

Edition : 1.0  
Date: (09/24)

## Instruction Manual

# ENGINE TILTER - Heavy Duty AET-900

Order Code: (A3425)

## 1.1 SPECIFICATIONS

|               |                |
|---------------|----------------|
| Order Code    | A3425          |
| <b>MODEL</b>  | <b>AET-900</b> |
| Load Capacity | 907kg          |
| Nett Weight   | 6kg            |

## 1.2 USAGE

Do not exceed the recommended W.L.L. capacity.



### **WARNING - MAXIMUM RATED LOAD IS 907KG'S.**

*Before lifting load, be sure all bolts on lifting beam & all fasteners connected to load are engaged & tightened.*

*Keep body and body parts from under lifted load at all times.*

*Failure to follow operating & safety instructions provided may result in personal injury or death.  
Read and understand the Instruction Manual.*

## 1.3 DESCRIPTION

The 907KGS Engine Tilter is a device to be used between an overhead lifting hoists an unevenly weighted load such as an auto engine with transmission intact. The device is designed to increase efficiency in a variety of hoisting applications by allowing the operator to lift off-centre loads and adjust the working angle of the load.

## 1.4 OWNER/USER RESPONSIBILITY

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this engine tilter. Personnel involved in the use and operation of equipment shall be careful, competent, trained, and qualified in the safe operation of the equipment and its proper use when servicing motor vehicles and their components. Warning information should be emphasised and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

Owner and/or user must study and maintain for future reference the manufacturer's instructions. Owner and/or user is responsible for keeping all warning labels and instruction manuals legible and intact. Replacement labels and literature are available from the manufacturer.

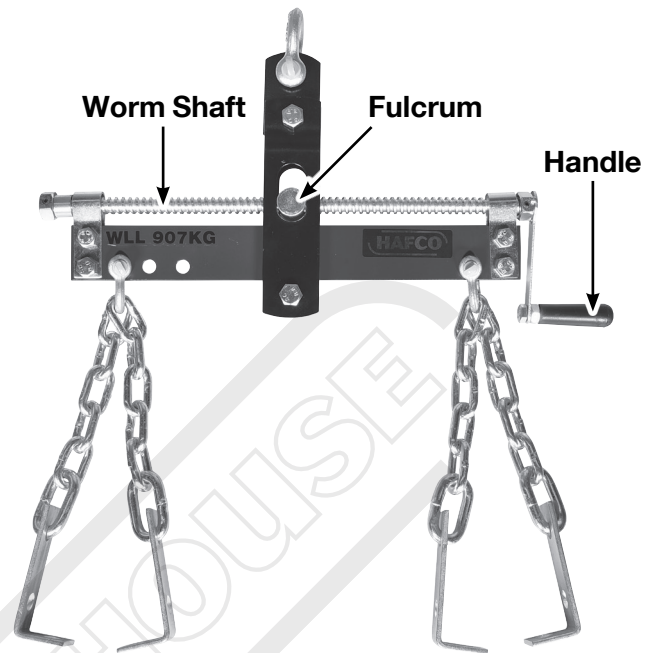
## 1.5 INSPECTION

Visual inspection should be made before each use of the engine tilter, checking for damage, loose, or missing parts. Each tilter must be inspected by a manufacturer's repair facility immediately, if accidentally subjected to an abnormal load or shock. Any tilter which appears to be damaged in any way. Is found to be badly worn, or operates abnormally **MUST BE REMOVED FROM SERVICE** until necessary repairs facility. It is recommended that an annual inspection of the tilter be made by a manufacturer's authorised repair facility and that any defective parts, decals or warning labels be replaced with manufacturer's specified parts.

A list of authorised repair facilities is available from the manufacturer.

