

## **Crown Automotive Sales Co., Inc.**

## HYDRAULIC BLEEDING OF EXTERNAL SLAVE CYLINDERS WITHOUT BLEED SCREWS

- 1. Push the slave cylinder pushrod in and disconnect both retaining bands of the retaining strap. Release the pushrod and allow it to fully extend. DO NOT CUT OR DISCARD RETAINING STRAP.
- 2. Tip the slave cylinder up approximately 45 degrees and pour clutch hydraulic fluid into the hydraulic port until all the air has been expelled.
- 3. With the slave cylinder still tipped up, insert the clutch hydraulic tube with a new small rubber seal lubricated with clutch fluid in the slave cylinder hydraulic output port. Insert retaining pin and drive in with a punch.
- 4. Hold slave cylinder vertically with pushrod facing the ground. Hold pushrod against the palm of your hand in a position which allows the slave cylinder to be lower than the master cylinder.
- 5. Slowly depress the pushrod into the slave cylinder approximately 1-1.2" (25-30mm), while watching the master cylinder reservoir for air bubbles. Cycle the slave cylinder in this manner until air bubbles are no longer entering reservoir, approximately 10-15 cycles.
- 6. With the master cylinder reservoir cap removed, slowly push the slave cylinder pushrod back in and reconnect the two bands and retaining strap. The slave cylinder is now ready to be installed on the vehicle.

## MASTER CYLINDER – REMOVAL AND INSTALLATION

- 1. Disconnect master cylinder pushrod from clutch pedal. Inspect and replace pedal bushing if worn or damaged.
- 2. If the safety interlock switch is fitted to the pushrod, disconnect the switch connector.
- 3. Using 3mm (7/64) diameter punch, drive out the retaining pin that holds the hydraulic tube to the master cylinder. Be careful not to damage the master cylinder body.

NOTE: On some vehicles the hydraulic line will have an in-line tube connector which can be disconnected using the hydraulic Quick Connect tool.

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