



HPI Tutorial – How to fit a Steel Spur Set to your Savage X

The **HPI steel spur gear conversion** for the Savage offers increased durability of the spur gear of the original Savage.

The Steel Spur Gear Set can also be used on the Savage X with just a couple more parts.

Remember when fitting the steel spur gear that you **must also fit a Racing Clutch Bell**. The Racing Clutch Bells are especially hard and designed to be used with the Steel Spur Gears.

Parts Required:-

#86807 - Steel Spur Gear Set (49T used here, other sizes available)

#77106 - Racing Clutch Bell (16T used here, other sizes available)

And these two parts to fit them onto the Savage X:

#72130 - Stainless Steel Slipper Plate

#86130 - Slipper Clutch Hub



The parts you will need

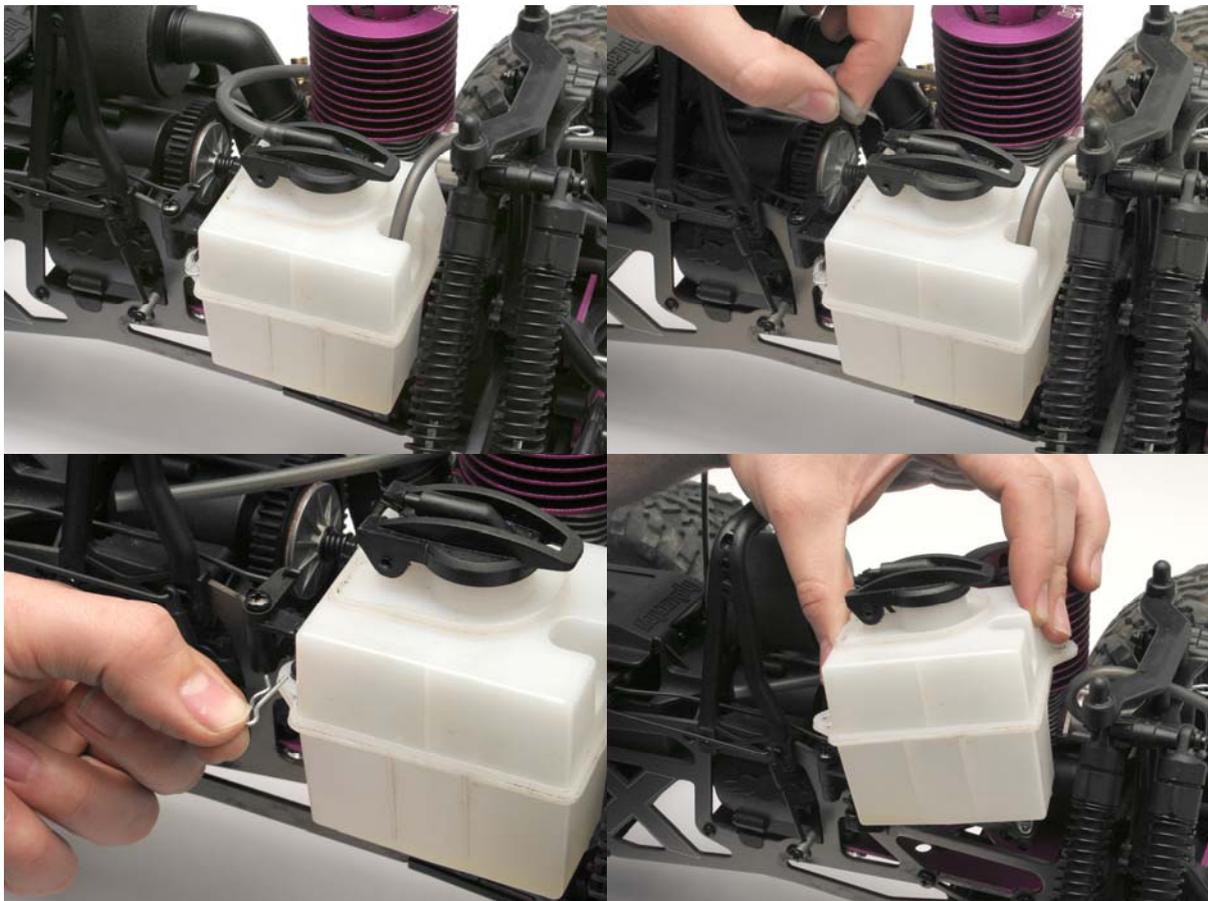


Tools Required:-

3mm Allen Driver
Phillips Screw Driver
7mm Nut wrench

1. Remove the fuel tank

Remove the fuel lines from the fuel tank, they will simply pull off. Then remove the 2 clips that hold the fuel tank on and lift it off.

