

Single 14" Stamped Angle Spring Installation Guide

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1. Check the condition of the flywheel, If it is cracked or warped, refer to the manufacturers 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 (3/8.16TPI (Threads Per Inch) and 50mm (2") long) at the eleven (11) and one (1) o'clock positions.
5. Position the front disc into the flywheel and insert the alignment tool into the pilot bearing, making sure that the side marked **pressure plate** faces the 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 access after the transmission is installed,
7. Tighten the bolts at 35-40 ft. lbs., in an even, modified star pattern. Make sure that the cover assembly seats correctly on the flywheel. Replace the two guide studs with bolts and tighten to 35-40 ft, lbs.
8. Remove the blocks under the release bearing cage. These should slide away freely
9. Remove the alignment tool.
10. Position the clutch brake, if needed, on the main drive gear.
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: 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 any excess will find its way to the clutch friction material,
13. If for some reason the clutch is to be removed, be sure to insert the blocks between the release bearing cage and the top of the cover.

Adjustment Instructions

1. Remove the inspection cover at the bottom of the clutch housing.
2. Check the adjustment of the clutch. If a clutch brake is installed, clearance between the top of the bearing cage and the clutch brake when the clutch brake plates are positioned against the transmission should be a minimum of 12.7mm (1/2"). Without a clutch brake the minimum dimension should be 19mm (3/4").
3. Turn flywheel until the adjustment lock is at inspection hole. Loosen lock plate retaining bolt to allow access to adjuster bolt.
4. Release clutch by depressing the pedal. The adjusting ring will turn only while the pedal is depressed and the clutch is in the released position.

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5. Turn the adjusting ring clockwise to move the bearing cage towards the transmission. Turn the adjusting ring counter clockwise to move the bearing cage towards the flywheel.
6. After approximately 12.7mm (1/2") clearance is achieved, replace the adjustment lock. This observation must be made while the clutch is in the engaged (pedal up) position.
7. On original installation, adjust the pedal linkage to ensure approximately 3mm (1/8") between the yoke and the wear pads. All future adjustments should be made on 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 3mm (1/8") dimension.

Maintenance Tips

1. Lubricate the clutch release bearing at each chassis lubrication period, using high **temperature grease**. Do not over grease, as the excess will find its way to the clutch friction material.
2. Adjust the clutch **before the pedal clearance has disappeared**. Failure to do this will result in slippage, and an adjustment may not help.
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.

Service Suggestions

When replacing the clutch, think in terms of the "total installation". Failure to replace other worn or damaged components in the clutch system may affect the performance of the replacement clutch you are about to install and may result in a dissatisfied customer. Warranty evaluation will take into account the following clutch related areas.

- Resurface the flywheel. There is no such thing as an "OK", used flywheel. Replace the pilot bearing.
- Replace and properly align the drive lugs in a pot type flywheel, where applicable. Install a new clutch brake where applicable.
- Check the clutch release fork for wear. No more than 0.25mm (0.010") wear is allowed on either side. The release fork and shaft assembly must be true to the clutch bearing housing assembly, or correct release may not be achieved.
- Check the half shafts for wear, as well as the bushings.
- Look for the telltale rivulet of oil at the bottom of the flywheel housing.
- Check the splines on the input shaft. If they are worn, the discs may not slide freely. Check flywheel and clutch housing alignment.
- Check the linkage for wear or separation and lubricate grommets and other potential friction points.

**TAKING A FEW EXTRA MINUTES TO CHECK THESE ITEMS WILL HELP
ENSURE A PROLONGED, TROUBLE FREE CLUTCH LIFE.**