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SF50-75sD/L CMP50-75sD/L

SERVICE MANUAL

RATED CAPACITY : 5000~7500kg



Part No. 8034927 Manual No. SM690 Rev.2 Jun,2004

Manufactured by **CLARK**Material Handling
Asia

#40–1, Ungnam-Dong, Changwon-City, Kyungnam, Korea

GENERAL

00

- •00-01 REVISION HISTORY
- 00 02 FOREWORD
 - Foreword
 - How to read this manual
- •00-03 SAFETY
 - General precautions
 - Preparations for work
 - Cautions during operation
- 00 04 STANDARDS
 - Measurement conversions
 - Standard tightening torque

REVISION HISTORY

Action required

Add

Replace

Discard

Mark

 \bigcirc

)

(

Indication

Page to be newly added

Page to be replaced

Page to be deleted

Jun. 2004.

01

00

When new or revised information is published to update this manual the action to be taken with the pages is indicated in the table.

Pages not marked are not currently revised, but are included for page numbering continuity.

| Mark Page Revision number |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| ● 00–01–1 ③ | 01–03–1 ① | 10–03–10 | 10–08–1 | 10–13–4 |
| • 00-01-2 ③ | | 10–03–11 | 10-08-2 | 10–13–5 |
| • 00–01–3 ③ | 01–04–1 | 10-03-12 | 10-08-3 | 10–13–6 |
| • 00-01-4 ③ | 01–04–2 | 10–03–13 | 10-08-4 | |
| 00–01–5 | 01–04–3 | | 10-08-5 | 10-14-1 |
| | | 10–04–1 | | 10-14-2 |
| 00-02-1 | 01–05–1 | 10-04-2 | 10-09-1 | 10–14–3 |
| 00-02-2 | 01–05–2 | 10–04–3 | 10-09-2 | 10-14-4 |
| | | 10-04-4 | 10-09-3 | 10–14–5 |
| 00–03–1 | 10-01-1 | 10–04–5 | 10-09-4 | 10–14–6 |
| 00–03–2 | 10-01-2 | 10–04–6 | 10–09–5 | 10–14–7 |
| 00–03–3 | 10–01–3 | 10–04–7 | 10-09-6 | |
| 00–03–4 ① | 10-01-4 | 10–04–8 | 10-09-7 | 10–15–1 |
| 00–03–5 | | | 10-09-8 | 10–15–2 |
| 00–03–6 | 10–02–1 ① | 10–05–1 | 10-09-9 | 10–15–3 |
| 00–03–7 | 10-02-2 | 10–05–2 | 10–09–10 | 10–15–4 |
| 00–03–8 | 10-02-3 | 10–05–3 | | |
| 00–03–9 | 10-02-4 | 10–05–4 | 10–10–1 | 12–01–1 ① |
| 00–03–10 | 10-02-5 | 10–05–5 | 10–10–2 | 12-01-2 |
| | 10-02-6 | 10–05–6 | 10–10–3 | 12–01–3 |
| 00–04–1 | 10-02-7 | 10–05–7 | 10–10–4 | 12-01-4 |
| 00–04–2 | 10-02-8 | 10–05–8 | 10–10–5 | 12–01–5 |
| 00–04–3 | 10-02-9 | | 10–10–6 | 12–01–6 |
| 00–04–4 | 10-02-10 | 10–06–1 | 10–10–7 | 12–01–7 |
| | 10-02-11 | 10-06-2 | 10–10–8 | 12–01–8 |
| 01–01–1 ① | 10-02-12 | 10–06–3 | 10–10–9 | 12-01-9 |
| 01–01–2 | 10-02-13 | 10–06–4 | | |
| 01–01–3 ① | 10-02-14 | 10–06–5 | 10–11–1 | 12-02-1 |
| 01–01–4 ① | 10–02–15 | 10–06–6 | 10–11–2 | 12-02-2 |
| 01–01–5 ① | 10–02–16 | 10–06–7 | 10–11–3 | 12-02-3 |
| ● 01–01–6 ③ | 10–02–17 | 10–06–8 | 10–11–4 | 12-02-4 |
| ● 01–01–7 ② | 10–02–18 | 10-06-9 | 10–11–5 | 12-02-5 |
| 01–01–8 ^② | | 10-06-10 | 10-11-6 | 12-02-6 |
| 01–01–9 ① | 10–03–1 | 10–06–11 | 10-11-7 | 12-02-7 |
| 01–01–10 | 10-03-2 | / · · · · | 10–11–8 | 12-02-8 |
| 01–01–11 | 10-03-3 | 10-07-1 | 40.40.4 | 12-02-9 |
| 01–01–12 ① | 10-03-4 | 10-07-2 | 10-12-1 | 12-02-10 |
| 01–01–13 | 10-03-5 | 10-07-3 | 10–12–2 | 12-02-11 |
| | 10-03-6 | 10-07-4 | 40.40.4 | 12-02-12 |
| 01–02–1 ① | 10-03-7 | 10-07-5 | 10-13-1 | 12-02-13 |
| 01–02–2 ① | 10-03-8 | 10–07–6 | 10-13-2 | 12-02-14 |
| | 10–03–9 | | 10–13–3 | 12-02-15 |

