

# **Pre Trip Inspection**

1. Check that all the documents (Bill of lading, Manifest, Permits) match the cargo you are hauling
2. Make sure you have the right truck and trailer
3. Review the Post-Trip inspection report and make sure that any listed problems are repaired and signed by the mechanic
4. Put the Key IN your pocket so no one can move the truck while your doing your pre trip
5. Look Under the vehicle for fresh OIL, COOLANT, GREASE, or FUEL leaks
6. Look Under the vehicle for anything hanging off of the truck or trailer
7. Check to make sure there isn't anything on the ground that you'll run over when you move the truck
8. Face the front of your vehicle and check to make sure it is not leaning to one side indicating 1 or more flat tires/ Broken suspension components, Shifted/improperly loaded or over loaded trailer

## **FACE TRUCK and START FROM THE TOP!**

1. AIR SHIELD- Properly mounted and secured not cracked bent, or broken
2. I.D CLEARANCE LIGHTS- Properly mounted and secured not cracked bent or broken, good rubber seal, no moisture, amber in color and function properly
3. HORN- Properly mounted and secured not cracked, bent or broken
4. WINDSHIELD- Properly mounted and secured not cracked, bent or broken, good rubber seal, clean, no illegal stickers
5. WINDSHIELD WIPERS- Properly mounted and secured not cracked, bent or broken, good rubber on the blades, and good tension on the wipers
6. HOOD LATCHES- Properly mounted and secured not cracked, bent or broken
7. GRILL-- Properly mounted and secured not cracked, bent or broken, nothing blocking airflow to the radiator
8. HEAD LIGHTS- - Properly mounted and secured not cracked, bent or broken, good rubber seal, no moisture, clean, clear in color, function properly
9. TURN SIGNALS-- Properly mounted and secured not cracked, bent or broken, good rubber seal, no moisture, clean, clear in color, function properly
10. BUMPER- Properly mounted and secured not cracked, bent or broken

11. LICENSE PLATE- Properly mounted and secured not cracked, bent or broken, clean, up to date
12. HOOD MIRRORS- Properly mounted and secured not cracked, bent or broken, good rubber seal, clean

## **OPEN HOOD**

### **RIGHT SIDE OF ENGINE COMPARTMENT**

1. RADIATOR- Properly mounted and secured not cracked, bent or broken, free of dents, inspect the fan for missing blades, look for hanging wire that can catch on the blades
2. OIL LEVEL- Make sure between full and add marks, check to make sure there is NO Water or DIESEL in the oil
3. ALTERNATOR- Properly mounted and secured not cracked, bent or broken, check all wires make sure there all, Properly mounted and secured not cracked, bent or broken, or frayed. NO more then  $\frac{3}{4}$  of an inch of play in the middle of the belt
4. WATER PUMP- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, check all HOSES going to and from to be sure there, Properly mounted and secured not cracked, bent or broken, NOT LEAKING
5. TURBO- Properly mounted and secured not cracked, bent or broken, NO LEAKING
6. S PIPE AND FLEX PIPE- Properly mounted and secured not cracked, bent or broken, NO LEAKS soot trail would indicate a leak
7. EXHAUST ELBOW- Properly mounted and secured not cracked, bent or broken, NOT LEAKING soot trail would indicate a leak
8. EXHAUST MOUNTING BRACKET- Properly mounted and secured not cracked, bent or broken
9. EXHAUST SYSTEM- Properly mounted and secured not cracked, bent or broken, NO LEAKS soot trail would indicate a leak

### **LEFT SIDE OF ENGINE COMPARTMENT**

1. COOLANT LEVEL- make sure the reservoir is, Properly mounted and secured not cracked, bent or broken, check level threw reservoir/sight glass, or open cap DO NOT OPEN WHILE HOT!
2. AIR COMPRESSOR- Properly mounted and secured not cracked, bent or broken, NOT LEAKING

3. WINDSHIELD WASHER FLUID- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, add more if needed, USE DE-ICER in winter

