











# **1000KG FOLDING ENGINE CRANE**

**Owners/Instruction Manual** 



"If the product fails to perform as specified we'll happily offer a refund or exchange"

Manufactured and packaged for SRGS PTY LTD ABN 23 113 230 050 6 Coulthards Avenue, Strathpine QLD 4500, Australia

# 1000KG FOLDING ENGINE CRANE

**Owners/Instruction Manual** 





#### **WARRANTY**

Our product is guaranteed to be free from quality and manufacturing defects for a period of 12 months.

If your product becomes defective during this period, SRGS PTY LTD will offer you either a replacement, credit or refund where a product is faulty; wrongly described; different from the sample shown to you or do not do what they are supposed to do.

This warranty will not cover substantially modified product; misuse or abuse of the product contrary to user instructions or packaging label; change of mind and normal wear and tear.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

To claim the warranty, take the product to the front Service Desk of your nearest store of purchase. You will need to show receipt or other proof of purchase. Additional information may be required to process your claim. Should you not be able to provide proof of purchase with a receipt or bank statement, identification showing name, address and signature may be required to process your claim.

Any expenses relating to the return of your product to the store will normally have to be paid by you. For online store purchases, SRGS PTY LTD will pay for the return freight for any product assessed as having a major failure.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods or services to which this warranty relates.

This warranty is provided by SRGS PTY LTD, 6 Coulthards Avenue, Strathpine QLD 4500, Australia. Phone: 1300 175 010.

#### WARNING

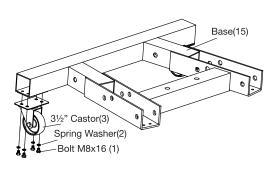
- 1. Do not overload the crane. Overloading could cause damage or failure of the engine crane.
- 2. Always use the crane with legs lowered and secured on a hard, level surface capable of sustaining the load. Using the crane on other than a hard level surface can result in crane instability and possible loss of load.
- 3. Please ensure all securing pins are installed before attempting to use the crane.
- 4. Before use, ensure all nuts and bolts are correctly fitted and tightened.
- 5. Boom and load must be in lowest possible position before attempting to move a loaded crane. Always move the load slowly and smoothly to avoid uncontrolled swinging and possible loss of load.
- 6. Never attempt to raise a load while the folding legs are raised.
- 7. Modifications must not be carried out on this engine crane.

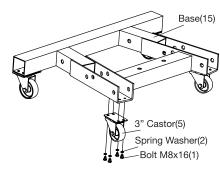


#### **ASSEMBLY**

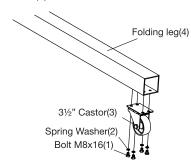
### CAUTION: DO NOT TIGHTEN ANY BOLTS UNTIL YOU ARE FULLY FINISHED WITH ASSEMBLY. OTHERWISE PARTS WILL NOT LINE UP PROPERLY.

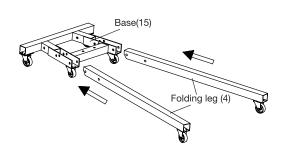
- 1. To attach two 3½" Castors(3) to the rear section of the Base(15), align the four mounting holes in each Castor with the four mounting holes on the underside of each Base end. Secure in place using four Bolts(1), and Spring Washers(2).
- 2. To attach two 3" Castors(5) to the front section of the Base(15), align the four mounting holes in each Castor with the four mounting holes on the underside of each base end. Secure in place using four Bolts(1), and Spring Washers(2).





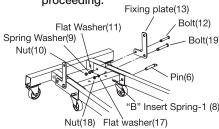
- 3. To attach 3½" Castor(3) to the end of each Folding leg (4), align the four mounting holes in each Castor with the four mounting holes on the underside of each Leg. Secure in place using four Bolts(1), and Spring Washers(2).
- 4. Slide Legs(4) into front of the Base(15).



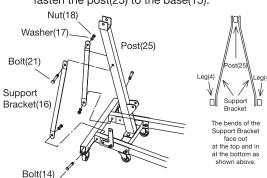


5. Folding Leg (4) in place using the Pins(6). To insert the Pins, lift up on front of Base(15) until holes line up. After all two Pins(6) are inserted, insert "B" Insert Spring-1(8) through small hole at end of each Pin until it snaps into place. Then use two Bolts(12), Flat washers(11), Spring washers(9), Nuts(10), Bolts(19), Flat washers(17), and Nuts(18) to fasten the Fixing plates(13).

Note: Make sure Pins are secure before proceeding.

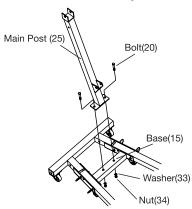


7. Use two Bolts(14), Washers(17) and Nuts(18) to fasten the lower ends of the Support Brackets(16) to the inside of the Base(15), then use one Bolt(21), Washer (17) and Nut(18) to fasten the top ends of the Support Brackets(16) to the Post(25). Once the support brackets are attached, fasten the post(25) to the base(15).

