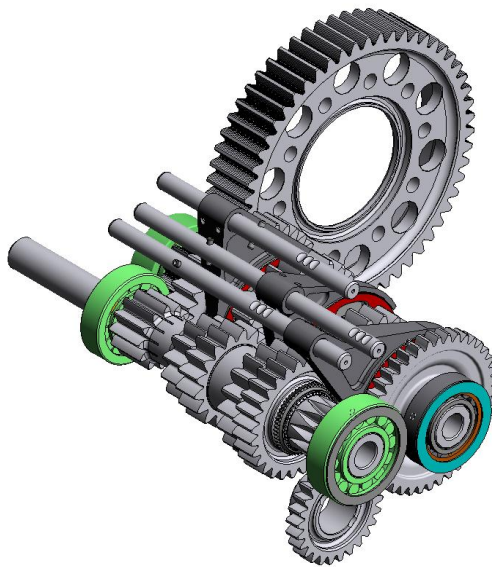


# **HOLINGER**

# ***HLE V2 KIT ASSEMBLY INSTRUCTIONS***

**FOR *Mitsubishi Lancer Evolution IV-IX***



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**Updated 15/04/11**

## **ASSEMBLY NOTES:**

The Holinger **HLE-V2** kit directly replaces the original Mitsubishi gearset, to become a race-ready dog-change gearbox.

The majority of the Mitsubishi workshop manual is relevant to gearboxes with the **HOLINGER HLE-V2** kit fitted, however priority should be given to the specific setup information included in this manual.

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**Note:** Use the HLE-V2 exploded drawing to assist you when working on this transmission.

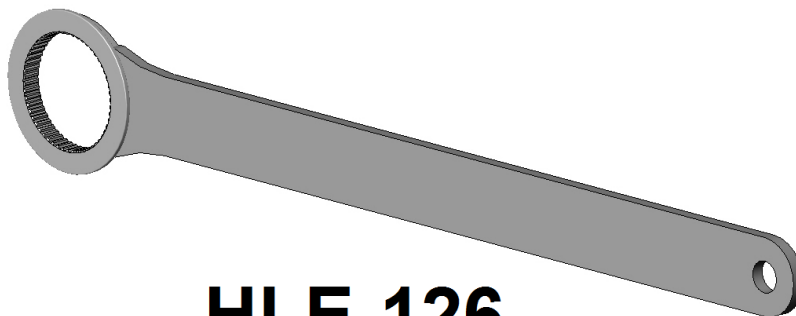
## **SUB ASSEMBLIES:**

### ***Input Shaft:***



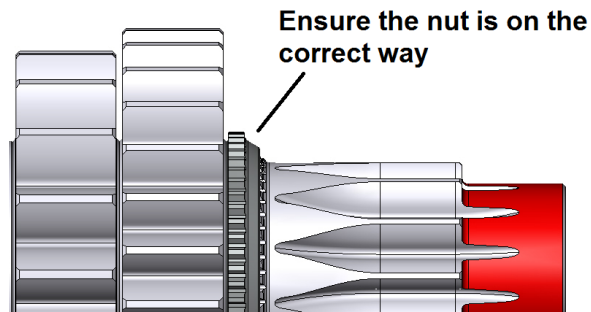
Start by sliding the 3<sup>rd</sup> Spline-Gear onto the shaft and up against the integral 2<sup>nd</sup> Gear. Follow this with the 3<sup>rd</sup> /4<sup>th</sup> Input Shaft Spacer (*HLE-102*), then 4<sup>th</sup> and 5<sup>th</sup> Spline-Gears.

A specialized nut, *HLE-103*, has been manufactured by Holinger for use in the kit. It requires a Holinger supplied spanner, *HLE-126*, to tightened or remove it.

