Introduction

The Scotty's Adapter is designed to give as many years of service as your Land Rover. Absolutely, the finest materials are used in manufacturing the plate and the bushing. The machining is also done to the very highest standards.

In the past 20 years, about 500 Scotty's Adapters have been installed in Land Rovers and none have failed.

Should you have any questions, please write to:

Scotty's
45 Ridge Drive
Concord, CA 94518
or call Scotty at 510-686-2255.

Selecting An Engine

It is very imortant to use the right engine in your conversion project. When selecting engines, the early models (late 1960s) are recommended, as they have larger cooling capacities.

The Scotty's Adapter is designed to fit the following Chevrolet engines:

4 cyl. "Iron Duke" 153 cu. in. (Recomended for 88s.)
6 cyl. "in–line" 250 (Recomended for 109s.) NADA 2.6
V–6. (Recomended for 88s & 109s.)
V–8. (Not recomended for 88s or 109s.)

•The 4cyl "Iron Duke is the most straight forward. It replaces the Land Rover 4cyl. almost as an engine swap, adding approximately 30hp to the vehicle. } VERY GOOD

•The 6cyl. in–lines can be fitted into the standard Land Rover frame, but requires some fabrication. } VERY TIGHT

When installed into a 1967 109, 2.6 liter Land Rover frame, the in–line 6 is a very good conversion.

•The V–6 makes a good conversion, but a bit more fabrication is required. } NOT RECOM

•The V–8 fits much the same as the V–6.

4 CYL RON

4 CYL "IRON DUKE" 153 CU IN.

6 CYL IN LINE CHEVY RECOMMENDED

FOR 1967 NADA 2.6 109.

ALTHOUGH THE ADAPTER WILL FIT GM V6 & V8

THEY ARE NOT RECOMMENDED

Installation Notes

Flywheel

The flywheel used on all engines is the Chevy Vega, "Vega 4-140-71 standard 4 cyl., 3-speed Opel type"

The recess on the flywheel **face** must be machined flat. The Rover pressure plate (clutch) will fit the bolt pattern on this flywheel. Use shouldered bolts which will make for a snug fit. Flywheel bolt sets are available at most auto parts stores.

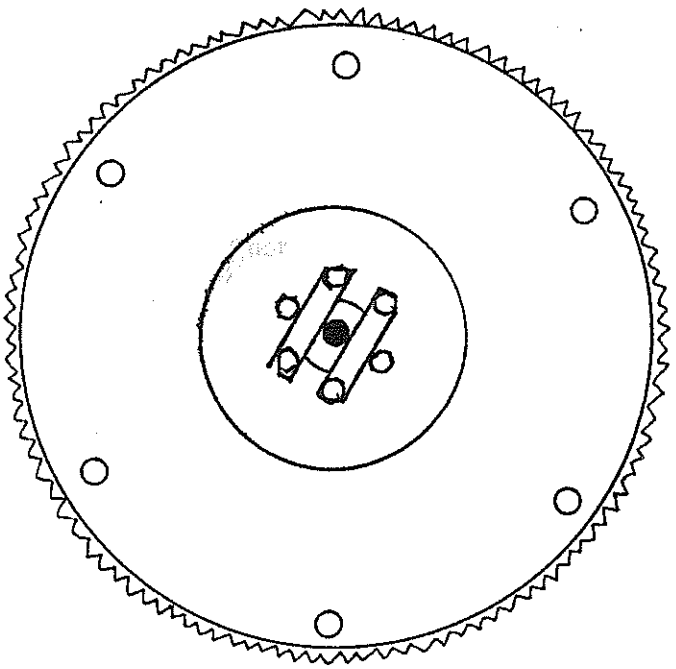

Figure 1 – Flywheel with bush & tab washers

Pilot Bush

The pilot bush, when fitted to the Chevy crank shaft at rear of engine, requires tab washers to help secure it's position.