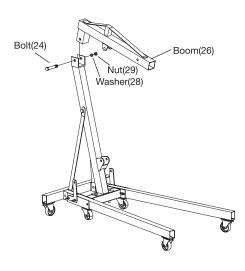


**NOTE**: it is normal for the support brackets (16) to be under tension when tightened. This ensures the crane will operate normally.

 Use the Bolts(20), Washers(33), and Nuts (34) to secure the bottom of the Main Post(25) to the Base(15). However do not tighten the bolts yet, the post(25) will need to be loose for step 7.

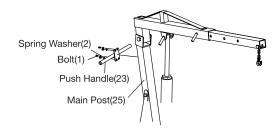


8. Use the Bolt(24), Washer(28), and Nut(29) to attach the Boom(26) to the top of the Post(25).

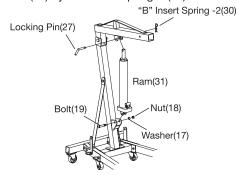




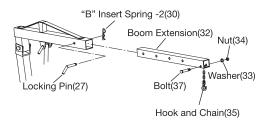
 Use four Bolts(01) and Spring Washers(02) to attach the Push Handle(23) to the Main Post(25).



10. Use a Bolt(19), Washer(17) and Nut(18) to attach lower end of the Ram(31) to the Post, insert the Locking Pin(27) by a "B" Insert Spring -2(30) to attach the top of the Ram to the Boom, and secure the Locking Pin(27) by "B" Insert Spring -2(30).



11. Slide the Boom Extension(32) into the Boom and use the Locking Pin(27) and "B" Insert Spring -2(30) to secure at the desired load rating. Use the Bolt(37), Washer(33) and Nut(34) to attach the Hook and Chain(35) to the end of the Boom Extension(32).



#### **OPERATING INSTRUCTIONS**

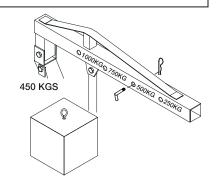


**WARNING:** Read ENTIRE IMPORTANT SAFETY INFORMATION section at beginning of this manual including all text under subheadings therein before set up or use of this product.

#### Lifting and Lowering

 Locate the hole on the Boom with a weight limit higher than the weight you will be lifting.

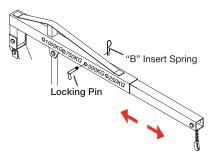
For example: Locate the 500KGS hole on the Boom for a load that is under 500KGS.



 Adjust the Boom Extension so the hole on Boom Extension aligns with the chosen hole on the Boom. Secure into place by inserting the Locking Pin through aligned hole and securing in place with the R-Clip.

WARNING! Keep clear of the object that is being lifted by the Engine Crane. Be aware of the possibility of a load slipping off the Hook and Chain. An item that falls from the Crane can cause serious injury.

- Move the Crane so that the Hook and Chain are directly above the item to be lifted.
- 4. Securely attach the Hook and Chain to the item.
- 5. To raise the Boom, turn the Ram's release valve fully clockwise (right). Insert the Handle into the Ram and pump (up and down) repeatedly until the item has been lifted to the desired height.



WARNING! Fully tighten the release valve or else the Ram may lower or may not be able to reach the full height.

6. To lower the Crane, SLOWLY turn the Ram's release valve counterclockwise (left) until desired lowering speed is attained. Failure to so may result in damage to the engine.

#### Folding the Frame

WARNING! Do not fold the Crane while loaded. Do not move engine crane with legs in upright position. To do so may cause instability & engine crane may topple causing damage or injury.

- 1. Lower the Crane all the way.
- Remove R-Clips from the front Pins. Remove the front Pins. Leave rear Pins in.
- 3. Raise the Legs until they rest toward base.
- 4. Insert leg pin into hole on fixing plate (13) on the base. Reinsert pin to secure leg in upright position for storage.

#### **Bleeding Instructions**

After transporting or prolonged storage air may enter the hydraulic system of the Engine Crane Ram. It is necessary to bleed the air from the system prior to use. Follow the below instructions to complete this procedure.

IMPORTANT! Before first use, check for proper hydraulic oil level and thoroughly test the equipment. If it does not work properly, bleed excess air from its hydraulic system as follows:





- 1. Open Release Valve and lower Ram completely.
- 2. Remove Oil Filler Plug and fill with hydraulic oil (sold separately) to full level.
- 3. Apply downward pressure to the Boom and Pump the Ram Handle quickly several times.
- 4. Check the Oil Fill Hole and, if necessary, top off the Oil Fill Hole with hydraulic oil. IMPORTANT: When adding or replacing oil, always use good grade of low viscosity HYDRAULIC FLUID. (Recommended ISO 32, SAE10 or equivalent).

- Avoid mixing types of fluid. DO NOT use Brake Fluid, Alcohol, Glycerine, Detergent, Motor Oil or Dirty Oil.
- 5. Replace the Oil Filler Plug and close the Release Valve.
- 6. Test the equipment several times for proper operation before attempting to lift a load. If, after bleeding, the equipment still does not appear to be working properly, do not use the equipment until it has been repaired by a qualified service technician.

