be made by rotating the clutch adjusting ring and not on the pedal linkage. If the amount of pedal free-play is excessive, adjust with the pedal adjusting screw. Do not alter the $\frac{1}{8}$ " dimension.
3. Routine Adjustment: Clutch adjustment is necessary once the clutch pedal free-play begins to diminish. Check and measure the distance between the release fork tips and the contact pads on the underside of the release bearing housing. This dimension must be set to $\frac{1}{8}$ ". This $\frac{1}{8}$ " dimension will diminish as the friction surfaces wear in the clutch. The adjusting ring must be rotated in the CW direction to reestablish this $\frac{1}{8}$ " dimension between the fork and contact pads.
4. Turn flywheel until the adjustment lock is lined up with the inspection hole. Remove cap screw and lock.
5. Release clutch by depressing the pedal. The adjusting ring will rotate only while the pedal is depressed and the clutch is in the released position.
6. Rotate the adjusting ring in clockwise direction to move the bearing cage towards the transmission. Rotate the adjusting ring in counter-clockwise direction to move the bearing cage towards the flywheel. **Note:** normal clutch adjustment is performed by rotating the adjusting ring in the CW direction.
7. Replace the adjustment lock after verifying that the $\frac{1}{8}$ " clearance between the fork and contact pads is achieved and the release bearing is moving a full $\frac{1}{2}$ " as the pedal is depressed. This observation regarding the $\frac{1}{8}$ " clearance must be made while the clutch is in the engaged (pedal up) position.

Maintenance Tips

1. Lubricate the clutch release bearing at each chassis lubrication period, using high temperature grease that meets the following specification (NLGI 2 or 3). Do not over grease, as the excess will find its way onto the clutch friction material.
2. Adjust the clutch before the pedal free-play has disappeared. Failure to do this will result in slippage and possible internal damage to the clutch components.
3. If the clutch is hydraulically assisted, make sure the slave and master cylinder are functioning properly. For hydraulic linkage adjustment, refer to the specific vehicle manufacturers' procedures.

