

**12JS200T -G7921**

**备 件 目 录**

**Spare parts list**

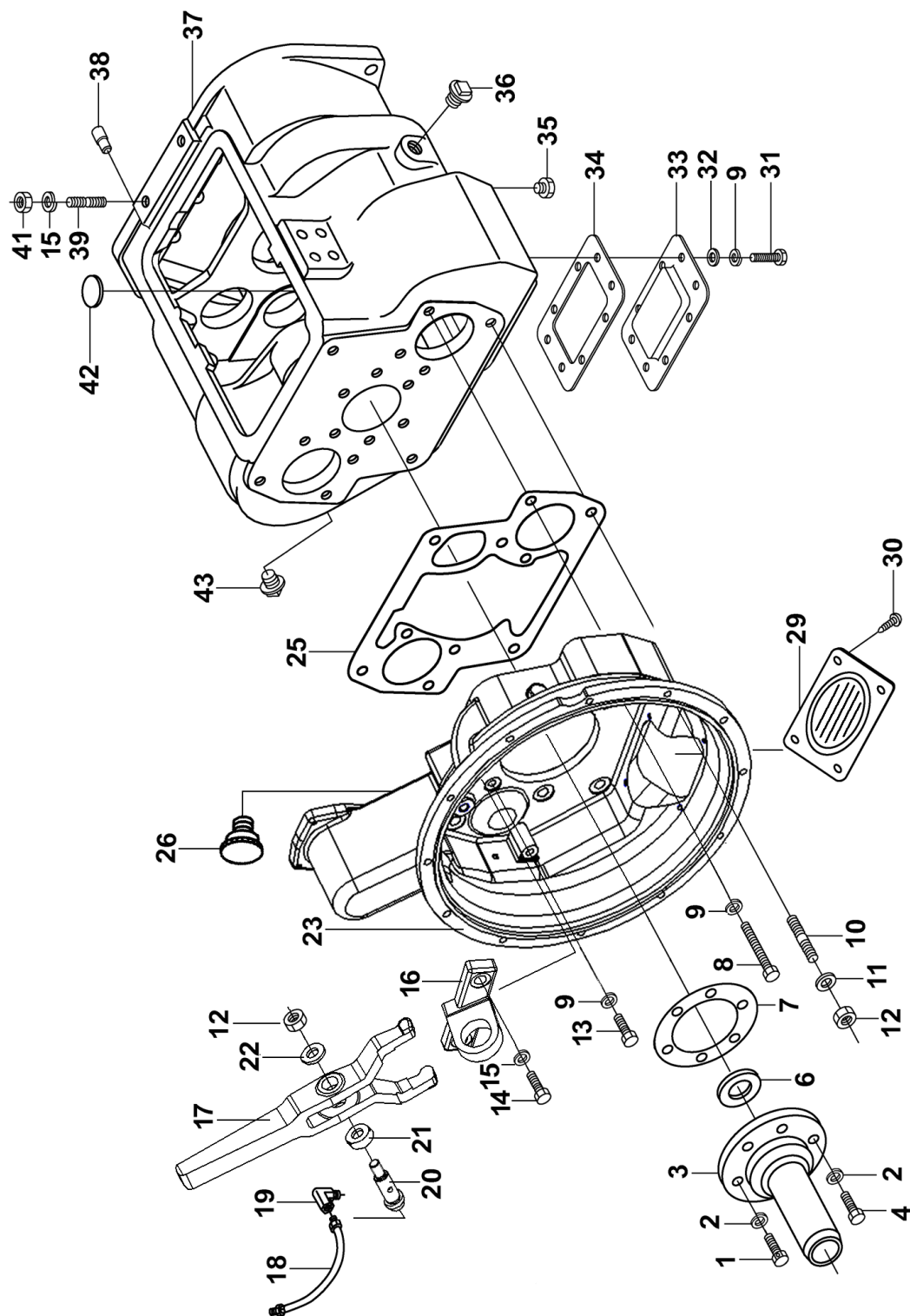
**Shaanxi Fast Gear Co.ltd.**

**陕西法士特齿轮有限责任公司**

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# 一、变速器壳体总成 Housing of clutch and transmission



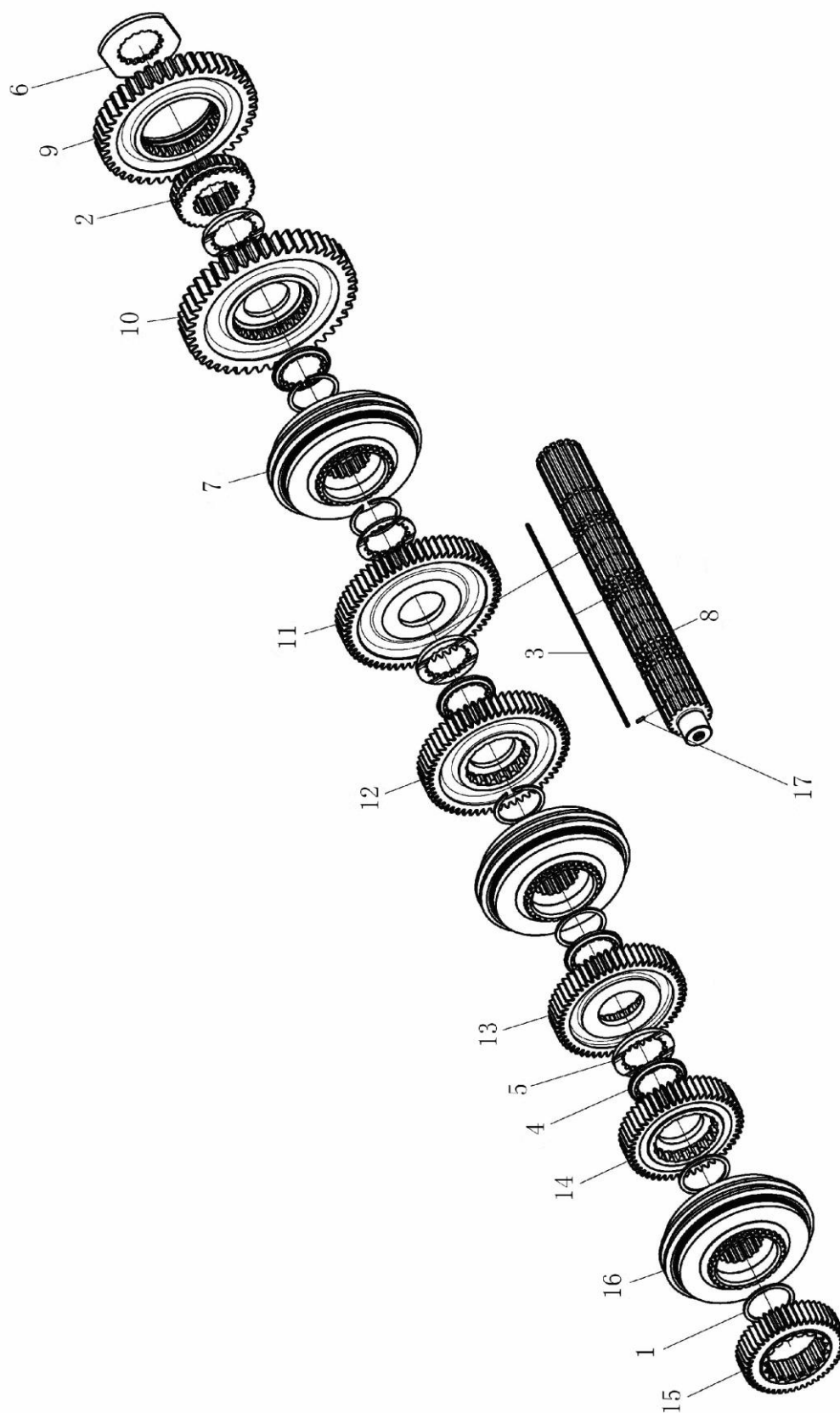
法士特备件目录

| 序号 | 代号               | 名称                                   | 数量 |
|----|------------------|--------------------------------------|----|
| 1  | Q1701032         | 六角头头部带孔螺栓 M10×32<br>Capscrew         | 2  |
| 2  | GB93-87          | 弹簧垫圈 10<br>lockwasher                | 6  |
| 3  | JS180-1701040-1  | 一轴轴承盖<br>Cover                       | 1  |
| 4  | GB5782-86        | 六角头螺栓 M10×32<br>Capscrew             | 4  |
| 6  | F500A-1802191    | 一轴轴承盖油封<br>Oil seal                  | 1  |
| 7  | 14311            | 一轴轴承盖衬垫<br>Gasket                    | 1  |
| 8  | GB5783-86        | 小六角头螺栓 M12×90<br>Capscrew            | 2  |
| 9  | GB93-87          | 弹簧垫圈 12<br>lockwasher                | 8  |
| 10 | C01056           | 双头螺栓<br>Stud                         | 6  |
| 11 | Q40316           | 垫圈 16<br>Washer                      | 2  |
| 12 | GB889-80         | 六角尼龙圈锁紧螺母 M16×1.5<br>Nylon inset nut | 1  |
| 13 | GB5782-86        | 小六角头螺栓 M12×38<br>Capscrew            | 2  |
| 14 | GB21-76          | 小六角头螺栓 M16×45<br>Capscrew            | 2  |
| 15 | Q40316           | 弹簧垫圈 16<br>lockwasher                | 2  |
| 16 | JS180-1601024-1  | T 型板<br>Release york bracket         | 1  |
| 17 | JS180-1601021-17 | 拨叉<br>Release york                   | 1  |
| 18 | 51016            | 油管总成                                 | 1  |
| 19 | 12880            | 45° 弯管接头<br>Connector                | 1  |
| 20 | JS180-1601023-1  | 拨叉轴<br>Rease york shaft              | 1  |
| 21 | GE25ES           | 关节轴承<br>Knuckle bearing              | 1  |
| 22 | JS180-1601022-1  | 垫片<br>Washer                         | 1  |
| 23 | 15410-50         | 离合器壳体                                | 1  |

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|    |                    |                                  |   |
|----|--------------------|----------------------------------|---|
|    |                    | <b>Clutch housing</b>            |   |
| 25 | 20822              | 离合器壳体衬垫<br><b>Gasket</b>         | 1 |
| 26 | GB1154-79          | 旋盖式油杯 A-6<br><b>Oil cup</b>      | 1 |
| 29 | JS180-1701016-3    | 离合器手孔盖<br><b>Cover</b>           | 1 |
| 30 | GB21-76            | 小六角头螺栓 M8×12<br><b>Capscrew</b>  | 4 |
| 31 | GB21-76            | 小六角头螺栓 M12×25<br><b>Capscrew</b> | 8 |
| 32 | Q40112             | 平垫圈<br><b>Washer</b>             | 8 |
| 33 | 16596              | 底取力窗口盖<br><b>Cover</b>           | 1 |
| 34 | 16929              | 底取力窗口衬垫<br><b>Gasket</b>         | 1 |
| 35 | 6JS160T-1709587-1  | 油堵<br><b>Oil plug</b>            | 1 |
| 36 | 6JS160T-1709588-1  | O 型密封圈<br><b>O-ring</b>          | 1 |
| 37 | 12JS160T-1701015-9 | 变速器壳体<br><b>Main case</b>        | 1 |
| 38 | 14334              | 后盖定位销<br><b>Pin</b>              | 2 |
| 39 | Q1231640           | 双头螺栓<br><b>Capscrew</b>          | 2 |
| 41 | GB52-76            | 六角螺母 M16×1.5<br><b>Nut</b>       | 2 |
| 42 | 14373              | 圆磁铁                              | 3 |
| 43 | Q61304             | 方头锥形螺塞                           | 1 |

## 二、二轴总成 Main shaft assembly



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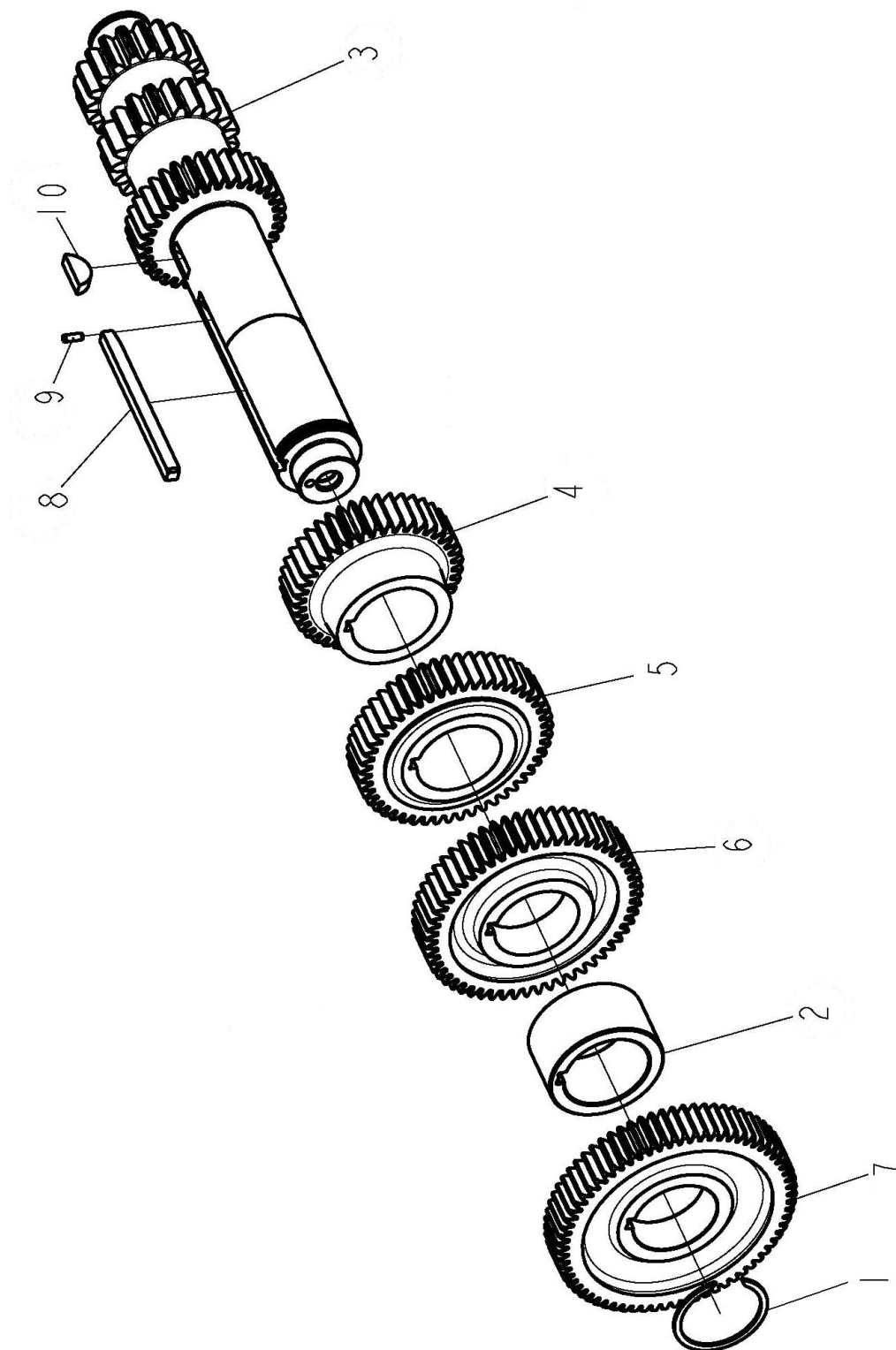
| 代号 | 零件号               | 零件名称.                                              | 数量 |
|----|-------------------|----------------------------------------------------|----|
| 1  | 16763             | 止动环<br>Stop ring                                   | 6  |
| 2  | 12JS160T-1701108  | 滑套<br>Sliding bush                                 | 1  |
| 3  | 12JS160T-1701121  | 二轴六角键<br>Hexagonal key of main shaft               | 1  |
| 4  | 12JS160T-1701122  | 二轴齿轮花键垫<br>spling gasket of main shaft gears       | 5  |
| 5  | 12JS160T-1701123  | 二轴齿轮隔垫<br>gasket for main shaft gears              | 3  |
| 6  | 12JS160T-1701125  | 二轴倒档齿轮垫片<br>gasket for reverse gear of mainshaft   | 1  |
| 7  | 12JS160T-1701170  | 一二档同步器总成<br>Synchronizer of 1-2 speed gears        | 1  |
| 8  | 12JS200T-1701105  | 二轴<br>Main shaft                                   | 1  |
| 9  | 16JS200T-1701110  | 二轴倒档齿轮<br>Reverse gear of main shaft               | 1  |
| 10 | 12JS200T -1701111 | 二轴一档齿轮<br>1 <sup>st</sup> speed gear of main shaft | 1  |
| 11 | 12JS200T -1701112 | 二轴二档齿轮<br>2 <sup>nd</sup> speed gear of main shaft | 1  |
| 12 | 12JS200T -1701113 | 二轴三档齿轮<br>3 <sup>rd</sup> speed gear of main shaft | 1  |
| 13 | 12JS200T -1701114 | 二轴四档齿轮<br>4 <sup>th</sup> speed gear of main shaft | 1  |
| 14 | 12JS200T -1701115 | 二轴五档齿轮<br>5 <sup>th</sup> speed gear of main shaft | 1  |
| 15 | 12JS200T -1701116 | 一轴齿轮                                               | 1  |

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|    |                |                                                                             |   |
|----|----------------|-----------------------------------------------------------------------------|---|
|    |                | Gears of input shaft                                                        |   |
| 16 | JS130T-1701180 | 同步器总成<br>3 <sup>rd</sup> and 4 <sup>th</sup> speed synchronizer<br>assembly | 2 |



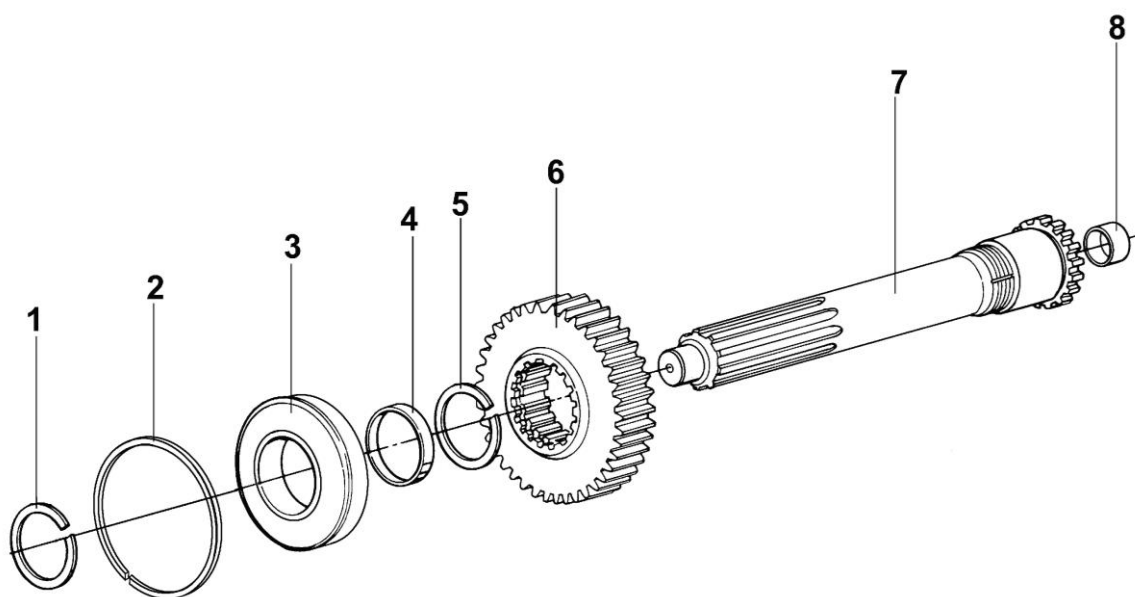
### 三、中间轴总成 Countershaft assembly



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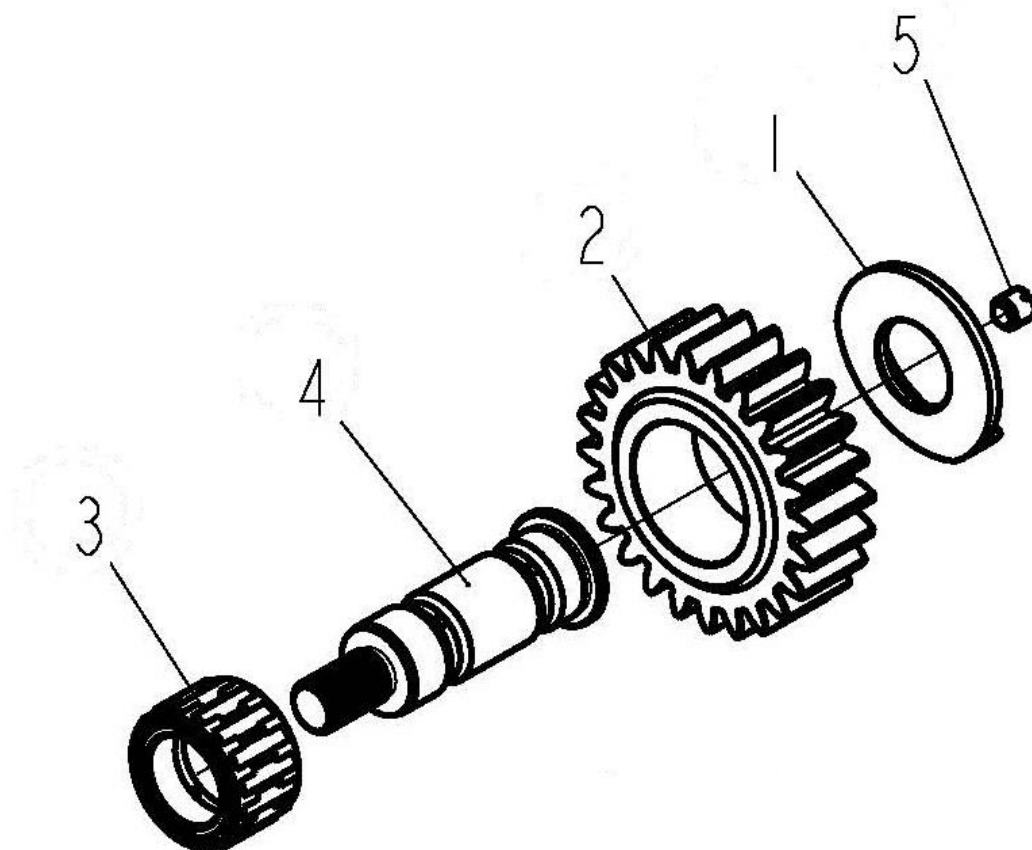
| 代号 | 零件号               | 零件名称.                                                  | 数量 |
|----|-------------------|--------------------------------------------------------|----|
| 1  | 19198             | 中间轴止动环<br>stop ring of countershaft                    | 1  |
| 2  | 12JS160T-1701057  | 隔套<br>Distance sleeve                                  | 1  |
| 3  | 12JS200T-1701048  | 中间轴<br>countershaft                                    | 1  |
| 4  | 12JS200T -1701050 | 中间轴三档齿轮<br>3 <sup>rd</sup> speed gear of counter shaft | 1  |
| 5  | 12JS200T -1701051 | 中间轴四档齿轮<br>4 <sup>th</sup> speed gear of counter shaft | 1  |
| 6  | 12JS200T -1701052 | 中间轴五档齿轮<br>5 <sup>th</sup> speed gear of counter shaft | 1  |
| 7  | 12JS200T -1701057 | 中间轴传动齿轮<br>Driver gear of counter shaft                | 1  |
| 8  | 16JS200T-1701055  | 中间轴四方键<br>Square key of countershaft                   | 1  |
| 9  | Q5280514          | 弹性圆柱销<br>Spring column pin                             | 1  |
| 10 | X-6-E             | 半圆键<br>Semi-circular key                               | 1  |

## 四、一轴总成 Input shaft assembly



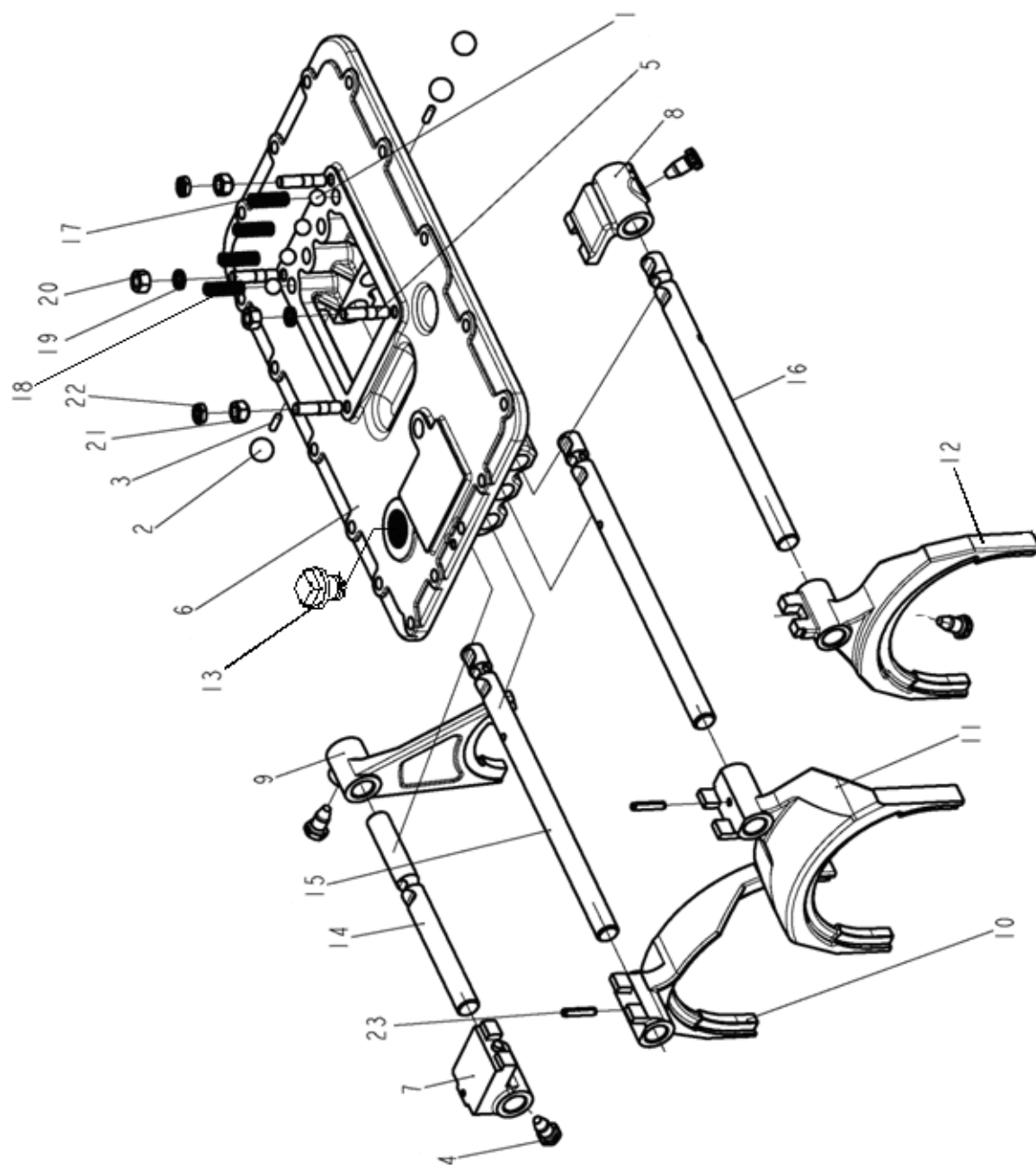
| 代号 | 零件号               | 零件名称.                               | 数量 |
|----|-------------------|-------------------------------------|----|
| 1  | 16980             | 轴用压扁钢丝挡圈<br>Circlip for axle        | 1  |
| 2  | C01020            | 止动环<br>Stop ring                    | 1  |
| 3  | 150212K           | 一面带止动槽和防尘盖的单列向心球轴承<br>Bearing       | 1  |
| 4  | 16463             | 齿轮隔垫<br>Gasket for gears            | 1  |
| 5  | 14750             | 止动环<br>Stop ring                    | 1  |
| 6  | 12JS200T-1701116  | 一轴齿轮                                | 1  |
| 7  | JS180-1701030-1-S | 一轴<br>Input shaft                   | 1  |
| 8  | 16566             | 二轴导套<br>Guide sleeve for main shaft | 1  |

## 五、倒档中间轴总成 Reverse countershaft assembly



| 代号 | 零件号               | 零件名称.                                | 数量 |
|----|-------------------|--------------------------------------|----|
| 1  | 12JS160T-1701084  | 杯形倒档垫圈<br>Washer                     | 1  |
| 2  | 12JS200T -1701083 | 倒档中间齿轮<br>Reverse countershaft gears | 1  |
| 3  | DS100-1701085     | 滚针轴承<br>Bearing                      | 1  |
| 4  | JS220-1701082     | 倒档中间轴<br>reverse countershaft        | 1  |
| 5  | Q2821212          | 开槽平端紧定螺钉<br>flat-end fastening bolt  | 1  |

## 六、上盖总成 Top cover assembly



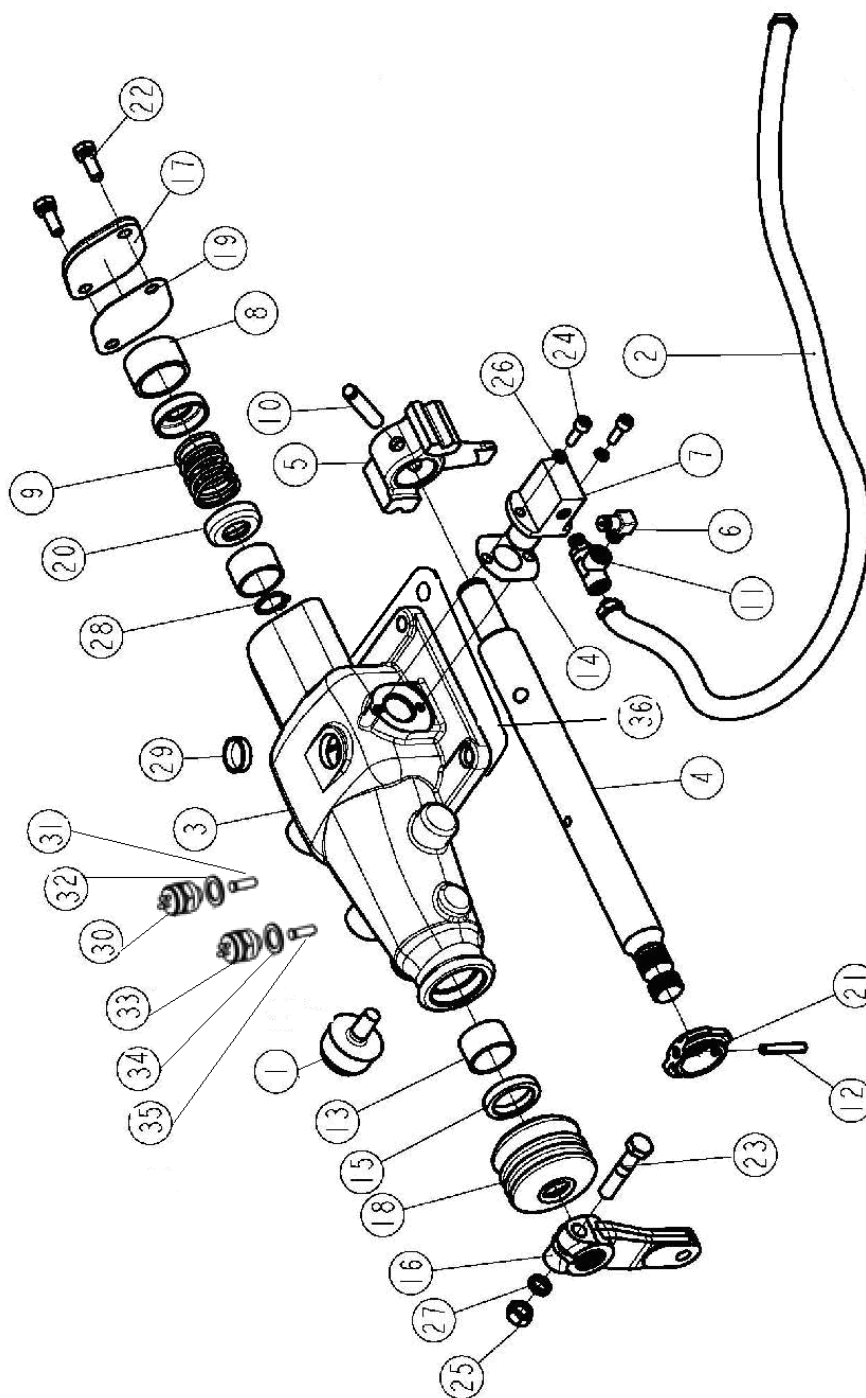
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| 代号 | 零件号              | 零件名称.                                                                                     | 数量 |
|----|------------------|-------------------------------------------------------------------------------------------|----|
| 1  | 12.7G100BGB-T308 | 钢球<br>Steel ball                                                                          | 4  |
| 2  | 19.5G100BGB-T308 | 钢球<br>Steel ball                                                                          | 3  |
| 3  | 1634             | 拨叉轴联锁销<br>Inter locking pin of yoke shaft                                                 | 2  |
| 4  | 3220             | 换档拨叉锁止螺钉<br>locking bolt of shifting yoke                                                 | 3  |
| 5  | 11066            | 双头螺栓<br>Bi-head bolt                                                                      | 4  |
| 6  | 12JS160T-1702015 | 上盖<br>Top cover                                                                           | 1  |
| 7  | 12JS160T-1702050 | 倒档导块总成<br>Reverse guide block                                                             | 1  |
| 8  | 12JS160T-1702054 | 五六档换档导块<br>5 <sup>th</sup> 6 <sup>th</sup> speed guide block                              | 1  |
| 9  | 12JS160T-1702055 | 倒档拨叉<br>Shifting yoke                                                                     | 1  |
| 10 | 12JS160T-1702056 | 一二档拨叉<br>1 <sup>st</sup> and 2 <sup>nd</sup> speed yoke                                   | 1  |
| 11 | 12JS160T-1702057 | 三四档拨叉<br>3 <sup>rd</sup> and 4 <sup>th</sup> speed yoke                                   | 1  |
| 12 | 12JS160T-1702058 | 五六档拨叉<br>5 <sup>th</sup> and 6 <sup>th</sup> speed yoke                                   | 1  |
| 13 | Q614B10          | 方头锥形螺塞                                                                                    | 1  |
| 14 | 12JS160T-1702063 | 倒档拨叉轴<br>Yoke shaft of reverse speed                                                      | 1  |
| 15 | 12JS160T-1702064 | 一二三四档拨叉轴<br>Yoke shaft of 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> | 2  |

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|    |                  |                                                                |   |
|----|------------------|----------------------------------------------------------------|---|
|    |                  | speeds                                                         |   |
| 16 | 12JS160T-1702066 | 五六档拨叉轴<br>Yoke shaft of 5 <sup>th</sup> 6 <sup>th</sup> speeds | 1 |
| 17 | F96084           | 压缩弹簧<br>Compressed spring                                      | 1 |
| 18 | F96085           | 压缩弹簧<br>Compressed spring                                      | 3 |
| 19 | Q40310           | 弹簧垫圈<br>lockwasher                                             | 2 |
| 20 | Q361B10          | 2 型六角螺母<br>Nut                                                 | 2 |
| 21 | X-1-603          | 六角螺母<br>Nut                                                    | 2 |
| 22 | Q351B10          | 六角薄螺母<br>Nut                                                   | 2 |
| 23 | Q5280628         | 弹性圆柱销<br>Column pin                                            | 2 |

## 七、操纵装置总成 Controlling device



| 代号 | 零件号   | 零件名称. | 数量 |
|----|-------|-------|----|
| 1  | 15276 | 通气塞   | 1  |



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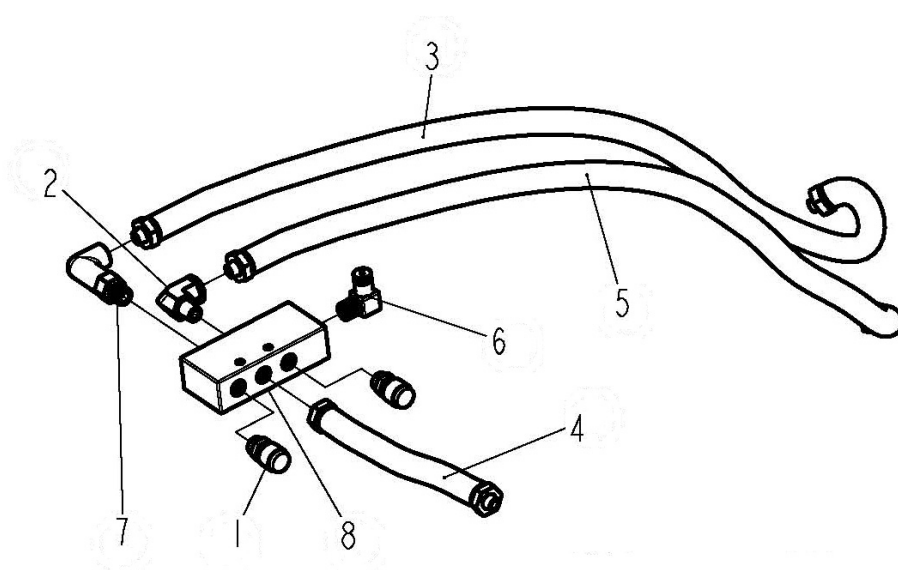
|    |                  |                                         |   |
|----|------------------|-----------------------------------------|---|
|    |                  | Breather plug                           |   |
| 2  | 55534            | 气管总成<br>Pipe assembly                   | 1 |
| 3  | 12JS160T-1703015 | 操纵装置壳体<br>housing of controlling device | 1 |
| 4  | 12JS160T-1703017 | 横向换档杆<br>horizontal shifting lever      | 1 |
| 5  | 12JS160T-1703018 | 拨头<br>plug                              | 1 |
| 6  | 12JS160T-1703021 | 90° 快换接头<br>90° quick shift connecter   | 1 |
| 7  | 12JS160T-1703022 | 气路控制阀<br>gas path controlling valve     | 1 |
| 8  | 12JS160T-1703024 | 限位套<br>Spacing sleeve                   | 1 |
| 9  | 12JS160T-1703027 | 压缩弹簧<br>Compressed spring               | 1 |
| 10 | C03030           | 圆柱销<br>Column pin                       | 1 |
| 11 | C03052           | 三通管接头<br>Three ways connecter           | 1 |
| 12 | C09035           | 弹性圆柱销<br>Spring column pin              | 1 |
| 13 | F91345           | 套<br>Bush of horizontal shifting lever  |   |
| 14 | F91353           | 双 H 气阀衬垫<br>Double H valve gasket       | 1 |
| 15 | F91444           | 油封                                      | 1 |

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|    |           |                                                                |   |
|----|-----------|----------------------------------------------------------------|---|
|    |           | Oil sealing                                                    |   |
| 16 | F96035    | 套<br>Bush of horizontal shifting<br>lever                      | 1 |
| 17 | F99666-2  | 双 H 气阀衬垫<br>Double H valve gasket                              | 1 |
| 18 | F99669    | 油封<br>Oil sealing                                              | 1 |
| 19 | F99672-2  | 套<br>Bush of horizontal shifting<br>lever                      | 1 |
| 20 | F99673-1  | 弹簧座<br>Spring pedestal                                         | 2 |
| 21 | F99681    | 低倒挡开关控制块<br>control device for low and reverse<br>speed switch | 1 |
| 22 | Q1420822  | 六角头螺栓和弹簧垫圈组合件<br>hexagonal bolt and spring<br>gasket           | 2 |
| 23 | Q151B1050 | 六角头螺栓-细牙<br>fine-teeth hexagonal bolt                          | 1 |
| 24 | Q218B0618 | 内六角圆柱头螺钉<br>inner hexagonal column head<br>bolt                | 2 |
| 25 | Q341B10   | 1 型六角螺母<br>Nut                                                 | 1 |
| 26 | Q40306    | 弹簧垫圈<br>lockwasher                                             | 2 |
| 27 | Q40310    | 弹簧垫圈<br>lockwasher                                             | 1 |
| 28 | Q43120    | 轴用弹性挡圈                                                         | 1 |

|    |        |                               |   |
|----|--------|-------------------------------|---|
|    |        | Spring baffle plate for axles |   |
| 29 | Q72224 | 碗形塞片<br>Bowl-shape patch      | 1 |

