

Scope of work for Installation and Commissioning of Air Spring Control Equipments in LHB Coaches

1.0 Scope of work for Installation and Commissioning of Air Spring Control Equipments in different variants of LHB Coaches shall include following, as per their respective drawings:

- 1.1 Fitment of all the equipments, pipe & pipe fittings of Air Spring System
- 1.2 Leakage and functional testing of Air Spring System

2.0 Applicable Drawings:

Sn	Type of Coach	Drawing No.
1	LWACCN, LWACCW, LWFAC LWCBAC, LWFCWAC	LW36243
2	LWSCN	LS36129
3	LSDD	LG36007, LG36003, LG36005, LG36103
4	LSLRD	LR36431
5	LWSCZ	LJ36128
6	LVPH	VP36136
7	Any Other Variant	Will be advised by Shop Officers

Note: Firms should refer the latest drawings available with Shop.

3.0 Tools Required:

- 3.1 Portable Electric/Pneumatic Drilling Machines
- 3.2 Set of Drill Bits/Taps
- 3.3 Hack Saw
- 3.4 Hammers
- 3.5 Measuring Tapes
- 3.6 Set of Screw Drivers
- 3.7 Powered/Motorised Screw drivers
- 3.8 Angle Grinder
- 3.9 Pipe Wrench
- 3.10 Bench Vice and Pipe Vice
- 3.11 Allen Key Set
- 3.12 Ratchet & Sockets
- 3.13 Stop Watch
- 3.14 Arc Welding Set

4.0 Tentative Procedure for Work:

- 4.1 Set and fix all brackets with under frame members for clamping the pipes and/or fixing the devices with appropriate hardware/welding as per respective drawing.
- 4.2 Lift the Aux. Reservoir 150 Ltrs with the help of fork lifter and position, set & fix with under frame members with the help of Reservoir Suspension arrangement & appropriate hardware as per respective drawing. Ensure the proper tightness of the reservoir.



- 4.3 Set and fix all the pipes for Air Spring System with under frame member with the help of pipe fittings e.g. Tee reducer, Isolating Cock, Equal Tee, Two Way Dirt Collector, Check Valve, Brackets etc. and appropriate hardware as per respective drawing.
- 4.4 Connect the Air Spring Control Equipments with Air Brake pipe lines.
- 4.5 All joints should be properly tightened to avoid any leakage.
- 4.6 Ensure the all connections as per respective drawing.
- 4.7 Test air leakage and proper functioning of Air Spring System.

5.0 Terms & Conditions:

5.1 Miscellaneous Terms and Conditions:

5.1.1 Formalities for starting the execution of work:

- 5.1.1.1 The Firm's Representative shall report to Dy.CME/Fur for the completion of formalities required for the deployment of their staff to execute the work in Furnishing Shop of RCF.
- 5.1.1.2 The Firm's Representative shall submit an application in the Format attached as Annexure-1, for the permission to work in Furnishing Shop of RCF.
- 5.1.1.3 The Firm's Representative shall also provide the following documents related to their staff (going to be deputed in Furnishing Shop of RCF for the execution of work), along with the above application:
 - 5.1.1.3.1 Copies of Aadhar Card.
 - 5.1.1.3.2 Copies of Education Certificate.
 - 5.1.1.3.3 Evidence being the Firm staff (Copies of Identity Card or Appointment Letter issued by the Firm)
 - 5.1.1.3.4 Evidence of Induction Training given to staff for making them competent to execute the work under Scope of Work.
 - 5.1.1.3.5 Skill Matrix and Competency Data Sheet of staff in the latest Format. Specimen format is attached as Annexure-2.
- 5.1.1.4 The Firm's Representative shall coordinate with the Furnishing's Engineers nominated by Dy.CME/Fur for getting issue the Gate Passes for their Staff. Gate Passes with photo Identity will be issued by RCF administration but getting police verification is the responsibility of the Firm.

Note for Para 5.1.1 above:

- a. Firm's Representative should be the paid employee of the Firm or the owner himself of the Firm.
- b. Firm shall mean here the Firm itself who is supplying the material. If the Firm supplying the material, hires any other Firm for the execution of work or outsourced the execution of work to other Firm, then Firm shall means, the Firm who is authorized by the Material Supplying Firm.
- c. Staff going to be deployed for the execution of work should be the paid employees of the Firm.

5.1.2 Free Supply items by RCF:

- 5.1.2.1 Fork Lifter for in house handling of heavy material
- 5.1.2.2 Electricity, Compressed Air and Water Supply
- 5.1.2.3 Single Wagon Testing Rig (SWTR)

5.1.3 Conditions related to execution of work:

- 5.1.3.1 The Firm shall depute his Supervisor to coordinate with Shop Official and to supervise the execution of work. The Firm shall provide the Mobile Numbers of his deputed Supervisor to the Shop Officials.