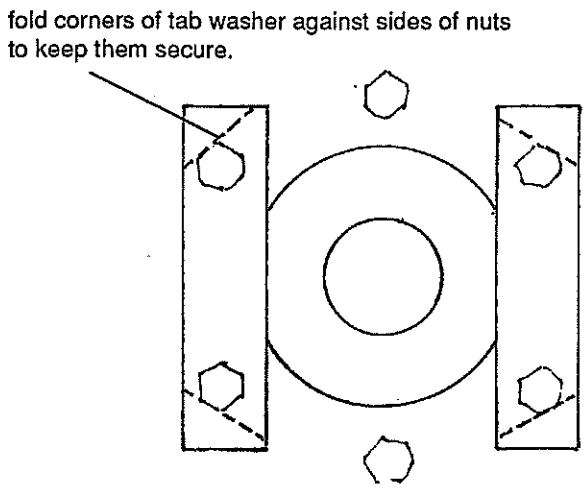

Figure 2 – Pilot Bush with tab washers

Engine Positioning

After fitting flywheel & clutch to engine, instal the Chevrolet engine, retaining the distance between the Land Rover bell housing and the cross member as much as possible. The nose of the engine should be just slightly tilted upward, if anything.

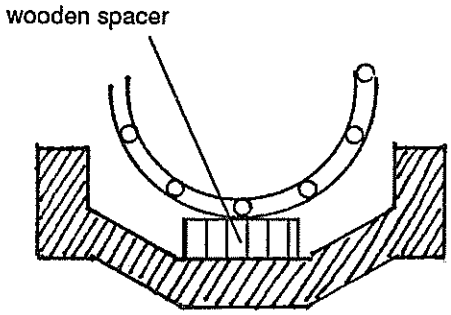

Figure 3 – Keep same distance between bottom of bell housing and front cross member as with original engine using a temporary spacer.

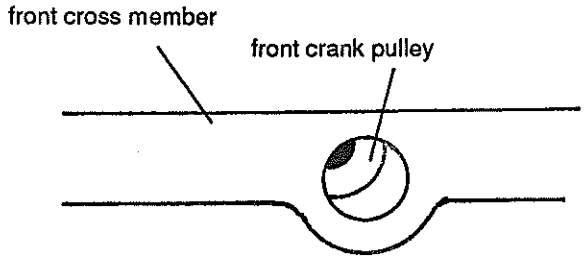

Figure 4 – Approximate position of engine pulley as seen through front cross member

Engine Mounts

Fabricate engine mounts from engine to LR chassis mounts and double check position before attaching.

Radiator Positions

4cyl., V–6, V–8:

The radiator position stays the same. The only change is to have the radiator hose connections changed to Chevy dimensions.

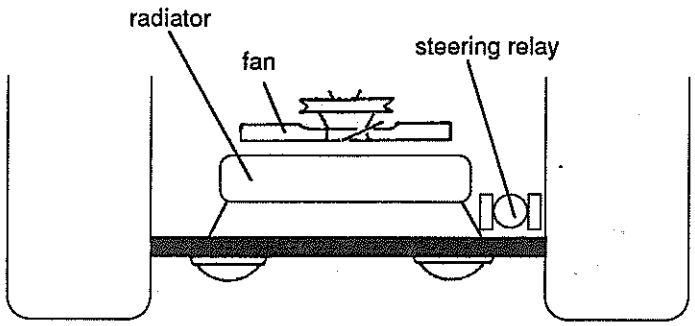

Figure 5 – Radiator position is unchanged for 4cyl., V–6, & V–8.

6cyl. in–line on standard LR frame:

Due to the length of the engine, a cross–flow radiator has to be mounted onto the front cross member. This requires cutting the cowel behind the grill. An electric or an "off–set"mechanical fan may be fitted. On Series II & IIA Land Rovers, the head lamps must be extended forward or converted to Series III style.