ENERAL

00

REVISION HISTORY

01 2 3

G

| Mark Page Revision number |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 12-02-16 | 12-05-17 | 12–10–3 | 12–15–4 | 0 13–03–17 |
| 12-02-17 | 12–05–18 | 12-10-4 | | ○ 13–03–18 |
| 12-02-18 | 12-05-19 | 12–10–5 | 0 13–01–1 | O 13–03–19 |
| 12-02-19 | 12-05-20 | 12–10–6 | 0 13–01–2 | 0 13–03–20 |
| 12-02-20 | 12-05-21 | 12–10–7 | 0 13–01–3 | 0 13–03–21 |
| 12-02-21 | | 12–10–8 | 0 13–01–4 | 0 13–03–22 |
| | 12-06-1 | 12-10-9 | 0 13–01–5 | ○ 13–03–23 |
| 12-03-1 | 12-06-2 | 12–10–10 | 0 13–01–6 | 0 13–03–24 |
| 12-03-2 | 12-06-3 | 12–10–11 | 0 13–01–7 | |
| 12-03-3 | 12-06-4 | 12–10–12 | 0 13–01–8 | ○ 13–04–1 |
| 12-03-4 | 12-06-5 | 12–10–13 | 0 13–01–9 | 0 13–04–2 |
| 12-03-5 | 12-06-6 | 12-10-14 | 0 13–01–10 | 0 13–04–3 |
| 12-03-6 | 12-06-7 | 12–10–15 | | ○ 13–04–4 |
| 12-03-7 | 12-06-8 | 12–10–16 | 0 13–02–1 | ○ 13–04–5 |
| 12-03-8 | 12-06-9 | 12-10-17 | 0 13–02–2 | 0 13–04–6 |
| 12-03-9 | 12-06-10 | 12–10–18 | 0 13–02–3 | ○ 13–04–7 |
| 12-03-10 | 12-06-11 | | 0 13–02–4 | ○ 13–04–8 |
| 12-03-11 | 12-06-12 | 12-11-1 | ○ 13–02–5 | ○ 13–04–9 |
| 12-03-12 | 12-06-13 | 12–11–2 | 0 13–02–6 | ○ 13–04–10 |
| 12-03-13 | 12-06-14 | 12–11–3 | 0 13–02–7 | 0 13–04–11 |
| 12-03-14 | 12-06-15 | 12–11–4 | ○ 13–02–8 | 0 13–04–12 |
| 12-03-15 | 12-06-16 | 12–11–5 | ○ 13–02–9 | 0 13–04–13 |
| 12–03–16 | | 12-11-6 | 0 13-02-10 | 0 13–04–14 |
| 12-03-17 | 12-07-1 | 12-11-7 | 0 13–02–11 | 0 13–04–15 |
| | 12-07-2 | 12–11–8 | 0 13-02-12 | |
| 12-04-1 | 12-07-3 | 12–11–9 | 0 13-02-13 | ○ 13–05–1 |
| 12-04-2 | 12-07-4 | 12-11-10 | 0 13-02-14 | 0 13–05–2 |
| 12-04-3 | 12-07-5 | 12-11-11 | 0 13-02-15 | 0 13–05–3 |
| 12-04-4 | 12-07-6 | 12-11-12 | 0 13–02–16 | 0 13–05–4 |
| 12-04-5 | 12-07-7 | 12–11–13 | 0 13–02–17 | ○ 13–05–5 |
| 12-04-6 | 12-07-8 | 12-11-14 | 0 13–02–18 | 0 13–05–6 |
| 12–04–7 | | 12-11-15 | 0 13–02–19 | 0 13–05–7 |
| 12-04-8 | 12-08-1 | | 0 13-02-20 | ○ 13–05–8 |
| 12-04-9 | 12-08-2 | 12-12-1 | 0 13-02-21 | 0 13–05–9 |
| 12-04-10 | 12-08-3 | 12-12-2 | 0 13-02-22 | 0 13–05–10 |
| 12-04-11 | 12-08-4 | | ○ 13–02–23 | 0 13–05–11 |
| - | 12-08-5 | 12–13–1 | | 0 13–05–12 |
| 12-05-1 | | 12-13-2 | ○ 13–03–1 | 0 13–05–13 |
| 12-05-2 | 12-09-1 | 12–13–3 | 0 13–03–2 | 0 13–05–14 |
| 12-05-3 | 12-09-2 | 12-13-4 | 0 13-03-3 | 0 13–05–15 |
| 12-05-4 | 12-09-3 | 12-13-5 | 0 13-03-4 | 0 13–05–16 |
| 12-05-5 | 12-09-4 | 12-13-6 | 0 13-03-5 | 0 13–05–17 |
| 12-05-6 | 12-09-5 | 12-13-7 | 0 13-03-6 | 0 13–05–18 |
| 12-05-7 | 12-09-6 | 12 10 1 | 0 13-03-7 | 0 13–05–19 |
| 12-05-8 | 12-09-7 | 12-14-1 | 0 13-03-8 | 0 13-05-20 |
| 12-05-9 | 12-09-8 | 12-14-2 | 0 13-03-9 | 0 13-05-21 |
| 12-05-10 | 12-09-9 | 12-14-3 | 0 13–03–10 | 0 13-05-22 |
| 12-05-11 | 12-09-10 | 12-14-4 | 0 13-03-11 | 0 13-05-23 |
| 12-05-12 | 12-09-11 | 12-14-5 | 0 13-03-12 | |
| 12-05-13 | 12-09-12 | 12 11 0 | 0 13-03-13 | ○ 13–06–1 |
| 12-05-13 | 12 00 12 | 12–15–1 | 0 13-03-13 | 0 13-06-2 |
| 12-05-14 | 12-10-1 | 12-15-2 | 0 13-03-14 | 0 13-06-3 |
| 12-05-16 | 12-10-1 | 12-15-2 | ○ 13–03–13 ○ 13–03–16 | 0 13-06-4 |
| 12-00-10 | 12-10-2 | 12-10-0 | | |

