

Read this manual carefully and learn to operate and service your sulky before using it.

CONTENTS

To keep the warranty, the sulky must be maintained and operated as directed in this manual.

1. INSTRUCTIONS FOR SAFE OPERATION

All references to "left-side", "right-side", "front", and "back" are given from the operator's position.

STEERING SULKY OPERATOR'S MANUAL

SERIAL NUMBER: _____

Look for this symbol to point out important safety precautions. If means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.



This product has been tested in accordance with ANSI B71.1.

NOTE

Read this manual carefully and learn to operate and service your sulky before using it.

To keep the warranty, the sulky must be maintained and operated as directed in this manual.

All references to "left-side", "right-side", "front", and "back" are given from the operator's position.

Use the serial numbers to ensure prompt and correct service when ordering parts, requesting service or making inquiries.

SERIAL NUMBER: _____



Look for this symbol to point out important safety precautions. It means -- ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

This product has been tested in accordance with ANSI B71.4.

SECTION I

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1. INSTRUCTIONS FOR SAFE OPERATION

2. OPERATING INSTRUCTIONS

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SECTION 1

Instructions for Safe Operation

Improper use of this equipment can injure people and damage the equipment. People using or servicing this equipment must read and follow the instructions in this manual.

It is important to understand that this manual and any other Gravely instruction manuals do not cover every possible danger. It is impossible for Gravely to know all possible dangers in operating and servicing the equipment.

The purchaser must give these instructions to the people operating and maintaining this equipment. These people must use eye and foot protection.

1.1 Preparation:

1. Read this manual and the tractor manual carefully.
2. Learn the location and function of all controls.
3. Learn how to use the controls to stop the tractor and attachment quickly.
4. Use caution with gasoline. Gasoline is very flammable. Keep it in a clean and tight container away from flames or hot items. Never put gasoline in the fuel tank while the engine is running or hot. Clean up spilled gasoline before starting engine.
5. Be certain that all shields, guards, and interlock switches are in the correct positions.
6. Never permit children to operate the equipment.
7. Inspect area to be mowed and remove all material which could be thrown by the mower.
8. Before starting the engine, put the PTO control lever in the "OFF" position and the gear shift lever in the neutral "N" position.
9. When hauling the equipment, connect the chassis to the transporting vehicle. Never connect from control levers, rods, or like items that could be damaged.
10. Replace all parts that become damaged or lost.
11. The tractor must be equipped with dual wheels before operating with a steering sulky.
12. Check the operation of the operator presence controls before operating the equipment. See Section 1.2.22.

1.2 Operation:

1. Wear foot and eye protection. Do not wear loose clothing.
2. Do not use the equipment in the dark without adequate lighting.
3. Keep the equipment in good condition. Maintain it as directed in this manual.
4. USE ONLY GRAVELY ACCESSORIES AND ATTACHMENTS.
5. Do not overspeed the engine. Do not override the governor.
6. Keep away from moving parts.
7. Keep people and animals away from the operating area.
8. Do not let people other than the operator near the operating equipment.
9. Do not use sulky on slopes or rough terrain.
10. Look for and keep away from hazards.
11. After hitting an object, stop the equipment and engine. Check for damage. Repair any damage before operating.
12. Look behind when operating in reverse. Look for people and hazards.
13. Operate only from the operator's position, seated on the sulky with hookup only to a two-wheel tractor.
14. Use standard sulky hookup to connect only the sulky.
15. If there is a sudden change in the sound or vibration of the equipment, stop the engine and check for damage. Repair any damage or failure before continuing operation.
16. Never run the engine indoors except to move it outside. Exhaust fumes are dangerous.
17. Go slowly on slick surfaces.
18. Follow traffic laws when operating on or near a road.
19. Before making adjustments or servicing, move the PTO to "OFF," turn the ignition switch to "OFF," and wait until all moving parts completely stop.

20. Before leaving the operator's position, put the PTO lever in the "OFF" position, turn the ignition key to the "OFF" position.
21. Never use sulky without an attachment on the tractor.
22. Ensure that all operator presence controls function properly. The sulky operator presence feature is used in conjunction with those mounted on the tractor handlebars. Therefore, older tractor models without operator presence controls cannot utilize this safety feature of the sulky.