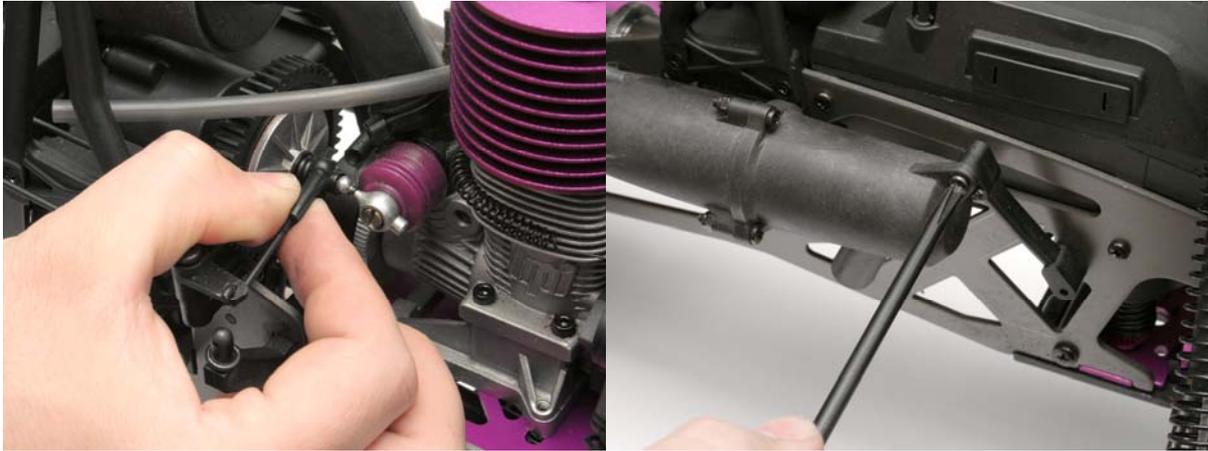


Remove the fuel tank

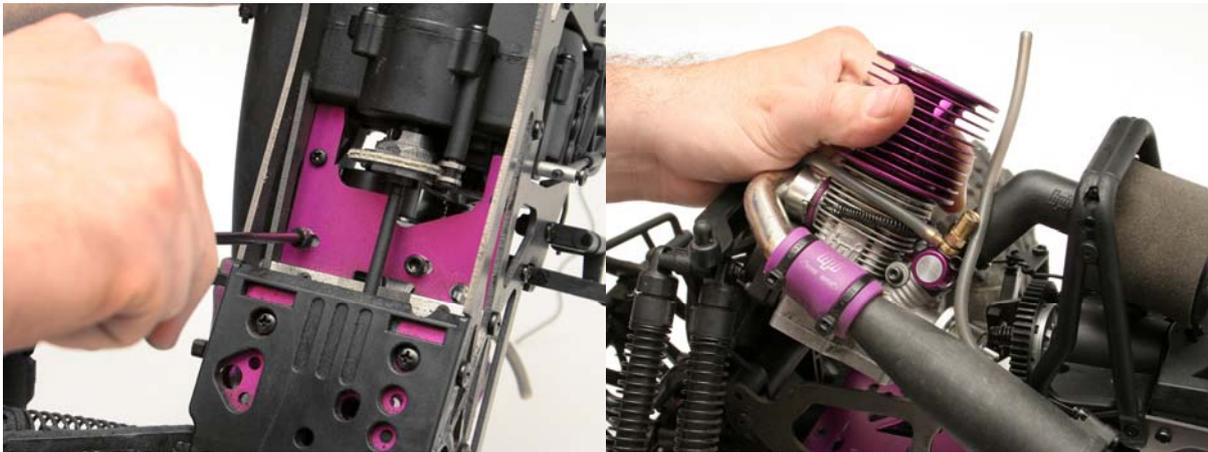


2. Remove the engine

Disconnect the throttle linkage from the carburettor, this should simply pop off. Then unscrew the front of the exhaust.



Now unscrew the 4 bolts that hold the engine in place. The engine should now lift out of the truck.



Remove the engine from the truck



3. Remove the Slipper Clutch

Undo the nut with a 7mm driver, then carefully remove the spring and washer. Now remove the plates and the spur gear from the shaft. Take care not to loose the pin that the last plate locates on to.