REVISION HISTORY

00 01

3 3

| Mark Page Revision number | Mark Page Revision number | Mark Page Revision number | Mark Page Revision number | Mark Page Revision number |
|--|---------------------------|---------------------------|---------------------------|--|
| ○ 13–06–5 | ○ 13–10–11 | 0 13–14–6 | 15-02-17 | 15-02-70 |
| 0 13–06–6 | 0 13–10–12 | 0 13–14–7 | 15-02-18 | 15-02-71 |
| 0 13–06–7 | 0 13–10–13 | 0 13–14–8 | 15-02-19 | 15-02-72 |
| O 13–06–8 | 0 13–10–14 | 0 13–14–9 | 15-02-20 | 15-02-73 |
| ○ 13–06–9 | 0 13–10–15 | ○ 13–14–10 | 15-02-21 | 15-02-74 |
| ○ 13–06–10 | | 0 13–14–11 | 15-02-22 | 15-02-75 |
| ○ 13–06–11 | ○ 13–11–1 | 0 13–14–12 | 15-02-23 | 15-02-76 |
| 0 13–06–12 | 0 13–11–2 | 0 13–14–13 | 15-02-24 | 15-02-77 |
| 0 13–06–13 | 0 13–11–3 | 0 13–14–14 | 15-02-25 | 15-02-78 |
| ○ 13–06–14 | 0 13–11–4 | 0 13–14–15 | 15-02-26 | 15-02-79 |
| ○ 13–06–15 | 0 13–11–5 | 0 13–14–16 | 15-02-27 | |
| ○ 13–06–16 | 0 13–11–6 | 0 13–14–17 | 15-02-28 | 15–03–1 |
| ○ 13–06–17 | 0 13–11–7 | 0 13–14–18 | 15-02-29 | |
| 0 13–06–18 | 0 13–11–8 | 0 13–14–19 | 15-02-30 | ○ 15–04–1 |
| ○ 13–06–19 | 0 13–11–9 | | 15-02-31 | 0 15–04–2 |
| 0 13-06-20 | 0 13–11–10 | ○ 13–15–1 | 15-02-32 | 0 15–04–3 |
| 0 13-06-21 | 0 13–11–11 | 0 13–15–2 | 15-02-33 | 0 15-04-4 |
| 0 13-06-22 | 0 13–11–12 | 0 13–15–3 | 15-02-34 | 0 15–04–5 |
| ○ 13–06–23 | 0 13–11–13 | 0 13–15–4 | 15-02-35 | 0 15-04-6 |
| 0 13-06-24 | 0 13–11–14 | 0 13–15–5 | 15-02-36 | 0 15-04-7 |
| 0 13-06-25 | 0 13–11–15 | | 15-02-37 | 0 15-04-8 |
| 0 13-06-26 | | ○ 13–16–1 | 15-02-38 | 0 15-04-9 |
| 0 10 00 20 | 0 13–12–1 | 0 13–16–2 | 15-02-39 | ○ 15-04-10 |
| ○ 13–07–1 | 0 13-12-1 | 0 13–16–3 | 15-02-40 | ○ 15–04–10 ○ 15–04–11 |
| 0 13-07-2 | 0 13-12-2 | 0 13–16–4 | 15-02-40 | 15–04–11 15–04–12 |