## **STEERING AND LINKAGE SYSTEM**

1. POWER STEERING RESERVOIR- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, and fluid between FULL and ADD
2. STEERING WHEEL SHAFT- Properly mounted and secured not cracked, bent or broken, Universal joint not loose and PROPERLY greased
3. GEAR BOX- Properly mounted and secured not cracked, bent or broken, NOT LEAKING
4. PITMAN ARM- Properly mounted and secured not cracked, bent or broken, GOOD PINCH BOLT
5. CASTLE NUT AND COTTER KEY- Properly mounted and secured not cracked, bent or broken
6. DRAG LINK- Properly mounted and secured not cracked, bent or broken
7. UPPER AND LOWER CONTROL ARMS- Properly mounted and secured not cracked, bent or broken, Good castle nuts and cotter keys
8. TIE ROD- Properly mounted and secured not cracked, bent or broken

## **FRONT SUSPENSION SYSTEM**

1. FRONT AND REAR SPRING MOUNT- Properly mounted and secured not cracked, bent or broken, no missing bolts
2. LEAF SPRINGS- Properly mounted and secured not cracked, bent or broken, NO MORE the ¼ broken or missing
3. U-BOLTS- Properly mounted and secured not cracked, bent or broken, check for shiny threads indicating that there loose
4. SHOCK ABSORBERS- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, rubber bushing top and bottom
5. AIR BAGS- Properly mounted and secured not cracked, bent or broken, no holes, NOT LEAKING, and check bottom BELL is not cracked or broken (If air ride equipped)

## **AIR BRAKE SYSTEM**

1. BRAKE CHAMBERS- Properly mounted and secured not cracked, bent or broken, good C-Clamp, NOT LEAKING
2. SLACK ADJUSTER- Properly mounted and secured not cracked, bent or broken, NO more then 1 inch of free play with the brakes released
3. BRAKE LINES- Properly mounted and secured not cracked, bent or broken, NOT LEAKING

4. BRAKE PADS- Properly mounted and secured not cracked, bent or broken, at LEAST  $\frac{1}{4}$  of an inch of pad
5. BRAKE DRUM- Properly mounted and secured not cracked, bent or broken, NO oil or discoloration indicating overheating

## **FRONT WHEELS**

1. RIMS- check inside and out side to make sure that it's, Properly mounted and secured not cracked, bent or broken, no illegal welds
2. TIRES- Properly mounted and secured not cracked, bent or broken, check inner and outer sidewall for ABRASIONS, BRUISES, and CUTS, at LEAST  $\frac{4}{32}$ 's of an inch of tread in ALL major grooves, TIRE pressure 100-110
3. LUG NUTS- Properly mounted and secured not cracked, bent or broken, NO rust trails or shiny threads indicating that there loose
4. VALVE STEMS- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, and has METAL dust cap
5. HUB SEAL- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, NO MISSING BOLTS, check level if low add 90 weight gear oil

## **LEFT SIDE OF TRACTOR**

1. SPLASH GUARDS- Properly mounted and secured not cracked, bent or broken
2. MIRROR BRACKET- Properly mounted and secured not cracked, bent or broken
3. MIRRORS- Properly mounted and secured not cracked, bent or broken, good rubber seal, no moisture, clean
4. DRIVER DOOR- Properly mounted and secured not cracked, bent or broken, make sure inner and out door latch work and that window goes up and down, good rubber seal, door hinge holds the door
5. SADDLE STRAPS- Properly mounted and secured not cracked, bent or broken, there MUST be rubber between straps and tank
6. FUEL TANK- Properly mounted and secured not cracked, bent or broken, NOT LEAKING
7. FUEL CAP- Properly mounted and secured not cracked, bent or broken, have inner and out rubber seal and functioning pressure release valve
8. GRAB HANDLE AND STEPS- Properly mounted and secured not cracked, bent or broken, and can hold the weight of the driver, and free of debris
9. OVERALL SIDE OF TRACTOR- No damage, missing rivets, Sleeper window not cracked or broken and good rubber seal

10. SIDE COMPARTMENT- check to make sure door is Properly mounted and secured not cracked, bent or broken, and there MUST be 3 DOT triangles, a FUSE for every fuse used in the truck UNLESS the truck is equipped with breakers, and there Must be a 5BC Fire Extinguisher if you are not hauling HAZMAT and a 10BC if you are hauling HAZMAT
11. BATTERY BOX- Properly mounted and secured not cracked, bent or broken, good connections to the batteries no excessive corrosion, wires in good condition