To check operation of sulky operator presence, engage PTO. While seated, place both hands on steering wheel and lift up from seat slightly. The control is operating correctly if the engine stops.

SECTION 2

Operating Instructions

Read this manual and the tractor manual carefully before operating the equipment.

- 2.1 Start the engine. Wait until the engine is running smoothly.
- 2.2 Engage the attachments.
- 2.3 Move the throttle lever to the "FAST" position.
- 2.4 Put the direction control lever in the "FORWARD" position.
- 2.5 Turn the steering wheel clockwise to steer to the right.
Turn the steering wheel counterclockwise to steer to the left.

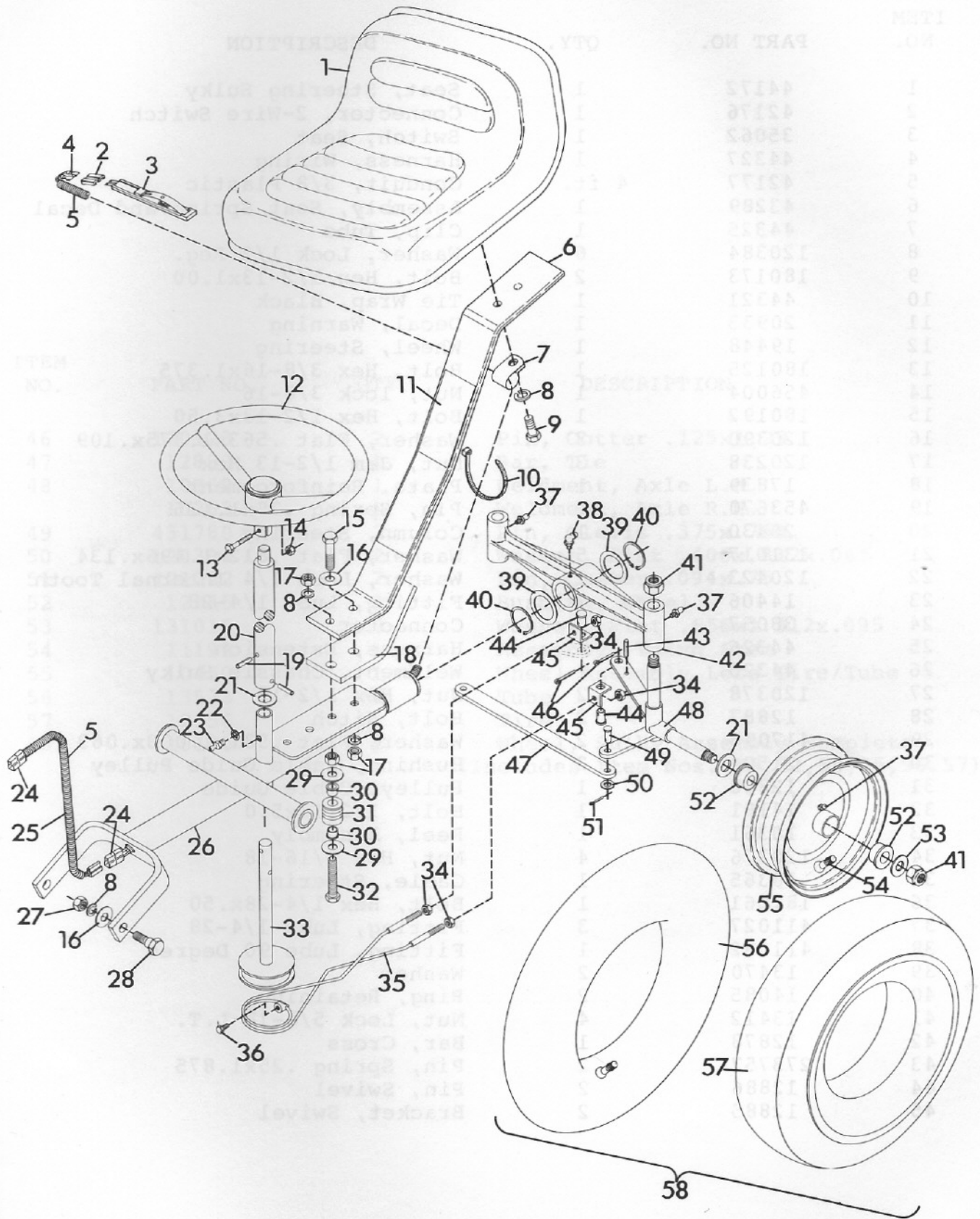
SECTION 3

Service Instructions

- 3.1 Inspect the sulky daily for damage, loose or missing hardware. Correct any fault before operating.
- 3.2 Maintain tire pressure between 10psi (69 kN/m²) to 12 psi (83 kN/m²).
- 3.3 Apply multi-purpose grease to the lube fittings about every 8 hours of operation. There are three fittings in the cross bar, one in the chassis weldment and one in each wheel assembly. Apply oil at the pivot points on both axle weldments about every 8 hours of operation.
- 3.4 Installation and Removal:
 1. Align the holes in the chassis assembly hitch with those in the tractor hitch. Fasten the chassis assembly to the hitch with the two hitch bolts, .563 x 1.375 x .109 flat washers, 1/2" lock washers and 1/2-13 hex nuts.
 2. Connect the wiring harness extension to the tractor's wiring harness connector located above the engine.
 3. To remove the sulky, remove the hardware listed above.

SECTION 4

Illustrated Parts and Parts List



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	44172	1	Seat, Steering Sulky
2	42176	1	Connector, 2-Wire Switch
3	35062	1	Switch, Seat
4	44327	1	Harness, Wiring
5	42177	4 ft.	Conduit, 3/8 Plastic
6	43289	1	Assembly, Seat Spring and Decal
7	44325	1	Clip, Tube
8	120384	6	Washer, Lock 1/2 Reg.
9	180173	2	Bolt, Hex 1/2-13x1.00
10	44321	1	Tie Wrap, Black
11	20933	1	Decal, Warning
12	19448	1	Wheel, Steering
13	180125	1	Bolt, Hex 3/8-16x1.375
14	456004	1	Nut, lock 3/8-16
15	180192	1	Bolt, Hex 1/2-13x3.50
16	120390	3	Washer, Flat .563x1.375x.109
17	120238	3	Nut, Jam 1/2-13 Hex
18	17839	1	Plate, Reinforcement
19	453670	2	Pin, Spring .25x1.125
20	20430	1	Column, Steering
21	131017	5	Washer, Flat .812x1.496x.134
22	120423	1	Washer, Lock 1/4 Internal Tooth
23	14406	1	Fitting, Lube 1/4-28
24	38057	2	Connector
25	44326	1	Harness, Extension
26	44320	1	Weldment, Chassis Sulky
27	120378	2	Nut, Hex 1/2-13
28	12887	2	Bolt, Hitch
29	417098	2	Washer, Flat .531x1.000x.063
30	21504	2	Bushing, Cable Guide Pulley
31	12888	1	Pulley, Cable Guide
32	14181	1	Bolt, 1/2-13x5.0
33	10361	1	Reel, Assembly
34	120376	4	Nut, Hex 5/16-18
35	10365	1	Cable, Steering
36	181561	1	Bolt, Hex 1/4-28x.50
37	411027	3	Fitting, Lube 1/4-28
38	411032	1	Fitting, Lube 90 Degree
39	13470	2	Washer
40	14085	2	Ring, Retaining
41	13412	4	Nut, Lock 5/8-18 L.T.
42	12878	1	Bar, Cross
43	273757	2	Pin, Spring .25x1.875
44	12886	2	Pin, Swivel
45	12885	2	Bracket, Swivel

SECTION 2
Set-Up Instructions

ITEM NO.	PART NO.	QTY.	DESCRIPTION
46	120123	2	Pin, Cotter .125x1.25
47	12883	1	Bar, Tie
48	10362	1	Weldment, Axle L.H.
	10363	1	Weldment, Axle R.H.
49	431780	2	Pin, Clevis .375x.750
50	120394	2	Washer, Flat .406x.812x.065
51	121222	2	Pin, Cotter .094x.75
52	12345	2	Bushing, Wheel
53	131016	2	Washer, Flat .656x1.312x.095
54	11191	1	Assembly, Valve Stem
55	10450	1	Wheel Assembly Less Tire/Tube
56	13573	1	Tube
57	12356	1	Tire
58	10140	2	Wheel, Sulky Assembly Complete (Includes Item Nos. 37,52,54,55,56,57)