## 1.6 OPERATING INSTRUCTIONS

To remove an auto or truck engine with transmission intact, First uncouple the transmission and remove motor mount bolts. With the Engine Tilter hooked to an overhead hoist above the engine, attach the L shape connections at the end of the four (4) chains (choose one of the two holes provided) to the engine head bolts – two at the front, both sides, and two at rear, both sides. Using the engine hoist, take up slack in chain carefully. Lift a few inches and check load balance. To reach the desired angle for load balance, adjust the position of the movable fulcrum in the beam by turning the handle at the of the worm shaft. Then carefully lift out the engine and transmission. By turning the handle one direction or the other, the suspended engine and transmission can then be tipped only enough to remove. Reverse the above steps to reinstall repaired engine transmission. For this and other types of loads, make sure all connections are tight and secure.



The following operational instructions are recommended to prevent serious personal injury or damage. Never use this Engine Tilter with an engine hoist having a capacity of less than 1 ton!

### Operator Should ALWAYS

1. Be familiar with tilter operating controls, procedures and warnings.
2. Make sure all connections to load are tight and secure.
3. Maintain firm footing when operating tilter.
4. Make sure that load is free to move and will clear all obstructions.
5. Take up slack carefully, check load balance, lift a few inches and check load holding action before continuing.
6. Avoid swinging of load.
7. Make sure that all persons stay clear of suspended load.
8. Warn personal of an approaching load.
9. Protect load chain from weld spatter or other damaging contaminants.
10. Promptly report to you supervisor or repair any malfunction, unusual performance, or damage of the sling.
11. Inspect beam regularly, replace damaged or worn parts, and keep appropriate records of maintenance.

### Operator Should

1. Never lift more than rated load.
2. Never use damaged tilter or tilter that is not working correctly.
3. Never use the beam with twisted, kinked, damaged or worn chain.
4. Never lift a load if any binding prevents equal loading on all supporting chains.
5. Never allow attention to be diverted from operation the tilter.
6. Never use beam to lift, support or transport people.
7. NEVER LIFT LOADS OVER PEOPLE.
8. Never leave a suspended load unattended.
9. Never allow sharp contact between tilter and obstructions.
10. Never allow the chain or link to be used as a ground for welding.
11. Never allow the chain or link to be touched by a live welding electrode.
12. Never attempt to lengthen the load chain or repair damaged chain.

# WARNING

## General Machinery Safety Instructions

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Machinery House  
requires you to read this entire Manual before using this machine.

- 1. Read the entire Manual before starting machinery.** Machinery may cause serious injury if not correctly used.
- 2. Always use correct hearing protection when operating machinery.** Machinery noise may cause permanent hearing damage.
- 3. Machinery must never be used when tired, or under the influence of drugs or alcohol.** When running machinery you must be alert at all times.
- 4. Wear correct Clothing.** At all times remove all loose clothing, necklaces, rings, jewelry, etc. Long hair must be contained in a hair net. Non-slip protective footwear must be worn.
- 5. Always wear correct respirators around fumes or dust when operating machinery.** Machinery fumes & dust can cause serious respiratory illness. Dust extractors must be used where applicable.
- 6. Always wear correct safety glasses.** When machining you must use the correct eye protection to prevent injuring your eyes.
- 7. Keep work clean and make sure you have good lighting.** Cluttered and dark shadows may cause accidents.
- 8. Personnel must be properly trained or well supervised when operating machinery.** Make sure you have clear and safe understanding of the machine you are operating.
- 9. Keep children and visitors away.** Make sure children and visitors are at a safe distance for you work area.
- 10. Keep your workshop childproof.** Use padlocks, Turn off master power switches and remove start switch keys.
- 11. Never leave machine unattended.** Turn power off and wait till machine has come to a complete stop before leaving the machine unattended.
- 12. Make a safe working environment.** Do not use machine in a damp, wet area, or where flammable or noxious fumes may exist.
- 13. Disconnect main power before service machine.** Make sure power switch is in the off position before re-connecting.
- 14. Use correct amperage extension cords.** Undersized extension cords overheat and lose power. Replace extension cords if they become damaged.
- 15. Keep machine well maintained.** Keep blades sharp and clean for best and safest performance. Follow instructions when lubricating and changing accessories.
- 16. Keep machine well guarded.** Make sure guards on machine are in place and are all working correctly.
- 17. Do not overreach.** Keep proper footing and balance at all times.
- 18. Secure workpiece.** Use clamps or a vice to hold the workpiece where practical. Keeping the workpiece secure will free up your hand to operate the machine and will protect hand from injury.
- 19. Check machine over before operating.** Check machine for damaged parts, loose bolts, Keys and wrenches left on machine and any other conditions that may effect the machines operation. Repair and replace damaged parts.
- 20. Use recommended accessories.** Refer to instruction manual or ask correct service officer when using accessories. The use of improper accessories may cause the risk of injury.
- 21. Do not force machinery.** Work at the speed and capacity at which the machine or accessory was designed.
- 22. Use correct lifting practice.** Always use the correct lifting methods when using machinery. Incorrect lifting methods can cause serious injury.
- 23. Lock mobile bases.** Make sure any mobile bases are locked before using machine.
- 24. Allergic reactions.** Certain metal shavings and cutting fluids may cause an allergic reaction in people and animals, especially when cutting as the fumes can be inhaled. Make sure you know what type of metal and cutting fluid you will be exposed to and how to avoid contamination.
- 25. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.