## **REAR OF TRACTOR**

1. CATWALK/STEPS/GRAB HANDLE- Properly mounted and secured not cracked, bent or broken, and can hold the weight of the driver
2. DOT TAPE- Properly mounted on rear of sleeper and CLEAN
3. AIRLINES/ELECTRICAL PIG TAIL- Properly mounted and secured not cracked, bent or broken, NOT LEAKING
4. DRIVE SHAFT- Properly mounted and secured not cracked, bent or broken
5. U-JOINTS- Properly mounted and secured not cracked, bent or broken, and greased
6. FRAME AND CROSS MEMBERS- Properly mounted and secured not cracked, bent or broken, no missing bolts or illegal welds
7. FIFTH WHEEL- Properly mounted and secured not cracked, bent or broken, AND greased, (if no trailer is attached it should be tilted back towards the trailer)
8. FIFTH WHEEL MOUNTING BOLT- Properly mounted and secured not cracked, bent or broken, (IF SLIDING FIFTH WHEEL Make sure locking pins are in the locked position)
9. FIFTH WHEEL PLATFORM- Properly mounted and secured not cracked, bent or broken
10. RELEASE ARM- Properly mounted and secured not cracked, bent or broken, IN THE LOCKED POSITION WITH SAFETY LATCH IN PLACE
11. PIVOT PINS- Properly mounted and secured not cracked, bent or broken, good cotter keys
12. LOCKING JAWS- Properly mounted and secured not cracked, bent or broken, (IF ATTACHED TO TRAILER LOOK INTO THE THROAT OF THE FIFTH WHEEL AND MAKE SURE ITS LOCKED AROUND THE SHANK OF THE KING PIN AND NO GAP BETWEEN FIFTH WHEEL AND THE APRON OF THE TRAILER)

## **SUSPENSION SYSTEM**

1. FRONT AND REAR SPRING MOUNT- Properly mounted and secured not cracked, bent or broken, no missing bolts
2. LEAF SPRINGS- Properly mounted and secured not cracked, bent or broken, NO MORE the  $\frac{1}{4}$  broken or missing
3. U-BOLTS- Properly mounted and secured not cracked, bent or broken, check for shiny threads indicating that there loose
4. SHOCK ABSORBERS- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, rubber bushing top and bottom
5. AIR BAGS- Properly mounted and secured not cracked, bent or broken, no holes, NOT LEAKING, and check bottom BELL is not cracked or broken (If air ride equipped)
6. TORSION BAR- Properly mounted and secured not cracked, bent or broken

## **BRAKES**

1. BRAKE CHAMBERS- Properly mounted and secured not cracked, bent or broken, good C-Clamp, NOT LEAKING
2. SLACK ADJUSTER- Properly mounted and secured not cracked, bent or broken, NO more then 1 inch of free play with the brakes released
3. BRAKE LINES- Properly mounted and secured not cracked, bent or broken, NOT LEAKING
4. BRAKE PADS- Properly mounted and secured not cracked, bent or broken, at LEAST  $\frac{1}{4}$  of an inch of pad
5. BRAKE DRUM- Properly mounted and secured not cracked, bent or broken, NO oil or discoloration indicating overheating

## **RIMS AND TIRES**

1. RIMS INNER AND OUTER- check inside and out side to make sure that it's, Properly mounted and secured not cracked, bent or broken, no illegal welds, NO debris between rims (IF it has DAYTON rims check to make sure spacer is there and not cracked or broken)
2. TIRES INNER AND OUTER- Properly mounted and secured not cracked, bent or broken, check inner and outer sidewall for ABRASIONS, BRUISES, and CUTS, at LEAST  $\frac{2}{32}$ 's of an inch of tread in ALL major grooves, TIRE pressure 100-110
3. LUG NUTS- Properly mounted and secured not cracked, bent or broken, NO rust trails or shinny threads indicating that there loose

4. VALVE STEMS INNER AND OUTER- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, and has METAL dust cap
5. HUB SEAL- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, NO MISSING BOLTS, check level if low add 90 weight gear oil

## **REAR DRIVE AXLE**

SAY: I'm going to check this axle the SAME way I checked the front drive axle and name off all the parts your going to check (you DO NOT need to point to or describe them or say what you're checking for)