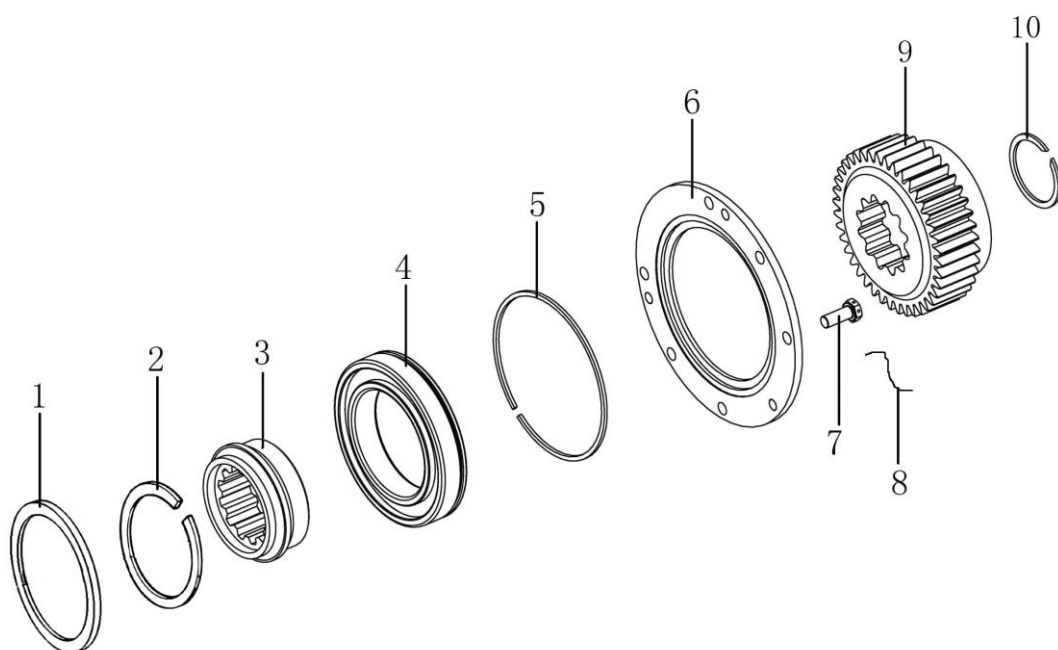
## 八、单 H 阀总成 single H valve



| 代号 | 零件号   | 零件名称.                             | 数量 |
|----|-------|-----------------------------------|----|
| 1  | 7935  | 通气塞<br>Breather plug              | 2  |
| 2  | 12845 | 90 度弯管接头<br>90 degree siphon plug | 1  |
| 3  | 55511 | 气管总成<br>Pipe assembly             | 1  |
| 4  | 55512 | 气管总成                              | 1  |

|   |                  |                                        |   |
|---|------------------|----------------------------------------|---|
|   |                  | Pipe assembly                          |   |
| 5 | 55507            | 气管总成<br>Pipe assembly                  | 1 |
| 6 | 12JS160T-1703021 | 90° 快换接头<br>90 degree syphon connector | 1 |
| 7 | 12JS160T-1703051 | 90° 弯管接头<br>90 degree syphon connector | 1 |
| 8 | 12JS160T-1703052 | 单 H 阀<br>Single H valve                | 1 |

