(B)

Installation Instructions

CLUTCH INSTALLATION INSTRUCTIONS 14" STAMPED STEEL / TWO 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. We recommend resurfacing the flywheel before a clutch installation.
- 2. Check pilot bearing fit in flywheel. We strongly recommend replacing the pilot bearing at this time.
- 3. Check the transmission 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 in the new clutch. Install the "rear" disc onto alignment tool, making sure that the side marked "**Pressure Plate Side**" faces the transmission.
- 6. Install the strap drive intermediate plate over the guide studs. Make sure that the side marked "**Flywheel Side**" on the aluminum spacer ring faces the flywheel and drive straps are facing the transmission. The four holes through the drive straps are the pilot holes for the adapter ring. Make sure that all cardboard inserts are removed from the ring.
- 7. Insert the front disc onto the alignment shaft. Make sure that the side of the disc labeled "Flywheel Side" faces the flywheel.
- 8. Position the cover assembly over the guide studs on the flywheel by sliding it over the alignment shaft. Start the bolts and tighten in a cross-pattern.
- 9. Tighten the bolts at 35-40 ft. lbs., in an even, modified cross pattern. Make sure that the cover assembly seats properly on the flywheel. Replace the two guide studs with bolts and tighten to 35-40 ft. lbs. **IMPORTANT:** Make sure the adjusting mechanism is at the bottom, where you can get to it after the transmission is installed.
- 10. **Important:** If the intermediate plate is equipped with (4) separator pins make sure that the pins are in contact with the flywheel surface by tapping each pin using a flat punch until they are against flywheel. Do not damage these pins. Access to these pins can be found in the 4 through holes in the clutch cover flange that are not used. Set these pins after the clutch cover is bolted to flywheel and before transmission is installed.
- 11. The two wooden blocks or plastic spacer should fall out from in between the release bearing housing and the clutch cover as the clutch is tightened to the flywheel. Save the two wooden blocks or plastic spacer as they should be reinserted back into position if the clutch is to be removed from the flywheel for inspection.
- 12. Remove the alignment tool.
- 13. Install the clutch brake onto the input shaft if one is required in this application (optional for non-synchronized trans)
- 14. 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. Locate the release yoke in the proper relation to the release bearing housing as the transmission is moved into place.
- 15. 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 specified as NLGI 2 or 3.

If for some reason the clutch is to be removed, be sure to reinsert the wooden blocks or plastic spacer in between the release bearing housing and the top of the cover.

See next page for Adjustment and Maintenance Procedures



Installation Instructions



CLUTCH ADJUSTMENT INSTRUCTIONS 14" STAMPED STEEL / TWO 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 ½". When a clutch brake is not used, this dimension should be ¾" 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 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 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 1/8". This 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 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 1/8" clearance between the fork and contact pads is achieved and the release bearing is moving a full ½" as the pedal is depressed. This observation regarding the 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.



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