# WARNING

## Engine Tilter Safety Instructions

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Machinery House  
requires you to read this entire Manual before using this machine.

- 1. Engine Tilter Loading Requirement.** Refer to your vehicle service manual to locate the safe engine lifting/support locations, and to verify that the engine weight does not exceed the maximum engine tilter load rating.
- 2. Engine Tilter Condition.** Engine Tilter must be maintained for a proper working condition. Never operate a Engine Tilter that has damaged or worn parts. Scheduled routine maintenance should be performed on a scheduled basis. Check the frame, chain, welds and hook for cracks or damage. Replace if necessary.
- 3. Crushing Hazard.** Never place any part of your body under the Engine Tilter, or under a lifted load. Serious injury can occur.
- 4. Work area hazards.** Pay attention to other persons in the area and know what is going on around the area to ensure unintended accidents.
- 5. Overloading Engine Tilter.** Do not over load the Engine Tilters capacity. Test and adjust the balance point before lifting the entire weight of the item.
- 6. Warning Labels.** Take note of any warning labels on the Engine Tilter and do not remove them.
- 7. Safe Operation.** Load must be directly under the Engine Tilter before lifting. Raise the object slightly with the crane or hoist and rotate the crank on the load leveler to adjust the balance of the object or achieve the desired angle.
- 8. Other Hazards.** Never allow children to play on Engine Tilter while in use or in storage.
- 9. Call for help.** If at any time you experience difficulties, stop and call you nearest branch service department for help.

# PLANT SAFETY PROGRAM

## NEW MACHINERY HAZARD IDENTIFICATION, ASSESSMENT & CONTROL

### Engine Tilter

Developed in Co-operation Between A.W.I.S.A and Australia Chamber of Manufactures  
This program is based upon the Safe Work Australia, Code of Practice - Managing Risks of Plant in the Workplace ( WHSA 2011 No10 )

| Item No. | Hazard Identification              | Hazard Assessment | Risk Control Strategies<br><small>(Recommended for Purchase / Buyer / User)</small>  |
|----------|------------------------------------|-------------------|--|
| B        | CRUSHING                           | HIGH              | Ensure engine tilter is appropriately secured at top hook.<br>Ensure load is correctly slung and approved slings, chains etc are used.<br>Keep body clear from under load at all times.<br>Do not exceed maximum lifting capacity.<br>Always check around load before lowering.<br>Check engine tilter and lifting equipment for damage prior to lifting.<br>Ensure capacity of beam and girder trolley etc are appropriate.<br>Wear safety boots. |
| C        | CUTTING, STABBING<br>OR PUNCTURING | MEDIUM            | Wear protective clothing to avoid contact with sharp objects.  |

Plant Safety Program to be read in conjunction with manufactures instructions



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Authorised and signed by:

Safety officer:

Manager:

Revised Date: 12th March 2012



### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

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