## 九、副箱驱动齿轮总成 Drive gears assembly of auxiliary case

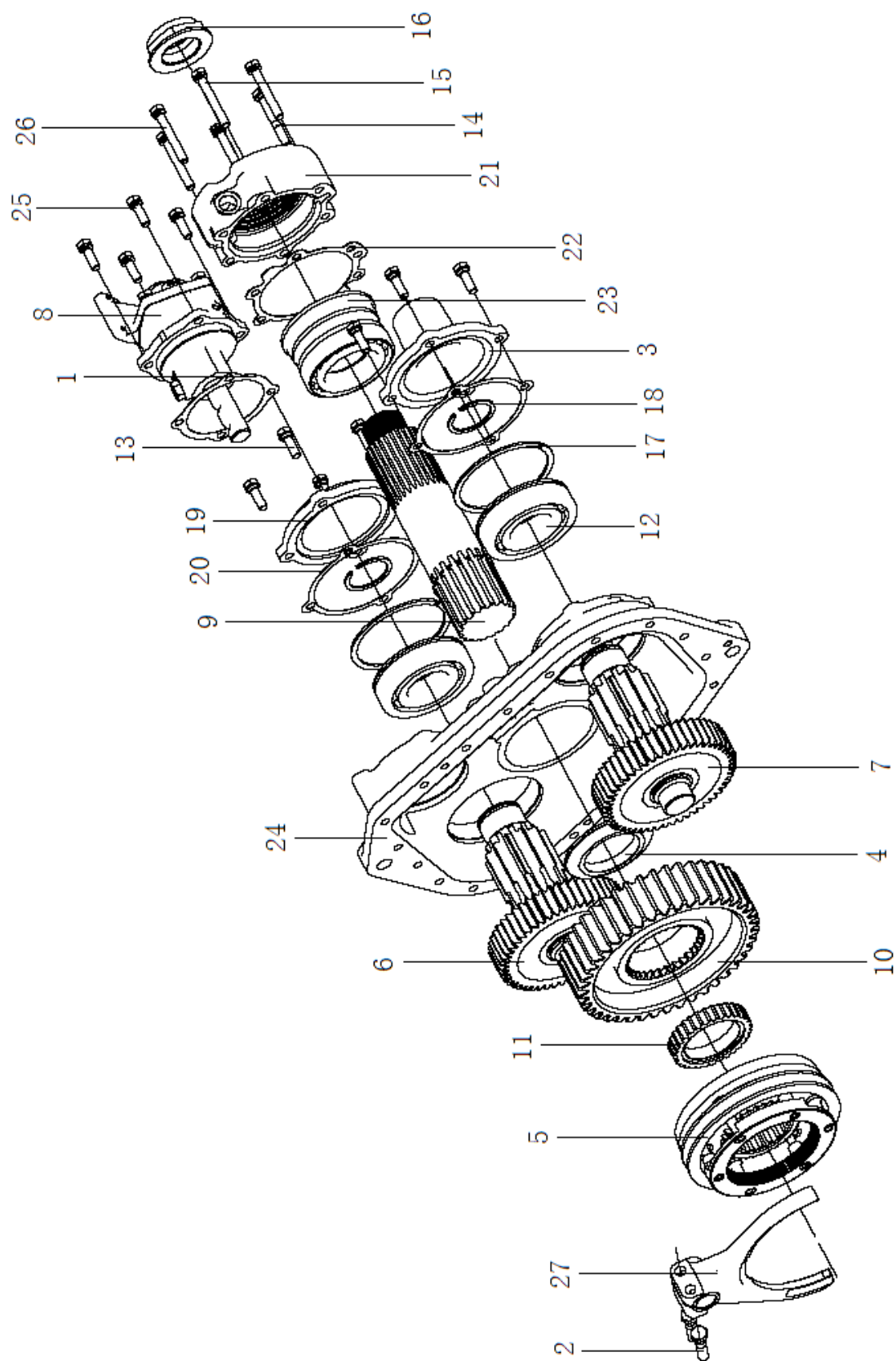


| 代号 | 零件号              | 零件名称.                               | 数量 |
|----|------------------|-------------------------------------|----|
| 1  | 12JS160T-1701107 | 倒档齿轮卡环<br>Snap ring of reverse gear | 1  |

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|    |                  |                                                             |    |
|----|------------------|-------------------------------------------------------------|----|
| 2  | 12JS160T-1701106 | 主轴齿轮垫圈<br>Washer                                            | 1  |
| 3  | 12JS160T-1701124 | 轴承支座<br>Support pedestal of bearing                         | 1  |
| 4  | 50118            | 带止动槽的单列向心球轴承<br>bearing                                     | 1  |
| 5  | C01019           | 止动环<br>Stop ring                                            | 1  |
| 6  | JS220-1707031    | 副箱轴承定位盘<br>allocation plate of bearing in<br>auxiliary case | 1  |
| 7  | C09032           | 六角头头部带孔螺栓<br>Capscrew with hole on head                     | 6  |
| 8  | 1819             | 铁丝<br>iron wire                                             | 按需 |
| 9  | 12JS200T-1707030 | 副箱驱动齿轮<br>Drive gears of auxiliary case                     | 1  |
| 10 | 16763            | 止动环<br>Stop ring                                            | 1  |

## 十、后盖总成 Rear cover assembly

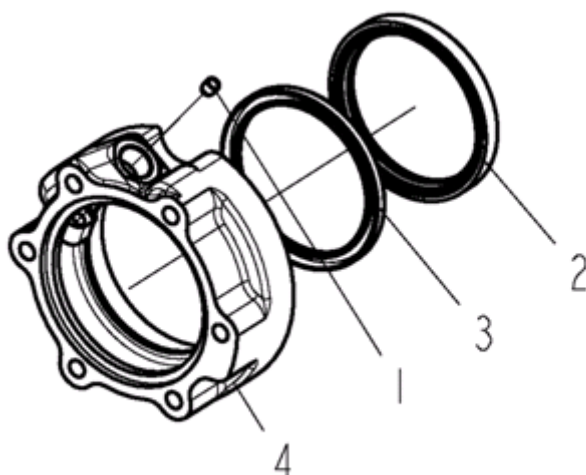


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| 代号 | 零件号              | 零件名称.                                                         | 数量 |
|----|------------------|---------------------------------------------------------------|----|
| 1  | 14347            | 密封垫<br>gasket                                                 | 1  |
| 2  | Q171B1250        | 六角头头部带孔螺栓<br>Capscrew                                         | 2  |
|    |                  |                                                               |    |
| 4  | 12JS160T-1707108 | 副箱主轴齿轮压板<br>baffle plate of main shaft gears                  | 1  |
| 5  | 12JS160T-1707140 | 同步器总成<br>high speed synchronizer                              | 1  |
| 6  | 12JS200T-1707047 | 副箱加长中间轴焊接总成<br>lengthened countershaft welding assembly. Aux. | 1  |
| 7  | 12JS200T-1707050 | 副箱中间轴焊接总成<br>Countershaft welding assembly. Aux.              | 1  |
| 8  | JS220-1707060-18 | 副箱气缸总成<br>Range cylinder assy                                 | 1  |
| 9  | 12JS200T-1707105 | 副箱主轴<br>Mainshaft                                             | 1  |
| 10 | 12JS200T-1707106 | 副箱主轴减速齿轮<br>Gear M/S low                                      | 1  |
| 11 | 12JS200T-1707107 | 副箱主轴垫圈<br>Washer                                              | 1  |
| 12 | 192311E          | 短圆柱滚子轴承<br>Bearing                                            | 2  |
| 13 | A-C09008         | 螺栓总成<br>Bolt assembly                                         | 4  |
| 14 | A-C09009         | 螺栓总成<br>Bolt assembly                                         | 1  |
| 15 | C09033           | 六角头头部带孔螺栓和弹簧垫圈组合件<br>Capscrew and lockwasher                  | 1  |
| 16 | F96006           | 凸缘螺母<br>Nut                                                   | 1  |
| 17 | Q433120          | 止动环<br>Snap ring                                              | 2  |
| 18 | JS180-1707051    | 止动环<br>Snap ring                                              | 2  |
| 19 | JS180-1707052    | 副箱中间轴盖<br>Cover                                               | 1  |

|    |                   |                                                       |   |
|----|-------------------|-------------------------------------------------------|---|
| 20 | JS180-1707053     | 副箱中间轴盖衬垫<br>Gasket                                    | 2 |
| 21 | JS180-1707154-4   | 主轴后轴承盖总成<br>Cover                                     | 1 |
| 22 | JS180-1707156     | 主轴后轴承盖衬垫<br>Gasket                                    | 1 |
| 23 | 16JSS300T-1707109 | 圆锥滚子轴承<br>Bearing                                     | 1 |
| 24 | JS220-1707015     | 后盖壳体<br>Rear housing                                  | 1 |
| 25 | Q1421032M         | 预涂胶六角头螺栓和弹簧垫圈组合件<br>Capscrew with glue and lockwasher | 4 |
| 26 | Q1421075          | 六角头螺栓和弹簧垫圈组合件<br>Capscrew and lockwasher              | 4 |
| 27 | 16775-1           | 副箱拨叉<br>Shift yoke                                    | 1 |

## 十一、主轴后轴承盖总成(JS180-1707154-4)



| 代号 | 零件号             | 零件名称.           | 数量 |
|----|-----------------|-----------------|----|
| 2  | 19109-2         | 油封<br>Oil seal  | 1  |
| 4  | JS180-1707155-3 | 主轴后轴承盖<br>Cover | 1  |