| | | | 15-02-41 | 0 15-04-12 |
| | 0 13-12-4 | ○ 13–16–5 | | |
| 13–07–4 12.07 € | ○ 13–12–5 ○ 13 12 6 | 15 01 1 | 15-02-43 | ○ 15–04–14 ○ 15 04 15 |
| ○ 13–07–5 | ○ 13–12–6 ○ 13–12–7 | 15-01-1 | 15-02-44 | ○ 15–04–15 ○ 15–04–16 |
| ☐ 12 00 1 | 10.10.0 | 15–01–2 15–01–3 | 15-02-45 | 45 64 45 |
| ○ 13–08–1 ○ 13–08–2 | | | 15-02-46 | |
| | | 15-01-4 | 15-02-47 | ○ 15–04–18 ○ 15 04 10 |
| 0 13-08-3 | 0 13–12–10 | 15-01-5 | 15-02-48 | 0 15-04-19 |
| 0 13-08-4 | 0 13–12–11 | 15–01–6 15–01–7 | 15-02-49 | ○ 15–04–20 ○ 15–04–21 |
| ○ 13–08–5 ○ 12,08,0 | 0 13–12–12 | | 15-02-50 | 0 15-04-21 |
| ○ 13–08–6 ○ 12 08 7 | 0 13–12–13 | 15-01-8 | 15-02-51 | 0 15-04-22 |
| ○ 13–08–7 | 0 13–12–14 | 15–01–9 | 15-02-52 | 0 15-04-23 |
| . 40, 00, 4 | 0 13–12–15 | 45 00 4 | 15-02-53 | 0 15-04-24 |
| ○ 13–09–1 ○ 13 00 3 | 0 13–12–16 | 15-02-1 | 15-02-54 | 0 15-04-25 |
| ○ 13–09–2 ○ 12,00,2 | 0 13–12–17 | 15-02-2 | 15-02-55 | 0 15-04-26 |
| ○ 13–09–3 ○ 12 02 1 | 0 13–12–18 | 15-02-3 | 15-02-56 ① | 0 15-04-27 |
| 0 13-09-4 | 0 13–12–19 | 15-02-4 | 15-02-57 | 0 15-04-28 |
| ○ 13–09–5 | 0 13–12–20 | 15-02-5 | 15-02-58 | 0 15–04–29 |
| o 10 10 i | ○ 13–12–21 | 15-02-6 | 15-02-59 | 0 15-04-30 |
| 0 13–10–1 | | 15-02-7 | 15-02-60 | 0 15-04-31 |
| 0 13–10–2 | 0 13–13–1 | 15-02-8 | 15-02-61 | 0 15-04-32 |
| ○ 13–10–3 | 0 13–13–2 | 15-02-9 | 15-02-62 | 0 15-04-33 |
| 0 13–10–4 | ○ 13–13–3 | 15-02-10 | 15-02-63 | 0 15-04-34 |
| 0 13–10–5 | - 10 | 15-02-11 | 15-02-64 | 0 15-04-35 |
| ○ 13–10–6 | 0 13–14–1 | 15-02-12 | 15-02-65 | 0 15-04-36 |
| ○ 13–10–7 | 0 13–14–2 | 15-02-13 | 15-02-66 ① | 0 15–04–37 |
| 0 13–10–8 | 0 13–14–3 | 15-02-14 | 15-02-67 ① | 0 15–04–38 |
| ○ 13–10–9 | 0 13–14–4 | 15-02-15 | 15-02-68 | 0 15–04–39 |
| ○ 13–10–10 | ○ 13–14–5 | 15–02–16 | 15–02–69 | 0 15–04–40 |

