Fitting Sheet 22 -
HDJ 1600 Landcruiser Clutch

*IMPORTANT - A VDJ starter motor
is required to work with this package*

Important tips when fitting a custom HDJ 1600 Landcruiser Clutch

- Thoroughly clean block face (and sandwich plate if fitted)
- NPC install the ring gear using a heat shrink method. Care is taken to ensure the ring gear is fitted to the flywheel correctly, but before fitting, please confirm that the ring gear is seated correctly.
- Fit the flywheel and torque bolts to specifications, apply Loctite sparingly on the threads.
- Torque flywheel bolts to 127nm
- Fit new spigot bearing.
- Clean flywheel face, pressure plate face & inside diameter of pressure plate casting with thinners. Make sure that the inner crank area around the spigot bearing & crank bolts is also cleaned thoroughly.
- Remove clutch fork, check for wear, clean and regrease behind fork and on pivot ball.
- DO NOT over grease the clutch spline. Remove all excess grease.
- DO NOT touch the surfaces of the clutch plate with dirty hands.
- Fit clutch using correct aligning tool, use new pressure plate bolts supplied, apply Loctite sparingly on the threads and torque to specifications
- Fit silver hex bolts first to support cover, then use the black ARP shanked bolts to centralise. Bolt down as evenly as possible to ensure no vibration while vehicle is running.
- ARP shanked pressure plate bolt to be used in small opposing holes for locating (as per picture).
- Torque pressure plate bolts **ARP and non-ARP 5/16 UNC to 34nm (used in 1600 kit)**
- **Before fitting the gearbox to the engine:**
-      You will need to remove the stud from the top starter motor hole in the bellhousing
-      Then drill the hole to 12.5mm to allow for the new 12mm bolt to fit the new VDJ starter motor.
-      IMPORTANT - Test fit the bell housing to ensure the pressure plate & flywheel have full clearance. Some bell housings have extra ridges that may require clearancing.
- Now you are ready to fit your transmission.
- Once your transmission is in place you can fit the new VDJ starter motor & billet adaptor using the bolts supplied. You will have 1 x M12x1.25x60hex head bolt with a spring & flat washer which goes through the bell housing and adaptor back into the starter motor. The 2x M10x1.25x25socket head cap screw bolts are for the lower holes. One bolts to the bell housing. The other bolts back into the starter motor. (bolt orientation shown in pics)
- Make sure that the transmission is properly supported when fitting.
- When bleeding the clutch, evacuate dirty or contaminated clutch fluid, and use new fluid.
- Some adjustment may be needed at the clutch pedal under the dash. Be careful not to go too far with the pedal adjustment, if adjusted too far it can result in the release bearing having constant load applied to the pressure plate (the easiest way to check is to get under the car, push the rod back into the slave cylinder and make sure the fork has free play)
- Finally, the clutch must be run in by driving normally for at least 1000km's

NOTES:

- You may be aware of a possible noise when fitting an aftermarket clutch to the VDJ, HDJ & HZJ Landcruiser. This noise may be heard during gear changes or at idle with the clutch disengaged usually around 2,000rpm and higher. This is not a failure of any part and is not causing any damage to the vehicle.
- When fitting this clutch, master cylinder adjustment may be required to avoid clutch release issues. In some cases, the pedal stop may need to be backed off slightly to get free-play on the clutch pedal. You can re-check the pedal adjustment after 1000km's once the clutch has settled in properly.
- Now you have your brand-new NPC clutch fitted you will need to give it a chance to bed in before putting it through any hard use.1000km's of regular day to day driving is recommended. It's the engagement of the clutch that does the bedding in, so ideally lots of gear changes and around town driving.
- Burnouts, flat changes, and general hard use is not recommended until the clutch has had a chance to bed in

ARP BOLTS

remove stud & drill hole to 12.5mm

into Starter Motor

Bell Housing side

into Bell Housing