TIREBOSS

Tire Pressure Control



TIRE CHANGE PROCEDURES

V1-0408



TIRE PRESSURE CONTROL INTERNATIONAL LTD.

Tire/Wheel Changing Procedures - Steer Tires



WARNING - <u>ALL</u> valve cores <u>MUST</u> be removed for the *TIREBOSS™* system to operate properly. Failure to remove valve cores can cause unsafe or dangerous driving conditions as the *TIREBOSS™* system will be unable to maintain proper tire pressures.

Typical STEER Tire Removal Procedures - See following Diagram A

- 1. Ensure all Steer axle **TIREBOSS™** wheel valves and/or frame valves are closed
- 2. Shut the power switch "OFF" on the **TIREBOSS™** Operator Control Unit (switch on back left side)
- 3. Relieve air pressure from the **TIREBOSS™** tire mainline by the Schrader valve (**top** Schrader marked with an 'S') located on the right side of the **TIREBOSS™** valve box. (usually located on the truck frame)
- 4. 'MARK' with a grease pencil, one wheel stud and rim location to ensure the proper alignment of wheel hoses during re-installation of the wheel
- 5. If equipped with **TIREBOSS™** hub protectors, remove the 4 wheel nuts holding it in place and set hub protectors aside for reinstallation at a later time
- 6. Undo **TIREBOSS™** wheel hose from the hub cap. Hold hose adaptor fitting with a wrench and undo swivel fitting attached to wheel hose. (CAUTION Steer wheel hose is pressurized)
- 7. Undo wheel hose at the valve stem fitting and insert a valve core into the valve stem.
- 8. Undo wheel nuts and remove wheel. If rim does not fit over hose adaptor fitting, remove by holding hubcap fitting with wrench.



WARNING - When removing or replacing hose adaptor fitting from hub cap, always use a wrench to hold hub cap fitting. Failure to do so will twist air lines inside hub cap and cause breakage and air loss of front tires.

9. Repair or replace tire as required. If rim is changed, 'MARK' new rim in same location as old rim (as orientated from the valve stem)

Typical STEER Tire Re-installation Procedures - See following Diagram A

- 1. Re-install wheel matching up the previously 'MARKED' stud and rim
- 2. Tighten and torque wheel nuts to manufacturers specifications.
- 3. If hose adaptor fitting was removed, apply thread sealing compound and re-install using a wrench to hold the hub cap fitting



WARNING - When removing or replacing hose adaptor fitting from hub cap, always use a wrench to hold hub cap fitting. Failure to do so will twist air lines inside hub cap and cause breakage and air loss of front tires.

- 4. **Remove valve core** and install wheel hose onto valve stem (Do not overtighten the nut, it should be just snug.)
- 5. Using a small amount of anti-seize compound, reattach the wheel hose to the hose adaptor fitting ensuring the hub cap fitting does not turn.
- 6. Open **all** steer axle wheel and frame valves
- 7. Turn the **TIREBOSS** To Operator Control Unit "ON" and run truck until steer tire pressures stabilize at the highest pressure setting (HIGHWAY LOADED)
- 8. Soap water test **all** steer wheel fittings to ensure no leaks are present
- 9. If equipped with **TIREBOSS™** hub protectors, remove 4 wheel nuts to allow for mounting. Tighten and torque wheel nuts as per manufacturer specifications

Tire/Wheel Changing Procedures - Drive Tires



WARNING - <u>ALL</u> valve cores <u>MUST</u> be removed for the *TIREBOSS™* system to operate properly. Failure to remove valve cores can cause unsafe or dangerous driving conditions as the *TIREBOSS™* system will be unable to maintain proper tire pressures.

Typical DRIVE Tire Removal Procedures - See following Diagram B

- 1. Ensure **all** Drive axle **TIREBOSS™** wheel valves are closed
- 2. Shut the power switch "OFF" on the **TIREBOSS™** Operator Control Unit (switch on back left side)
- 3. Relieve air pressure from the **TIREBOSS™** tire mainline by the Schrader valve (**bottom** Schrader marked with a 'D') located on the right side of the **TIREBOSS™** valve box. (usually located on the truck frame)
- 4. At the drive wheel end, undo the orange drive hose from the rotary union compression fitting and tuck end out of the way
- 5. 'MARK' with a grease pencil, one wheel stud and rim location to ensure the proper alignment of wheel hoses during reinstallation of the wheel
- 6. Undo **TIREBOSS™** wheel hoses from the wheel end manifold swivel fittings
- 7. Undo wheel nuts and remove outer wheel. (In most cases the rim will fit over the **TIREBOSS™** wheel end manifold)
- 8. Before removing the inner wheel, 'MARK' rim at the same location as the previously 'MARKED' stud
- 9. Remove inner wheel
- 10. Remove **TIREBOSS™** wheel hose from valve stem and repair or replace tire as required. If rim is changed, 'MARK' new rim in same location as old rim (as orientated from valve stem)

