# General guidelines for installation of HPS 3,6 - 4,7 Compressors.

(See also the dimensional drawing no:509 (3,6 - 4,2)

**The compressor installation must be done with a by-pass system**, see attached drawing no:8007. This connection and valve should operate in such way, that it limits the pressure ratio at part loads and deceleration to maximum of 2.0.

The adapters on both the suction side as well as the discharge side can be shaped so that they can be used to mount the compressor on to the engine.

Please note! The base plate or bracket must be machined flat within 0.05 mm. If not, there is risk for distortion of the casing causing failure.

If you are using an Extended Drive the drive must be supported by a bracket.

#### Lubrication

The compressor use a self contained oil system, the oil level is measured by the supplied dip stick. The compressor is designed to be mounted with the outlet facing down. For other mounting positions of the compressor, the oillevel / oilsystem must be confirmed by the manufacturer. In any case, the total volume of oil in such installation must not be less than 150cm3. For higher pressure ratios / certain mounting positions a pressure oil lubrication system must be used, contact manufacturer for more information. **Do not overfil!** 

Note!: The gearcase is ventilated by the shaft of the extended drive / pulley bolt. Always use the supplied pulley bolt/s!

The oil change interval must not exceed 15 000 miles.

# **Discharge connection**

The discharge pipe should be mounted using 7 bolts. It must be installed so that there is a restrictionless communication between the space at the discharge port itself and the discharge pipe. Please note! The minimum cross section area of the outlet system / intercooler depends of the actual flow/pressure and should be designed to minimize the pressure drop of the outlet air. mounting face must be machined flat within 0.05 mm.

# **Suction connection**

The suction pipe should be mounted using six bolts. An air filter must be used on the suction side with an air flow capacity suitable for the supercharger. The quality of the filter equal to that used on car engines.

Please note! The inlet system must be designed for the application (max recommended speed of the inlet air is 70 meter/second) Connection flange must be machined flat within 0.05 mm.

### **Belt drive**

The compressor is equipped with a pulley for a poly-v-belt (PK 10). Minimum recommended diameter of the compressor pulley is 3inch / 76mm. A spring loaded belt tensioner must be used.

Please note! Max. belt tension is 600 N. Use idler pulley to get increased wrapangle if needed.

WARNING: This compressor is a close tolerance, high quality product that can not be subjected to dirt or any type of foregin material.