## **REAR OF TRACTOR**

1. MUD FLAPS- Properly mounted and secured not cracked, bent or broken, and should be NO MORE then 6-8 inches off the ground
2. REAR LIGHTS- Properly mounted and secured not cracked, bent or broken, good rubber seal, no moister, red in color and function properly and have the 4 functions of TAIL LIGHTS, BRAKE LIGHTS, 4 WAYS, TURN SIGNALS

## **TRAILER**

1. FRONT OF TRAILER- Check for damage and missing rivets, and check trailer inspection and registration are up to date
2. AIR AND ELECTRIC CONNECTIONS- Properly mounted and secured not cracked, bent or broken, make sure glad hands have good seals
3. CLEARANCE LIGHTS- Properly mounted and secured not cracked, bent or broken, good rubber seal, no moister, function properly, and should be amber in color

### **Look down left side of trailer**

1. TRAILER FRAME- Make sure its straight and no missing rivets
2. OVERALL SIDE OF TRAILER- No damage, no missing rivets, and has DOT tape on ALL sides of the trailer
3. SIDE MARKER LIGHTS- Properly mounted and secured not cracked, bent or broken, good rubber seal, no moister, amber in color on front and side and red in color at rear and function properly
4. TRAILER APRON- Properly mounted and secured not cracked, bent or broken, AND greased
5. KING PIN- Properly mounted and secured not cracked, bent or broken, NO flat spots, and should have a ping sound when taped with a hammer

6. LANDING GEAR- Properly mounted and secured not cracked, bent or broken, CHECK CROSS MEMBERS, make sure handle rests in cradle and works in high and low gear, and both sides come down evenly, and the sand feet are Properly mounted and secured not cracked, bent or broken, and free of debris
7. FLOOR AND FLOOR CROSS MEMBERS- Properly mounted and secured not cracked, bent or broken, no holes in floor
8. AIR LINES UNDER TRAILER- Properly mounted and secured not cracked, bent or broken, at LEAST 18 inches off the ground
9. TANDEM SLIDE RAILS- Properly mounted and secured not cracked, bent or broken, locking pins and release lever in the LOCKED position

## **FRONT TRAILER TANDEM AXLE**

### **SUSPENSION SYSTEM**

1. FRONT AND REAR SPRING MOUNT- Properly mounted and secured not cracked, bent or broken, no missing bolts
2. LEAF SPRINGS- Properly mounted and secured not cracked, bent or broken, NO MORE the ¼ broken or missing
3. U-BOLTS- Properly mounted and secured not cracked, bent or broken, check for shiny threads indicating that there loose
4. AIR BAGS- Properly mounted and secured not cracked, bent or broken, no holes, NOT LEAKING, and check bottom BELL is not cracked or broken (If air ride equipped)

### **BRAKES**

1. BRAKE CHAMBERS- Properly mounted and secured not cracked, bent or broken, good C-Clamp, NOT LEAKING
2. SLACK ADJUSTER- Properly mounted and secured not cracked, bent or broken, NO more then 1 inch of free play with the brakes released
3. BRAKE LINES- Properly mounted and secured not cracked, bent or broken, NOT LEAKING
4. BRAKE PADS- Properly mounted and secured not cracked, bent or broken, at LEAST ¼ of an inch of pad
5. BRAKE DRUM- Properly mounted and secured not cracked, bent or broken, NO oil or discoloration indicating overheating



## **RIMS AND TIRES**

1. RIMS INNER AND OUTER- check inside and out side to make sure that it's, Properly mounted and secured not cracked, bent or broken, no illegal welds, NO debris between rims (IF it has DAYTON rims check to make sure spacer is there and not cracked or broken)
2. TIRES INNER AND OUTER- Properly mounted and secured not cracked, bent or broken, check inner and outer sidewall for ABRASIONS, BRUISES, and CUTS, at LEAST 2/32's of an inch of tread in ALL major grooves, TIRE pressure 100-110
3. LUG NUTS- Properly mounted and secured not cracked, bent or broken, NO rust trails or shinny threads indicating that there loose
4. VALVE STEMS INNER AND OUTER- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, and has METAL dust cap
5. HUB SEAL- Properly mounted and secured not cracked, bent or broken, NOT LEAKING, NO MISSING BOLTS, check level if low add 90 weight gear oil