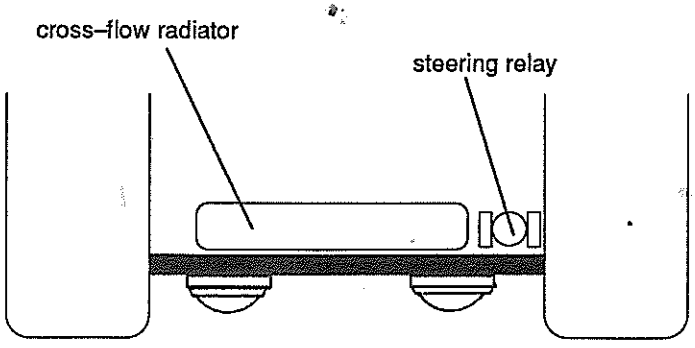

Figure 6 – Positioning of cross–flow radiator using in–line 6 in standard LR frame.

6cyl. in–line on 2.6 liter LR frame:

The 2.6 liter frame has more distance between cross members that the standard LR frame and an 18" fan can be fitted directly to the water pump without modification. The rear part of the right front headlamp housing must be cut to allow radiator fit.

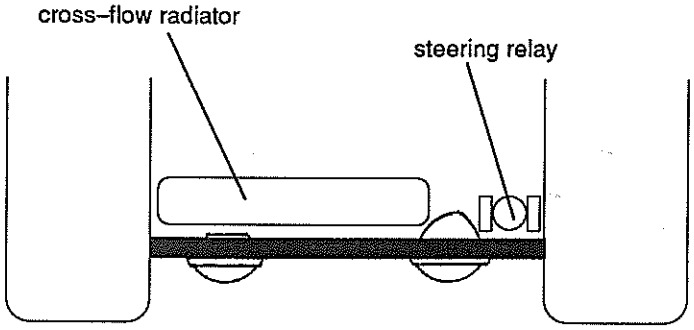

Figure 7 – Positioning of cross–flow radiator using in–line 6 in 2.6 liter LR frame.

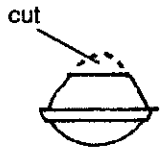

Figure 8 – On 2.6 liter 109 chassis, leave headlamps in position but cut nipple on right front lamp housing.

Electrical

We recomend that you replace the Lucas generator and alternator with one of the following Delco alternators:

•Delco #10SI with built–in regulator. This is a very commom alternator used in most GM cars during the last 20 years. When purchasing this alternator, check to see that wire connection outlet is as in figure 9.

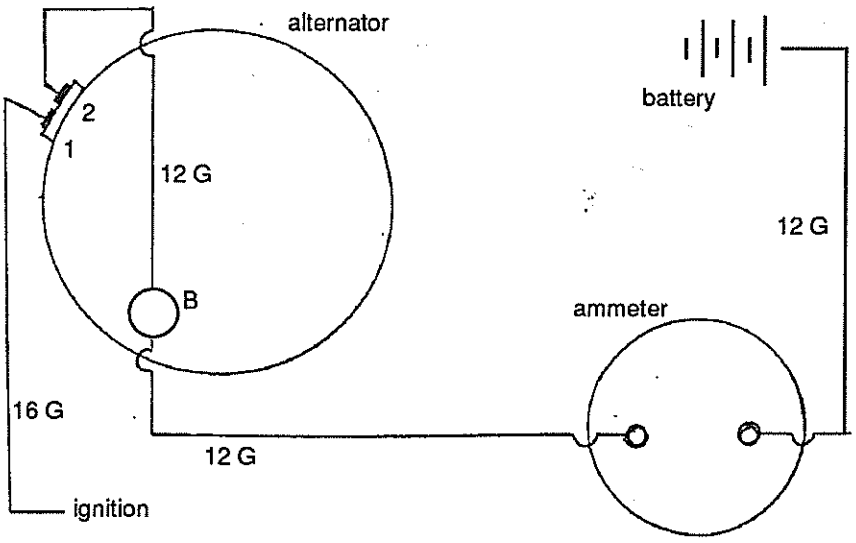

Figure 8 – Wiring diagram for Delco alternator

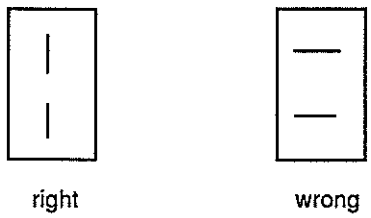

Figure 9 – Right & wrong wire connection outlet configurations for alternator.