WARNING – GEAR PULLER SAFETY

Any piece of equipment can be dangerous if not operated properly. <u>YOU</u> are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface, or render inoperable any of the safety devices or warnings on this equipment. <u>IF</u> any safety devices or warnings have been removed, defeated, defaced, or rendered inoperable, <u>DO NOT USE THIS EQUIPMENT!!!</u>

WARNING: This product can expose you to chemicals including naphthalene and chromium from petroleum products which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <u>www.P65warnings.ca.gov</u>

DANGER

This tool has and creates Multiple Pinch Points. It may come lose with Extreme Force. There is a chance of parts being shot at high speeds. This could cause serious injury or death to the operator or bystanders. Keep hands, feet and all other body parts clear at all times.

Never operate equipment of any kind if you are tired or if you are under the influence of alcohol, drugs, medication, or any substance that could affect your ability or judgment. Be alert! If you get tired while operating this equipment, take a break. Tiredness may result in loss of control.

All vehicles are different. Always consult a good shop manual from a reputable company for the exact procedure.

Caution! To prevent personal injury,

- Wear eye and face protection!
- **Before repairing a vehicle, block the wheels to prevent the vehicle from moving.** After jacking up the vehicle. **Always** place safety stands in the places recommended in the owner's manual. Never use the jack as the sole means of support.

NEVER get under, or place any body parts under a vehicle that that is held up solely by a jack.

INSTRUCTIONS

Always wear eye and hand protection.

Always refer to the vehicle manufactures service manual for proper procedures and precautions.

Before each use inspect, clean, and lubricate threads on threaded shaft.

After each use, clean, and lubricate the threads. Store the tool so that the threads are not damaged.

Turn the nut on the threaded shaft using a **HAND OPERATED** ratchet wrench with the correct sized 6-point socket. Keep shaft of tool straight. **DO NOT USE POWER TOOLS**.

To efficiently use a gear puller and get the desired results, you must consider several factors; these are related to space available for it to fit and to have a firm grip on the part to be pulled. The jaws of the puller must be the right size to fit the part and give a firm grip. Using an under or over-sized puller that does not hold the part as firmly as required exposes the mechanic working with it to injury.

There are several steps to follow whenever one is handling a puller; make sure that the gear puller is the right size and type, either a 3-jaw puller or a 2-jaw puller. It is essential to avoid damaging the parts when working.

Secondly, the positioning of the puller is paramount, as the jaws must make contact with the outer or inner side of the part to be pulled. Ensure that the middle bolt is in touch with the tip of the shaft then apply the tension gradually. The jaws should be parallel to the axis to avoid damaging the threads or the part being pulled.

The most universal of pullers is the 3-jaw puller which has three articulating arms that have both internal and external hooks. You can use them to remove gears, pulleys, wheel hubs, all kinds of hard to remove parts. They come in several sizes, so it is important to select the correct puller for the job at hand.



The classic 3-jaw puller works for gears, pulleys and all other manner of press-fit parts that may need some help coming off. Just be careful because they tend to pop loose.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. **IF** there is any doubt as to the operation or safety of the equipment, **DO NOT USE!! CALL A TOOL SHED IMMEDIATELY!!!** FAILURE TO FOLLOW **THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH**