**二级维护设备商**

接口文档

版本V1.0

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## 接口说明

所有json 对应的字段都必须传过来，如果没有值就传空值

所有内部json对象都用string传值.例子如下

接口地址

[www.xtaowu.com](http://www.xtaowu.com) 测试环境

<https://carlife.shanghaiqixiu.org> 生产环境

{

"sign":"d6eb120462d321e3168ddde2f6bc53a9",

"timestamp":"1608628369",

"image":"http://",

"nonce":"xineksdf",

"companyIdentity":"企业统一社会信用代码"

"entrustRepair":"托修方",

"licensePlate":"车牌号",

"vehicleType":"车型",

"engineNum":"发动机号",

"contractNum":"合同编号",

"chassisNum":"底盘号",

"incomingDate": "2020-12-20",

"faultDiagnosis":"{\"information\":\"故障信息\",\"desc\":\"故障描述\",\"evaluate\":\"评价\"}",

"axleBrakingRatio":"{ \"axle1\": {\"result\":\"结果\", \"limit\":\"限值\",\"evaluate\": \"评价\" },\"axle2\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\",\"axle3\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\",\"axle4\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\",\"axle5\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\",\"axle6\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\" }}",

"brakingUnbalanceRate":"{ \"axle1\": {\"result\":\"结果\", \"limit\":\"限值\",\"evaluate\": \"评价\" },\"axle2\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\",\"axle3\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\",\"axle4\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\",\"axle5\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\",\"axle6\": {\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\" }}",

"vehicle":"{\"vehicleBrakingRate\":{\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\":\"评价\"},\"parkingBrakeRate\":{\"result\":\"结果\",\"limit\":\"限值\",\"evaluate\":\"评价\"} }",

"initialSpeed":"{\"brakingDistance\":{ \"result\":\"结果\",\"limit\":\"限值\",\"evaluate\":\"评价\" },\"mfdd\":{ \"result\":\"结果\",\"limit\":\"限值\",\"evaluate\":\"评价\" },\"brakingStability\":{ \"result\":\"结果\",\"limit\":\"限值\",\"evaluate\": \"评价\" }}",

"gasolineCar":"{\"excessAirRatio\":{\"measured\":\"实测值\",\"limit\":\"限值\"},\"idleSpeedCo\":{\"measured\":\"实测值\",\"limit\":\"限值\"},\"idleSpeedHc\":{ \"measured\":\"实测值\",\"limit\":\"限值\"},\"highIdleSpeedCo\":{\"measured\":\"实测值\",\"limit\":\"限值\"},\"highIdleSpeedHc\":{ \"measured\":\"实测值\",\"limit\":\"限值\"},\"evaluate\":\"评价\" }",

"dieselVehicle":"{\"opticalAbsorptionCoefficient\":{ \"first\":\"1\",\"second\":\"2\",\"third\":\"3\",\"average\":\"平均值\",\"limit\":\"限值\"},\"smokeIntensity\":{ \"first\":\"1\",\"second\":\"2\",\"third\":\"3\",\"average\":\"平均值\",\"limit\":\"限值\"},\"evaluate\":\"评价\" }",

"conclusion": 0,

"inspector":"质量检查员",

"entrustRepairOpinion": 1

}

## 一．上传进厂检验单

/api/maintain/incoming/order

请求方式post

进厂检验单 sign 加密方式

第一步 以下字段按key进行字典升序排列

contractNum=20201222085959&nonce=xineksdf&timestamp=1608628369

第二步 再在前面加上 分配的加密key 然后MD5生成sign值

加密key|contractNum=20201222085959&nonce=xineksdf&timestamp=1608628369

请求参数

{

"companyIdentity":"企业统一社会信用代码",

"image":"进厂单图片地址",

"sign":"sign", //sign 效验码

"timestamp":"1608628369", //当前时间戳

"nonce":"xineksdf", //随机码

"entrustRepair":"托修方",

"licensePlate":"车牌号",

"vehicleType":"车型",

"engineNum":"发动机号",

"contractNum":"合同编号",

"chassisNum":"底盘号",

"incomingDate":"进厂日期",

"faultDiagnosis":{

"information":"故障信息",

"desc":"故障描述",

"evaluate": "评价" //合格，不合格

},

"axleBrakingRatio":{ //轴制动率

"axle1": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

},

"axle2": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

},

"axle3": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

},

"axle4": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

}"axle5": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

},

"axle6": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

}

},

"brakingUnbalanceRate":{ //制动不平衡率

"axle1": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

},

"axle2": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

},

"axle3": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

},

"axle4": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

}"axle5": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

},

"axle6": {

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

}

},

"vehicle":{ //整车

"vehicleBrakingRate":{ //整车制动率

"result":"结果",

"limit":"限值",

"evaluate":"评价" //合格，不合格

},

"parkingBrakeRate":{ //驻车制动率

"result":"结果",

"limit":"限值",

"evaluate":"评价" //合格，不合格

}

},

"initialSpeed":{ // 初速度

"brakingDistance":{ //制动距离

"result":"结果",

"limit":"限值",

"evaluate":"评价" //合格，不合格

},

"mfdd":{ //MFDD

"result":"结果",

"limit":"限值",

"evaluate":"评价" //合格，不合格

},

"brakingStability":{ //制动稳定性

"result":"结果",

"limit":"限值",

"evaluate": "评价" //合格，不合格

}

},

"gasolineCar":{ //汽油车

"excessAirRatio":{ //过量空气系数（入）

"measured":"实测值",

"limit":"限值"

},

"idleSpeedCo":{ //怠速CO

"measured":"实测值",

"limit":"限值"

},

"idleSpeedHc":{ //怠速HC

"measured":"实测值",

"limit":"限值"

},

"highIdleSpeedCo":{ //高怠速CO

"measured":"实测值",

"limit":"限值"

},

"highIdleSpeedHc":{ //高怠速HC

"measured":"实测值",

"limit":"限值"

},

"evaluate":"评价" //合格，不合格

},

"dieselVehicle":{ //柴油车

"opticalAbsorptionCoefficient":{//光吸收系数

"first":"1",

"second":"2",

"third":"3",

"average":"平均值",

"limit":"限值"

},

"smokeIntensity":{ //烟度值（Rb）

"first":"1",

"second":"2",

"third":"3",

"average":"平均值",

"limit":"限值"

},

"evaluate":"评价" //合格，不合格

},

"conclusion": 1 //1合格，0不合格

"inspector":"质量检查员",

"entrustRepairOpinion": 1 //1同意，0不同意

}

返回结果

{

"code": 0,

"message": "success",

"data": {

"incomingInspectionId": "20201222105974" //进厂检验单id

}

}

## 二．提交竣工检验单

/api/maintain/completed/submitInspectionOrder

竣工检验单 sign 加密方式

第一步 以下字段按key进行字典升序排列

id=123&incomingInspectionId=1&nonce=xineksdf&timestamp=12321312321

第二步 再在前面加上 分配的加密key 然后MD5生成sign值

分配的加密key|companyIdentity=1&nonce=xineksdf&timestamp=12321312321

请求方式post

请求参数

{

"companyIdentity":"企业统一社会信用代码"

"incomingInspectionId": "123", //进厂检查报告id

"sign":"验签",

"nonce":"随机数",

"timestamp":"时间戳",

"clean": 0, //清洁 0为不合格，1为合格

"fasten": 0,//牢固 0为不合格，1为合格

"lubricating": 0,//润滑 0为不合格，1为合格

"seal": 0,//密封 0为不合格，1为合格

"accessoryEquipment": 0,//附属设备 0为不合格，1为合格

"engineBehavior": 0,//发动机工作状况 0为不合格，1为合格

"engineEquipment": 0,//发动机装备 0为不合格，1为合格

"steeringMechanism": 0,//转向机构 0为不合格，1为合格

"tire": 0,//轮胎 0为不合格，1为合格

"suspension": 0, //悬架 0为不合格，1为合格

"shockAbsorber": 0,//减震器 0为不合格，1为合格

"axle": 0,//车桥 0为不合格，1为合格

"clutch": 0,//离合器 0为不合格，1为合格

"gearbox": 0,//变速器、传动轴、主减速器 0为不合格，1为合格

"tractionConnectingDevice": 0,//牵引连接装置和锁止机构 0为不合格，1为合格

"headlight": 0,//前照灯 0为不合格，1为合格

"signalIndicating": 0,//信号指示装置 0为不合格，1为合格

"meter": 0,//仪表 0为不合格，1为合格

"visualInspectionImage": "imge",//外观检查图片

"faultDiagnosis": { //事故诊断

"estimate": "有", //无 or 有

"describe": "事故描述",

"evaluate": "评价" //合格 or 不合格

},

"totatorInertia": { //转向盘最大自由转动量

"totatorInertia": "转向盘最大自由转动量",

"evaluate": "评价",

"limit": "限值"

},

"sideSlip": { //转向轮横向侧滑量（m/km）

"axle1": { //第一转向轴

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axle2": { //第二转向轴

"result": "结果",

"evaluate": "评价",

"limit": "限值"

}

},

"axleBrakingRatio": { //车轴制动率

"axis1": { //轴一

"result": "结果",

"evaluate": "评价", //评价

"limit": "限值"

},

"axis2": { //轴二

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis3": { //轴三

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis4": { //轴四

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis5": { //轴五

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis6": { //轴六

"result": "结果",

"evaluate": "评价",

"limit": "限值"

}

},

"brakingUnbalanceRate": { //制动不平衡率

"axis1": { //一轴

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis2": {//二轴

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis3": {//三轴

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis4": {

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis5": {

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"axis6": {

"result": "结果",

"evaluate": "评价",

"limit": "限值"

}

},

"vehicle": { //整车

"vehicleBrakingRate": { //整车制动率

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"parkingBrakeRate": { //驻车制动率

"result": "结果",

"evaluate": "评价",

"limit": "限值"

}

},

"initialSpeed": { // 初速度

"brakingDistance": { //制动距离

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"mfdd": { //MFDD

"result": "结果",

"evaluate": "评价",

"limit": "限值"

},

"brakingStability": { //制动稳定性

"result": "结果",

"evaluate": "评价",

"limit": "限值"

}

},

"headlightCheck": { //前照灯

"leftOuter": { //左外

"lightHigh": 123, //灯高(mm)

"distanceLight": { //远光光强

"result": "结果",

"limit": "限值",

"evaluate": "评价"

},

"distanceLightExcursion": { //远光偏移（mm/10m）

"vertical": "垂直",

"verticalLimit": "限值",

"verticalEvaluate": "评价",

"level": "水平",

"levelLimit": "限值",

"levelEvaluate": "评价"

},

"nearLightExcursion": { //近光偏移（mm/10m）

"vertical": "垂直",

"verticalLimit": "限值",

"verticalEvaluate": "评价",

"level": "水平",

"levelLimit": "限值",

"levelEvaluate": "评价"

}

},

"leftInside": { //左内

"lightHigh": 123,//灯高(mm)

"distanceLight": {//远光光强

"result": "结果",

"limit": "限值",

"evaluate": "评价"

},

"distanceLightExcursion": {//远光偏移（mm/10m）

"vertical": "垂直",

"verticalLimit": "限值",

"verticalEvaluate": "评价",

"level": "水平",

"levelLimit": "限值",

"levelEvaluate": "评价"

},

"nearLightExcursion": {//近光偏移（mm/10m）

"vertical": "垂直",

"verticalLimit": "限值",

"verticalEvaluate": "评价",

"level": "水平",

"levelLimit": "限值",

"levelEvaluate": "评价"

}

},

"rightOuter": { //右外

"lightHigh": 123,//灯高(mm)

"distanceLight": {//远光光强

"result": "结果",

"limit": "限值",

"evaluate": "评价"

},

"distanceLightExcursion": {//远光偏移（mm/10m）

"vertical": "垂直",

"verticalLimit": "限值",

"verticalEvaluate": "评价",

"level": "水平",

"levelLimit": "限值",

"levelEvaluate": "评价"

},

"nearLightExcursion": {//近光偏移（mm/10m）

"vertical": "垂直",

"verticalLimit": "限值",

"verticalEvaluate": "评价",

"level": "水平",

"levelLimit": "限值",

"levelEvaluate": "评价"

}

},

"rightInside": { //右内

"lightHigh": 123,//灯高(mm)

"distanceLight": {//远光光强

"result": "结果",

"limit": "限值",

"evaluate": "评价"

},

"distanceLightExcursion": {//远光偏移（mm/10m）

"vertical": "垂直",

"verticalLimit": "限值",

"verticalEvaluate": "评价",

"level": "水平",

"levelLimit": "限值",

"levelEvaluate": "评价"

},

"nearLightExcursion": {//近光偏移（mm/10m）

"vertical": "垂直",

"verticalLimit": "限值",

"verticalEvaluate": "评价",

"level": "水平",

"levelLimit": "限值",

"levelEvaluate": "评价"

}

}

},

"gasolineCar": { //汽油车

"excessAirRatio": { //过量空气系数

"measured": "实测值",

"limit": "限值",

"evaluate": "评价" //合格，不合格

},

"idleSpeedCo": { //怠速CO

"measured": "实测值",

"limit": "限值",

"evaluate": "评价" //合格，不合格

},

"idleSpeedHc": { //怠速HC

"measured": "实测值",

"limit": "限值",

"evaluate": "评价" //合格，不合格

},

"highIdleSpeedCo": { //高怠速CO

"measured": "实测值",

"limit": "限值",

"evaluate": "评价" //合格，不合格

},

"highIdleSpeedHc": { //高怠速HC

"measured": "实测值",

"limit": "限值",

"evaluate": "评价" //合格，不合格

}

},

"dieselVehicle": { //柴油车

"opticalAbsorptionCoefficient": { //过量空气系数（入） //光吸收系数

"first": "1",

"second": "2",

"third": "3",

"average": "平均值",

"limit": "限值",

"evaluate": "评价" //合格，不合格

},

"smokeIntensity": { //烟度值（Rb）

"first": "1",

"second": "2",

"third": "3",

"average": "平均值",

"limit": "限值",

"evaluate": "评价" //合格，不合格

}

},

"inspectionResult": 0, //检验结果 0为不合格，1为合格

"inspector": "质量检查员",

"inspectionTime": "2020-12-17"

}

返回结果

{

"code":0,

"message":"success"

}

## 三．上传图片

* 请求参数 form-data

| **参数** | **值** |
| --- | --- |
| nonce | 随机数（自己随便生成-–不能超过32位） |
| timestamp | 当前时间戳 |
| companyIdentity | 企业身份标识 |
|  |  |
| sign | MD5签名（根据上面的参数MD5生成） |
| file | 图片流文件 |

* 规则

MD5签名 = MD5（企业MD5加密key|companyIdentity=企业身份标识&nonce=随机数&timestamp=时间戳）

* 示例

sign = MD5（secretKey|companyIdentity=014582238P&nonce=54321&timestamp=1608800951

* 请求方式 post
* 请求地址

www.xtaowu.com/api/maintain/upload/image

{

"code": 0,

"message": "success",

"data": {

"imageUrl": "http://qiniu.xtaowu.com/dev/mb/ber/202012/62830f82d63a4fac8122afde4a39d730"

}

}