N E

G

Е

R A

L

GENERAL

00

() 1

4 ③

Revision Revision Revision Revision Revision Mark Page Mark Page Mark Page Mark Page Mark Page number number number number number 0 15-04-41 20-02-8 20-02-61 20-03-6 30-02-2 0 15-04-42 20-02-9 20-02-62 20-03-7 30-02-3 15-04-43 20-02-10 20-02-63 20-03-8 30-02-4 15-04-44 20-02-11 20-02-64 20-03-9 30-02-5 15-04-45 20-02-12 20-02-65 20-03-10 30-02-6 20-02-66 15-04-46 20-02-13 20-03-11 30-02-7 15-04-47 20-02-14 20-02-67 20-03-12 30-02-8 20-02-15 15-04-48 20-02-68 20-03-13 30-02-9 15-04-49 20-02-16 20-02-69 20-03-14 30-02-10 15-04-50 20-02-17 20-02-70 20-03-15 30-02-11 0 15-04-51 20-02-18 20-02-71 20-03-16 30-02-12 15-04-52 20-02-19 20-02-72 20-03-17 30-02-13 15-04-53 20-02-20 20-02-73 20-03-18 30-02-14 15-04-54 20-02-21 20-02-74 20-03-19 30-02-15 15-04-55 20-02-22 20-02-75 20-03-20 20-03-21 20-02-23 30-03-1 0 15-04-56 20-02-76 15-04-57 20-02-24 20-02-77 20-03-22 30-03-2 20-02-25 0 15-04-58 20-02-78 20-03-23 30-03-3 15-04-59 20-02-26 20-02-79 20-03-24 15-04-60 20-02-27 20-02-80 20-03-25 40-01-1 (1) 0 15-04-61 20-02-28 20-02-81 20-03-26 15-04-62 20-02-29 20-02-82 20-03-27 40-02-1 (1) 15-04-63 20-02-30 20-02-83 20-03-2 1 15-04-64 20-02-31 20-02-84 20-03-29 40-03-1 15-04-65 20-02-32 20-02-85 20-03-30 40-03-2 1 20-02-33 20-02-86 20-03-31 0 15-04-66 40-04-1 15-04-67 20-02-34 20-02-87 20-03-32 (1) 20-02-35 15-04-68 20-02-88 20-03-33 (40 - 04 - 2)15-04-69 20-02-36 20-02-89 20-03-34 15-04-70 20-02-37 20-02-90 20-03-35 40-05-1 (1) 40-05-2 20-02-91 (1) 0 15-04-71 20-02-38 20-03-36 15-04-72 20-02-39 20-02-92 ① 20-03-37 40-05-3 (1) 15-04-73 20-02-40 20-02-93 20-03-38 15-04-74 20-02-41 20-02-94 20-03-39 40-06-1 15-04-75 20-02-42 20-02-95 20-03-40 50-01-1 15-04-76 20-02-43 20-02-96 20-03-41 15-04-77 20-02-44 20-02-97 20-03-42 50-01-2 15-04-78 50-01-3 20-02-45 20-02-98 20-03-43 15-04-79 20-02-46 20-02-99 20-03-44 50-01-4 15-04-80 20-02-47 20-02-100 20-03-45 50-01-5 0 15-04-81 20-02-48 20-02-101 50-01-6 15-04-82 20-02-49 20-02-102 30-01-1 50-01-7 20-02-50 20-02-103 30-01-2 20-01-1 20-02-51 20-02-104 30-01-3 50-02-1 1 20-01-2 20-02-52 20-02-105 30-01-4 50-02-2 50-02-3 20-02-53 20-02-106 30-01-5 20-02-1 50-02-4 20-02-54 20-02-107 30-01-6 20-02-2 20-02-55 50-02-5 30 - 01 - 720-02-3 20-02-56 20-03-1 ① 30-01-8 50-02-6 20-02-4 20-03-2 30-01-9 20-02-57 20-02-5 20-02-58 20-03-3 30-01-10 50-03-1 20-02-6 20-02-59 20-03-4 50-03-2 1 20-02-7 20-02-60 20-03-5 30-02-1 50-03-3