SECTION 5

Set-Up Instructions

- 5.1 Remove sulky from shipping container.
- 5.2 Apply multi-purpose grease to one end of the axle on the sulky chassis assembly. Put a .812x1.496x.134 flat washer on the end of the axle. Slide a wheel assembly on the axle, valve stem side out, followed by a .656x1.312x.095 flat washer and 5/8-18 thin lock nut. Tighten the lock nut until there is a small amount of resistance to rotate the wheel assembly. Loosen the nut until the wheel assembly turns freely. NOTE: To prevent damage, the wheel must rotate freely. Repeat this procedure for the other end of the axle.
- 5.3 Remove the .187x1.25 cotter pin from the reel assembly shaft. Discard the cotter pin. Align the holes in the steering column with the holes in the reel assembly shaft and retain with two .25x1.125 spring pins. See the illustration in Section 4. Put the steering wheel on the steering column and retain with the 3/8-16x1.375 hex bolt and 3/8-16 lock nut.
- 5.4 Remove the 1/2" jam nut and lock washer from the 1/2-13x5.00 hex bolt. Fasten the reinforcement plate and seat spring assembly to the sulky chassis assembly with the 1/2-13x3.50 hex bolt, .563x1.375x.109 flat washer, 1/2 spring lock washer, 1/2-13 hex jam nut and the jam nut and lock washer just removed. See the illustration in Section 4 and tighten the bolts to the specifications in Chart 1.
- 5.5 Fasten the seat and wiring harness to the seat spring assembly with the 1/2-13x1.00 hex bolts, tube clip and two 1/2 spring lock washers. Spread the tube clip apart and slip it over the wiring harness at the rear of the sulky. Ensure that the tube clip is assembled in the front hole in the seat spring.
- 5.6 Place the tie wrap around the wiring harness and seat spring at approximately one half the span of the seat spring.
- 5.7 Slide the seat switch into the hole underneath the seat and snap into place. Connect the wiring harness to the switch.
- 5.8 Connect the harness extension to the wiring harness at the front of the sulky.

SECTION 6

LIMITED FIVE-YEAR WARRANTY

The Warranty does not cover the following:

1. Transportation to the service location by the Owner. Service charges for transportation to the service location are not covered.

2. Normal maintenance services and parts as a result of normal wear and tear, such as oil, filters, belts, hoses, and other accessories. The Owner is responsible for the cost of these items.

3. The Gravelly Product which has been altered or modified in any way.

4. Any wear or tear to the product caused by use in an application for which it was not designed.

The Limited Five Year Warranty is voided by Gravelly International, Inc. only to the original purchaser. If Gravelly equipment is leased by Gravelly, the Warranty shall extend also to the original lessee as if such lessee were the original purchaser.

Gravelly warrants that all new equipment manufactured by Gravelly (Gravelly Products) and delivered to the Owner in accordance with the terms of the Limited Five Year Warranty shall be free from defects in material and workmanship for the term of the Limited Five Year Warranty. Gravelly does not cover any repairs or parts for the Limited Five Year Warranty. Gravelly will, at its option, repair or replace any part of the Gravelly Product which is found to be defective or damaged during the term of the Limited Five Year Warranty.

BOLT TORQUE SPECIFICATIONS		
BOLT SIZE	FOOT POUNDS (ft. lbs.)	NEWTON METERS (N.m)
1/4"	7	9.5
5/16"	14	19
3/8"	25	34
7/16"	40	54
1/2"	60	82
9/16"	83	113
5/8"	120	163
3/4"	200	271

CHART 1

The Limited Five Year Warranty is voided by Gravelly International, Inc. only to the original purchaser. If Gravelly equipment is leased by Gravelly, the Warranty shall extend also to the original lessee as if such lessee were the original purchaser.