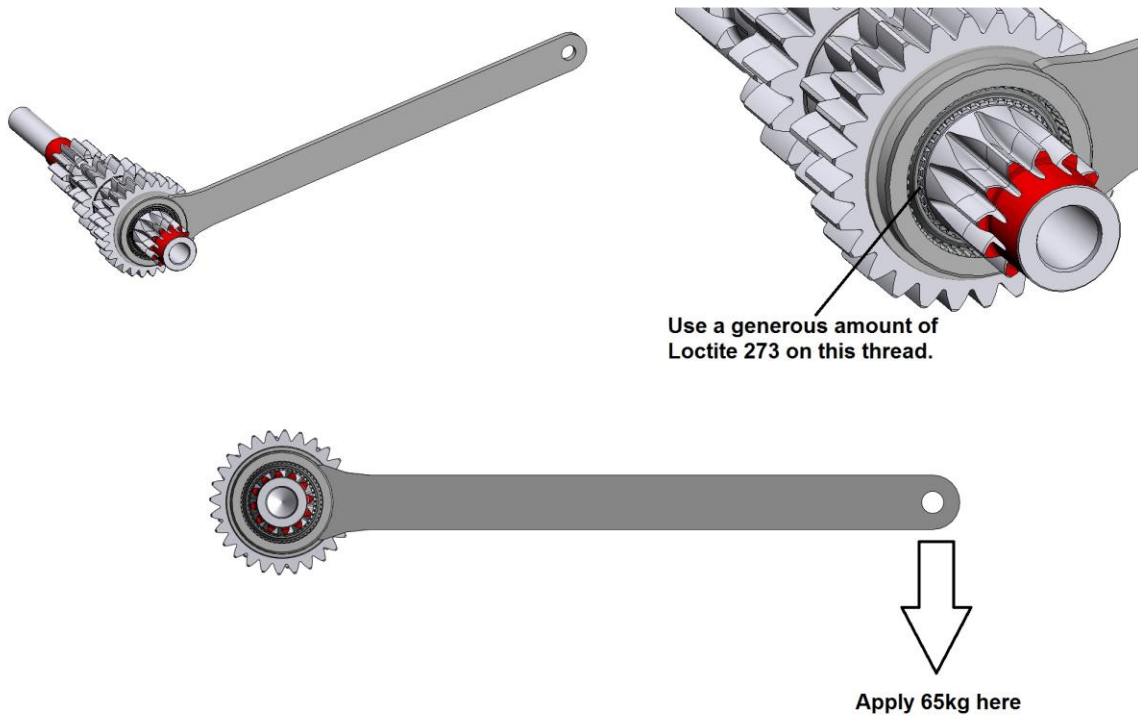


**HLE-126**

Screw the *HLE-103* nut onto the input shaft and secure using Loctite 263.



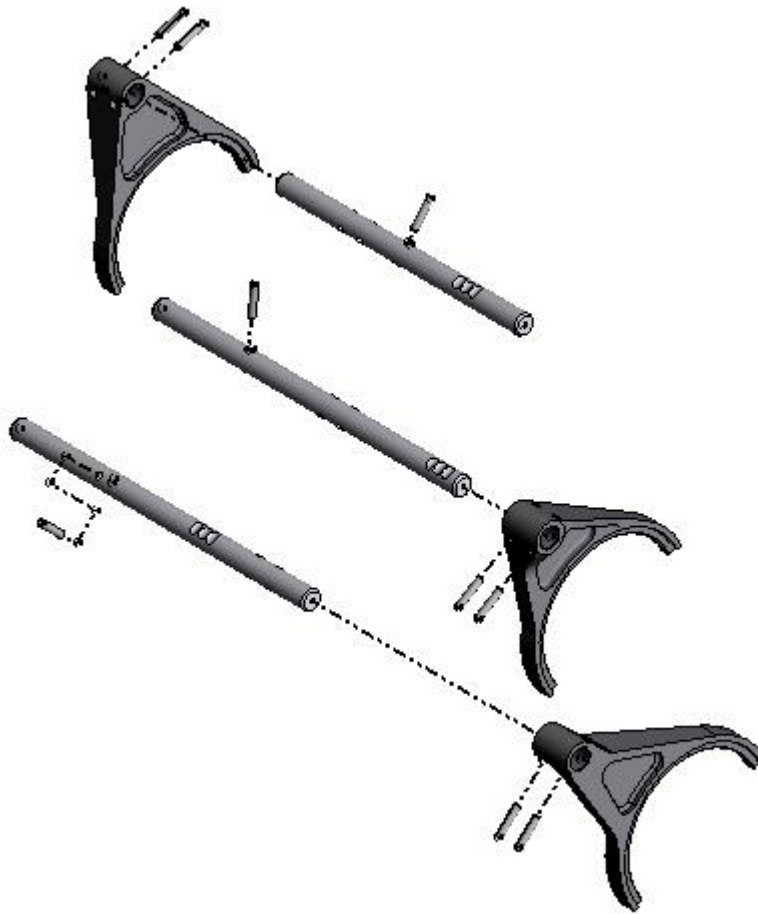
Tighten the nut using the *HLE-126* spanner, applying 65kg at the point in the following diagram (This equates to ~280N-m of Torque):



Finish the preparation of the Input Shaft by pressing both inner-races from the roller bearings, *104-307219NJ (NJ206EC3)* and *104-358021NJ (NJ307EC3)*, onto the shaft.