REVISION HISTORY

REVISION HISTORY

00

| Mark Page Revision | Mark Page Revision | Mark | Page Revision | Mark | Page | Revision | Mark | Page | Revision |
|--------------------|--------------------|------|---------------|------|-------|----------|------|-------|----------|
| number | number | Mark | rage number | manx | i ugo | number | mark | i ugo | number |
| 50-03-4 | 60–02–15 ① | | | | | | | | |
| 50-03-5 | | | | | | | | | |
| 50–03–6 ① | 70–01–1 ② | | | | | | | | |
| 50–03–7 ① | 70–01–3 ② | | | | | | | | |
| | 70–01–5 ① | | | | | | | | |
| 50-04-1 | • 70-01-7 ① | | | | | | | | |
| 50-04-2 | • 70-01-9 1 | | | | | | | | |
| 50-04-3 | 0 70–01–11 | | | | | | | | |
| 50-04-4 | ○ 70–01–13 | | | | | | | | |
| 50-04-5 | 0 70–01–15 | | | | | | | | |
| 50-04-6 | | | | | | | | | |
| 50-04-7 | | | | | | | | | |
| 50-04-8 | | | | | | | | | |
| 50-04-9 | | | | | | | | | |
| | | | | | | | | | |
| 50-05-1 | | | | | | | | | |
| 50-05-2 | | | | | | | | | |
| 50-05-3 | | | | | | | | | |
| 50-05-4 | | | | | | | | | |
| 50-05-5 | | | | | | | | | |
| 50-05-6 | | | | | | | | | |
| | | | | | | | | | |
| 50-05-7 | | | | | | | | | |
| 50-05-8 | | | | | | | | | |
| 50-05-9 | | | | | | | | | |
| 50-05-10 | | | | | | | | | |
| 50-05-11 | | | | | | | | | |
| 50-05-12 | | | | | | | | | |
| 50-05-13 | | | | | | | | | |
| 60-01-1 | | | | | | | | | |
| 60-01-2 | | | | | | | | | |
| 60-01-3 | | | | | | | | | |
| 60-01-4 | | | | | | | | | |
| 60-01-5 | | | | | | | | | |
| 60-01-6 | | | | | | | | | |
| 60-01-7 | | | | | | | | | |
| 60-01-8 | | | | | | | | | |
| 60-01-8 | | | | | | | | | |
| 00-01-9 | | | | | | | | | |
| 60-02-1 | | | | | | | | | |
| 60-02-1 | | | | | | | | | |
| | | | | | | | | | |
| 60-02-3 | | | | | | | | | |
| 60-02-4 | | | | | | | | | |
| 60-02-5 | | | | | | | | | |
| 60-02-6 | | | | | | | | | |
| 60-02-7 | | | | | | | | | |
| 60-02-8 | | | | | | | | | |
| 60-02-9 | | | | | | | | | |
| 60-02-10 | | | | | | | | | |
| 60-02-11 | | | | | | | | | |
| 60–02–12 ① | | | | | | | | | |
| 60–02–13 🛈 | | | | | | | | | |
| 60–02–14 ① | | | | | | | | | |

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Е

FOREWORD

FOREWORD

This shop manual has been prepared as an aid to improve quality of repairs by giving the serviceman an accurate understanding of the product and by illustrating the correct way to perform repairs and make judgements. Make sure you understand the contents of this manual and use it to the full effect at every opportunity.

This shop manual mainly contains the technical information necessary for operations performed in a service workshop.

For ease of understanding, the manual is divided into sections for each main system of the machine, and the sections are further divided into groups.

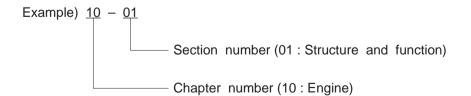
SAFETY

- Improper operation and maintenance of this machine could result in serious injury or death.
- Read the Operation and Maintenance Manual carefully BEFORE operating the machine.
- Always keep the Operation and Maintenance Manual and Parts catalogue near the work area.
- Obey precautions concerning flammable liquids, hazardous fluids, oils, lubricants and cleaning solvents.
- To prevent injury to workers, this symbol **A** is used to mark safety precautions in this manual. The precautions accompanying this symbol should always be followed carefully.
- The specifications contained in this shop manual are subject to change at any time and without any advance notice. Contact your SAMSUNG distributor for the latest information.

HOW TO READ THIS MANUAL

CHAPTER AND SECTION

This manual is issued as a guide to carrying out repair and maintenance. To easily understand this manual it is divided as follows:

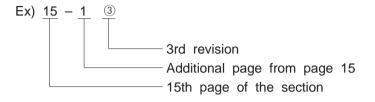




PAGE

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Page numbering is started from each section. Therefore, revised pages can be easily inserted. Also, additional pages and revision number can be indicated.