Undo the nut that holds on the slipper clutch

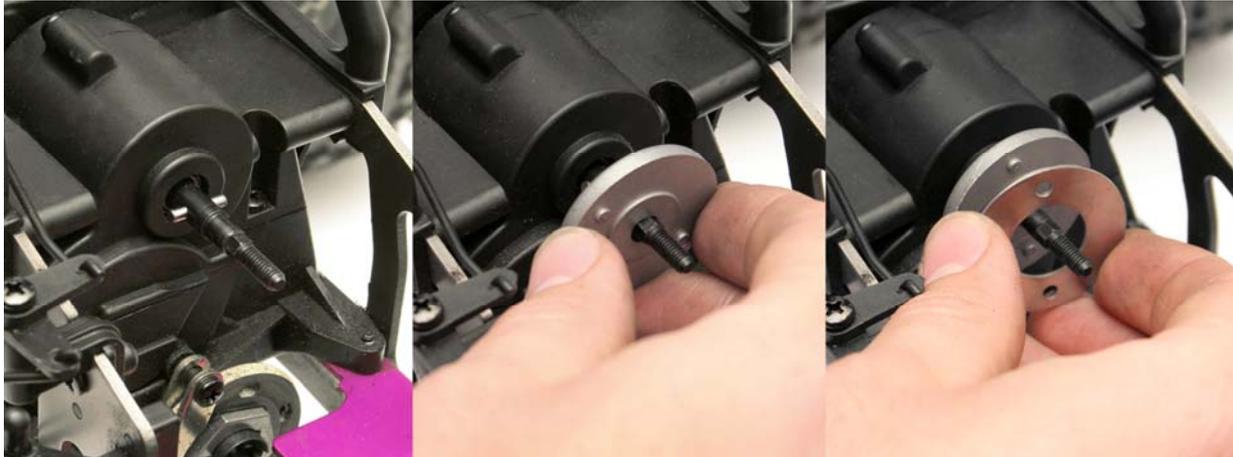


Remove the spring, washer and the slipper clutch parts

4. Fit the Slipper Clutch Hub

Now you are ready to fit the new parts with Steel Spur Gear.

Fit the 86130 Slipper Clutch Hub. This should simply slide onto the shaft and locate onto the pin.

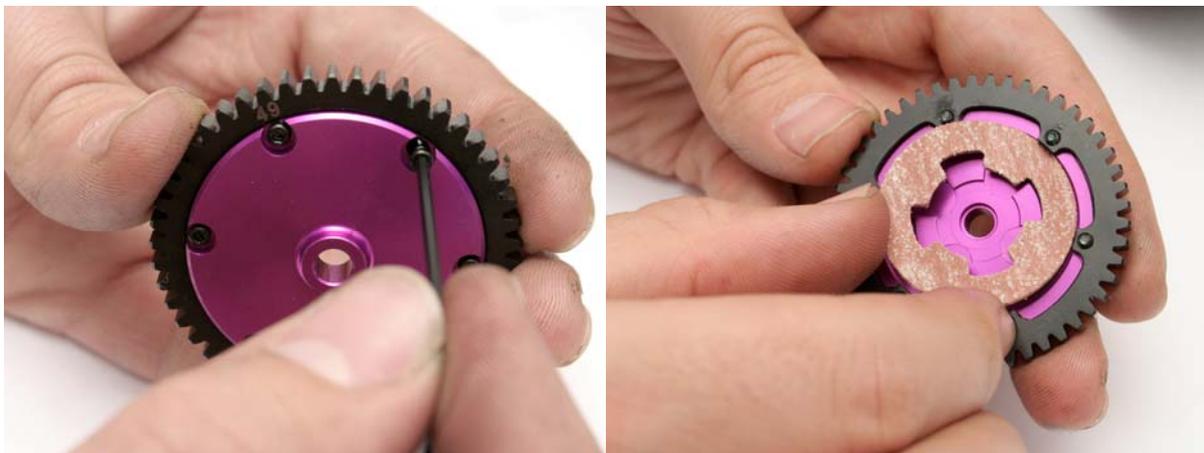


Put on the new slipper hub and stainless steel slipper plate

The Stainless Steel Slipper Plate will locate onto the hub.

5. Fit the Steel Spur Gear Set

Before you fit the Steel Spur Gear Set you need to screw the gear to the purple aluminium hub. Make sure to use the supplied Thread Lock when doing this so that the screws do not come loose when in use.



Screw the steel gear to the purple aluminium hub, then attach the slipper pad

When this is done stick the slipper pad to the hub and slide the whole assembly onto the shaft.

Replace the washer, spring and the nut and tighten. The slipper clutch needs to be set so that it will slip under high loads but not slip in normal use. Please see the tutorial on [slipper clutch settings](#).



Fit the new spur gear and replace the washer, spring and nut

6. Fit the Racing Clutch Bell

It is important to use the Racing Clutch Bell with the Steel Spur Gear. This is a direct replacement for the standard clutch bell on the truck.



Remove the standard clutch bell

To fit the Racing Clutch Bell you need to first remove the standard clutch bell. Undo the screw that holds it in place, remove the clutch bell then refit with the Racing Clutch Bell. Remember to use thread lock on the screw to stop it coming loose.



Fit the Racing Clutch Bell, remember to use thread lock on the screw

7. Rebuild the Truck

Replace the engine into the truck. Make sure to use thread lock on the engine screws. Set the mesh between the clutch bell and spur gear so that there is a very small amount of play between the gears.

Replace the throttle linkage as well as the screw at the front of the exhaust.



Replace the fuel tank, fuel lines and the R clips and you are good to go!