## **REAR DRIVE AXLE**

SAY: I'm going to check this axle the SAME way I checked the front drive axle and name off all the parts your going to check (you DO NOT need to point to or describe them or say what you're checking for)

## **REAR OF TRAILER**

1. REAR LIGHTS- Properly mounted and secured not cracked, bent or broken, good rubber seal, no moisture, red in color and have the 4 functions of TAIL LIGHTS, BRAKE LIGHTS, 4 WAYS, TURN SIGNALS
2. DOT BUMPER- Properly mounted and secured not cracked, bent or broken, has DOT tape on it
3. DOORS- Properly mounted and secured not cracked, bent or broken, no damage, has DOT tape on them, latches and hinges work, and has door ties to hold doors open
4. MUD FLAPS- Properly mounted and secured not cracked, bent or broken, no more then 6-8 inches off the ground
5. LICENSE PLATE- Properly mounted and secured not cracked, bent or broken, clean, up to date, and license plate light works

## **INSIDE THE CAB**

1. **ROLL DRIVER WINDOW DOWN**- To listen and smell anything that might be wrong
2. **DRIVERS SEAT**- Properly mounted and secured not cracked, bent or broken, and adjusted for the driver
3. **SEAT BELT**- Properly mounted and secured not cracked, bent or broken, not frayed and latches properly
4. **MIRRORS**- Properly mounted and secured not cracked, bent or broken, AND adjusted for the driver
5. **WINDSHIELD**- Properly mounted and secured not cracked, bent or broken, no illegal stickers
6. **STEERING WHEEL**- Make sure there isn't more than 2 inches of play in a 20 inch steering wheel
7. **PUT KEY IN IGNITION**
  - a. Tell instructor your going to start the truck and will be watching your **OIL PRESSURE** gauge, and that if the pressure does not start to rise within 5 **SECONDS** your going to shut the truck off
  - b. Start truck and watch oil pressure
  - c. Check all other gauges to make sure they are functioning
  - d. Say: Low air pressure light and buzzer should be on and remain on until the air pressure builds to at least 60 PSI
8. While the air pressure is building:
  - a. Check Heat and defrost make sure the work
  - b. Check wipers and washers
  - c. Check light indicators on dash (high beams, left and right turn signal and 4 ways
  - d. Raise RPM's to 1200-1500 until air pressure stops rising should stop between 100-125 PSI
  - e. Check horns **CITY HORN** and **HIGHWAY HORN**
9. Put truck in 1<sup>st</sup> gear and release the Tractor brakes (Push in Yellow Button)
  - a. Slowly release clutch until you feel the truck tug on the trailer, and then push the clutch back in, what your checking here is that the fifth wheel is locked, Trailer spring/Parking brakes work, and that your tandems are locked.
10. **SHUT THE TRUCK OFF** with the transmission still in 1<sup>st</sup>
  - a. Turn the ignition back on but **NOT** the truck
  - b. Release the Trailer brakes (push in the red button)
  - c. After the initial drop in air pressure make sure that you **DO NOT** lose more than 3 PSI in a minute
  - d. Then fully apply service brake (the foot brake) and hold it you should not loose more than 4 PSI in a minute

- e. Begin pumping down the brakes, the low air pressure alarm and light should come on when the air pressure drops below 60 PSI
- f. The Red and Yellow button should pop out when the air pressure is between 20-40 PSI the red button should pop out first if not you have a problem, What your checking here is your tractor protection valve

- 11. Ask the instructor if he/she wants you to get out and check your lights
- 12. Then shut the ignition off and say: "That completes my pre-trip inspection".

### **ADDITIONAL THINGS TO DO IN REAL LIFE AFTER YOUR TEST**

- 1. Do a tug test with the Red button pushed in and the yellow one out to check the Spring/Parking brakes on the tractor
- 2. After both tug test release both tractor and trailer (push both buttons in) and roll forward and press the brake pedal to check service brakes
- 3. Roll forward some more and just apply the trailer service brakes with the Trolley bar on the steering column or dash board to check the service brakes on just the trailer.