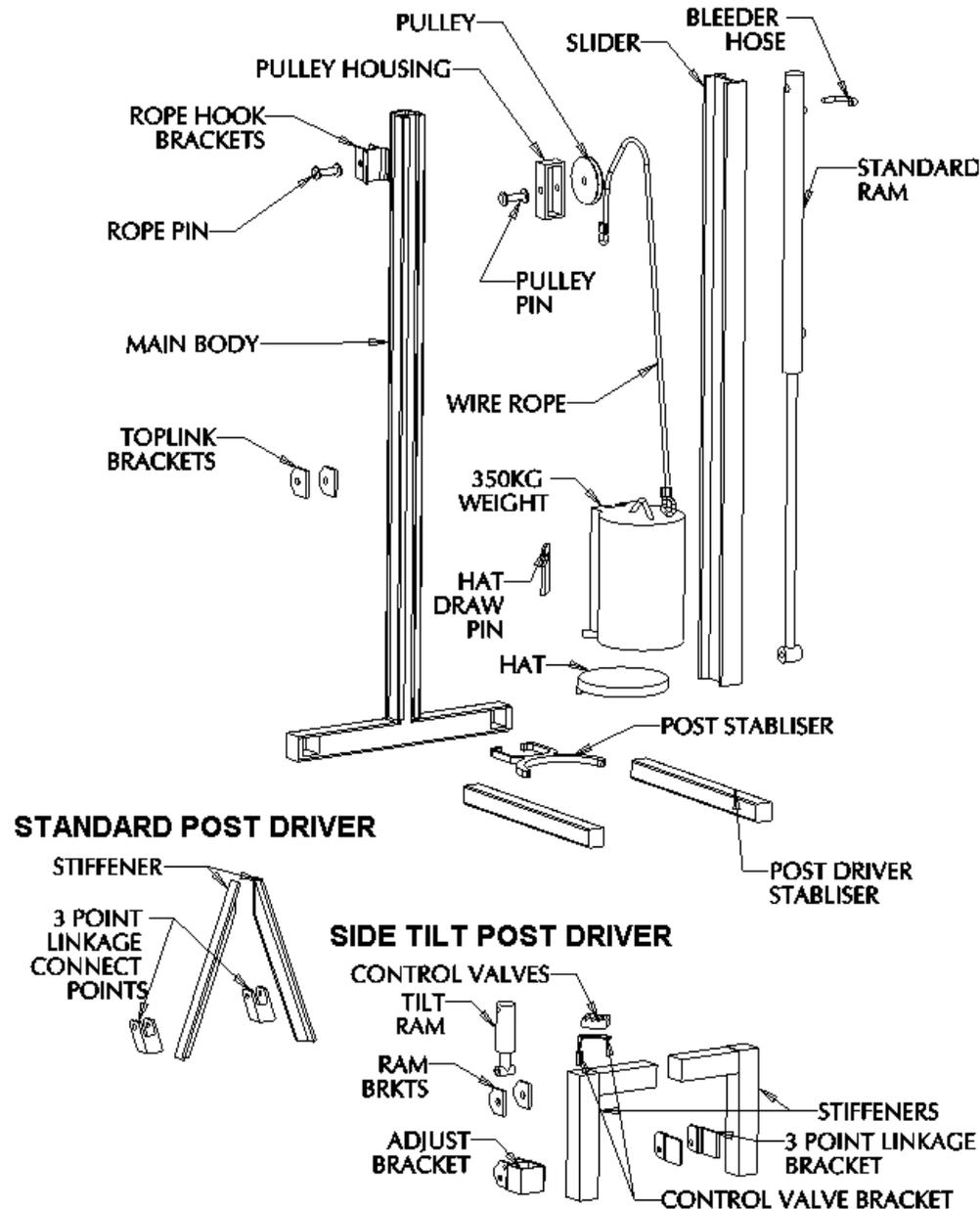


<i>Rams</i>	Ø Bore	Ø Rod	Stroke
Hammer Ram	70mm	40mm	1150mm
Tilt Ram (Side tilt only)	70mm	40mm	150mm

### Post Driver Parts



# **POST DRIVER**

## **SAFETY AND USER'S MANUAL**



— This Data Sheet relates to all Malone Engineering Post Drivers —

### **Safety**

**MALONE ENGINEERING REQUIRES THAT ANYONE OPERATING OR MAINTAINING THE POST DRIVER READ AND UNDERSTANDS ALL SAFETY, OPERATION AND MAINTENANCE DATA CONTAINED IN THIS MANUAL.**

The Post Driver is an attachment for tractors. The driver is raised hydraulically and then released in a free fall. Never operate the post driver if unauthorized persons are in the area, especially small children. Cease operations if unauthorized people approach and inform them of the potential hazards so they understand why you will not continue until they leave the area. Hazards associated with post driving may be pinch points, noise exposure, splinters, eye injury, impact trauma, trip/slip/fall, overhead electrical contact, underground utility contact and entanglement. DO not risk injury or death by ignoring good safety practices. All accidents can be avoided.

**You are responsible for safe operation and maintenance of the Post Driver. The most important safety device on the equipment is a safe operator.**

### **Safety Warnings**

- Never put hands or fingers between hammer hat or post.
- Never stand directly in front of Post Driver while operating. Stand at 45 degrees.
- The operator should be wearing, long sleeved shirt, long legged pants,, hearing protection, eye protection, a hard hat, steel-toed boots, and gloves. Any other persons, who will be working nearby, must, also, wear hearing protection.