Typical DRIVE Tire Re-installation Procedures - See following Diagram B

- 1. Ensure all valve cores are removed. Reinstall the wheel hose onto valve stem (Do not overtighten the nut, it should be just snug.) Soapwater test for leaks. Inner wheel uses the straight wheel hose fitting and when installed, the rubber hose protector should be slid to the base of the valve stem. Outer wheel uses the curved wheel hose. Outer wheel valve stem should be turned into the rim to avoid damage to wheel hose or valve stem.
- 2. Reinstall inner wheel, matching up previously 'MARKED' stud and rim
- 3. Reinstall outer wheel by inserting inner wheel hose into appropriate rim hole and matching up the previously 'MARKED' stud and rim
- 4. Tighten and torque wheel nuts as per manufacturers specifications
- 5. Using a small amount of anti-seize compound, reattach the wheel hoses to the **TIREBOSS™** manifold swivel fitting ensuring valve handles are parallel with the side wall of the tire.
- 6. Using oil on rotary union compression fitting threads and sleeve, reattach the orange drive hose (orange drive hose should be approximately 2" away from the tire side wall)
- 7. Open **all** drive axle wheel valves
- 8. Turn the **TIREBOSS™** Operator Control Unit 'ON' and run truck until drive tire pressures stabilize at the highest setting (HIGHWAY LOADED)
- 9. Soap-water test **all** drive wheel fittings to ensure no leaks are present

Tire/Wheel Changing Procedures - Trailer Tires



WARNING - <u>ALL</u> valve cores <u>MUST</u> be removed for the **TIREBOSS™** system to operate properly. Failure to remove valve cores can cause unsafe or dangerous driving conditions as the **TIREBOSS™** system will be unable to maintain proper tire pressures.

Typical TRAILER Tire Removal Procedures - See following Diagram C

- 1. Ensure all Trailer axle **TIREBOSS™** wheel valves are closed
- 2. Shut the power switch "OFF" on the **TIREBOSS™** Operator Control Unit (switch on back left side)
- 3. Relieve air pressure from the **TIREBOSS™** tire mainline by the Schrader valve (2nd from bottom Schrader marked with a 'T') located on the right side of the **TIREBOSS™** valve box. (usually located on the truck frame)
- 4. 'MARK' with a grease pencil, one wheel stud and rim location to ensure the proper alignment of wheel hoses during reinstallation of the wheel
- 5. Undo **TIREBOSS™** wheel hoses from the hub cap tee swivel fittings
- 6. Undo wheel nuts and remove outer wheel. If rim does not fit over hub cap tee fitting, remove tee fitting by holding hub cap fitting with wrench.



WARNING - When removing or replacing hub cap tee fitting from hub cap, always use a wrench to hold hub cap fitting. Failure to do so will twist air lines inside hub cap and cause breakage and air loss of trailer tires.

- 7. Before removing inner wheel, 'MARK' rim at same location as previously 'MARKED' stud
- 8. Remove inner wheel
- 9. Remove **TIREBOSS** wheel hose from valve stem. Repair or replace tire as required. If rim is changed, 'MARK' new rim in same location as old rim (as orientated from the valve stem)

Typical TRAILER Tire Re-installation Procedures -See following Diagram C

- 1. Ensure all valve cores are removed. Reinstall the wheel hose onto valve stem (Do not overtighten the nut, it should be just snug.) Soapwater test for leaks. Inner wheel uses the straight wheel hose fitting and when installed, the rubber hose protector should be slid to the base of the valve stem. Outer wheel uses the curved wheel hose. Outer wheel valve stem should be turned into the rim to avoid damage to wheel hose or valve stem.
- 2. Reinstall inner wheel, matching up previously 'MARKED' stud and rim
- 3. Reinstall outer wheel by inserting inner wheel hose into appropriate rim hole and matching up the previously 'MARKED' stud and rim
- 4. Tighten and torque wheel nuts as per manufacturers specifications
- 5. If hub cap tee fitting was removed, apply thread sealing compound and re-install using a wrench to hold the hub cap fitting



WARNING - When removing or replacing hubcap tee fitting from hub cap, always use a wrench to hold hub cap fitting. Failure to do so will twist air lines inside hub cap and cause breakage and air loss of trailer tires.

- 6. Using a small amount of anti-seize compound, reattach the wheel hose to the hub cap tee ensuring the hub cap fitting does not turn and valve handles are parallel with the sidewall of the tire.
- 7. Open **all** trailer axle wheel valves
- 8. Turn the **TIREBOSS™** Operator Control Unit "ON" and run truck until trailer tire pressures stabilize at the highest pressure setting (HIGHWAY LOADED)
- 9. Soap water test **all** trailer wheel fittings to ensure no leaks are present

Tire/Wheel Changing Procedures - Diagrams

