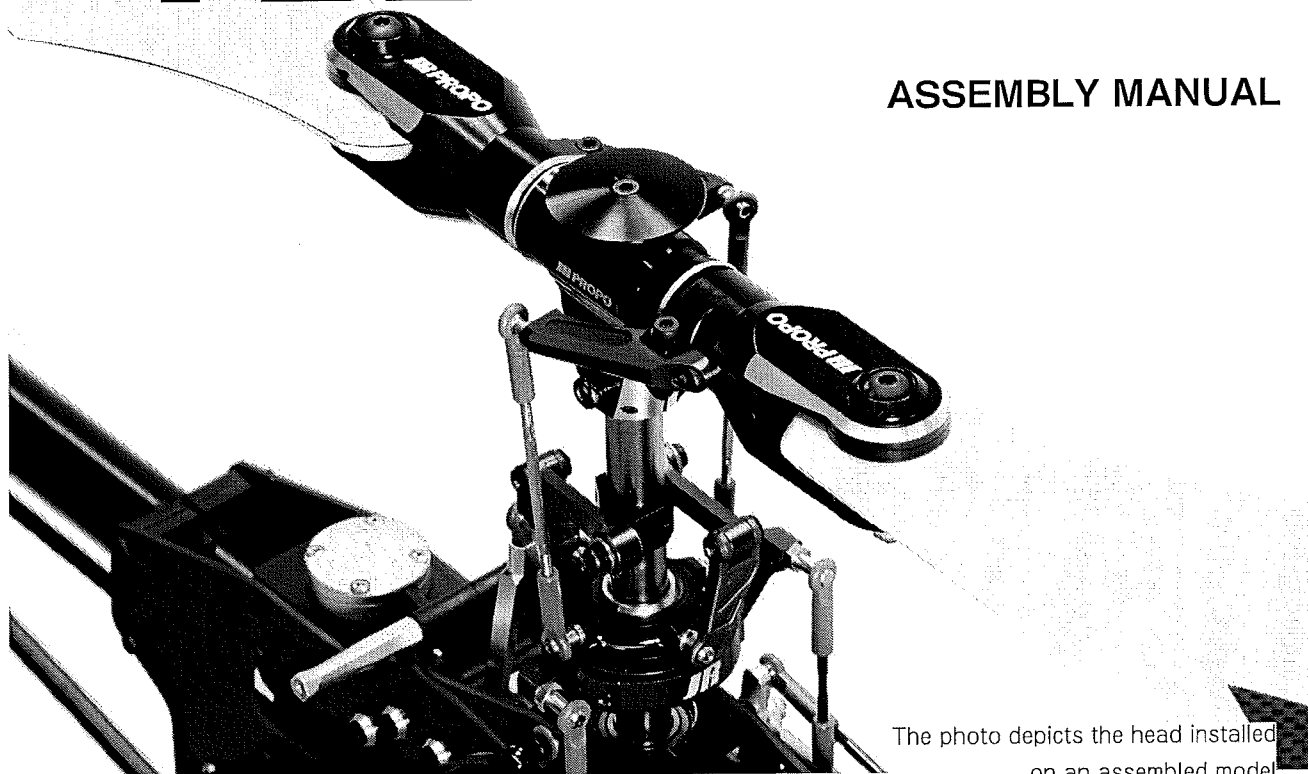


NO.84048/84049

# JR Flybarless Rotor Head

# FBL 90 V2

## ASSEMBLY MANUAL



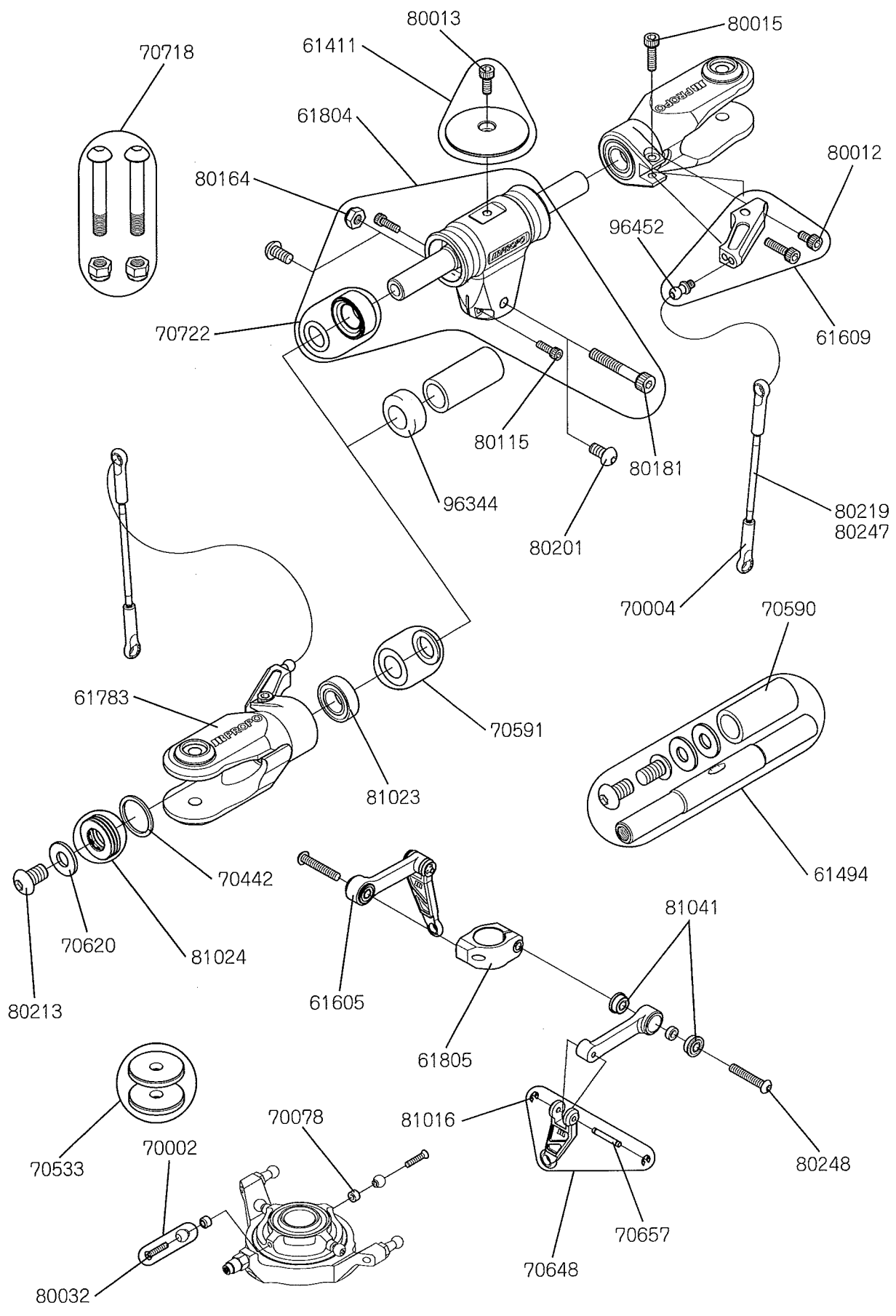
The photo depicts the head installed on an assembled model

- 【Compatibility】** JR helicopters with 12mm main shaft  
**【Main Rotor Dia.】** 1,580mm (with 710mm main rotor blades)  
**【Preparation】** Remove the main rotor head assembly, washout assembly and associated linkages from your helicopter.