### **Pre-Operation Checklist**

It is important for both personal safety and maintaining the good mechanical condition of the Post Driver that this checklist is followed.

- Grease every 20 hour of operation and pre / post season.
- Ensure tractor is of sufficient weight to be stable with the Post Driver attached.
- Ensure that the Post Driver is properly attached to the tractor's 3 point linkage and that mechanical retainers such as lynch pins are installed.
- Check that all hydraulic fittings & connections are tight and in good condition.
- Check wire rope clamps are tight and wire rope is in good condition.
- Check for damaged, worn, missing parts and replace if necessary.

- Check safety decals are in place on beam and hammer, and that they are clean and legible. Replace missing or illegible safety decals.

### Operating Instructions

- Position the tractor with the post driver at location where post is to be driven in.
- Apply brake securely and put transmission into Park / Neutral.
- Lower Post Driver to the ground with tractor link arms. Ensure stabilisers are in place unless operating near ground obstacle which requires removal of stabiliser. Use extreme care when operating under such condition and re-attach stabiliser as soon as possible. (Side tilt: On uneven ground, adjust tilt ram such that Post Driver sits firmly on ground.)
- Be aware of height restriction ie. overhanging trees, overhead wire, etc.
- Operate main ram to lift Hammer and Hat above height of post.
- Position post, if posts are not square on top face, make sure that the highest point of post is up against the beam, and in the center of it.
- Lower Hammer and Hat onto post and unhook Hat Draw Pin from Hammer.
- Lift Hammer a short distance, then drop by pushing lever to max lower position. Repeat short strokes to start post. Note: Stand at 45 deg. to Hammer weight; NOT IN FRONT. Think of driving a fence post like driving a nail. Take it easy until the post is started so it doesn't kick out of the driver. Monitor every strike and observe the condition of the post. Stop driving if the post encounters an impassable object, or if it begins to crack, or the top begins to mushroom. Consider a pilot hole if ground conditions create the post driving conditions just mentioned.
- Once the post has started, hammer should be raised no more than 2 feet and dropped. Repeat until post is at required height. Note: For posts of small cross-section it may be necessary to limit the height the Hammer is dropped from to prevent the post breaking up under impact load.
- Hook Hat Draw Pin on to Hammer and lift off post.
- Lift Post Driver off ground with tractor link arms and move away from post such that the hammer can be lowered before moving to next location. Note: The Hammer weighs 350kg and must be kept near the bottom of the beam at all times while the tractor is in motion. If this is not done the beam can be bent and the tractor capsized.

### Storage Safety

- Make sure the unit is sitting firm and solid and will not tip over.
- Brace Angle Adjustment Ram (on Side tilt Post Driver).
- Rest weight and post cap on a post driven into ground when storing for long periods.

### Post Driver Transportation Safety

- Make sure you are in compliance with all local regulations regarding transporting equipment on public roads and highways.
- Ensure that the machine is securely attached to the tractor.
- Be aware of any height restrictions on route ie. overhead wires, bridges, etc. It may be necessary lie the Post Driver down on a trailer for transportation.

### Limited Warranty

Standard products manufactured by Malone Engineering (Ballyglass, Claremorris, Co. Mayo, Ireland) are warranted to be free from defects in workmanship and material for a period of 120 days from the date of shipment, and products which are defective in workmanship or material will be repaired or replaced, at the option of Malone Engineering, at no charge to the Buyer. Products manufactured by Malone Engineering are designed to perform well under reasonable conditions. Usage of products under extreme conditions and not within recommended guidelines can and will cause excessive wear and damage to the products. Final determination as to whether a product is actually defective rests with Malone Engineering. The obligation of Malone Engineering hereunder shall be limited solely to repair and replacement of products that fall within the foregoing limitations, and shall be conditioned upon receipt by Malone Engineering of notice of any alleged defects or deficiency promptly after discovery within the warranty period. No products shall be returned to Malone Engineering without its prior consent.

### Technical Specification

	Standard	Side Tilt	
Mass	Circa 800kg	Circa 800kg	
Hammer weight	350kg	350kg	
Width	106cm	106cm	
Height	300cm	300cm	
Length	80cm	80cm	
Height with hammer raised	410cm	410cm	
Attachment to tractor	3 point linkage	3 point linkage	
Hydraulic connections	¾" male quick release	¾" male quick release	
Grease points	7 + slider	8 + slider	
Post size	Max 11' x Ø 12"	Max 11' x Ø 12"	
<u>Hoses</u>	Hose size & type	Length	Couplings
Bleeder hose (standard to both)	1/4" 2 wire	9"	Female / 90 deg elbow
Standard			
Hammer Ram to Tractor	3/4" 2 wire	5 ft 3"	Male Quick Release / Male
Side Tilt			
Hammer Ram to Control Valve	3/4" 2 wire	5 ft 3"	Female / Male
Control Valve to Tractor	3/8" 2 wire	5 ft	Male Quick Release / 90° elbow Female
Tractor to Control Valve	3/8" 2 wire	5 ft	Male Quick Release / 90° elbow Female
Control Valve to Tilt Ram	3/8" 2 wire	5 ft 4"	Female / 90° elbow Female
Tilt Ram to Control Valve	3/8" 2 wire	5 ft 4"	Female / 90° elbow Female