- 5.1.3.2 Coaches for the execution of work under Scope of Work will be allotted to the Firm by the Engineer nominated by Dy.CME/Fur.
- 5.1.3.3 The Firm has to draw the material from Furnishing Depot of RCF through Furnishing Progress Section and move it to the working place/coach and stacked in proper manner at stage or nominated area. Material Handling Equipment like Fork Lifter in operative condition for moving of material from Furnishing Depot to working place/coach will be provided by Furnishing Progress Section of RCF but the Firm has to arrange his own driver having valid driving licence to drive the fork lifter.
- 5.1.3.4 Pipes, Pipe Fittings, Clamps, Brackets, Hardware as per respective drawing and Grease, Sealing Tapes, Air Brake Testing Equipments will be provided by RCF, Kapurthala. Crimping Machine/ Crimping Hand Tools/ Die for making ferrule joints will be arranged by Firm itself.
- 5.1.3.5 All the tools machines and consumables viz. Drill Machines, Set of Drill bits, Set of Tap, Hacksaw, Hammer, Set of Spanners, Set of Screw Drivers etc. and Lighting arrangement inside the coach etc. and work bench, ladder & working platform etc. as required to execute work as per Scope of Work shall be arranged by the Firm. The Firm shall use safe tools. Proper extension boards shall be used. Extension wires with joints and without insulation shall not be used. All the tools should have proper electrical plugs. Empty drums of paint or adhesive shall not be used as stools/tables.
- 5.1.3.6 Suitable drilling/tapping/re-tapping/cutting/welding shall be done by the Firm for fixing/mounting of items/assemblies whereas required as per respective drawings.
- 5.1.3.7 The Firm shall maintain Quality of work and good workmanship and must ensure that:
- 5.1.3.7.1 Latest applicable version of RCF's issued Working Instructions is being followed for the execution of work under scope of work.
- 5.1.3.7.2 Latest applicable alteration/versions of the drawings are being followed as per PSL/Design Master List. The notes given in the drawings are also being followed.
- 5.1.3.7.3 All hardware is being fitted as per drawing.
- 5.1.3.7.4 All bolts (if shown in drawing) are fully tightened to get spring washer flat.
- 5.1.3.7.5 All screws (if shown in drawing) are properly tightened and its fitment is aesthetically pleasing.
- 5.1.3.7.6 Screws/bolts are not being hammered.
- 5.1.3.8 **The Firm shall complete the execution of work under scope of work in a coach within next 3 consecutive working shift from the shift in which that particular coach is allotted.**
- 5.1.3.9 The Firm shall remove the excess scrap and scattered material from the coach/site after completion of work. Firm's staff shall not dump sweeping, garbage here and there. It will be dumped in nominated bins.
- 5.1.3.10 Stage Inspection of application work shall be carried out by the Dy.CME/Fur or his Authorized Engineer. However, final clearance of coach shall be done by Quality Department of RCF.
- 5.1.3.11 Any inspection points raised on the work done under Scope of Work, till the dispatch of the coach, shall be cleared by the Firm within 02 hours of its reporting to the Firm's Supervisor.
- 5.1.3.12 **The Firm should be capable to produce at least 08 coaches per day with the execution of work under Scope of Work. However the Firm has to adhere, the requirement of RCF in this regard.**
- 5.1.3.13 The Firm shall be solely responsible for the orderly and proper conduct of his staff during the period of work inside the RCF/KXH. The staff should be polite and courteous. No food items shall be allowed at the work place. All the food to be consumed in canteen.

5.1.3.14 The Firm will take care of his workmen and will provide necessary & mandatory PPEs as per rules /regulation prevalent in RCF. The Firm shall also ensure that their workmen are using these PPEs while working.

5.1.3.15 Smoking, chewing of Pan/Gutka/ any intoxicant is strictly prohibited at work place.

5.1.3.16 In case of any damage to RCF property, Coach Item or Shell during execution of work, the same shall be repaired/replaced by the Firm.

5.2 Statutory Terms & Conditions:

5.2.1 The Firm shall be responsible to ensure compliance with the provisions of different applicable Acts and the Rules made there under (for the time being in force) e.g. "Minimum Wages Act, 1948", "Apprentices Act", "Payment of Wages Act, 1936", "Contract Labour (Regulation and Abolition) Act, 1970", "Contract labour (Regulation and Abolition) Central Rules 1971", "Employees Provident Fund and Miscellaneous Provisions Act, 1952", "Workmen's Compensation Act 1923", "Factories Act 1948" etc.

5.2.2 The Firm shall comply with all applicable laws, bye-laws rules and regulations for the time being in force pertaining to the employment of local or imported labour and shall take all necessary precautions to ensure and preserve the health and safety of all staff employed directly or through petty contractors or sub-contractors on the works.

5.2.3 The following set of registers should be maintained at the worksite by the Firm and should be shown to the Statutory Authority (i.e. the Labour Enforcement Officers etc.):

Sn.	Form No.	Register
1	XIII	Register of Workman Employed by Contractor
2	XIV	Employment Card
3	XVI	Muster Roll
4	XVII	Register of Wages
5	XVIII	Form of Register of wages cum muster roll
6	XIX	Wage Slip
7	XX	Register of deductions for damage or loss
8	XXI	Register of Fines
9	XXII	Register of Advances
10	XXIII	Register of Overtime

5.2.4 Wage Register should be witnessed by the respective nominated Engineer of Furnishing Shop of RCF.

5.2.5 Payment to laborers has to be made as per the Minimum Wages Act, revised from time to time. Payment to the laborers should be made through Bank Payment System (A/c payee cheques or direct fund transfer) and necessary documentary evidence for the same must be provided to the respective nominated Engineer of Furnishing Shop of RCF.