### 【Contents】

|                               |   |                                  |   |
|-------------------------------|---|----------------------------------|---|
| Head button                   | 1 | Rotor spacer t3                  | 4 |
| FBL center hub (90) V2        | 1 | Joint ball spacer t2.75          | 2 |
| Main blade holder assembly 90 | 2 | Threaded rod M2.3 × 60 (∅ 2.5)   | 2 |
| FBL Pitch arm (90)            | 2 | Threaded rod M2.3 × 65 (∅ 2.5)   | 2 |
| Upper plate lock base         | 1 | Universal link                   | 4 |
| FBL Washout arm assembly      | 2 | Special socket head bolt M4 × 26 | 1 |
| Spindle shaft (10 Φ )         | 1 | Button head bolt M3 × 18         | 2 |
| Spindle shaft tube            | 1 | Button head bolt M4 × 8          | 2 |
| Rigid collar                  | 2 | Button head bolt M6 × 10         | 2 |
| O-ring 8.8 × 12.6 × 1.9       | 2 | Socket head bolt M2.6 × 8        | 2 |
| Damper rubber H90             | 2 | Socket head bolt M3 × 6          | 1 |
| Control ball L5.5             | 2 | Socket head bolt M3 × 8          | 2 |
| Spindle shim washer           | 2 | Socket head bolt M3 × 12         | 2 |
| Spindle washer M6             | 2 | HG Main blade bolt M5            | 2 |
| Thrust washer                 | 2 | Nylon lock nut M5                | 2 |
| Grip spacer                   | 2 | Nylon lock nut M4 (t3.8)         | 1 |
| Thrust bearing 9 × 17 × 5     | 2 | Flat head screw M2 × 10          | 2 |

**WWW.JRPROPO.CO.JP**



| ITEM NO. | DESCRIPTION                                | QTY. | NOTE  |
|----------|--|------|---|
| 61411    | Head button                                | × 1  | w/Socket head bolt M3 × 8                         |
| 61494    | Spindle shaft (10 Φ )                      | × 1  | w/Shaft tube,Washer,Bolts                         |
| 61605    | FBL Washout arm assembly                   | × 2  | Collar : Red LF-730ZZ already installed           |
| 61609    | FBL Pitch arm (90)                         | × 1  | w/Socket head bolt M3 × 6,M3 × 12                 |
| 61783    | Main blade holder assembly 90 (Logo print) | × 1  | L-1790ZZ already installed                        |
| 61804    | FBL center hub (90) V2                     | × 1  | w/Rigid collar,O-ring,bolt (spindle not included) |
| 61805    | Upper plate lock base                      | × 1  |   |
| 70002    | Joint ball B                               | × 10 | w/Hlat heas screw M2 × 10                         |
| 70004    | Universal link                             | × 10 |   |
| 70078    | Jpint ball spacer t2.75                    | × 2  |   |
| 70442    | Thrust washer                              | × 2  |   |
| 70533    | Rotor spacer t3                            | × 4  |   |
| 70590    | Spindle shaft tube                         | × 1  |   |
| 70591    | Grip spacer set                            | × 2  | w/Spindle shim washer                             |
| 70620    | Spindle washer M6                          | × 2  |   |
| 70648    | Washout link C                             | × 2  |   |
| 70657    | Washout link pin                           | × 2  |   |
| 70718    | HG Main blade bolt set M5 (black)          | × 2  | w/M5 × 30, Nylon lock nut                         |
| 70722    | Rigid collar set                           | × 1  | w/O-ring 8.8 × 12.6 × 1.9 for one kit             |
| 80012    | Socket head bolt M3 × 06                   | × 10 |   |
| 80013    | Socket head bolt M3 × 08                   | × 10 |   |
| 80015    | Socket head bolt M3 × 12                   | × 10 |   |
| 80031    | Flat head screw M2 × 10                    | × 10 |   |
| 80115    | Socket head bolt M2.6 × 08                 | × 10 |   |
| 80164    | Nylon lock nut M4 (t3.8)                   | × 10 |   |
| 80181    | Special socket head bolt M4 × 26           | × 2  |   |
| 80201    | Button head bolt M4 × 8                    | × 10 |   |
| 80213    | Button head bolt M6 × 10                   | × 10 |   |
| 80219    | Threaded M2.3 × 60 ( Ø 2.5)                | × 2  |   |
| 80247    | Threaded M2.3 × 65 ( Ø 2.5)                | × 2  |   |
| 80248    | Button head bolt M3 × 18                   | × 10 |   |
| 81016    | E stopper ring M1.5                        | × 10 |   |
| 81023    | Shielded bearing 9 × 17 × 5                | × 2  | L-1790ZZ  |
| 81024    | Thrust bearing 9 × 17 × 5                  | × 1  | SST-1790DSG                                       |
| 81041    | Flanged bearing F 03 × 07 × 3              | × 2  | LF-730ZZ  |
| 96344    | Damper rubber H90 (10 Φ )                  | × 2  |   |
| 96452    | Control ball L5.5                          | × 1  |   |