MEWP Pre-Use Check Explanation

Item	Explanatory Notes
Engine oil/coolant/hydraulic oil levels Battery/batteries charging system Engine compartment All pivot points and retaining clips	All fluid levels should be checked to confirm that levels fall within the safe starting range for the systems by using either dipstick readings or spy glass. The battery or batteries should be checked for security, deterioration, signs of leakage, shorting and supply cables checked for security and soundness of insulation. The state of charge of the battery should be verified and the power isolation checked that it can be appropriately activated and is effective. Chargers, leads and connections should be checked for insulation and defects. Acid levels should also be checked where appropriate. The engine compartment shall be inspected for debris, leaks, loose connections, guards in place, build-up of dust in radiator cores, air filtration system and condition of 'v' belts All pivot pins and retaining clips must be in place and checked for wear, lubrication and security. Only the manufacturers specified pins and locking devices should be used.
Hydraulic/engine system for leaks	Throughout the vehicle, hydraulic lines shall be checked for leaks, signs of rubbing (severe cases tend to expose metal braiding) or fouling, rupture, damaged or loose connectors and for missing or loose bolts on connections and/or retaining brackets. The condition of rams for 'burrs' and where they emerge from their cylinders, together with the seals, shall be examined for the extent of any hydraulic fluid 'smearing'. The tightness of the hydraulic tank filler cap shall also be checked. Any signs of engine oil leaks shall also be noted.
Wheels/tyres/tracks Steps/handrails and access points	Each tyre should be inspected for excessive tread wear, wall deterioration and for cuts, chunking and damage or potential damage due to debris. Uneven tread wear should be noted in case it indicates incorrect wheel alignment. The pressures should be checked visually if not of a solid design. Wheels shall also be required to be clean for any public highway use. Wheels shall be checked for security with any missing wheel-nuts brought to the attention of the examiner. Wheels shall also be inspected for build-up of any debris which may impede their movement. Axle extensions should also be checked for function. Tracked systems should be checked for internal build-up of debris and track condition, tension or anything that may impair their movement. All access points should be checked for security, cleanliness and signs of damage.

Carrier condition anchorage points All guarding and covers	The general condition and security of all carrier components i.e. sides, railings, toe-plates, floor, and anchorage points should be examined for signs of distortion, weakness and damage. Safety harness anchor points should be clearly identified and free from defect and contamination. The carrier bed should also be clutter free and complete Any failings to welded joints must be identified. Fold-down guard systems (scissor) also need to be inspected to ensure locking pins are in place. All guarding must be inspected for damage, security and effectiveness which also include all covers and side panelling.
Warning decals/control symbols SWL identified	All warning decals and control symbols should be in place and readable. Carrier SWL's must be identified and understood.
Overall condition	The vehicle/MEWP should be checked for general condition and cleanliness. Inspections should include identifying any over-stressed areas, cracked welds, structural damage and loose parts. The hydraulic boom should also be fully extended and checked for signs of damage, scoring, lubrication, bush wear and free movement. All light lenses should be checked for damage and cleanliness.
Greasing	Greasing shall be carried out to the manufacturer's recommendations. All components shall be checked for sufficient lubrication.
Harness/lanyard inspected	Fall protection shall be inspected for the correct type, damage, deterioration, thorough inspection date, cuts and abrasions.
Power source	Fuel supplies shall be checked and battery charge confirmed. Smooth starting and running shall also be checked particularly in cold weather conditions.
Emergency lowering system	The emergency lowering procedures should be identified and each candidate must prove to be competent in this technique. Some vehicles allow for the testing of this procedure quite easily and where so should be carried out. Bleed down systems can be time consuming and in some cases require professional re-setting and therefore would be expected to be covered in theory only.

Overload/tilt protection systems	Any system fitted to the vehicle/MEWP to warn against potential overload should be checked (as appropriate) for correct operation. Tilt systems must also be confirmed as operational. Some scissor lift designs are also equipped with pot hole protection systems.
Access gates function	All access points must be able to be made secure once the operator takes control within the carrier. In some cases these are not activated until the boom is initially lifted.
Electrical system	All electrical systems must be confirmed as operational including all warning systems, gauges, working lights (including beacons), warning systems and charge. Electrical systems for emergency lowering must be checked including the overriding of the carrier controls. Electrical wiring should be checked for chaffing, stretching, security and signs of 'shorting'.
Audible warning systems	All horns, klaxons, sirens and other acoustic devices should be checked for audibility and, in the event of failure, the resultant safety actions should be noted. The acoustic reaction when applying certain controls or as a result of certain adverse/unsafe MEWP's motions should be verified in accordance with the manufacturer's instructions
Function of all hydraulic and motive controls	All hydraulic/motive controls should be checked for correct and safe operation throughout the range of their control. This would include the use of both the carrier and ground controls. Delegates need to be aware of controls that are hard to engage, excessively loose or slack. Pictograms should be clearly visible. The manufacturers fitted RPM manual control device should be checked for correct operation, where this is damaged the MEWP should not be used. Where remote systems (control boxes) are available these too should be confirmed as operational.
Brakes and steering	Both should be confirmed as effective and fully operational including equipment that has options between two and four wheel steer and two and four wheel drive.
Limit switches	All limit switches should be checked for effectiveness including particularly those that impose lower operational speeds once the equipment is used for a certain configuration.

Carrier levelling system	Highly important that the carrier remains parallel to the position first set up at ground level. Some systems are hydraulically activated and some others rely on mechanical means. The latter are subject to physical checks by the operator to ensure that pins and locking clips are confirmed in place.
Stabiliser/outrigger function Stabiliser/outrigger locking systems	Stabiliser extensions and legs should be checked thoroughly to ensure that they are working correctly. Lock off valves (If fitted) work, cam-lock operation, retaining clips, extension feet in place and free movement of 'feet' and lowering arms.
Extending platform systems	Check for free movement and secure locking systems.
Power take off (PTO)	The operation of the power take off should be checked to make sure it engages/disengages correctly.
Emergency stop control Manufacturers manual	All emergency stop controls must be tested to ensure their immediate effectiveness. Confirmed as available
Reporting Procedure	Any faults or defects found must be noted onto the specific defect report sheet. Management/examiners need informing of the defects and action to be taken must be documented. Where defect constitutes a major safety risk, equipment must not be used and the examiner immediately notified.