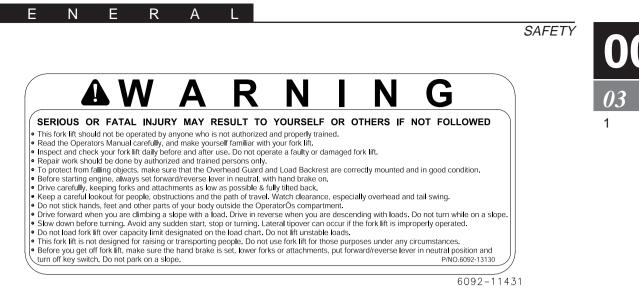


For the revision status in this manual, refer to REVISION HISTORY.

SYMBOLS

The following symbols as defined below are used in this manual to convey the intent of the instructions concerning safety and repair.

| Symbol | Item | Remarks | | | |
|--------|----------------------|---|--|--|--|
| | Safety | Special safety precautions are necessary when performing the work. | | | |
| | Caution | Special technical precautions or other precautions for preserving standards are necessary when performing the work. | | | |
| | Tightening torque | Places that require special attention for the tightening torque during assembly. | | | |
| | Tool | Places that require proper tools used in assembling and disassembling. | | | |
| | Adhesive | Places to be applied with adhesive. | | | |
| | Lubricating | g Places where oil or lubricant must be added. | | | |



GENERAL PRECAUTIONS

SAFETY PRECAUTIONS

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- When carrying out any operation or maintenance, have trained and experienced personnel carry out the work.
- When carrying out any operation or maintenance, carefully read the Operation and Maintenance Manual.

Read all the precautions given on the decals which are fixed to the machine.

SAFETY DEVICE

- Make sure that all guards and covers are mounted in their proper position. Repair or replace if damaged.
- Pay attention to the method of using any safety locking device or safety belt.

SAFETY CLOTHES AND HELMET

- Wear the specified work clothes in the correct manner.
- Use the specified protective gear (helmet, safety glasses, safety shoes, mask, gloves). Guard against injury from flying pieces of metal

or debris, wear goggles, gloves and helmet. Always have a trained and experienced welder carry out any welding work. When carrying out welding work, always wear

welding gloves, apron, glasses, cap and other clothes suitable for welding work.



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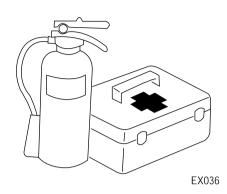
PREPARE FOR EMERGENCIES

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- Know where fire extinguishers are located and how to use them.
- Keep a first aid kit and an eye wash kit near the work area.
- Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



HANDLE FLUIDS SAFELY-AVOID FIRES

- Handle fuel with care it is highly flammable.
- Do not refuel the machine while smoking or when near open flame or sparks.
 Always stop the engine before refueling machine. Fill the fuel tank outdoors.
- Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.



DISPOSE OF FLUIDS PROPERLY

- Improperly disposing of fluids can harm the environment and ecology. Before draining any fluids, find out the proper way to dispose of waste from your local environmental agency.
- Catch draining fuel, oil, or other fluids in suitable containers. Do not use food or beverage containers that may mislead someone into drinking from them. Wipe up spills at once.
- Do not pour oil into the ground, down a drain, or into a stream, pond, or lake. Observe relevant environmental protection regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, and other harmful waste.



EX043

SAFETY

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AVOID HARMFUL ASBESTOS DUST

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• Avoid breathing dust that may be generated when handling components containing asbestos fibers. Inhaled asbestos fibers may cause lung cancer.

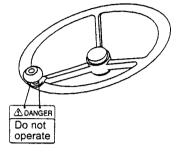


EX025

PREPARATIONS FOR WORK

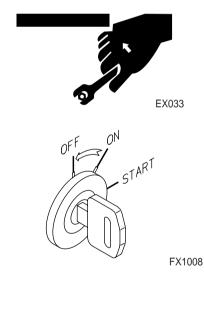
WARN OTHERS OF SERVICE WORK

- Unexpected machine movement can cause serious injury.
- Before performing any work on the machine, attach a "Do Not Operate" tag to the steering wheel or the right control lever.
- When carrying out any operation with two or more workers, always agree on the operating procedure before starting.