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Gravelly International, Inc.
One Gravelly Lane
Greenville, NC 27015
With Customer Service Department

Gravelly International, Inc.
One Gravelly Lane
Greenville, NC 27015
With Customer Service Department

SECTION 6

LIMITED FIVE-YEAR WARRANTY

1. This Limited Five-Year Warranty is issued by Gravely International, Inc., only to the original purchaser. If Gravely equipment is leased by Gravely, this Warranty shall extend also to the original lessee as if such lessee were the original purchaser.
2. Gravely warrants that all new equipment manufactured by Gravely ("Gravely Products") shall be free of defects in material and workmanship for the term described in paragraph 4, below. Except as hereinafter provided, this Warranty does not cover any engine, tires or battery forming a part of the Gravely Product. Engine and tires are covered by and subject to separate warranties of the manufacturers thereof.
3. In the event that any Gravely Product warranted hereunder shall be defective or fail to conform with this Warranty, Gravely shall, subject to the provisions hereof, pay for, or provide labor and materials for, the repair or replacement of such defective Gravely Product.
4. This Warranty is for five years (60 months) from purchase date for Gravely Products used exclusively for personal, family or household purposes, and two years (24 months) for products used for other purposes (commercial use), excluding rental firms. Gravely products used for rental purposes will be warranted for 90 days. Repair of Gravely Products after the second year (24 months from date of purchase) shall be subject to a \$50.00 deductible for each repair. (After two years, Gravely agrees to repair or replace defective Gravely Products used exclusively for personal, family or household purposes only to the extent that the cost of such warranty covered repair or replacement exceeds \$50.00.)

Batteries are warranted by Gravely for a period of twelve (12) months only. If a battery shall fail within twelve (12) months of purchase, the replacement cost thereof shall be prorated over a twelve-month term based upon the number of months since purchase.
5. To obtain Warranty Service on a Gravely Product (including any battery or other component not manufactured by Gravely), use this procedure:
 - a. Notify the Gravely dealer from whom you purchased the equipment.
 - b. If you have moved and it is not convenient to notify the selling dealer, notify the nearest Gravely dealer. You should supply this dealer with a copy of the bill of sale as proof of the date of purchase.
 - c. Make arrangements to have the equipment delivered to the dealer (refer to paragraph 6 a., below).
 - d. If you have any questions concerning the Gravely Limited Warranty, they should be referred to:

Gravely International, Inc.
One Gravely Lane
Clemmons, NC 27012
Attn: Customer Service Department
 - e. Warranty service on Gravely Products must be performed by an authorized Gravely dealer.
6. This Warranty does not cover the following:
 - a. Transportation to the Gravely dealership. (If the Gravely dealer provides transportation, he will charge for such service.)
 - b. Normal maintenance services and normal replacement of items such as spark plugs, belts, oil, oil filters, air filters, and mower, plow or cultivator blades, gauge wheels, skids and other wear items.
 - c. Any Gravely Product which has been altered or modified in any way.
 - d. Any repair or replacement occasioned by customer neglect or lack of proper maintenance. (The purchaser is responsible for making sure that Gravely Products are operated and serviced as directed in the applicable manual or service instruction. Incorrect use or maintenance will void this Warranty.)
 - e. Any repair occasioned by the use of any attachment not approved by Gravely. (The use of any such unapproved attachment will void this Warranty.)
7. GRAVELY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, OR WARRANTIES AS TO THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALL WARRANTIES ARE LIMITED IN DURATION TO THE TERMS SET OUT IN PARAGRAPH 4, ABOVE. GRAVELY SHALL HAVE NO LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE BREACH OF ANY WARRANTY, INCLUDING, BUT NOT LIMITED TO, LIABILITY FOR INCONVENIENCE, RENTAL OR PURCHASE OF REPLACEMENT EQUIPMENT, OR FOR LOSS OF PROFITS OR OTHER COMMERCIAL LOSS.
8. Some states do not allow limitations on how long an implied warranty lasts, so the above statement may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
9. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.
10. A Gravely product registration card is supplied with each Gravely Product. Please complete the card and return it to Gravely at the address listed on the card. The equipment registration card will be used by Gravely for:
 - a. Recording date of purchase.
 - b. Notification of owners in compliance with the Consumer Product Safety Act, should any notification be necessary.The return of such card is necessary for your warranty to be effective.
11. This Warranty is not subject to change or modification by anyone, including Gravely dealers and no Gravely dealer is authorized to make any representations or promises on Gravely's behalf.

 **GRAVELY**

One Gravely Lane, Clemmons, NC 27012