#### MAINTENANCE AND SERVICING



**WARNING:** Procedures not specifically explained in this manual must be performed only by a qualified technician.

#### TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

#### Cleaning, Maintenance, and Lubrication

- 1. BEFORE EACH USE, inspect the general condition of the tool. Check for:
  - loose hardware,
  - misalignment or binding of moving parts,
  - cracked or broken parts, and
  - any other condition that may affect its safe operation.
- Before each use, throughly test the Ram for proper operation prior to its actual use. If the Ram appears to not be working properly, follow Bleeding instructions on page 6.
- 3. Change the hydraulic oil at least once every three years:
  - With the Ram fully lowered, remove the Oil Filler Plug on the side of the Housing.

- b. Tip the Ram to allow the old hydraulic oil to drain out of the Housing completely, and dispose of the old hydraulic oil in accordance with local regulations.
- with the Ram upright, completely fill the Housing with a high quality hydraulic oil (not included) until the oil just begins to run out of the Oil Fill Hole.
- d. Open the valve Release Screw and pump the Handle to bleed air from the system.
- e. Reinstall the Oil Filler Plug.
- 4. Wipe dry with a clean cloth. Then, store the Ram in a safe, dry location out of reach of children and other non-authorized people.

#### **TROUBLESHOOTING**

TO PREVENT SERIOUS INJURY: Use caution when troubleshooting malfunctioning ram. Stay clear of supported load. Completely resolve all problems before use. If solutions presented in Troubleshooting guide do not solve the problem, have a qualified technician inspect and repair ram before use. After ram is repaired: Test it carefully without a load by raising and lowering it fully, checking for proper operation, BEFORE RETURNING RAM TO OPERATION.

#### DO NOT USE A DAMAGED OR MALFUNCTIONING RAM!

Symptom	Causes	Actions
Crane will not lift load	Release valve not closed tightly Overloading problem	Ensure release valve is done up tightly Correct overloading problem
Crane slowly lowers	Release valve not closed tightly Overloading problem Possible air trapped in hydraulic system	Ensure release valve is done up tightly Correct overloading problem With ram fully retracted(boom at lowest point), pinch oil filler plug with thumb and index finger and pump Crane plunger by hand to rid any excess air. NOTE: Process my need to be repeated multiple times
Poor lifting performance	Fluid level low Possible air trapped in hydraulic system	Ensure correct level of fluid in the ram With ram fully retracted(boom at lowest point), pinch oil filler plug with thumb and index finger and pump Crane plunger by hand to rid any excess air. NOTE: Process my need to be repeated multiple times
Crane will not lift to full extension	Fluid level low	Ensure correct level of fluid in the ram

#### AIR BLEEDING PROCEEDURE

After transporting or prolonged storage air may enter the hydraulic system of the Engine Crane Ram. It is necessary to bleed the air from the system prior to use. Follow the below instructions to complete this procedure.

**IMPORTANT!** Before first use, check for proper hydraulic oil level and thoroughly test the equipment. If it does not work properly, bleed excess air from its hydraulic system as follows:

- 1. Open Release Valve and lower Ram completely.
- 2. Remove Oil Plug and fill with 500ml hydraulic oil (sold separately) to full level.
- 3. Apply downward pressure to the Boom and Pump the Ram Handle quickly several times.
- 4. Check the Oil Fill Hole and, if necessary, top off the Oil Fill Hole with hydraulic oil.
- 5. Replace the Oil Plug and close the Release Valve.
- 6. Test the equipment several times for proper operation before attempting to lift a load. If, after bleeding, the equipment still does not appear to be working properly, do not use the equipment until it has been repaired by a qualified service technician.

#### **PARTS LIST**

Part No.	Description	Qty	Part No.	Description	Qty
01	Bolt M8×16	28	16	Support Bracket	2
02	Spring Washer 8	28	17	Flat Washer 16	6
03	3-1/2"Castor	4	18	Nut M16	6
04	Folding leg	2	19	Bolt M16×90	3
05	3"Castor	2	20	Bolt M14×100	2
06	Pin	2	21	Bolt M16×100	1
07	Bead Ring	2	22	Handle Grip	3
08	"B" Insert Spring-1	2	23	Push Handle	1
09	Spring Washer 12	2	24	Bolt M20×110	1
10	Nut M12	2	25	Main Post	1
11	Flat Washer 12	2	26	Boom Arm	1
12	Bolt M12×85	2	27	Locking Pin	2
13	Fixing Plate	2	28	Flat Washer 20	1
14	Bolt M16×80	2	29	Nut M20	1
15	Base	1	30	"B" Insert Spring-2	2

31	Hydraulic Ram	1	35	Hook and Chain	1
32	Extension Boom	1	36	Handle	1
33	Flat Washer 14	3	37	Bolt M14x80	1
34	Nut M14	3			