## **Selector Forks:**



The selector forks should be attached to the selector-rods using 5x22mm Roll Pins.

The standard selection mechanism rod-ends are retained for use with the Holinger HLE-V2 kit.

They must also be retained with 5x22mm Roll Pins, however an additional 3x22mm Roll Pin should be inserted into the 5mm pins as an extra precaution.

It is possible that there may be contact between the rear parts of the standard rod-ends. Please refer to the attached picture:

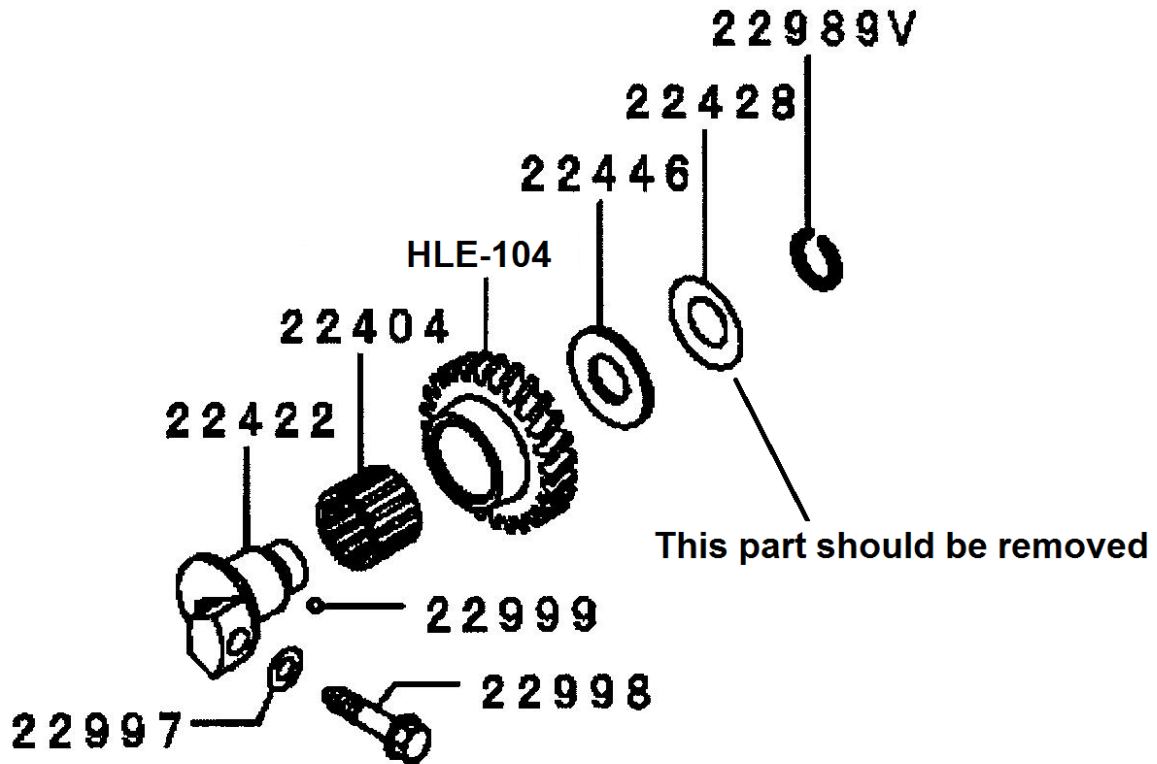


*Relieve the rod-ends with a die-grinder or similar to ensure there is NO contact when assembled.*



**Reverse Idler:**

Assemble this gear on standard spindle without the spring washer.  
Refer to attached picture:



## SHAFT END FLOAT:

Both input shaft and output shaft are required to have **end-float** with this gearset installed.

Setup as the Mitsubishi workshop manual details, but with the following alterations:

Select spacers that allow **0.002”-0.004” (0.05mm - 0.1mm)** end-play on both shafts.

**Note: These settings are specified for a gearbox that is at room temperature.**

## LUBRICATION

The extreme pressure additives in Limited Slip Differential oil have proven to aid gear life.

We recommend, fully synthetic LSD oil, with an API GL 5 or higher rating and heavier viscosity range, typically 85w-140. 75w-90 is also acceptable.