USE TOOLS PROPERLY

- Use a tool only for its designed application.
- Keep all tools in good condition and know the correct way to use them.
- Decide on a place in the repair workshop to keep tools and removed parts.
- Always keep the work area clean and make sure that there is no dirt or oil on the floor.
- Before adding oil or making any repairs, park the machine on hard, level ground and put blocks under the wheels to prevent the mahcine from moving.
- Before starting work, lower the forks or any other work equipment to the ground.
- Turn the engine OFF, remove the start key, and apply the parking brake.
- Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the machine. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.





EX042

GENERAL

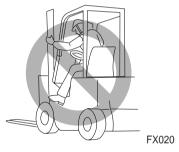
USE HANDHOLDS AND STEPS

- Do not jump onto or down from the fork lift.
- When getting on or off the fork lift, use the step provided.
- Do not grasp an operating lever or steering wheel when getting on or off.
- Always keep the step clean and repaired.
- Never operate with wet or oily hands and feet.

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OPERATE FROM THE OPERATOR'S SEAT

- Do not operate the fork lift from any place other than the designated operator's position.
- Improper seating may cause serious injury.



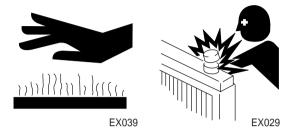


SAFETY

CAUTIONS DURING OPERATION

SERVICE COOLING SYSTEM SAFELY

- Hot coolant can burn you. Let it cool down.
- Turn the radiator cap slowly to release pressure. Do not remove cap if engine is overheated.



AVOID HIGH-PRESSURE FLUIDS

- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by releasing pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.
- Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.
- Be careful not to break, twist or damage the high pressure pipes.

A jet spray of high pressure oil may cause electrical fires.

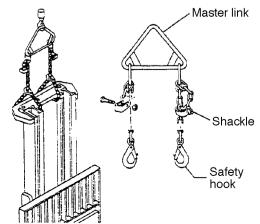
HANDLING OF HEAVY OBJECTS







- When raising heavy components, use a hoist or crane.
- Check if the wire rope, chains and hooks are free from damage.
- Always use lifting equipment which has ample capacity. Install the lifting equipment at the correct places.
- Use a hoist or crane and operate slowly to prevent the component hitting any other part.
- When disassembling or assembling, support the machine with blocks, jacks or stands before starting work.
- Before starting work, lower the forks or any other work equipment to the ground.
- Do not work under the equipment when the equipment is not sufficiently supported.



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SAFETY

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ELECTRICAL SYSTEM

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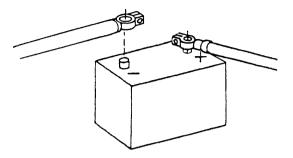
• When welding on the machine or working on the electrical system, ALWAYS turn the key switch OFF and remove the lead from the battery negative (–) terminal.

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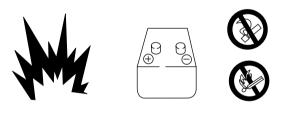
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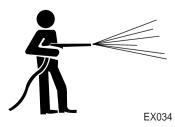
- When removing components, be careful not to break or damage the wiring. Damaged wiring may cause electrical fires.
- When working on the battery, wear goggles or safety glasses.
- Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin and eat holes in clothing and cause blindness if splashed into the eyes. If you spill acid on your clothes or skin, immediately flush with large quantities of water.
- If splashed into the eyes, flush with water and get medical attention immediately.
- Keep sparks, lighted matches, and open flame away from the top of battery. Battery (hydrogen) gas can explode.
- Battery posts and cables touched by metal objects can short circuit and burn you.
 Keep tools away from posts, wires and terminals.
 - Tighten the battery terminals to ensure good contact.
- When disassembling and assembling the battery, make sure that the battery terminals are correctly connected.
- If water gets to the electrical system, abnormal operation or failure can result.
 Do not use water or steam on sensors, connectors and instruments in the cab.











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CAUTIONS DURING OPERATION

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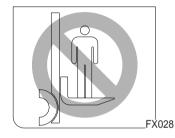
NEVER STAND UNDER FORKS

 Do not allow anyone to stand or walk under the elevated forks, or load.
 Failure to comply can cause serious injury or death.



NEVER RIDE ON FORKS

• Never use the forks to lift people. Failure to comply can cause serious injury or death.



ROTATING PARTS / ALIGNING HOLES

- Never touch rotating parts such as the fan blades or fan belt.
- When aligning two holes, never insert your fingers or hand.

Be careful not to get your fingers pinched in a hole, or between parts or tools.



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