5.2.6 The normal working hours shall be similar to the working hours of Furnishing Shop of RCF. However Firm staff shall have to work on Sunday or Holiday, if required.

5.2.7 The Firm shall ensure that all Environmental Protection Laws of Central and State Government are unscrupulously followed during the operation and waste disposal.

5.2.8 Preservation of peace: The Firm shall take requisite precautions and use his best endeavors to prevent any riotous or unlawful behavior by or amongst his workmen and other employed directly or through the petty contractors or sub-contractors on the works and for the preservation of peace and protection of the inhabitants and security of property in the neighborhood of the works.

5.3 Penalty Clause:

5.3.1 Penalty of Rs. 500 per event per staff shall be levied upon the Firm if any of their staff found driving Fork Lifter without having valid Driving License or using extension wires with joints

without insulation or using tools without proper electrical plugs or using empty drums of paint/adhesive as stools/tables or hammering the screws/bolts or dumping sweeping/garbage here and there or working without PPEs or smoking, chewing of Pan/Gutka/any intoxicant at work place or taking food at work place.

- 5.3.2 Penalty of Rs. 1000 per delayed shift per coach shall be levied upon the Firm if the work in a coach not gets completed within prescribed time limit.
- 5.3.3 Penalty of Rs. 500 per event shall be levied upon the Firm if excess scrap and scattered material not get removed from the coach/site after completion of work.
- 5.3.4 Penalty of Rs. 125 per delayed hour per coach shall be levied upon the Firm if any defect/deficiency in the work done, not get cleared within the prescribed time limit.
- 5.3.5 Penalty of Rs. 2000 per event shall be levied upon the Firm if they do not work on desired day/shift.
- 5.3.6 **Damage/Loss to the Railway Property by Firm staff:** Cost of the Damage/Loss as accessed by Railway shall be recovered from Firm.

5.4 Special Conditions:

- 5.4.1 Penalty described in penalty clause shall be levied upon the Firm supplying the material even if the same is arising because of their Authorized Firm.
- 5.4.2 The Firm shall comply with the relevant provisions of various Standard/System applicable in RCF e.g. IRIS, Energy Management System etc. and shall provide relevant documents as and when required.
- 5.4.3 Non compliance with the provision of applicable Acts, Rules, Laws, By-Laws, Standard or System by the Firm shall be liable for reduction in the quantity of order or cancellation of order.
- 5.4.4 The Firm shall take all precautionary safety steps to prevent any untoward incident inside the Railway premises. The Firm shall note that no compensation due to any loss of life/material or any other account shall be given by the Railways and Firm shall have to pay all compensation in case of any accident, injury to the labour.



Annexure-1

Date: _____

To

Dy.CME/Fur
RCF/KXH**Sub:** Permission to work in Furnishing Shop of RCF.**Ref:** P.O No. _____ dated _____.

Sir,

Vide above referred letter, I/we have received order for the Supply, Installation & Commissioning of _____ * (*give description of the item).

Kindly permit ours following staff for Installation & Commissioning of said items in Furnishing Shop of RCF.

Sn	Name of Staff	Father/Husband Name	Mobile No.	Aadhar No.

DECLARATION:

I _____ S/o Sh. _____ owner/authorized representative of M/s _____ do here by affirm and declare that all the above Staff are covered under ESI/Medical Insurance and continuously residing in Punjab i.e. none of the above staff has come from other State to Punjab in last 15 days. In case this information is found to be incorrect, I will be personally responsible for the same.

Stamp & Signature

Contact No. _____

Email _____



कार्य प्रबंधक/फर्निशिंग
Works Manager/Furnishing
रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory, Kapurthala

Annexure-2

RAIL COACH FACTORY, KAPURTHALA / रेल कोच फैक्टरी, कपूरथला
SKILL MATRIX/ कौशल मैट्रिक्स
Business Management System(ISO/TS 22163)/बिजनेस मैनेजमेंट सिस्टम (आईएसओ / टीएस 22163)

Form No/फॉर्म नं- PRF 5002

Version/संस्करण-2.0

Name of Process:																		
Working Skill ->																		
Name	Emp No.	Designation																
			E															
			A															
			E															
			A															
E: Expected Competence Level			Level – 1 : Cannot do the job (Learner)						Level – 3 : Can work Independently (Advanced)									
A : Actual Competence Level			Level – 2 : Can do under supervision (Basic)						Level – 4 : Can train others (Coach)									

Signature of Supervisor (Name/ Designation/Date)

Signature of Officer (Name/ Designation/Date)



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Works Manager/Furnishing
रेल डिब्बा कारखाना, कपूरथला
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